THE STRUCTURE AND WORKING OF AN URBAN LABOUR MARKET IN INDIA : A SURVEY OF TWO RESIDENTIAL CONCENTRATIONS IN CALCUTTA

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A B S T R A C T

The present paper is a micro-level study of
urban labour market using the core-periphery theory frame-
work. The study based on the data collected from a survey
of two <u>bustees</u> (slums) in Calcutta Metropolitan Area,
confirms the hypothesis that core-periphery unequal
exchange frame-work provides a valid description of the
functioning of urban labour markets in a developing
economy. While for general interest the paper includes
various other findings of the survey, it concludes with
the policy implications of core-periphery unequal
exchange within the urban economy.

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1. INTRODUCTION

The study reported here was a study of an urban labour market. In view of the voluminous (and still growing) literature on labour markets already in existence the question arises as to the relevance of a fresh survey. The answer, briefly, is that the present micro-level survey sought to plug a number of loopholes in the existing literature. In this introductory section we briefly review the existing literature on labour markets - or, rather, that portion of the literature that is of direct relevance to the present study, and point out the loopholes referred to above. In the next section we shall state the specific objectives of the present study.

Recent Research on Labour Economics

Recent research on underdeveloped urban labour markets has concerned itself mainly with two broad groups of issues - one related to rural-urban migration and the duality of the urban labour markets, and the other to the estimation of unemployment. It is only the first group that will be commented upon in this section, while the second group of issues will be referred to in the next.

Economists investigating urban labour markets in India have found an interconnection between employment opportunities and productivity on the one hand, and the problem of migration and labour market duality on the other. There is a large literature on the problem of rural-urban migration in India.[1] Building on the basic theoretical analysis provided by Harris and Todaro [26]

and Todaro[54],most of these studies have sought to
isolate the important determinants of rural-urban
migration in India and to estimate migration equations.

The consequences of migration have received
more attention in the works on labour market duality.
The underdeveloped part of the urban labour market
(christened as the 'informal' or the 'unorganised' labour
market) is considered to owe its existence to the massive
flow of rural-urban migration.[2]

The term 'informal' in this context has, however,
been a centre of controversy mainly because of the absence
of a clear definition. Some economists have denied the
existence of a clear-cut duality, and proponnded a
continuously varying degree of 'formality'. Interesting
though it is on theoretical grounds, the continuum hypothe-
sis would be difficult to deal with in an empirical study.

In recent years a somewhat different kind of
theory of urban sector dualism has made its appearance.
It can be named the 'core-periphery' theory. Since the
focus of a major part of the present study is on examining
the empirical relevance of an urban labour market in an
LDC, it seems worth-while to set out this theory at some
length.

Criticism of Neoclassical Theory - Historical Antecedints

The best starting point is to recognise that
the neo-classical orthodoxy is today the dominant
theoretical position on labour economics just as it is
in other fields of economics. Briefly, neoclassical labour
economics consists of the marginal productivity theory
of demand for labour on the one hand and a labour supply

theory based on utility maximisation by workers on the other. In specific branches of neoclassical labour economics the labour supply theory takes the form of the theory of investment in human capital (as a theory of determination of one's skill or occupation). Building on this basis, the neoclassical theorists have gone in for various new developments, extensions and modifications not directly relevant for our purposes.

What is important for our purposes is to note that if the wage rate is determined by the intersection of demand and supply curves of labour the working of the labour market would not admit of one of the most pressing economic and social problems facing the LDC's today viz. involuntary unemployment. It is easy to see that if one admits this type of unemployment, the neoclassical wage determination theory ceases to be valid.

This import has led a number of economists to build labour market theories outside the competitive framework. (Some of these works are related to the extensions of the basic neoclassical framework referred to above.) Among these theories the ones most directly relevant for our purposes here are the so-called Segmented Labour Market (SLM) theories. The basic tenet of this approach is that the labour market equilibrium can not be captured in terms of an all-encompassing perfectly competitive general equilibrium. Rather, 'the' labour market of an economy is segmented into a number of labour markets. Perfect competition in the traditional sense is absent in most of these markets although the exact nature of the imperfect competition will vary between the submarkets.

Some of the essential points of S.L.M. theories can be traced to the writings of classical economists. Two of the great names in the history of economic thought - Adam Smith and John Stuart Mill - can be credited with an early recognition of the problem that the observed degree of inequality of the statistical distribution of earnings in the labour market is difficult to reconcile with the model of a classically competitive economy. The idea of explaining wage differentials with the help of the concept of 'noncompeting groups' can be traced to Chapter 10, Book I, of Wealth of Nations. According to Smith, the 'agreeableness or disagreeableness' of the jobs, the difficulty or easiness of learning them, the stability of employment, the degree of mutual trust between the employers and the employees, and the probability or improbability of success in the jobs - all go to explain wage differentials. It may be noted that the second of the points mentioned above is an embryonic form of the theory of human capital and the fifth point is an expression of risk-taking theory. Smith, thus, anticipated the modern neoclassical orthodoxy as well as the theory of non-competing groups in important ways.

Mill, on the other hand, noted that some of the factors that Smith enumerated worked in exactly the opposite directions. For instance, in the Smithian scheme of things, the agreeable jobs should fetch less than the disagreeable ones. However, 'the really exhausting and the really repulsive labours, instead of being better paid than others, are almost invariably paid the worst of all, because performed by those who have no choice ... The undesirable (labourers) must take what they can get. The more revolting the occupation, the more certain it is to receive the minimum of remuneration, because it

devolves upon the most helpless and degraded, on those who from squalid poverty. or from want of skill and education, are rejected from all other employments. Partly from this cause, and partly from the natural and artificial monopolies .... the inequalities of wages are generally in an opposite direction to the equitable principle of compensation erroneously represented by Adam Smith as the general law of the remuneration of Labour'' [39, P 372].

However, Mill's own hopes that the progress of general education and lower birth rates among the lower classes would gradually put an end to wage inequality in particular and labour market segmentation in general have been belied by history. This explains the continued general interest in S.L.M. theory.

Modern Radical Labour Economics

In the more recent writings on the subject one can clearly distinguish between three strands of thought . Probably the closest to the orthodox position is the 'job competition' theory proposed by Thurow [52] and Thurowand Lucas[53].According to this theory the number and types of jobs are technologically determined and workers' skills (human capital) and the wage offers are irrelevant here. Thus there is no labour supply curve. Moreover, the demand for labour is not a smooth function of the wage rate. This rate itself is determined largely by social customs and institutional factors. It is rigid. Queue of workers at fixed wages constitute the labour supply and employers use screening devices based on their trainability and adaptability.

Probably the best-known type of S.L.M. theory is the dual labour market theory proposed by Doeringer and Piere [16]. This theory was foreshadowed in the work of Dunlop [17] and Kerr [34] who viewed the growth of large firms

and established trade unions as promoting internal ('within firm') labour markets which are rather weakly connected to the external ('between firms') labour markets.[3]

Doeringer and Piore define a primary labour market as one composed of jobs in large firms and/or unionised jobs which tend to be better jobs - offering higher wage and greater stability. The secondary labour market which has much in common with the Dunlop-Kerr external labour market contains ill-paid jobs mainly held by workers with unstable work patterns people who are victims of discrimination.

The clearest analysis of core-periphery theory can be seen in the writings of radical labour market theorists who emphasise class realations and, in their criticisms of the capitalistic system in general, borrow a lot of ideas from Marxian analysis. In this literature the dual labour market idea is sometimes expressed in terms of an analogy with an LDC or a colony exploited by an imperialistic primary economy. These writings draw upon sociological analysis of institutional change but lays more stress on class-interest-based behaviour by employers and employees. Technology is treated as an endogenous variable which is determined by the employers so as to further class interests rather than profits.[4]

Gap in the Indian Economic Literature

The empirical implications of the core-periphery theory in particular and the S.L.M. approach in general have not been spelt out in the Indian literature on the labour market, specifically, urban labour market. One

can consider the urban economy polarised between a core
and a periphery, or as considered in the theoretical
literature the core and the informal sectors respectively.
The core-periphery theory views the periphery as engaged
on an 'unequal' trade and exchange with the core. The
theory, thus, represents a more general way of looking at
the interrelations between the two sectors of the urban
economy. Even the core-periphery theory of the urban labour
market appears to have gone unmentioned in the Indian
labour market literature.[5]

In view of the increasing recognition being won
by S.L.M. theory from economists of different schools we
are of the opinion that this is a major gap in the litera-
ture. Trying to fill up this gap was one of the two
major aims of the present research study. The second aim
had to do with the second plank of research on labour
markets in India referred to at the very beginning of this
section viz. the estimation of unemployment. We would also
touch on some of the theoretical and empirical problems
in this connection. In the final section (6) we shall try
to explain how these two different aims of the research
project could be looked upon as forming parts of a single
purpose. The next section elaborates the objective of the
study.

2. OBJECTIVE OF THE STUDY

Bisectoral Theory and the Putting Out System

The S.L.M. theory reviewed above was largely a
contribution of labour economists in the advanced countries
but it was later seen to yield realistic descriptions of
and predictions about the working of the urban economy in

several countries, developed as well as underdeveloped.
A wide variety of phenomena including skewed income dis-
tributions and the coexistence of inflation and unemployment
in the macroeconomy have been sought to be explained with
the help of the core-periphery theory.[6]

        Relatively few studies, however, have sought to
examine the labour-market aspects of the core-periphery
theory. Researchers investigating the informal labour
market in India have long recognised the so-called 'putting
out' system as one of the ways in which the formal and
the informal sectors of the urban economy are related. It
is by now well-known that many core-sector units, e.g.,
those in the footwear and electric fan industries, get
much of their work done in the informal sector on job
contract basis. They provide the workers with the raw
materials and buy up the entire finished product at
pre-determined prices.[7]   The core sector industries later
sell the products under their own brand names at inflated
prices. This has largely been explained by the higher wages
demanded by the organised labour in the core sectors. We
can add to this the Doeringer-Piore hypothesis that the
'culture of poverty' of the informal sector makes it
easier for the core to exploit them.[8]

        The putting out system, however, is only one of
the several aspects of the core-periphery relationship.
It is only one of the ways in which the unequal exchange
can operate. The broader questions are whether the two
sectors of the urban economy can be looked upon as two
subeconomies (the internal and the external labour market
in the Doeringer-Piore sense) engaged in trade and
exchange and if so, whether the mode of operation of this

trade can be considered to be unfavourable to the periphery.
Clearly, the organised industries can engage the unorganised
workers through the putting-out system by offering them
a wage rate lower than what the unionised workers demand.
But if this is the dominant type of relation, the unorga-
nised sector workers would be just another categories of
employees engaged, albeit indirectly, by the registered
or formal industries, and the bisectoral theory of the
urban economy would lose much of its appeal. As already
stated, explaining the applicability of the core-periphery
distinction in the context of an underdeveloped labour
market in India formed a major purpose of this research
study.

How to Test Duality

The very first step on the process of testing
whether the core-periphery theory is at all relevant in
a LDC labour market (as distinct from a commodity market)
is to arrive at a test of whether there is at all any
significant segmentation in the LDC labour market. If we
look at the Indian literature on this point we see that
the question was posed mainly from the point of view of
the commodity market and the criterion of distinction
centered on the size of the production unit. One opera-
tive distinction – the large sector-small sector distinc-
tions is not sufficiently well-grounded in theory. The
microeconomic theory of the firm does not imply that
small size per se puts a firm in the external labour
market. In fact, the putting out system referred to above
is a direct counterpoint since it is the large firms who
are engaging in this activity and yet nonorganised workers
are employed by the firms so that these workers form
part of the peripheral labour market.

The registered-unregistered distinction is closer to the commonsense distinction between formal and informal sectors. We basically accept this distinction or, rather, its labour market analogus. Therefore, we shall first examine whether the self-employed and the wage workers have proper licenses and job contracts. In other words, the presence or absence of formal job contracts are taken to be the reflection of development of underdevelopment of the labour market. We then examine whether workers without formal job contracts are engaged under backward modes and relations of production. In other words the nature of production methods and relations are taken to be the criterion of distinction between the core and the periphery.[9]

We must note here that the supporters of the unequal exchange view in the field of international trade have taken pains to explain that the theory is meaningful only in the context of trade between capitalistic economies. (The point will be dealt with more fully below.) The dominant partner is to be in a more advanced stage of capitalism than the dominated partner. In our context, therefore, the theory would be applicable if we can show that (a) the periphery represents a rudimentary stage of capitalism; but (b) it is in a backward stage compared to the core. Therefore, it is the difference in the degrees of sophistication of the techniques of production used in the core and the periphery that is important.

However, empirical testing of whether the relations and mode of production in a particular sector of the economy are in a particular stage of development of capitalism or not is easier said than done. Our approach would be to gather data on the use of power in the periphery and the

preponderence of non-wage relations between the employers
and the employees. Prepronderence of such non-wage elements
in the employer-employee relations would signify inadequate
development of wage labour and, if found true, would put
the periphery in the category of a precapitalistic economy.
Testing the urban duality hypothesis from the angle of
either the relations or the mode of production has not been
carried out so far. Prima facie, however, it does not seem
very likely that the capitalism-precapitalism criterion
would draw a sufficiently sharp distinction between internal
and external urban labour markets. This is because of
several reasons. In the first place, engaging in a bit of
casual empiricism, we do not think that the preponderence
of nonwage relations would be as strong in the urban external
sector as in agriculture. Secondly, some economists are
of the opinion that the more importance of personal elements
in the employer-employee relationship does not imply that
the relations or the modes of production are necessarily
precapitalistic.[10]

For instance, while economic historians have
not been able to agree on a rigorous definition of
faudalism, the description of its essential features (as
obtainable in the writings of Marx, Marc Bloch, Perry
Anderson and others) does not mention the importance of
'personalised transactions' as an important point. In fact,
it is well-known that even in the core sector financial
transactions and credit mobilisation operations are often
based on personal ties. This is particularly true of
cases where family networks of big business houses and
interlocking directorate of companies are at work. Indeed
as Bardhan noted, this is hardly surprising. In a world
of costly information, exchange systems based on personal
trust and inter-locking obligations in different transactions

between the same parties are effective means of achieving
cost efficiency. Enduring relationships in all economies
tend to be personalistic. We agree with Bardhan when he
says, ''......... personal ties between the transacting
agents are often automatically described in the literature
as feudal. This kind of careless labelling is worse than
inaccurate : it actually blocks our understanding of such
ties''. Thus, even if non-pecuniary relations turn out
be important in employer-employee dealings we would not
be able to categorise the periphery as constituting an
economic entirely altogether different from the core.

        We, therefore, supplement this test by another.
We examine the nature of the technology used. Going by
Marx's original discussion about the historical evolution
of the mode of production we decide that the importance
(or otherwise) of assembly line production is the crucial
characteristic of the factory system and this system, in
turn, is the crucial characteristic of capitalistic
production. Studying the history of technological
progress we see that the progress of assembly line production
has been correlated with the use of power in industry[11].
We, therefore, gather data on the use of power by the
production units and interpret the importance of power
use as a characteristic of a relatively advanced stage
of capitalism.

        We then examine the nature of the employers and/or
the clientele of the peripheral workers. (i.e., whether
they are constituents of the core or the periphery.) Over
and above relating the labour market duality with the
formal/informal duality of the urban production sector,
this will help us in answering the broad questions raised
in the preceding paragraphs. A 'casual' worker, even in a

registered unit, may not have a formal job contract.
If most informal workers are found to be engaged, directly
or indirectly, by registered units in this way the core-
periphery theory would largely be redundant. On the other
hand, if they are mostly engaged in peripheral units or
are engaged in selling finished or semi-finished products,
or services, to the formal sector units, the bisectoral
theory can be accepted.

Thus, our deciding criteria would be as follows.
We take the absence of formal job contracts and the
insignificance of use of power in production as the
principal characteristics of the peripheral sector. It
is hypothesised that a supporting characteristic is the
place of importance occupied by sales of commodities
and services to the core. If the predominant economic
activity in the periphery is direct sale of labour

services to the core, the relation between the two sectors
of the urban economy would be one of direct exploitation
of the old fashioned type, similar to the direct plundering
of a colonial economy by an imperialist aggressor. The
more sophisticated version of the core-periphery theory
which hypothesises trade and exchange between the two
sectors would then be judged to be inapplicable.

Unequal Exchange

However, the questions whether there is at all
any segmentation in the urban economy and, if so, whether
there is a significant trade relation between the different
sectors are relatively easily settled. It is more difficult
to ascertain whether the core-periphery trade (if there
is any) is carried on along 'unequal exchange' lines, i.e.,
whether, as posited in the core-periphery theory, the
core exploits the periphery not through direct plundering

but through the more sophisticated means of unfair pricing.
There are various sense in which the term 'unequal exchange'
has been used in the literature. (See Sau [48]). One Sense
is the Prebisch-Singer one of the terms of trade moving
secularly against LDC's (here, the periphery). Another
is the Immanual sense. Here 'equivalent' or 'equal'
exchange is defined in terms of 'value'. If two commodities
with equal amounts of value in them are traded at par,
this is an equivalent exchange. However, if one unit of
X is exchanged for a certain number of units of Y but
the 'labour contents' of these two quantities exchanged
are not equal, it is a case of unequal exchange. The
price of a commodity as determined through the process
of Transformation under the Law of equal Profitability
need not equal its value. In this scheme of things, unequal
exchange arises whenever organic composition of capital is
different between the trading parties. See Eamanne [19].)

Rosa Luxemburg [36] invoked the concept of unequal
exchange in the context of primitive capitalist accumulation.
The thesis was extended by Preobrazhensky [43] to the context
of primitive socialist accumulation where it was suggested
that the socialised industrial sector of U.S.S.R. should
deliberately impose unequal exchange on the still unsocia-
lised rural sector. Mitra[40]has used the same concept
to hypothesise that the rural oblgarchs in India were
thwarting the process of industrialisation during the
1960's by engaging in unequal exchange with the industrial
sector. In all these cases the trade is between a
capitalist and a non-capitalist party, Sau[46] has extended
the analysis to the case of two capitalist economies
engaged in trade. The difference between the Enmanuel
and the Sau versions of the theory is that in

the former an advanced country is visualised as having
a higher pre-trade profit rate than a backward country.
When trade taken place, the profit rate settles somewhere
in between. In Sau the post-trade profit rate is higher
in both countries than the pre-trade rate. According to
Sau, the essence of the logic of unequal exchange is
based on a wage differential between the advanced and
the backward countries. In Sau's symbols, p is the
price of the good exported by the backward country, w
is the wage rate and r is the profit rate

$$p = bw + ap(1+r) \quad \text{or} \quad p = \frac{bw}{1-a(1+r)} \qquad \ldots (1)$$

where, for simplicity it is assumed that the production
of one unit of this commodity requires b units of labour
and a units of itself and labour is paid post factaur.
The advanced country imports this commodity (called $\bar{x}$)
and exports another commodity (y). Let the unit of
measurement of this commodity be such that its
price also equals p. Let us assume that for producing one
unit of y, $(b-\triangle b)$ units of labour and $(a + \triangle a)$ of itself
are required. (Note that we are assuming here that the
advanced country has a higher organic composition of
capital.) However, the wage rate in the advanced country
is higher, Let us say it is Rw where R 1. Also, assume
that the profit rate is equalised in the two countries
when trading takes place. Thus

$$p = \frac{(b-\triangle b)Rw}{1-(a+\triangle a)(1+r)} \qquad \ldots (2)$$

(1) and (2) imply that

$$\frac{b}{1-a(1+r)} = \frac{(b-\triangle b)R}{1-(a+\triangle a)(1+r)}$$

Since R > 1, we get

$$\frac{b}{1-a(1+r)} > \frac{(b-\triangle b)}{1-(a+\triangle a)(1+r)} \qquad \ldots (3)$$

It can now be shown that the left-hand-side is nothing
but the labour content per unit of x. Similarly, the
right-hand-side is the labour-content of one unit of y.
Since, by construction, one unit of x exchanges for one
unit of y, the backward country is giving away more labour-
time than it is getting back in trade. This is the
essence of unequal exchange. Sau then shows that the
equal profit rate assumption can be dropped : the backward
country may have a higher profit rate as well as a lower
real wage rate. Also, the theory does not depend on the
assumption of balance in trade. The commodity trade balance
may be positive, negative or zero. None of these conceptua-
lisations is directly applicable to our context. One reason
for this is that some of these theoretical models are
dynamic is nature. One would need time series data over
an extended period of time for testing these theories.
Another reason is that testing these hypotheses would
require the empirical modelling of the entire urban informal
sector of an economy and to place it in opposition to
the core sector - a task well beyond the scope of the
present project.

However the Sau version of the theory of unequal
exchange can be adapted for our purposes. The theory
obviously applies to trade between capitalist countries
only : if the backward country is in a pre-capitalist
state, equation (i) will cease to have any meaning. Thus
we have to ascertain, first of all, whether the modes
of production in the perphery is capitalistic or not.
Notice that the simple fact that production techniques
in the periphery is relatively primitive does not make
the periphery non-capitalistic. The important question
is whether labour power in the periphery is a fairly
freely marketable good or there are feudalist constraints

(like bonded labour) on the working of the peripheral labour market. If such feudal elements are absent, we can take. the periphery to be a backward capitalistic economy. The unequal exchange theory will then be potentially applicable to core-periphery trade.

Another stumbling block in the path of direct application of the theory to our context is the fact that in our case the trading partners will not be different countries but different parts of the same economy with no legal restriction on mobility of labour between them. Why then should there be any wage differential? One answer to this question would be to go directly to the data and show that there is indeed a wage differential. However, the demonstration may not be perfectly convincing since most of the actual wage rates in the core are rates for various categories of skilled labour while in the periphery it is the unskilled wage that is important, and there is no dependable estimates of the numbers of units of unskilled labour that would be equivalent to one unit of various kinds of skilled labour. A more satisfactory proof would involve the demonstration that interest rate on loans is higher in the periphery than in the core since, then, it would be possible to hold the view that in the periphery capital accumulation is hindered:[12] Accordingly wage rate would be lower in the periphery if there were any comparable wage rate in the core.

The difference in interest rates would also be related to the state of the trade balance. When a country runs into a balance of payments deficit on the current account it can look forward to relief from international aid giving agencies or even from its trading partners in

in the form of credit at relatively low interest rates.
Also, the country in question can itself take a number
of steps including devaluation of the national currency.
None of these solutions would apply in our context since
there is no national boundary separating the core and
the periphery. Thus if the periphery has an import surplus
with respect to the core, this current account deficit
would remain yet the payments have to balance in the account-
ing sense. Under these circumstances there will take place
what balance of payments theorists call 'accommodating
capital movements'.[13] Since these capital movements are
compulsory, rather than voluntary, from the point of view
of the periphery, the suppliers of finance capital can
charge exorbitant interest rates as is usual in cases
of inelastic demand. This high rate of interest will then
inhibit accumulation and, therefore, make for a low wage
rate. Thus although the theory of unequal exchange is
valid whatever the trade balance may be, it is on surer
ground if the backward economy has a payment deficit.

Another point in this connection is worth commenting
upon. If there are monopoly elements in international
trade (and has been emphasised by Robinson[44] and Sweezy [50]
unequal exchange would emerge even if there was no wage
differential. This is clearly seen from equations (1)
and (2). Even if R=1, the labour content of a unit of
export of the backward partner (B) would exceed that of
a comparable unit of export of the advanced partner (A)
if the price paid by A for B's export is less than
the right hand side of equation (1) and/or if the price
charged by A for its own export exceeds the right-hand-side
(2) i.e., if, in our context, the core has monopolistic
and/or monopsonistic powers over the periphery. Similar
would be the case if the core can practice price discri-
mination between consumers in the core and in the periphery

in cases where the commodity consumed is the same.

Summarising, we may say that we can accept the view that the core-periphery trade is carried on along the lines of unequal exchange if (i) the periphery turns out to be a backward capitalist economy rather than a feudal one and (ii) the rate of interest on financial capital is higher in the periphery than in the core. If, in addition, the periphery has an import surplus with respect to the core and/or there is evidence of unfair pricing dictated by the monopolistic power wielded by the core, the claim will be strengthened.

In the core-periphery trade the excess of the amount paid out by the periphery over what is received by it from the core would represent the 'import surplus' of the periphery. It is this intersectoral trade that is, for our purposes, the basic question. The question which acts of sale or purchase (i.e., which parts of the survey data on 'who buys what from whom') deserve analysis from our point of view has to be decided against this criterion.

The 'Subemployment' Rate

As stated before, analysing the relevance of the S.L.M. theory in the context of the LDC's was one of the two purposes of the present research project. The other purpose was to fill up some large gaps in the existing empirical literature on labour markets. Although, as noted before, rural-urban migration has been recognised as the main cause behind the proliferation of the informal sector, there is a disheartening look of data regarding many important economic characteristic of migrant as well as

non-migrant workers. The proposed project aims at filling
this gap not only because it is expected that data on
some of these characteristic will have a bearing on the
core-periphery relationship but also because that would
be an achievement by itself.

One group of these characteristics relates to
the saving behaviour of the workers : the amount of
savings, the mode of its utilisation, the pattern of
remittances (if any) outside the urban economy etc.

Another relatively unresearched characteristic,
however, deserves not only a special cention but some
elaboration. It relates to <u>excess labour supply</u> in general
and <u>disguised unemployment</u> in particular. Papers relating
to the second broad group of issues mentioned at the
very beginning of Section I have dealt with the estimation
of disguised unemployment in the rural sector,[14] and
covert or open unemployment in the urban sector (see,
for example, Dholakia[15].In comparison very little has
been done by way of estimating the amount of excess
supply in urban labour markets.

We have argued elsewhere that the proper measure
of excess supply in urban labour markets is <u>not</u> the rate
of unemployment but what has been called the <u>rate of</u>
<u>'subemployment'</u>.[15]   We were able to show there that
<u>unemployment rates in the urban areas of West Bengal were</u>
<u>statistically unrelated to some indices of industrial</u>
<u>expansion and general socio-economid development</u>. In
defining 'subemployment' we considered not only the
openly unemployed but also (a) the involuntary part-time
workers, (b) the 'discouraged' workers and (c) the disguised
unemployed. We explained the theoretical grounds for

preferring the subemployment rate as an alternative
social indicator. Empirical estimation of this rate,
however, was not attempted there.

The standard sources of employment data in India
viz., the National Sample Survey, the Census and the
Employment Exchange registers do not provide data on the
discouraged workers or the disguised unemployed. Even
the estimates of open unemployment in these sources are
open to serious objections (see Sen[47.]). Neither have
we come across any other source of data that would help
us to estimate the subemployment rate. On the notional
level it can be easily seen that the problem of estimating
disguised unemployment in urban areas would be essentially
different from that of estimating it for the rural
economy. In the rural sector the work intensity per-worker
on the small family farms is typically lower than the
'norm' (however it is defined). This has provided the
basis for most of the suggested methods for measuring
disguised unemployment (see, for instance, Mehra[38.]). In
the urban areas, however, the substitution of human labour
for the scarce factor, capital, is the typical phenomenon
in the periphery. The work intensity per worker would here
be higher than the norm. The typical worker is, therefore,
overworked rather than underworked.

As explained by us in [2] in detail, the most
reasonable and realistic way of estimating urban disguised
unemployment would be to define a 'normal' wage rate
and calculate the number of hours that the typical urban
worker would have had to work if he was able to earn the
normal wage per hour. If this falls short of the standard
number of working hours he is to be counted as a disguised
unemployed.

The present project would try to estimate (at
a micro level) the rate of disguised unemployment and
the proportion of discouraged workers as well as the more
conventional type of unemployment, and to arrive at an
estimate of the subemployment rate.

Both the testing of the core-periphery distinction
and the delineation of the economic characteristics of
the workers (e.g., the saving behaviour, the subemployment
rate etc.) were carried out separately in migrant and
non-migrant residential concentrations in order to
examine whether the migrant/non-migrant distinction and
any bearing on the relevant issues.

Summary of Objectives

Summarising the points discussed above, we can
state that the present research was a (micro-level) study
of an urban labour market in India and sought (i) to
ascertain whether the core-periphery trading hypothesis
is a realistic description of the existing situation in
such labour markets; (ii) to delineate the exact ways
in which the core-periphery relationship operates;
(iii) to determine the economic characteristics of the
workers (with special reference to saving behaviour and
the subemployment rate); (iv) to test whether the core-
periphery relationship affects these economic character-
istics; and (v) to test whether there is any interrelation
between the migrant/non-migrant distinction on the one
hand and the core-periphery relations or the above-
mentioned economic characteristics on the other.

3. THE SURVEY
Need for Fresh Survey

The data required for testing the core-periphery hypothesis or estimating the subemployment rate are not available in secondary sources, the Census, the NSS and the Employment Exchange Registers. This observation is valid generally for the labour market in India as a whole but applies with a special force to the city of Calcutta.

The micro-level studies that have been carried out on Calcutta's labour market since mid-1950's (see Sen[48] CMDA [10] [33] have not generated data required for the present purposes. Given the resources and facilities we have surveyed only two residential concentrations of workers in Calcutta City : one inhabited predominantly by migrants and the other by non-migrant workers to get the data required to test the hypothesises.

Choice of Bustees

The criterion of choice among the hundreds of bustees in Calcutta was provided by various considerations including the degree of sharpness with which the dwellers of the bustees were divided between 'intersectoral' and 'intrasectoral' traders. Bustees with a preponderence of ambiguous cases were to be avoided. On the other hand, we needed a sizeable number of observations in each class of traders since, if either class was nearly empty, it would have been difficult to relate the core-periphery theory to the differences in the economic characteristic of workers. At the planning stage we considered it unlikely that all these requirements would be fulfilled by too many bustees. However, if there were two or more bustees satisfying these criteria the final selection among them

was to be random. Prior determination of whether a
particular bustee was inhabited by 'locals' or migrants
was not considered to be too difficult. Although the
Census does not publish tables on places of birth by
bustees, this information was available from other
surveys.[16] We compiled a list of 12 pairs of bustees —
each pair consisting of one migrant and one non-migrant
bustee and in the final random selection the pair that
came up was : the Nandibagan (non-migrant) and the
Pilkhana (migrant) bustees. These bustees were located
in Howrah, within the Calcutta Metropolitan District.
Even at the planning stage we were of the opinion that
the survey of these two residential concentrations is
expected to provide useful insights into the working of
the labour market in Calcutta. Since Calcutta was not
a typical as a large city in an LDC, the broad
qualitative conclusions were expected to be applicable
to other LDC's as well.

Sample Design

The micro-study of the two selected bustees was
in the nature of a survey. The house-hold was the sample
frame. It was the heads of the households who were
interviewed but the data related to all members of the
households.

Since the bustees comprised about 1600 families
with an average of 3.5 adult-equivalent members in each
family and since we had to collect data relating to all
the members of the household (this being a labour market
study), the complete enumeration method was found to be
infeasible in view of the limited time and resources.
The problem was compounded by the fact that for answering

many of the basic questions we needed a lot of information from each household. Therefore, we decided to go in for a sample study. In each bustee a sample exceeding 10 per cent of the population was taken.

Using a short questionnaire (soliciting just the names and addresses of the heads of households and one or two other characteristics e.g., the migration status) we made door-to-door visits entirely covering the two bustees. On the basis of this listing (which included about 1400 names of heads of households) we draw our random sample. There were 69 sampled households in Nandibagan and 91 of them in Pilkhana (Altogether about 640 individuals were covered.) As expected (on the basis of the casual empiricism mentioned earlier) Nandibagan came out to be a pre-dominantly non-migrant bustee. Pilkhana turned out to be a migrant bustee.

The exact breakdown of the sample is given in Table-1.

TABLE - 1
MIGRATION STATUS OF THE SAMPLED HOUSEHOLDS

Name of the Bustee	Migrant	Non-migrant
Nandibagan	20	49
Pilkhana	66	25

Heads of Data Collection

The broad items on which information was collected for this study were as follows :

(1) Mode of employment (family labour, wage labour, self-employment, etc.);

(2) Nature of contract (presence or absence of formal labour contract, licensing etc.);

(3) Labour aspects of the mode of production (wage and
non-wage benefits and obligations, extra-economic aspects
of employer-employee relations, etc.);

(4) Nature of clientele;

(5) Prices of factors and products (paid and charged);

(6) Income and indebtedness;

(7) Loans (purpose, source, etc);

(8) Saving and utilisation of savings (hoarding,
investment, remittances, etc.);

(9) Employment status;

(10) If employment was part-time, whether the partial
nature of employment was voluntary or involuntary;

(11) If unemployed, whether the person was a discouraged
worker;

(12) Conventional data on hours of work, personal and family
characteristics, migration status, etc.

4. TESTS OF THE HYPOTHESES

The Hypotheses

On the basis of what has been said in the proceding
sections, tests of the following hypotheses are important :

(1)   The bisectoral theory of the urban economy is
meaningful in view of the difference in the mode of
production in the two sectors. (i.e., the difference goes
deeper than the differences of size, proportion of migrants
etc. emphasized in the existing literature.)

(2)   The core-periphery theory (i.e., the concept
of the peripheral sector of the urban economy being
engaged in trade and unequal exchange with the core) is
a valid description of the way in which the two-sector
urban economy works.

(3)   Workers in the periphery usually do not have formal job contracts.

(4)   There is a systematic difference in income per head between the two sectors.

(5)   The core-priphery relations operate mainly through a process of unequal exchange.

(6)   The open unemployment rate is higher among the local workers than among the migrants.

(7)   The proportions of the involuntary part-time workers, the discouraged workers and the disguised unemployed are higher among the migrants than among the local workers.

(8)   The subemployment rate is higher in the periphery than in the core.

(9)   Workers who are residents of the periphery but employed in the core have positive savings but these are not utilised productively.

(10)   Local workers in the periphery have negligible savings.

(11)   Migrant workers send most of their savings outside the city of Calcutta.

(12)   The periphery is serviced largely by the informal financial market.

Hypotheses (1) - (3) and (5) do not need any elaboration. The need for testing (4) arises from the fact that some economists have tried to establish that income per head in the 'informal' activities is, in fact, higher than that in the formal sector.[17] Thus, the hypothesis is not as non-controversial as it at first seems to be. Hypotheses (6) - (8) have to do with the relation between estimates of excess supply of labour and the migration status. Rest of the hypotheses are based on popular notions about the working of the

peripheral labour market. Section 6 below will further clarify how the different hypotheses listed above fit into the central theme of this work.

It can be seen that these hypotheses will crucially affect optimal policies in the labour market. The policies for income generation in the periphery would depend on the nature of the linkages between the core and the periphery and of the differences between the two. Whether or not optimal policy formulation should distinguish between the migrants and local workers as target groups will also be related to these hypotheses. The exact way in which the migrant/non-migrant distinction is entangled with the core-periphery distinction will obviously be one of the principal determinants of policy. The data expected to be gathered on the many heads listed at the end of the previous section will be of immense help in quantifying the qualitative policy conclusions derived from the hypothesis.

The Tests :-

(i) In testing the first hypothesis we have distinguished distinguished three different modes of production – purely manual, use of hand machines and use of power-driven machines, and collected data of workers using these three modes of production. It is observed that 23.79 per cent of the total workers numbering 311 (of whom 173 are migrants and 138 are non-migrants) in the two residential concentrations use hand machines or power-driven machines. The details of the relevant data and results are shown in Table 2.

TABLE - 2

DISTRIBUTION OF WORKERS USING HAND-DRIVEN AND POWER-DRIVEN MACHINES

Modes of Production	Percentage of Workers using the Mode among		
	Migrant Workers	Non-migrant workers	TOTAL
1. Hand-driven machines	12.72	14.49	13.50
2. Power-driven machines	9.25	11.59	10.29
TOTAL	21.97	26.08	23.79

The percentage of workers using hand-driven machines among migrant workers is 12.72 and among non-migrant is 14.49 while among total workers it is 13.50. The percentage of workers using power-driven machines is 9.25 among migrants and 11.59 among non-migrants while it is 10.29 among total workers. The percentage of workers using both hand-driven machines and power-driven machines among migrants work out to be 21.97. It is 26.08 among non-migrants and 23.79 among all workers. Since the percentage of workers using both hand-operated machines and power-driven machines is only 24 in the periphery while in the core sector it is common knowledge that most of the workers use modern modes of production, there exists a substantial difference in the modes of production between the two sectors of the urban economy.

Another striking feature in this connection may be noted. In the periphery migrant and non-migrant female workers do not use any modern method of production (i.e., hand-operated machines or power-driven machines). Among the migrant males the percentage of workers using hand machines is 17.75 and that using power-driven machines is 12.90. The respective percentage among non-migrant males are 14.49 and 11.59. This also conforms to our hypothesis.

(ii) Our second hypothesis was that the core-
periphery theory is a valid description of the way in which
the two sector urban economy works. This hypothesis has been
tested on the basis of the importance of the export trade
of the periphery to the core relative to total income of the
periphery. In the total export trade of the periphery to the
core we have included the value of net exports of manufactured
goods of the periphery to the core and value of labour
services exported by the periphery to the core in the form
of wage labour serving outside employers and self-employed
labour catering for outside clientele. It is observed the
said percentage share of total net exports from the periphery
to the core is substantially high (Table 3).

TABLE - 3
TOTAL NET EXPORTS OF THE PERIPHERY TO THE
CORE AND INCOME OF THE PERIPHERY

Category of families	Net exports to the core (in '000 rupees)	Income of the periphery (in '000 rupees)	Percentage share of net exports to income of the periphery
Migrant	37.4	51.1	73.26
Non-migrant	21.7	50.8	42.60
TOTAL	58.1	101.9	57.02

While the migrant families export 73 per cent of
their income to the core, the said percentage for non-
migrant families is 43, the overall percentage being 57.
Since the percentage share of exports from the periphery to
the core is high, our second hypothesis is accepted.

The judgement that these percentages are 'high' can
be arrived at by comparing these figures with those for the
importance of international trade in the national income

of a country. For instance, it is held by common consent that India has a 'significant' trading relation with the rest of the world. Yet exports constitute merely 6 per cent of India's national income.[18]

Trading relationships, of course, includes import as well as export activities. However, we did not bother to test the importance of imports into the periphery from the core. Life in the periphery was seen to be dependent on the core on every account from the basic necessities of life down to the smallest accessories.

We conclude therefore, that the formal and the informal sectors of the urban economy do not live their separate existence; the working of the periphery is significantly influenced by its trading relationship with the core.

(iii) Our third hypothesis was that workers in the periphery usually do not have formal job contracts. This hypothesis has been tested in the case of both wage labourers and self-employed workers. It has been observed that the percentage of wage labourers having written job contract is 23 for migrant wage labourers and 19 for non-migrant workers (Table 4). Among the self-employed workers none turned out to have a formal license. (In some cases, of course, licenses were not required.) Since the vast majority (more than 75 per cent) of workers do not have formal job contract, the above hypothesis is accepted.

TABLE - 4

PERCENTAGE OF WAGE LABOURERS HAVING FORMAL JOB CONTRACT

Type of Family	Percentage of wage labourers having formal job contract
Migrant	23
Non-migrant	19
TOTAL	21

(iv) The fourth hypothesis concerned the existence of a systematic difference in income per head between the two sectors. In the periphery per capita income works out to be Rs. 128.85, income per worker is Rs. 327.71 (Table 5).

TABLE - 5
MONTHLY INCOME PER CAPITA OF MIGRANT AND NON-MIGRANT FAMILIES IN THE PERIPHERY

Type of family	Total income (Rs. '000)	No. of members	No. of workers	Per capita income (Rs)	Per worker income (Rs)
Migrant	51.10	387	173	132.05	295.39
Non-migrant	50.82	404	138	125.78	368.23
TOTAL	101.92	791	311	128.85	327.71

Average income of the workers in the migrant families of the periphery is Rs. 295.39 while that in the non-migrant families is Rs. 368.23. In the core sector average income of the workers is substantially higher than in the periphery. For instance, the average minimum wage (monthly) in engineering, jute, cotton, glass, rubber and paper industries is Rs. 488.94 for Group A or unskilled workers. Monthly wage for Group B or semi-skilled workers in those industries is, on the average, Rs. 544.97 and that for Group C or skilled workers is Rs. 572.64 (Table 6).

TABLE - 6

MONTHLY INCOME OF WORKERS IN SOME CORE INDUSTRIES

Name of Industry	Monthly wage of workers in			
	Group A or Unskilled	Group B or Semi-skilled	Group C or Skilled	Average
Engineering	473.70	751.90	794.90	673.50
Jute	682.00	682.00	682.00	682.00
Cotton	665.25	665.25	665.25	665.25
Glass	363.00	383.00	433.00	393.00
Rubber	382.00	393.00	419.00	398.00
Paper	367.67	394.67	441.67	401.34
AVERAGE	488.94	544.97	572.64	535.52

All these are to be compared with Rs. 327.71 which
is average monthly income of workers in the periphery. Thus
the hypothesis that there is a systematic difference in income
per head between the core and peripheral sectors of the urban
economy is accepted.

It should be noted that this contradicts the Breman
view that the formal-informal segmentation of the labour
market is irrelevant because some persons in the informal
sector earn more than some persons in the formal sector.
Indeed, from the general methodological point of view this
position is clearly untenable. This would be similar to
holding that there is no distinction between a developed
and an underdeveloped country because the richest men in an
underdeveloped country earn more than the poorest men in
a developed country. The scientific question involved here is
whether the over-all income distribution (encompasing both
the core and the periphery) is bimodal or unimodal. Since
we have already shown that the periphery constitutes

an economic system in its own right in our case the question
takes the form whether the central tendency of the income
distribution in the periphery is significantly lower than
that in the core. The question has now been answered in the
affirmative.

(v) It has been hypothesised that the core-periphery
trade runs along lines of unequal exchange.

As explained in Section 2, we test this hypothesis
by checking whether the peripheral labour market is a reason-
ably free one and whether there is any significant difference
between interest rates charged on loans in the core and in
the periphery.

In the survey data there was no evidence of any
extra-economic relation between the employer and the employee.
However, we have explained earlier(in Section 2)that even if
there was such evidence, this would not have implied that the
periphery was non-capitalistic in nature. More important
is the finding that the percentage of unfree labour is zero.
This was seen to be true whether the peripheral wage earner
was employed in the core or in a peripheral production unit.
So far as the self-employed workers were concerned, it was
seen that they could sell their labour to whom they chose to
do so. Indeed both wage workers and self-employed workers
appeared to act rationally on the basis of an implicit net
cost-benefit analysis. All the families surveyed could cite
their income and expenditure data fairly easily. Also, the
survey showed that 'discouraged worker' phenomenon was absent
in the periphery. Whoever could work was looking for work
or for better jobs implying that there was no restriction
on labour movement within the periphery. The evidence,
therefore, shows that labour-power is a fairly free

in the periphery. The periphery may be technologically
backward but basically it does represent a capitalistic system.

The average interest rate charged on loans in the
periphery was seen to be very high. For instance, the migrant
families pay an average interest of 28.13 per cent per annum
on loans. For non-migrant families the figure is 29.52. It
should be emphasised that these are average figures and
that some of the loans were taken from friends or relatives
at a zero interest for personal purposes. These were not,
therefore, what we understand by commercial loans. If we take
the cases of positive interest rates only, the average rate
would be about 100 per cent for both migrants and non-migrants.
(In the periphery, however, it is often difficult to separate
personal from commercial loans.) This is to be constrasted with
the 15 to 18 per cent rate of interest paid by the investors
in the core.[19]

The difference in interest rates was reflected in
the difference in wage rates. In respect of wage rate it is
seen that in the periphery labourers are paid low relative
to those in the core. In the periphery the average wage rate
per hour works out to be Rs. 1.28. It is lower for migrant
workers than for non-migrant workers and for female workers
is much lower compared to male workers (Table 7).

TABLE - 7
WAGE RATE PER HOUR IN THE PERIPHERY (RUPEES)

	Male	Female	TOTAL
Migrant workers	1.38	0.71	1.19
Non-migrant workers	1.64	0.49	1.41
TOTAL	1.50	0.63	1.28

In the core sector the wage rate per hour is obviously higher. The average minimum wage rate per hour in this sector is Rs. 2.04 in the Group A or unskilled category of workers in the engineering, jute, cotton, glass, rubber and paper industries, Rs. 2.27 in Group B or semi-skilled category, and Rs. 2.39 in the Group C or skilled category (Table 8).

TABLE - 8

WAGE-RATE PER HOUR IN THE CORE (RUPEES)

Name of Industry	Wage Rate (Rupees) per hour in			
	Group A or Unskilled Category	Group B or Semi-skilled Category	Group C or Skilled Category	Average
Engineering	1.97	3.13	3.31	2.80
Jute	2.84	2.84	2.84	2.84
Cotton	2.77	2.77	2.77	2.77
Glass	1.64	1.59	1.80	1.68
Paper	1.67	1.64	1.84	1.72
Rubber	1.66	1.63	1.74	1.68
AVERAGE	2.04	2.27	2.39	2.24

The average wage rate per hour for these industries in all categories of workers in the core sector works out to be Rs. 2.24 which is less than the average wage rate of Rs. 1.28 in the periphery. We, therefore, accept the hypothesis of unequal exchange between the core and the periphery. However, the case for the hypothesis can be strengthened by noting that for families surveyed in the two bustees there was an excess of purchases of commodities and services from the core over sales to the core. The import surplus was of the order of Rs. 3463 for migrants and Rs. 25,856 for non-migrants.

Since we arrived at these figures on the basis of our random sample, it appears to be a safe guess that the overall deficit in the balance of trade for the two bustees taken together would be about Rs. 3 lakhs. We must note that these figures exclude the direct sale of labour services to the core (i.e., bustee-dwellers performing wage labour in the core). If we include these sales in the calculations, the non-migrants still seem to have an import surplus of about Rs. 4,717. The migrants, however, would then have an export surplus. But our theoretical discussion (in Section 2) makes it clear that the theory of unequal exchange applies to merchandise trade only. A bustee-dweller engaged by the core would always get the benefit of the core-sector wage rate. Direct labour is subjected to exploitation through more traditional means : they are paid less than the value created by them. This latter type of exploitation is not the focus of the present study.

There is also some evidence of discriminatory pricing practices on the part of the core. So far as most of the articles of consumption are concerned the data did not reveal any significant price differential [20] Even here, however, there are reasons for suspecting an unfavourable deal for the periphery. As expected, most of the constituents of the periphery have sub-normal volumes of consumption. A peripheral family inevitably buys a much smaller number of physical units of the articles of a consumption than a family in the core. This was clearly seen in the responses to the questionnaire and also conforms to intuition [21] Now, it is well-known that there are substantial economies of scale in living expenses. Larger volumes fetch greater discounts. Small purchasers are, therefore, at a disadvantage. This factor will be hidden if the price data are quoted in, say,

per kilogram terms but actual purchases are, say, in amounts
of 50 grams. Thus there are grounds for suspecting discrimina-
tory pricing in the case of articles of consumption. Although
these articles are sold in the periphery through small shops
the prices are determined largely by the wholesalers who are
not constituents of the periphery. The small shop-owner
ekes out a bare existence. Though he places his orders for
quantities that seem to be bulky, he can not compete with
comparable shop-owners in the core. There is, therefore, some
indirect evidence of price discrimination by core sector
wholesalers.

In case of housing, the evidence of discrimination is
more direct. In most cases landlords in the bustees are
absentee landlords - the so-called 'thika tenants'. Thus it
is the constituents of the core who determine the rate of
return on housing in the core and in the periphery. In the
periphery it was seen that on an average a 'Kutcha' dwelling
unit measuring 100 square feet cost Rs. 1,025 while it
fetched a monthly rent of Rs. 25. The annual rate of return is
thus about 30 per cent. In the formal sector the rate of
rental return on housing is stated to be about 14 per cent.
Therefore, there is evidence of substantial discrimination
in the price of housing against the periphery. All told,
therefore, the core-periphery unequal exchange hypothesis
appears to be quite strongly supported by the data thrown up
by the survey.

(vi) Our sixth hypothesis was that the open
unemployment rate is higher among the local persons than among
the migrants. We have calculated the open unemployment rate at
two levels - one relative to total population and another
relative to total labour force in the working age group. Our
survey gives the results as shown in Table 9 .

TABLE - 9

OPEN UNEMPLOYMENT RATE AMONG LOCAL AND MIGRANT PERSONS

Type of Families	Open unemployment rate (Percentage)			
	Relative to population			Relative to labour force
	Male	Female	Total	
Local	9.18	9.13	9.15	14.01
Migrants	2.69	7.51	5.01	8.07

      The open unemployment rate relative to total population and to both male and female population as well as relative to total labour force in the working age group (15-59 years) is seen to be higher among local (non-migrant) persons than among the migrants. While the said rate relative to total population is 9.15 per cent among locals, the same is 5.01 among migrants. The said rate relative to labour force in the working age group is 14.01 among locals while that is 8.07 among migrants.

      (vii) Our seventh hypothesis stated that the proportions of the involuntary part-time workers, the discouraged workers and the disguised unemployed are higher among the migrants than among the local workers. In our final survey the number of the discouraged workers is found to be nil. The discouraged workers have been defined as those who are unemployed but do not look for jobs because the prevailing labour (employment) conditions in the labour market discourage them to do so. We have tried to make an estimate of disguised unemployment from our available data. We have had data on the actual working hours per day and the daily income of each worker. We have estimated the number of hours for which the

worker should work to earn the same daily income had he
earned the standard wage rate which was prevailing in the
core sector. We have deducted this standard working hours
from the actual working hours and the surplus hours have been
defined as the volume of disguised unemployment. So defined
the disguised unemployment has been estimated to be 628
man-hours among the migrants. We have calculated the percentage
of this disguised unemployed hours to total working hours
both for migrants and non-migrants. It came out to be 44.4
for migrants and 34.1 among non-migrants. The percentage of
disguised unemployed hours to total labour force hours in the
working age-group works to be 32.44 among migrants and 18.13
among local workers. This indicates that the disguised
unemployment rate is higher among the migrants than among
the non-migrants.

As before, we have calculated the proportion of
involuntary part-time workers at two levels - one in relation
to total population and another in relation to total labour
force in the working age-group. The proportions of the involun-
tary part-time workers are also observed to be higher among
the migrants than among the local workers (Table 10).

TABLE - 10

PROPORTIONS OF INVOLUNTARY PART-TIME AND DISGUISED
UNEMPLOYED WORKERS AMONG THE MIGRANTS AND LOCAL
WORKERS (PER CENT)

Types of Families	Proportions of involuntary part-time workers				Proportion of the disguised unemployed hours	
	To Total Population			To Total Labour force	To Actual Working Hours	To Labour Force Hours
	Male	Female	Total			
Migrants	0.81	2.31	1.53	2.47	44.40	32.44
Locals	0.76	1.68	1.23	1.89	34.10	18.33

The proportion of involuntary part-time workers
to total population among migrant workers is 1.53 per cent
which is higher than 1.23 per cent which is the said proportion
among local workers. The said proportion to total labour
force is 2.47 per cent among the migrant workers while that
is 1.89 per cent among the local workers. The proportions
of involuntary part-time workers and disguised unemployment
are observed to be higher among the migrants than among the
local workers.

As is shown in the table in case of disguised
unemployed the difference between the estimates for the
migrants and the locals is of the order of about 78 per cent.
In case of involuntary part-time employment there can be some
doubt whether the difference is significant in the statistical
sense. For male workers the difference here is of the order
of about 6.5 per cent. For female workers it was about 40
per cent while for both male and female workers taken together
it was about 20 per cent. From these percentage figures we
form the opinion that the hypothesis in question is accepted
so far as disguised unemployment and involuntary part-time
unemployment is concerned since the hypothesis was stated
for male and female workers taken together.

So far as the percentage of discouraged workers was
concerned, however, the hypothesis is rejected since, as
already stated, this rate was found to be zero for both
migrants and non-migrants.

(viii) Our next hypothesis has been that the
subemployment rate is higher in the periphery than in the
core. The subemployment rate is defined to be the sum of open
unemployment, part-time involuntary unemployment, disguised
and discouraged unemployment. Since discouraged workers are

zero in number, we add up the first three rates to arrive at
the subemployment rate (Table 11).

TABLE - 11
SUBEMPLOYMENT RATE IN THE PERIPHERY (RELATIVE TO LABOUR FORCE) (PER CENT)

Type of families	Open unemployment rate	Involuntary part-time unemployment rate	Disguised unemployment rate	Total
Migrant	8.07	2.47	32.44	42.98
Non-migrant	9.15	1.89	18.33	29.37
TOTAL	8.63	2.16	25.08	35.87

The total subemployment rate relative to total
labour force is estimated to be 35.87 per cent in the
periphery, 42.98 per cent among migrants and 29.37 per cent
among non-migrants or locals.

Now, a refutation of the hypothesis would involve
comparing the figures of Table 11 with corresponding figures
for the core. Estimates of core sector subemployment rate
are, however, unavailable.

However, on the basis of the data collected in NSS
32nd round (1977 - '78), the Planning Commission has arrived
on some unemployment estimates for 1980. According to this
estimates if we use the 'daily status' concept of employment
(where a person is considered to be employed if he worked for
four hours or more during a day in the 7-day period preceding
the time when he is interviewed), 19.17 per cent of the
Indian labour force (people aged between 15 and 59 years)
was unemployed in March, 1980. Note that this unemployment
figure includes all persons who were, for one reason or

another, actually working less than 4 hours a day, (so that
the concept comes close to our open plus part-time unemployment
and 'discouragement'). However, this is an all-India
estimate. Thus, even this figure of 19.17 has an upward
bias for our purposes. If we exclude the rural sector as well
as the urban peripheral sector in order to arrive at an
estimate of the core sector subemployment rate, it would
undoubtedly be much lower. Although there is no mention of
disguised unemployment here, it is obvious from our method
of calculating the rate of disguised unemployment in the
periphery that this rate can not turn out to be positive in
the core if core sector workers are paid legal wage rates.
On the whole, therefore, we decide to accept the hypothesis.

(ix) It has been hypothesised that workers employed
by the core have positive savings but these are not utilised
productively. To test this hypothesis we have calculated the
volume of savings of the working families in the core sector.
But in the absence of data on utilisation of saving, we
have tried to arrive at an approximation by means of calcula-
tion of the percentage of productive assets in total assets
which are financed from own sources or past savings. It has
been observed that more than 60 per cent of savings of the
workers engaged in the core was spent on unproductive
assets (Table 12).

TABLE - 12

UTILISATION OF SAVING OF THE BUSTEE WORKERS ENGAGED IN THE CORE

Type of families	Saving Ratio	Percentage of unproductive assets to total assets finan-ced from own source
Migrant	18.5	73.5
Non-migrant	6.4	61.2
TOTAL	14.5	64.42

The workers in the core have positive saving ratio which is higher than 14 per cent but most of these savings are utilised unproductively.

(x) Another related hypothesis has been that the local workers in the periphery have negligible savings. This hypothesis is tested on the basis of saving-ratio (i.e., the ratio of saving to total income) of the local (i.e., non-migrant) workers. It is estimated that the said ratio is 6.40 per cent which is definitely far above zero. This indicates that the saving ratio of the local workers in the periphery is not negligible.

(xi) It has been hypothesised that the migrant workers send most of their savings outside the city of Calcutta. This has been tested on the basis of data on total amount remitted relative to total savings or surplus generated out of income. It has been worked out that the percentage of remittances to total savings is 89.09 in respect of migrant families.

(xii) The last hypothesis has been that the periphery is serviced largely by the informal financial market. For the purpose of this hypothesis, banks, other financial institutions, provident funds etc. (in other words loan sources which are legally approved as such) were considered to form the formal financial market. Other loan sources constituted the informal financial market. This hypothesis may be tested at two levels - number of loans and amount of loans. We observe that the percentage of the number as well as the amount of loans financed by the unorganised sources is very high (Table 13).

TABLE - 13

IMPORTANCE OF INFORMAL FINANCIAL MARKET
IN THE PERIPHERY

Types of family	Percentage of number of loans financed by informal financial market	Percentage of the amount of loans financed by informal financial market
Migrant	66.66	49.20
Non-migrant	78.12	80.09
TOTAL	71.43	69.14

More than 71 per cent of the number of loans is financed by informal financial market. About 70 per cent of the amount of loan is financed by this source.

In summary, therefore, results confirm in most cases our preconceived notions about the working of the urban peripheral economy. There is, indeed, a rather sharp distinction between the core and the periphery of the economy. These two parts of the urban system do not live their separate existence; they are quite intimately linked with one another through trading activities. Moreover, terms of this trade does not seem to have been very fairly determined. So far as the subemployment rate is concerned there is a substantive difference between the core and the periphery. Also, most of the popular notions about the other characteristics of the informal labour market were confirmed with one important exception. The data do not support the view that the periphery has a negligible rate of saving. It should be noted, however, that result actually strengthens the present analysis. In the terminology used in Sau [46] we can say that the unfair nature of the core-periphery trade makes

the periphery an 'underdeveloped' rather than an 'undeveloped'
economy, the technical difference between the two being that
while in an undeveloped economy there is no growth because
there is no investible surplus, in an underdeveloped economy
there is a surplus but growth is still absent because this
surplus is siphoned away to its more developed (and still
developing) trading partner.

Scientific Ground of the Tests

Before concluding this section we note that most
of our tests of hypotheses are based on a simple comparison
of percentage figures. However, although no sophisticated
test statistic is used, our tests are actually quite rigorous.
It is a basic result in the theory of statistical inference
that if sampling is random, sample mean and the sample propor-
tion are unbiassed estimators of true population mean and popu-
lation proportions irrespective of the population distribution.
If the population distribution is not normal and if the
sample is small in size they may not be minimum variance
unbiased estimators (MVUE) i.e., among different possible
unbiased estimators they may not have the smallest variance.
However, even this caveat does not apply in our case. In
most cases our underlying population distribution is of the
binomial type. Consider, for instance, the 'experiment' of
approaching a bustee-dweller and enquiring whether he is
unemployed or not. Clearly, there are only two 'outcomes'
of this experiment : either he is unemployed or he is not. If
we now repeat this experiment for all the members of the
sample and assume that the probability of the event that a
particular member is unemployed does not affect the
probability of the event that another member is unemployed,
we get what is known, in statistics, as a series of Bernoullian
trials. The proportion of unemployed person in the sample

will be in statistical terminology, the proportion of
'successes' in this series of trials. The population
distribution of the number of successes in a series of such
trials is given by the binomial distribution. Now, another
result in inference theory states that in a set of Bernoullian
trials the sample proportion of 'successes' is an MVUE of
the population proportion. Moreover, it is a consistent
and efficient estimator of this parameter. It can
also be shown that it is 'sufficient' in the sense in which
this term is used by R.A. Fisher. Finally, it is a maximum
likelihood estimator. At this point we can also apply the
result that in a large sample the many non-normal distributions
can be taken to be approximately normal. By conventional
standards our sample size can be adjudged to be large. The
probability distributions of the different variables in
our case can, therefore, be taken to be nearly normal.
We can then apply the result that the sample mean will be
an MVUE of the true mean in the population. Again it will
also be consistent and efficient as well as sufficient.
Our 'simple' test procedure, thus, appears to be quite
securely grounded in statistical theory. (For proofs of
the various statistical theorems referred to above and their
further elaboration see, for instance, Mood and Graybill[41],
Hogg and Craig[29].

5. SOME ADDITIONAL DATA AND RESULTS

We had outlined earlier (Section 3) the broad
items on which information was to be collected for our
project. Since we have gathered data on these items in our
survey, we have tried to get some additional results. These
results are presented in this section. Admittedly, it is
somewhat loosely connected to our main line of argument.

Mode of Employment and Work Conditions

(a) We distinguished between diffèrent modes of employment, namely, family labour, wage labour and self-employment and collected data on the number of workers engaged in those modes. It is observed that wage labour constitutes the highest percentage of total workers, followed by self-employed workers. Family labour constitutes a meagre percentage (Table 14).

TABLE - 14

PERCENTAGES OF WAGE LABOUR, SELF-EMPLOYED
AND FAMILY LABOUR TO TOTAL WORKERS

Type of Family	Percentage of Workers as					
	Wage Labour			Self-employed		
	Hindu	Muslim	Total	Hindu	Muslim	Total
Migrant	38.82	60.00	58.96	35.95	35.00	35.84
Non-migrant	60.00	34.78	55.79	58.26	65.22	42.75
TOTAL	59.33	46.51	57.56	36.94	51.16	38.91

Type of Family	Percentage of Workers as		
	Family Labour		
	Hindu	Muslim	Total
Migrant	5.88	0	5.20
Non-migrant	1.74	0	1.44
TOTAL	4.10	0	3.54

Wage labours constitute 57.56 per cent of total workers and self-employed workers 38.71 per cent while family labour only 3.54 per cent, while in the self-employed category Muslim workers constitute the higher percentage than Hindu workers. The percentage of wage labourers is higher among the Hindu workers.

(b) We have also distinguished workers engaged in producing 'domestic' products and those engaged in 'export' products. 'Export' here, of course, means export to the core. No international trade is involved. It is observed that workers engaged in export industries constitute the higher percentage than those in domestic products both among the migrant and non-migrant workers (Table 15).

TABLE - 15
PERCENTAGE OF WORKERS ENGAGED IN DOMESTIC AND EXPORT INDUSTRIES

Types of family	Percentage of Workers Engaged in					
	Domestic Products			Export Products		
	Hindu	Muslim	Total	Hindu	Muslim	Total
Migrant	18.30	5.00	16.76	75.85	86.00	75.14
Non-migrant	30.43	47.83	33.33	53.04	30.43	49.27
TOTAL	23.51	27.90	24.12	64.93	55.81	63.67

The percentage of workers engaged in export products is 63.67 while that in domestic products is 24.12. It is observed that most of the migrant workers among Muslims are engaged in export industries.

(c) While the vast majority of wage labourers (about 79 per cent) do not have formal job contracts, (see Table 4 in the previous section), most of the wage labourers are working under employers who are registered (Table 16).

TABLE - 16
PERCENTAGE OF WAGE LABOURERS UNDER REGISTERED EMPLOYERS

Type of Family	Percentage of wage labourers under registered employers
Migrant	70.48
Non-migrant	76.62
TOTAL	73.08

More than 70 per cent of the migrant wage labourers work under registered employers. The said percentage is higher (76.62) in case of non-migrant workers.

(d) While wage rate is generally low for both male and female workers (see Table 17) the average duration of work is, on the average, relatively high (Table 17). . . -
(Table 17).

AVERAGE DURATION OF WORK (HOURS OF ALL WORKERS)

Type of Family	Average duration of work (hours) per day	
	Male	Female
Migrant	9.09	5.92
Non-migrant	8.66	6.03
TOTAL	8.89	5.96

The male workers do, on the average, about 9 hours of work per day while the female workers, most of whom are part-time workers, do about 6 hours per day.

Non-wage benefits which the workers enjoy have been classified into bonus, provident fund, over-time and other monetary and non-monetary benefits as well as social security and holidays. But it is observed that a small percentage of workers enjoy all these non-wage benefits (Table 18).

TABLE - 18

PERCENTAGE OF WORKERS ENJOYING NON-WAGE BENEFITS

Type of Family	Percentage of workers enjoying					
	Bonus	Provident Fund	Overtime	Other Monetary and non-monetary benefits	Social Securi-to	Holidays
Migrant	10.98	11.56	3.47	9.83	5.20	19.08
Non-migrant	11.59	9.42	6.52	14.49	7.24	17.39
Total	11.25	10.61	4.82	11.90	6.11	18.33

Less than 12 per cent of workers in the periphery enjoy bonus, providend fund, over-time and other monetary and non-monetary benefits, and less than 7 per cent the social security. Less than 19 per cent of workers enjoy paid holidays. Thus it is observed that more than 80 per cent of workers are deprived of any kind of non-wage and non-monetary benefits.

It is not that workers are not to incur monetary costs in connection with their job. Neither are their jobs free from risks and hazards. The percentages of workers who face the hazards and whose conveyance and other monetary costs are positive are shown in Table 19.

On the average more than 11 per cent of total workers are prove to risks and hazards (Table 19) but it was earlier observed (in Table 18) that only 6 per cent of them enjoy social security benefits. More than 8 per cent of the workers incur conveyance cost while more than 3 per cent other monetary costs.

TABLE - 19

PERCENTAGE OF WORKERS PRONE TO RISKS AND HAZARDS AND INCURRING CONVEYANCE AND OTHER MONETARY COSTS

Types of Family	Percentage of Workers		
	Prone to risks	Incurring	
		Conveyance	Other Monetary costs
Migrant	8.67	8.09	4.62
Non-migrant	14.49	9.42	2.17
TOTAL	11.25	8.68	3.54

Nature of Clientels

It has been observed in Table 14 that about 39 per cent of total workers are self-employed. The clients of these self-employed workers have been classified into two broad categories, local and outsider. While in the case of migrant self-employed workers, most of clients are outsiders, in the case of non-migrants the situation is quite reverse (Table 20).

TABLE - 20

PERCENTAGE OF SELF-EMPLOYED WORKERS WITH LOCAL AND OUTSIDE CLIENTS

Type of Family	Percentage of Self-employed Workers - where Clients are	
	Local	Outsider
Migrant	33.82	66.18
Non-migrant	75.41	24.59
TOTAL	53.49	46.51

While more than 66 per cent of the migrant self-employed workers cater to outsider clients, in the case of the non-migrant self-employed, the said percentage is only 24.59. This conforms to out earlier finding that the migrant workers contribute larger to the export trade to the core than the non-migrant ones (See Table 3).

However, on the average, the percentage of self-employed workers whose clients are outsider is 46.51 which is less than that of those whose clients are local (53.49).

Prices of Factors and Products (Paid and Charged)

The periphery generally exports labour and other services and some manufactured products to the core and imports manufactured household products from it. Besides this, it purchases capital mostly from unorganised sources. Thus the prices paid by the periphery are mainly for household articles and for capital received. On the other hand, the prices charged by it concern the labour services and some industry products supplied. The prices of products and factors, paid and charged are noted in Table 21. The relevant data refer to those applicable for non-migrant families in both Nandibagan and Pilkhana bustees.

The average price charged by the periphery for labour services is Rs. 1.28 for all males and females, migrants and non-migrants. The rate of interest paid by the periphery varies between Rs. 28.13 to Rs. 29.52 per cent per annum.

TABLE - 21

PRODUCTS' PRICES PAID AND CHARGED BY THE PERIPHERY

Serial No. and Products	Unit of measurement	Products Prices Paid	
		Open market (Rs.)	Ration shop (Rs.)
1. Cereals			
a) Rice	Kg.	4.50	2.41
b) Wheat	Kg.	3.00	1.91
2. Pulses			
a) Arhar	Kg.	6.50	
b) Musur	Kg.	5.50	
c) Mug	Kg.	6.00	-
d) Chola	Kg.	8.00	-
3. Fuel			
a) Coal (dust)	Kg.	0.70	-
b) Kerosin	Litre	2.00	-
c) Cowdung cake	100	3.00	-
4. Sugar	Kg.	6.00	3.75
5. Oil	Kg.	21.00	-
6. Soap			
a) Washing Soap	Piece	2.00	-
b) Sodal	Kg.	2.00	-
7. Clothing			
a) Shirt	Piece	40.00	-
b) Lungi	Piece	15.00	-

Income, Saving, Indebtedness, Etc.

(i) Income and Indebtedness

Total income of the sample families (86 migrant and 74 non-migrant) is composed of four different types of income; wages ,interest, rent and profit. Total income of the migrant families is about the same for the non-migrant

families, though the per capita income is higher for the
migrant families and the per family income is higher for
the non-migrant families. These differences are accounted
for by the average size of the migrant and the non-migrant
families (Table 22).

TABLE - 22

TOTAL MONTHLY INCOME, PERCAPITA INCOME, PER FAMILY INCOME
AND AVERAGE FAMILY SIZE IN THE PERIPHERY

Type of Family	Total Monthly Income (Rs.)	Population	No. of families	Per Capita income (Rs)	Per family income (Rs.)	Average size of family
Migrant	51,102	387	86	132.05	594.21	4.5
Non-migrant	50,817	404	74	125.78	696.72	5.5
TOTAL	101,919	791	160	128.85	636.99	4.9

Total income of the 160 sample families constia-
ting of 791 members is Rs. 1,01,919 - the average income
of the members being Rs. 128.65 and that of the families
Rs. 636.99. The total income of the migrant families is
Rs. 51,102 which is about the same as Rs. 50,817 - the
total income of the non-migrant families. The average size
of the migrant families being 4.5 which is less than 5.5
- the average size for non-migrant families, the per capita
income of the migrant members is Rs. 132.05 which is higher
than Rs. 125.78 - the per capita income of the non-migrant
families. The per family income of the non-migrant
families is Rs. 696.72 which is higher than that of the
non-migrant families on account of the larger size of the
families in the non-migrant group.

The indebtedness of the periphery may now be looked into. Indebtedness is a stock concept which means the accumulated loans at a certain point of time. In our final survey we have collected data on loans over years of the migrant and non-migrant families and these loans figures have been added to arrive at the indebtedness (total outstanding loans) figure. The total indebtedness as a percentage of income of the periphery is seen to be very high (Table 23).

TABLE - 23

INDEBTEDNESS AND INCOME OF THE PERIPHERY

Type of family	Total indebtedness (Rs.)	Total Income (Rs.)	Indebtedness - Income Ratio
Migrant	36,140	50,969	70.91
Non-migrant	65,810	50,817	129.50
TOTAL	1,01,950	1,01,786	100.16

The said ratio for the migrant families is as high as 70.91 per cent while the said percentage for the non-migrant families is 129.50, the total percentage for the periphery being 100.16.

(ii) Loans (purpose, source, etc.)

We distinguished between two purposes of loans in the periphery - productive and unproductive. The productive loans consist of those utilised for investment while the unproductive loans refer those which are utilised for purchasing consumer durables and for such purposes as footing the bill for social gatherings etc. It is observed that while in the periphery the loan propensity is very high, the said loans are mostly utilised for unproductive purposes. This has been studies in two respects -

the amount of loans and the number of loans. The percentage of loans spent for unproductive purposes is very high in respect of the amount and the number of loans (Table 24).

TABLE - 24

PURPOSES OF LOANS IN THE PERIPHERY

| Type of Family | Percentages of Loans spent for | | | |
| | Productive purpose | | Unproductive purpose | |
	Amount	Number	Amount	Number
Migrant	19.37	33.34	80.63	66.66
Non-migrant	45.43	25.00	54.56	75.00
TOTAL	35.80	28.81	64.20	71.19

The percentage of the amount of loans spent on unproductive purposes is 80.63 for migrant families and 54.56 for non-migrant families while the total percentage is 64.20. Similarly, the percentage of the number of loans spent on these unproductive purposes is 66.66 for migrants and 75.00 for non-migrant families, the total percentage being 71.19.

(iii) Saving and Utilisation of Savings (hoarding, investment, remittances, etc.)

We have collected data on the volume of the surplus of income over expenditure and this has been designated as saving. Out of 160 families surveyed, 89 families have positive savings and most of the families have saving of Rs. 100 or below (Table 25).

TABLE - 25

FREQUENCY DISTRIBUTION OF ANNUAL SAVING IN THE PERIPHERY

Saving Class (Rs.)	Number of Families	
	Migrant	Non-migrant
1 - 100	24 (47.0)	30 (78.9)
101 - 200	14 (27.5)	3 (7.9)
201 - 300	5 (9.8)	3 (7.9)
301 and above	8 (15.7)	2 (5.3)
TOTAL	51 (100)	38 (100)

The average annual saving for the migrant families is Rs. 183.71 and that for the non-migrant families is Rs. 97.21.

The saving-ratio in the periphery may now be estimated. The results in this respect are shown in Table 26.

TABLE - 26

SAVING RATIO IN THE PERIPHERY

Type of Family	Saving (Rs.)	Income (Rs.)	Saving-ratio (Rs.)
Migrant	9,369	50,969	18.38
Non-migrant	3,694	50,817	7.27
TOTAL	13,063	1,01,786	12.85

The saving ratio for the migrant families is 18.36 per cent, which is more than 7.27 per cent - the saving ratio for the non-migrant families. The average saving ratio in the periphery is 12.83 per cent.

Additional Information on Workers' Characteristics

(i) Employment Status

As regards employment status we have distinguished between full time workers and part-time workers. One important finding is that the percentage of part-time workers to total workers is higher among the migrants than among the non-migrants (Table 27).

TABLE - 27

PERCENTAGE OF FULL-TIME AND PART-TIME WORKERS

Type of Family	Percentage of Workers in					
	Full-time Work			Part-time Work		
	Male	Female	Total	Male	Female	Total
Migrant	95.12	24.00	74.56	4.88	76.00	25.44
Non-Migrant	95.44	39.29	84.05	4.55	60.71	15.94
TOTAL	95.28	29.49	78.78	4.72	70.51	21.22

While 25.44 per cent of the total workers is part-timer among the migrants, the said percentage among non-migrant workers is 15.94.

Among the female workers particularly, the percentage of part-time workers is higher in the group of migrants than in the group of non-migrants. The said percentage is 76.00 among migrants while that is 60.71 among the non-migrants. On the other hand, the percentage of female full-time workers among the non-migrants is 39.29 which is higher than - the percentage among the migrants. Another striking feature is that the percentage of male full-time and male part-time workers is almost the same among the migrants and the non-migrants.

We may also distinguish between temporary workers
and permanent workers on both male and female characteristics.
One prominent feature is that the percentage of temporary
workers is higher among the migrant than among the non-
migrant workers (Table 28).

TABLE - 28
PERCENTAGE OF TEMPORARY AND PERMANENT WORKERS

| Type of Family | Percentage of workers as | | | | | |
| | Temporary | | | Permanent | | |
	Male	Female	Total	Male	Female	Total
Migrant	33.33	74.00	45.08	66.67	26.00	54.92
Non-migrant	29.09	78.57	38.40	70.82	21.43	61.59
TOTAL	31.33	75.64	42.12	68.67	24.36	57.88

While the percentage of temporary workers among
the migrant workers is 45.08, the said percentage among
the non-migrant workers is 38.40, the average percentage
for both migrants and non-migrants being 43.12. This
percentage is particularly higher among the male workers
in the category of migrant workers - 33.33 as against
29.09 in the non-migrant group.

The percentage of permanent workers to total
workers is 57.88 which is higher than 42.12 - the percentage
of temporary workers to total workers. This is true both
for migrant and non-migrant workers; the former percentage
for migrant workers being 54.92 and for non-migrant workers
being 61.59. Most of the male workers are engaged in
permanent work, the said percentage being 68.67 (66.67
for migrant workers and 70.82 for non-migrant workers),
while most of the female workers are engaged in temporary
work, the said percentage being 75.64 (74.00 for migrant
workers and 78.57 for non-migrant workers).

It is important to distinguish between workers engaged in private sector, public sector, joint sector and family enterprise. It is observed that the percentage of workers engaged in private sector and in public sector are higher among the migrant workers. While those in family enterprise and joint sector are higher among the non-migrant workers (Table 29).

TABLE - 29

PERCENTAGES OF WORKERS IN PRIVATE, PUBLIC AND
JOINT SECTORS AND FAMILY ENTERPRISES

Type of Family	Percentage of Workers engaged in			
	Private Sector	Public Sector	Joint Sector	Family Enterprise
Migrant	45.66	12.14	1.16	41.04
Non-migrant	44.93	7.97	2.89	44.21
TOTAL	45.34	10.69	1.93	42.04

The percentage of workers engaged in private sector and public sector among migrant workers are 45.66 and 12.14 respectively, as against 44.93 and 7.97 among non-migrant workers. On the other hand, the percentages of workers engaged in joint sector and family enterprises among non-migrant are respectively 2.89 and 44.21, which are higher than 1.16 and 41.04 - the respective percentages for migrant workers.

Most of the workers are engaged in private sector the percentage being 45.34 (45.66 for migrant workers and 44.93 for non-migrant workers). This is followed by family enterprises where the percentage of workers is 42.04 - 41.04 for migrant and 44.21 for

non-migrant workers. The percentages of workers engaged
in public sector is only 10.61 and that in joint sector
is 1.93.

(ii)   We have seen earlier that more than 20 per cent
of the workers are part-time workers. It has been observed
that all the part-time workers are involuntary part-timers.
That is, no voluntary part-timer is found in our study.

(iii)   We have already stated in the previous section
that about 40 per cent of the total labour force is
unemployed. But in our survey we did not come across any
discouraged worker - one who feels disillusioned and
does not seek employment on account of the prevailing
conditions in the labour market.

Conventional Data

Hours of Work -

(i)   Workers in the periphery work
generally higher hours of work. It will be evident from
Table 30.

More than 65 per cent of the full-time migrant
workers work more than 8 hours per day. Average work hours
per day of the full-time migrant workers is 9.46 hrs. In
the case of non-migrant workers more than 54 per cent
of the full-timers do more than 8 hours' work. Average
work hours per day for them are 8.75 hrs.

It is also evident that 27.3 per cent of the
part-time migrant workers and 45.3 per cent of the non-
migrant part-time workers do more than 4 hours of work
per day. The average work hours for the migrant part-timers
is 4.41 and that for the non-migrant part-timers is 4.86.

(ii) Demographic Characteristics

The female-male ratio among those persons is shown

TABLE – 30

HOURS OF WORK IN THE PERIPHERY

Hours of Work	Hours of Work in the Periphery			
	Migrant		Non-migrant	
	Full-timer	Part-timer	Full-timer	Part-timer
3 – 4	–	32 (72.7)	–	12 (54.5)
5 – 6	–	12 (27.3)	–	10 (45.5)
7	1 (0.8)	–	2 (1.7)	–
8	43 (33.3)	–	51 (44.0)	–
9	7 (5.4)	–	2 (1.7)	–
10	65 (50.4)	–	52 (42.0)	–
11	–	–	2 (1.7)	–
12	13 (10.1)	–	7 (6.0)	–
14	–	–	1 (.9)	–
TOTAL	129 (100)	44 (100)	116 (100)	22 (100)

in Table 31. The average family size among non-migrants
is 5.5 which is higher than that (4.5) among migrants.

TABLE – 31

SEX BREAKDOWN OF POPULATION IN THE SAMPLE HOUSEHOLDS

Sex of Population	Migrant	Non-migrants	Total
Female	188 (486)	208 (515)	396 (501)
Male	199 (514)	196 (485)	395 (499)
TOTAL	387 (1000)	404 (1000)	791 (1000)

Note : Per thousand figures are given in parenthesis.

Among the total population the hindu population
is predominantly high. However, among the non-migrant
families, muslim population is higher than among the migrant
families. Also, female population is relatively high
among muslim population (Table 32).

TABLE - 32

HINDU - MUSLIM BREAK UP OF POPULATION

Religion	Migrant			Non-Migrant			Total
	Male	Female	Total	Male	Female	Total	
Hindu	186	173	359	165	171	336	695 (88)
Muslim	13	15	28	31	37	68	96 (12)
TOTAL	199	188	387	196	208	404	791 (100)

Percentage of literacy among migrants is higher
than that among non-migrants, and that among hindu population
and male population is higher compared to muslim and female
population respectively (Table 33).

TABLE - 33

PERCENTAGE OF LITERACY AMONG MIGRANTS, NON-MIGRANTS,
HINDUS AND MUSLIMS, AND MALES AND FEMALES

	Hindu	Muslim	Males	Females
Migrants	53.07	21.74	67.39	29.20
Non-migrants	47.91	36.76	58.67	34.13
Total Population	50.64	32.29	63.04	31.82

(iii) Some Other Economic Characteristics

Work pariticipation rate among migrants is higher than among non-migrants, and that among males is much higher than among females (Table 34).

TABLE - 34

WORK PARTICIPATION RATE AMONG MIGRANT AND NON-MIGRANT POPULATION AND AMONG MALE AND FEMALE POPULATION

	Males	Females	Total
Migrants	61.81	26.60	44.70
Non-migrants	56.12	13.46	34.15
Total Population	58.99	19.70	39.32

Average work participation rate is 39.32 per cent that is higher (44.70 per cent) among migrants than among non-migrants. The female participation rate is only 19.70 per cent and that is again higher among the migrants. The male participation rate is 58.99 per cent.

The work participation rate is higher among the muslim population than among the hindu population and it is true for both male and female segment of the population (Table 35).

TABLE - 35

WORK PARTICIPATION RATE AMONG HINDU AND MUSLIM POPULATION

	Males	Females	Total
Hindu	56.98	20.05	38.71
Muslim	77.27	28.85	51.10

The work participation rate among muslim population
is 51.10 per cent whiich is higher than 38.71 per cent the
hindu work participation rate. Among the muslim, the male
work participation rate is 77.27 per cent and the female
rate is 28.85 both of which are higher than the respective
rates among the hindu population.

Worker — non-worker ratio is higher among migrants
than among non-migrants in all sexes and, religion
conversely, the dependency ratio is higher(Table 36)
among non-migrants.

TABLE — 36
WORKERS — NON-WORKERS RATIO

Types of families	Hindu	Muslim	Male	Female	Total
Migrant	2:1	7:1	8.8:1	.8:1	2.2:1
Non-migrant	1.1:1	1.2:1	3.9:1	.3:1	1.1:1
TOTAL	1.5:1	2:1	5.5:1	0.4:1	1.5:1

We may be interested in distinguishing between
workers working in trading, industrial and service
enterprises. We observe that most of the wage workers
work in industrial enterprises (Table 37).

TABLE — 37
PERCENTAGE OF WAGE LABOURERS WORKING IN TRADING, INDUSTRIAL AND SERVICE ENTERPRISES

Type of Family	Percentage of Workers Working in		
	Trading Enterprises	Industrial Enterprises	Services Enterprises
Migrant	23.53	41.18	35.29
Non-migrant	10.39	53.25	36.36
TOTAL	17.88	46.37	35.75

Mode of recruitment : We collected data on workers recruited through advertisement and influential people. The influential people were distinguished into two groups: relatives and non-relatives. Data available represents the picture as shown in the Table 38.

TABLE - 38
PERCENTAGE OF WORKERS RECRUITED THROUGH ADVERTISEMENT AND INFLUENTIAL PEOPLE

Types of Family	Percentage of Workers recruited through			
	Advertisement	Relatives	Non-rela-tives	Total
Migrant	4.05	12.14	5.20	17.34
Non-migrant	2.17	5.78	1.16	6.94
TOTAL	3.22	10.00	3.54	13.54

The percentage of total workers recruited through influential people - relatives and non-relative - is 13.54. which is higher than that (3.22) through advertisement. Again, the percentage of workers recruited through influential relatives is higher (10.00) than through non-relative influential people, for which the said percentage share is 3.54.

6.   SUMMING-UP AND POLICY CONCLUSIONS
Summing Up

After having presented the data thrown up by our survey work we now have to take stock of the situation. The existing literature on the working of the urban economy in the less developed countries contains two principal strands of thought. One group of economists is of the view that there is no duality within the urban industrial

economy. The so-called informal sector is a part and parcel of the urban economy as a whole. The other group goes to the other extreme. They emphasise the 'putting out system' under which much of the economic activity in the bustees takes place. Since, under this system, the core sector supplies raw materials to the workers in the bustees and often buys up the products at pre-determined prices, this group tries to find non-capitalistic (if not actually feudalistic) relations of production in the informal sector. The second group is of the opinion that like a feudal system the informal sector suffers from a shortage of investible surplus. The bustee-dwellers who are fortunate enough to find wage employment in the core have positive savings but they use it unproductively. These people are, however, negligible in number. Among the rest, the non-migrant (or local) workers have negligible savings. The migrant workers, being more enterprising, do have some savings but they send most of it to their points of origin (to members of their families who 'stay back') The urban informal sector is, thus, a stagnant economy like villages in a feudal society.

We are of the opinion that both of these views are rather too extreme. We found evidence of quite sharp lines of distinction between the formal and the informal sectors. In the latter, the per capita income is significantly lower than the national average and, hence by implication, even lower than the average income in the core sector alone although there is no estimate of the last mentioned parameters. Moreover, we think that it is this comparison between average that is relevant. The Breman view [7] that the fact that some people in the informal sector earn more than some people in the formal sector is a decisive piece of evidence against the duality

hypothesis appears to us to be unacceptable.

We also found that the difference is deeper than just a matter of per capita income. Formal labour contracts are a rare phenomenon in the bustee economy. The description 'informal', therefore, seems to be quite applicable to this part of the urban economy. More importantly, the techniques of production are primitive in comparison to those prevalent in the formal sector. The hypothesis that there is a duality in the urban economy seems to be quite securely based on facts.

On the other hand, the view that the informal sector belongs to the pre-capitalistic genre seems to be erroneous. It is true that at one stage in the history of industrialisation in Calcutta and the surrounding regions there were severe restrictions on the mobility of labour. One hears stories of workers virtually being coerced into work contract (and into abiding by them) in the jute mills springing up on the two sides of the Ganges. But this was an era in the development of the urban economy as a whole and this era now belongs to history. Neither in the formal nor in the informal sectors is there such feudalistic restrictions on labour mobility today. Nobody, of course, claims to have observed such restrictions in the formal sector today. Our research project did not find any evidence of this phenomenon in the informal sector either. Also, contrary to popular belief, there was no evidence of important personal non-economic relations between the employers and employees in the informal sector. Strictly speaking, however, such personal relationships do not form an essential part of a definition

of feudalism so that their absence does not, by itself,
mean that the informal economy is non-feudalistic. More
important is the fact that it was our experience that
labour power has developed into a marketed commodity
in the bustees economy. Also, the 'economistic mentality'
seems to have taken a firm grip even on the informal sector :
everybody we interviewed seemed to think in the 'revenue-
minus-cost-equals-net benefit' way.

The informal sector, thus, was found to be a
capitalistic (though a backward capitalistic) economy.
Logically, therefore, the next question that arises is :
do these two capitalistic parts of the urban economy
largely live their own separate existences or are there
strong linkages between the two? Here the finding is that
the 'trade' between the formal and the informal sectors
constitutes a very important part of the economic activity
of the informal sector. The two sub-sectors of the urban
economy are quite closely linked. This was a crucial
step in our argument. From this we came to hold the view
that an analysis of the causes of economic backwardness
of the informal sector can not ignore the nature of its
trading relation with the formal in much the same way as
the causes of the lack of economic progress in a country
as a whole can not be completely analysed if the country
happens to have an 'open' economy but is assumed to be
'closed' in the economic theorist's model.

One school of international trade-theorists has
recently advanced the view that the trade between the
developed and the underdeveloped world takes the form of
an unequal exchange. It is this unequal exchange that
makes the Third World 'underdeveloped' rather than

'undeveloped' when these words are used in their technical
senses. An undeveloped economy is one where there is no
potential for growth since there is no investible surplus.
An underdeveloped economy is one where there is either
an actual or a potential surplus but which can not make
use of this surplus since it is siphoned off to the developed
world through the mechanism of unequal exchange.

The rest of our work on the research project
was guided by the question : is there a parallel between
this international version of the process of unequal
exchange and the nature of trade between the formal and
the informal sectors of an urban economy in a less developed
economy like India, The unequal exchange theory describes
the developed countries as the 'core' (or the 'centre')
of the world economy and the underdeveloped Third World
as the 'periphery'. The process of international
development is seen as one centripetal tendency of
transfer of vital investible resources from the periphery
to the core. We proceeded to test the hypothesis that the
formal sector of the urban economy is a core related to
the periphery of the informal sector in the way described
in unequal exchange theory. We used the terms 'core' and
'periphery' for the formal and the informal sectors. We
have not been absolutely original in drawing this comparison.
A group of labour economists in the advanced countries have
drawn this comparison within their own economics. For
example, it is held that within the U.S. economy the
'internal' labour market is a core served by the periphery
of the 'external' labour market. However, even if the
comparison has been meaningful in the U.S. economy, the
question remains as to how it would perform when applied
to the Indian context.

It turned out that, prima facie, the comparison
could be drawn. In the first place, the periphery even
in an urban area of a country like India is a capitalistic
economy.[22] Secondly, the periphery turned out to be
underdeveloped rather than undeveloped. It was found to
be rich in two of the most vital among economic resources
viz. manpower and investible funds. As a measure of the
excess manpower that is available, we applied the concept
of the subemployment, 'discouragement' from seeking
employment and disguised unemployment. Subemployment was
found to be substantial. In fact, measured in this way,
the excess supply of manpower turned out to be much
higher than what is indicated by standard statistics on
unemployment rates.[23]

Evidence was also gathered regarding the existence
of a surplus in the peripheral economy. The popular notion
of unproductive uses of savings was confirmed for the
case of those bustee-dwellers who worked in the core.
So far as other workers were concerned the notion that
non-migrant bustee-dwellers have negligible saving propen-
sities was contradicted by the evidence. These workers
were found to have a saving rate of 6 to 7 per cent. The
common belief that the migrant workers had a higher
saving propensity than the non-migrant worker was confirmed.

Thus there were grounds for forming the hypothesis
that the core-periphery trade is carried on along the lines
of unequal exchange. This crucial hypothesis was later
accepted in the light of the data generated by the survey.

Policy Formulation

We now come to the question of the policy conclu-
sions that may be derived from our study. If an economic
system (whether a country as a whole or the microcosm of a
bustee economy) has an actual or a potential surplus which
could potentially be invested and yet the system is found
to be economically stagnant, the question that arises is :
What is happening to the surplus? The answer that the
unequal exchange theory provides is : the surplus is
siphoned off to the dominant trade partner through the
process of unequal exchange. There obviously is a second
way in which the surplus can be used : it can be remitted
to out of the system.

In our survey it was found that the importance of
the proportion in which investible surplus can be remitted
out varied significantly between the cases of migrant and
non-migrant workers. In case of non-migrant workers there
was no evidence of significant remittances outside the
system. Absence of economic growth (and, by implication,
absence of investment) thus meant an excess of saving over
investment. In terms of conventional national income
accounting this should have been reflected in a balance
of payments surplus.[24] We have seen however, that the non-
migrant families in the bustees, taken as a group, have
a net deficit both in the balance of merchandise trade
and in the overall balance of payments. Where, then is
the surplus going? In the light of the data of our survey
we come to the conclusions that the surplus is being
drained off to the core by the process of unequal exchange.

So far as the migrant workers are concerned,
however, there is a positive balance of payments surplus

(though a balance of _trade_ deficit). This, of course,
does not nullify our finding that even the migrant
workers are locked in a relation of unequal exchange with
the core. Recall that unequal exchange can take place
irrespective of whether there is deficit or surplus in
the balance of payments. But here a part of the responsi-
bility for the observed economic stagnation may be borne
by outward remittances of savings. So far as the migrant
workers are concerned, unequal exchange is not _solely_
responsible for the stagnation. To an extent the absence
of profitable investment opportunities or the existence
of other reasons behind the outward remittance of savings
is also to blame.

Accordingly, the success of policies for the
development of migrant worker bustees may differ somewhat
from that for non-migrant bustees. In the case of non-
migrants the only way out of the stagnation is to make
the pricing process less unfavourable for the bustees.
This, of course, is easier said than done. However, it
does point toward certain well-defined lines of action.
In the first place, the severity of the problem can be
substantially reduced by tackling the cases of unfair
pricing. The _abolition of core-sector ownership of the_
peripheral dwelling units has to be done away with.
The recent governmental attempts at doing away with the
'thika tenancy' system is a step in the right direction.
The practice of charging higher prices per unit for
smaller volumes of purchases can be met by the formation
of _consumers' cooperatives_. These measures would remove
the secondary rounds of exploitation without touching the
basic process of unequal exchange. A _second_ line of
attack on the problem would be to try to raise the wage rate
in the periphery. It may be recalled that the mathematical
model of unequal exchange is built on the assumption of
a wage differential. The central theme in the action

plan against unequal exchange must, therefore, centre on this programme.

Our findings also imply that many of the conventional ways of increasing the wage rate would be useless in the present context. One conventional approach to the problem sees it as one of increasing the standard of living of the peripheral workers and urges various private and public charity programmes to supplement the wages received by the workers from gainful employment. A second approach emphasises the market imperfections and suggests measures which would make the labour market work more perfectly. Extending the coverage of employment exchanges, setting up 'Placement bureaus' etc. would, by making information flow more freely, help in attaining more favourable conditions for the workers. A third approach stresses the need for increasing the productivity of workers. Various types of <u>labour</u> training programmes and the spread of general education would raise the marginal productivity of labour at any given level of employment and, hence, the wage rate.

The findings, however, do not lead us to be enthusiastic about any of these measures. The 'humanitarian aid' is plainly a stopgap measure quite similar to temporary foreign aid that covers the balance of payments deficit of a country. It is clearly not a substantive solution. Making the labour market more perfect would not help either. The root of the problem is unequal exchange. The non-equivalence of the exchange is not based on market imperfections. Even if the labour market was perfectly competitive to begin with, the core-periphery exchange would have been unequal. The productivity-increasing

solution is good so far as it goes but it does not go
far enough. This can be seen in terms of inequality (3)
of Section-2 which we reproduce here for ready reference :

$$\frac{b}{1-a(1+v)} > \frac{b - \Delta b}{1-(a+\Delta a)(1+r)}$$

An increase in labour productivity in the periphery would
decrease b. If productivity in the core remains unchanged,
b-Δb would not change. If everything else too remains
unchanged, the difference between the left and the right
hand sides of the inequality would narrow. The exchange
between the core and the periphery would be less unequal.
A sufficient rise in productivity in the periphery will
even be able to wipe out the inequality and make the
exchange equal.

However, the assumption that other things are
equal is a crucial one in this argument and unlikely to
be fulfilled in practice. Any increase in labour productivity
will, in reality, encourage the suppliers of finance capital
to charge a higher interest rate. In effect, what the
increase in labour productivity achieves is a rightward
shift of the factor-price frontier. There is no guarantee
that the rate of interest or the rate of profit will remain
unchanged. If the r that appear on the left-hand-side
of the inequality increases in value, the difference
between the left and the right hand sides need not diminish.

What we suggest, instead, is a more direct
attack on the problem by formulating public policies aimed
at reducing the rate of interest on loan finance in
the periphery. This will directly step up accumulation
and, hence, increase the wage rate in the periphery. Although
the root cause of underdevelopment is to be sought in the
working of the labour process, formulation of development

policy can not consider the labour market in isolation.
Development planners in general have given much thought to
the problem of rural credit. In the field of urban
economic development the same problems of credit seems
to require urgent attention. We found that the periphery
is largely serviced by the informal financial market.
The public financial institutions have to come forward
and extend their services to the informal sector in much
the same way in which the district level 'gramin' banks
(rural banks) have gone into operation in the rural sector.
The same emphasis on making things easy for the credit-
seeker (by cutting down on formalities and paper-work,
accepting the anticipated output as collateral rather
than insisting on a tangible asset as a prior security
etc.) seems to be called for.

So far as policy toward bustees with migrant
concentrations is concerned the programme for bringing
down the interest rate on loan finance will have a double
edge. On the one hand, by increasing the wage rate, it
will reduce the non-equivalence of the core-periphery
exchange and arrest the invisible process of siphoning-off
to the core of the surplus produced in the periphery. On
the other hand, by making investment in the periphery more
profitable, it will discourage outward remittances of
savings. In this case, however, it is difficult to be
confident about complete success with the help of this
policy. If outward remittances are prompted, not by the
lack of investment opportunities in the periphery, but
by other factors (e.g., the need to take care of the members
of the migrants' families who stay back in the villages),
the remittances would continue even if the interest rate
comes down in the periphery. Neither does it seem feasible

or desirable to ban, or start a popular campaign against
outward remittances since the remittances are not crossing
the national boundary and may actually be helping the
development process in another part of the economy. It is
also important to remember that it is not possible to
decipher from statistical evidence how much of the
responsibility for the lack of development in the periphery
lies with unequal exchange with the core and how much of
it lies with the outward remittance of savings. As unequal
exchange theorists have taken pains to explain, the process
of unequal exchange is an _invisible_ one. It is not possible
to estimate numerically the 'amount' of unequal exchange.
It is only possible to answer the question whether there
is any unequal exchange or not - and that too by testing
the _assumptions_ behind the theory (e.g., the propositions
that the trading parties are both capitalistic, that there
is a wage differential etc.).

Thus, while we recommend the policy of wage
increases by means of public intervention in the loan
market in case of both migrant and non-migrant bustees
there is a difference in the degree of our confidence.
In non-migrant bustees there is every reason to believe
that this policy will certainly reduce the 'unequality'
of the core-periphery exchange but whether the benefit
of that will be reflected in a higher rate of development
in the periphery or it will simply lead to a fatter outflow
of investible funds from the urban periphery to the rural sector
is difficult to say-particularly for migrant bustees. Moreover, we
have to remember that even when it is peripheral development
that is facilitated, this policy may reduce the outward
flow of savings in which case there is a negative effect
somewhere else in the economy. Notice, however, that

though it is uncertain by how much a policy of wage
increase in the periphery will step up the pace of
peripheral growth, development can not take place without
such a policy since the core-periphery unequal exchange
will then remain as the barrier to growth.

Thus, summarising our policy discussion, we
may conclude that adoption of the policy of wage increase
through the reduction of the interest rate on loans is
likely to be <u>necessary and sufficient</u> for ushering in an
era of economic growth in the periphery so far the
non-migrant bustees are concerned. In the migrant bustees
this policy is <u>necessary</u> but may not be sufficient for
this purpose. Also, even when it is sufficient, growth
in this part of the periphery may be at the cost of
accumulation in other parts of the national economy.

The novelty of our policy recommendation lies
in stressing the need for an increase in the peripheral
wage rate (market wage rate for the wage workers and
imputed wage rate for the self-employed) <u>as a vehicle</u>
<u>for growth</u>. We are aware that suggestions for improving
the current standard of living of the poor are ubiquitous
in policy discussions. But in most cases an increase in
current consumption is seen as a distraction from the
path of growth. But some concessions have to be made for
current consumption of the masses, lest social discontent
gets out of hand. On the path to economic growth, current
consumption is a necessary evil. Our thesis is that
increasing the wage rate in the periphery is necessary
for putting an end to the core-periphery unequal exchange
and releasing investible surplus for putting an end to the

core-periphery unequal exchange and releasing investible
surplus for purposes of growth. The periphery represents
a growing system in an embryonic form. Whether the embryo
is going to develop into a system with a high rate of
growth or will present the ugly sight of arrested growth
depends on the degree of success with which we can get
rid of core-periphery unequal exchange within the urban
economic system.

NOTES

1. Even an illustrative list of works in this field should
   mention Anand [1], Banerjee and Kanbur [3], Bose [6],
   Connell [13] and Greenwood [24].

2. See, for instance, Bose [6], Joshi and Joshi [32],
   Lubell [35] and Papola [42].

3. David Gordon has reviewed this type of theory in
   [23]. Also, see Fusfeld [20].

4. See Tabb [51], Harrison [27], Marglin [37] and some
   of the papers in Edwards, Reich and Gordon [18].

5. For instance, the survey of the state of research
   in this field published by the ICSSR [30] does not
   mention any Indian work in this connection.

6. See Thurow [52] and Ross and Wachter [45].

7. Sometimes middlemen operate between the core
   industries and the informal sector workers.

8. For Indian data on the putting out system see,
   for instance, Papola [42].

9. After all the mere presence of poverty in one section
   of the urban economy does not enable one to assume
   the existence of 'urban duality' except in the literal
   sense of the term. The rural-urban duality, for

example, is meaningful, not because of the relative affluence of the urban sector, but because of the semi-feudal modes of production in the rural sector.

10. See Bardhan [4] and the references cited therein.

11. In fact, in some econometric works, the use of electricity is taken as a proxy for the use of capital.

12. We have to remember that in Marxian economics, on which the theory of unequal exchange is based, the interest rate is understood in the sense of interest charged on financial capital or what we usually mean by interest on loans. It is quite different from the rate of profit.

13. See the standard text books on conventional trade theory; for instance, Sodersten [49].

14. See, for instance, Harvitz [28].

15. See, for example, Dholakia [15].

16. For example, [2] the C.M.D.A. bustee surveys [14]. Also, there were in existence operative popular classification branding the different bustees of Calcutta as migrant or non-migrant.

17. See, for example, Bienefeld [5] for Fred Bienefeld's work on the labour market in Dar-es-Salam. Also, see Breman [7].

18. See Economic Survey 1981-'82 [22] and I.M.F. International Financial Statistics [31].

19. Recall from our earlier discussion in Section-2 that all that is required for the hypothesis to be acceptable is that the actual interest rate on commercial loans be higher in the periphery than in

the core. It is not necessary that core sector
loan-givers should practise discrimination between
investors in the core and in the periphery. In fact,
we show below that the periphery is serviced
largely by the informal financial market.

20. See the tables of product prices in Section- 5.

21. The per capita monthly consumptions of some important
articles in our survey were : rice - 5½ kg; Wheat -
6 kg; Meat - 1 kg and Milk - ½ litre.

22. It has been shown in the recent unequal exchange
literature that this theory of exchange can be put
on a rigorous scientific basis only when both the
trading parties have passed into the stage of
capitalism.

23. In passing we noted that, as expected, open unemployment
is somewhat higher among non-migrant workers than
among migrant workers while the other elements of
subemployment and the subemployment rate as a whole
were higher for migrant workers. This was 'expected'
since non-migrant workers, are supposed to have more
'fall-back resources' (like help from the family)
than migrant workers so that they are more able to
wait for a 'good' job.

24. If Y = gross national product, C = consumption,
I = investment, G = government purchases of goods and
services, X = exports and M = imports, we have
Y = C + I + G + X - M or Y - C - I = G + X - M or
S - I = G + X - M. Here, however, we are comparing
between two adjoining bustees. If the government does
not systematically discriminate between the bustees
in its purchase policies, we can ignore the G term
in this comparative study. Thus, in this relative

sense, an excess of S ever I should imply an excess
of X over M. (S = Saving).

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