

Handed

(69)

INSTITUTE OF
1 - MAR 1979
DEVELOPMENT STUDIES
LIBRARY

Preliminary Draft
Not for Quotation

PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS

Seminar Paper No. 32

May 1978

AN ECONOMIC ANALYSIS OF STREET DWELLERS

Khalil A. Hamdani

An Economic Analysis of Street Dwellers

Khalil A. Hamdani*

I. Introduction

In developing countries, a sizeable portion of the visible urban poor are street dwellers. These are persons who do not reside in structured or semi-structured dwellings. As such, they escape enumeration in surveys based on sample selection from a population listing. Since such surveys are the norm, data on street dwellers are scarce and, consequently, very little is known about them. In particular, it is unknown whether street dwellers are a unique group with specific earnings characteristics, or simply the more visible of the urban poor.

Given the urgency of urban poverty policy, it is important to assess the earnings capability of street dwellers and to determine if this differs from that of the general urban poor population. To do so, six questions require assessment. First, do street dwellers engage in economic activities different from that of other poor persons? Second, do they earn income adequate to meet their basic needs? Third, do they dwell in streets out of necessity or by choice? Fourth, are they the poorest of the poor? Fifth, should they constitute a unique target group for

*The author is a Senior Research Economist at the Pakistan Institute of Development Economics. He is grateful to Dennis N. De Tray for several discussions on the topic.

the focus of urban poverty policy? And finally, are there policy guidelines of specific relevance for street dwellers?

Answers to the above questions are not obvious. "Culture of poverty" theory suggests one set of answers [13, p.24]: street dwelling is a necessary and permanent existence for the alienated and hopeless, the poorest of the poor. While "informal sector" theory suggests another set of answers: access to nonformal employment opportunities necessitates that individuals dwell and work in the crowded streets of commercial and business districts [3, pp.40-1]. Still further sets of answers are suggested by migration theory: recent migrants dwell in streets while searching for housing [14], or temporary migrants dwell in streets by choice as they have no need for permanent urban housing [10, pp.44-7]. It is unknown which of these competing models best applies to street dwellers.

In November-December 1975, the Pakistan Institute of Development Economics surveyed 300 street dwellers in Rawalpindi City. The purpose of the survey was twofold. First, to provide a socio-economic profile of street dwellers. Second, to provide a basis for an earnings comparison of street dwellers with nonstreet dwellers--data for whom are available from the Institute's August-September 1975 survey of 1,000 Rawalpindi structured and semi-structured dwellings. This paper reports the results of the survey and, in the process, assesses the six questions raised above.

The paper is organized as follows. The next section describes the street dweller survey. The third section briefly examines the four models mentioned above. Against this theoretical background, the fourth section presents a profile of street dwellers, an earnings comparison of street dwellers with nonstreet dwellers, and a broad assessment of street dweller behaviour. The final section summarizes the conclusions and identifies the policy implications of the paper.

II. Data

The Pakistan Institute of Development Economics undertook two surveys of Rawalpindi City in 1975. Although a common questionnaire was administered by a common group of professional enumerators in both, the surveys sampled different populations. The first survey, enumerated in August and September, sampled 1,000 households from those that reside in structured or semi-structured dwellings. The second survey, enumerated in November and December, sampled 300 households from those that do not reside in structured or semi-structured dwellings. The difference in populations necessitated different sampling designs for each.

The sampling design of the first survey was standard (and is discussed in /6. Appendix/). Briefly, it was a one percent, two-stage sampling from an existing sampling frame of the Central Statistical Division for all structured and semi-structured dwellings in Rawalpindi. The first-stage sampling fraction was set at 0.04 and 16 clusters were randomly selected from the total of 400 clusters in the sampling frame. The second-stage sampling fraction was uniformly set at 0.28 and every i th ($= 1/0.28$) household of each selected cluster was systematically selected (given a random start) from an address listing of all structured and semi-structured dwellings. The design yielded a random sample of 1,000 households.

In contrast, the sampling design of the second survey, although also two-stage sampling, was somewhat arbitrary. On the presumption that street dwellers are rare items and are not evenly distributed in the city, the first-stage sampling procedure was to select geographic areas in which their expected concentration is high. Therefore, the general selection guideline was to sample areas near public facilities (such as water, sanitation, electricity, and emergency shelter). Examples of such areas are: railway stations, bus stands, hotels, restaurants, cinemas, mosques, bazaars, and bridges. Since such areas tend to be in the center of town, an additional guideline was to sample residential areas in the 16 sample clusters of the first survey.

The second-stage sampling procedure was to systematically sample every third street dweller in each selected area; this fraction is similar to that for the first survey. In order to correctly identify a street dweller, enumeration was conducted at night, between 9 p.m. and 10 p.m., and only individuals sleeping in streets were considered to be potential street dwellers.¹ If every third potential street dweller was not a city dweller (perhaps, a temporary visitor lacking accomodation or awaiting a transport connection), then the fourth potential street dweller was awakened and identified.² Each selected area was sampled in a single night; if the area was large, then more than one enumerator participated in the sampling.³ Unfortunately, a random start for each selected area was not guaranteed as to do so would have required the compilation of a population listing and a subsequent random selection decision every enumeration night--a cumbersome, time-consuming process.

¹This procedure excludes street dwellers who work at night and sleep during the day, however.

²An advantage in conducting the survey in winter months (November and December) is that, unlike in the summer months, persons with access to dwellings do not sleep in streets.

³This procedure does not fully prevent double-counting (as street dwellers are mobile between areas), however, no instances of double counting occurred.

The selected sample size was also somewhat arbitrary. The intention was to sample about one percent of the street dweller population; however, as the size of the population is unknown, an estimation was necessary. An estimation for Abidjan [10, p. 47] suggests that street dwellers constitute about 5 percent of the city's population. Five percent of Rawalpindi's population in 1975 is about 30,000 persons which is probably a high estimate of the number of street dwellers; a more realistic estimate is about 1 to 3 percent of the total population or 6,000 to 18,000 persons. Nonetheless, the sample size was set at 300.⁴

As the sampling design does not ensure random selection, it is important to note the possibility of sampling error.⁵ Generally, the sampling distributions of area-specific variables reflect the distribution of sampling areas. Occupation is possibly such a variable: sampling at hotels and restaurants would likely yield a sample of cooks and waiters, while sampling at railway stations and bus stands would likely yield a sample of drivers and porters. To the extent that the distribution of sampling areas is

⁴In fact, information was collected for 304 street dwellers as four were dependents of those sampled.

⁵The discussion of the possibility of nonsampling error in the first survey in [5, Appendix] applies as well for the second survey. The discussion suggests that the error is random and can be ignored.

representative, the sampling distributions of such variables are also representative. Unfortunately, since the selection of sampling areas was arbitrary, it is not necessarily representative and so the sampling distributions of area-specific variables are not necessarily representative, either.

Although the number of sampling areas was not predetermined, the average size of each was sufficiently small and the total sample size was sufficiently large to allow the sampling of 64 different areas. The distribution of the sample by sampling area indicates a fair degree of stratification (see Table 1). The geographic distribution of the sample is equally well-stratified (see Table 2). Note that these distributions are not necessarily representative of the overall distribution of street dwellers in Rawalpindi. Nonetheless, these sample distributions do indicate the representation of a large variety of potentially different types of street dwellers and so the data of the second survey should provide a broad-based profile of street dwellers.

Table 1

Distribution of Sample by Sampling Area

Type of Area	Number of:	
	Areas	Street Dwellers
Bazaar	23	91
Restaurant or Hoetel	13	34
Residential	10	41
Mosque	6	25
Bus Stop	4	68
Bridge	3	19
Cinema	3	17
Railway Station	2	9
Total	64	304

Table 2

Distribution of Sample by Distance

Distance from Center of City (in miles)	Number of:	
	Areas	Street Dwellers
0	17	52
0 - 1	16	115
1	22	82
1 - 3	9	55
Total	64	304

Note: The center of city is the area generally known as Raja Bazaar which is the main wholesale and retail trade center of Rawalpindi.

III. Theory

Economic theory provides two alternate explanations for the behaviour of street dwellers. If housing is regarded as a consumption commodity, then the demand for housing is a function of consumer preferences and their budget constraints. If budget constraints are severe, the demand for housing may be nonexistent. Alternatively, if consumer preferences are adverse, the demand for housing may also be nonexistent. While combinations of poverty and preferences are equally valid explanations, it is important to note that economic theory distinguishes between street dwelling by necessity and by choice.

Much emphasis is placed on the poverty explanation. "Culture of poverty" theory, developed by Oscar Lewis and widely applied in cultural anthropological studies of urban squatter settlements, is accepted by researchers at the Institute of Development Studies, Sussex [15,16] and recently by Gustav Papanek [13]. The theory focusses on factors that separate the poor from the general economy and the cultural impact of the separation on the poor. Among characteristics of the poor identified by the theory are [13, pp.24-5]:

- (1) the poor engage in marginal economic activities which require little (physical or human) capital and which provide low remuneration;
- (2) there is much variety in types of such activities; however,
- (3) mobility between activities is limited;
- and (4) income opportunities in different activities vary. It

is important to note that the latter two characteristics imply multiple labour markets, a controversial assumption in economic theory.

A variant of the poverty explanation which also emphasizes the necessary aspect of street dwelling is provided by "informal sector" theory. The theory focusses on factors that generate urban employment opportunities which require little (physical or human) capital. The theory identifies an informal sector that supplies budget-priced, minimally-packaged services which serve as inferior substitutes for higher-priced, better-packaged services supplied by the formal sector; examples of such substitutable services are haircuts supplied both by street barbers and by barber shops, and the retail sale of commodities both by street peddlers and hawkers and by department stores, grocery shops, and restaurants. Among characteristics of informal sector workers identified by the theory are 3,9,12: (1) they are self-employed, individual proprietors with little (physical or human) capital; (2) they provide a variety of (not necessarily marginal) services; (3) they often market their services in commercial and business districts; when they do so, (4) they either locate in streets or tiny, shared shops (because land costs are unaffordably high in central areas); (5) they frequently reside at their place of work (in order to protect their few fixed assets and because of long working hours and high transport costs); (6) they are mobile between activities;

(7) their activities yield low remuneration; and (8) their income opportunities in different activities are similar. These characteristics (specially, the third, fourth, and fifth) imply that individuals who can obtain housing on the urban periphery might nonetheless become street dwellers in order to gain access to nonformal employment opportunities unavailable at the periphery.

Various explanations which emphasize the necessity aspect of transient street dwelling are possible with the assumption of lag phenomena. If supply shortages exist in a disequilibrium housing market, then excess demand would need to queue for access to housing [14]. Literally, the queuing process could occur in the streets: recent migrants (specially, if unaccompanied by dependents) without access to homes of relatives or friends and unable to afford hotel accommodation could dwell in streets while searching for housing, as a last resort. Similarly, if an initial period of job search is necessary to secure employment, lack of income in this period would necessitate that recent migrants with little savings dwell in streets; of course, house- and job-search phenomena can occur simultaneously. Generally, these explanations imply that individuals who can ordinarily afford housing might nonetheless become street dwellers due to temporary dislocation effects of recent migration.

Transient street dwelling can also be viewed as a matter of choice rather than necessity. Heather Joshi, Harold Lubell, and Jean Mouly [10, pp.44-7] review African data on migrant urban labourers and identify a floating population with preference for street dwelling. Characteristics of floating migrants noted by the authors are [10, p. 45]:

[Their] commitment to an urban existence was so slight that [i] many of them did not even bother to find accommodation; [ii] most of them stayed in town for less than one year and [iii] none brought women with them. [iv] Most of them had come under the instructions of the elders, to whom [v] they would hand over their earnings. [vi] Expenditure in town was reduced to a minimum, since [vii] they accepted the lowest-paid jobs--mostly portering--and [viii] wanted to return home with their target sum of money as soon as possible.

These characteristics imply that individuals who can afford and obtain housing might nonetheless choose to be street dwellers due to an adverse preference for housing relative to their preference for other things. Note that caution is essential in a judgment of preferences as these are unobservable, but also note that either view of street dwelling as a matter of choice or necessity is a judgment of preferences.

There are, therefore, several possible explanations for street dwelling. It is unknown which of these best applies. Of course, different explanations could best apply to different types of street dwellers. Although all of the models mentioned above identify certain common street dweller

characteristics--all identify street dwellers as persons with little capital, especially human capital (such as general education, technical education, and skills), who, as a consequence, earn low income--it is desirable, for comparative analysis, to note the differences between models. Among predicted differences in street dweller characteristics, those for which data are available are presented in Table 3.

Table 3

Predicted Differences in Street Dweller Characteristics

Characteristic	Model:			
	Culture of Poverty	Informal Sector	House Search	Floating Migrant
Income Equality	low	high	?	?
Self-Employed	?	yes	?	?
Hours Worked	?	high	?	high
Years on Job	?	?	low	low
Recent Migrant	no	?	yes	yes
Rural Visits	no	?	?	yes
Rural Remittances	no	?	?	yes
Dependents	?	?	no	no
Reason for lack of housing	poverty	work	cannot find	do not need

Note: ? = unspecified, unknown, or controversial.

Unfortunately, the predictions in Table 3 are minimal for comparative analysis. In particular, the predictions are of minimal use in a comparison of the "floating migrant" and search theories. The former explains street dweller behaviour in terms of endogenous or demand factors (such as a lack of urban commitment) while the latter explains it in terms of exogenous or supply factors (such as unavailability of housing or employment opportunities). However, in practice, the two theories yield similar predictions due to the identification problem inherent in distinguishing demand responses from supply responses. It is important not to overlook this identification problem in the analysis of the next section.

IV. Analysis

A. Profile

The majority of the 304 street dwellers are male, 96 percent, and about half recent migrants: 46 percent migrated to Rawalpindi City no earlier than the year before the survey. About half, 52 percent, are migrants from the North West Frontier Province (NWFP) and are provincial aliens in the Punjabi social structure of Rawalpindi City. Although about half are married, all but 4 (or the 300 enumerated) are single street dwellers. However, the majority, 80 percent, support dependents outside Rawalpindi City and, on average, they remit a third of their gross income to (partially or fully) support 5 dependents. Furthermore,

more than a third of the street dwellers visit their native towns once a month, while half visit at least every other month.

With one exception, all the street dwellers are in the labour force (which is broadly defined to include beggars). Moreover, only one is unemployed and, also, only one is an unpaid family helper. Those that work (including beggars) do so, on the average, for 59 hours per week and only 10 percent feel that they have time for additional work. There are 58 beggars who comprise 19 percent of the sample. The remainder of the street dwellers are about equally distributed among the self-employed, employees, and casual workers; these comprise, respectively, 30 percent, 30 percent, and 19 percent, of the sample.

The street dwellers lack human capital and engage in activities which do not require it. Seventy-five percent are illiterate, while only 10 percent completed primary school and only 2 persons completed secondary school. Furthermore, 93 percent are without skills and 95 percent have no technical education. Excluding beggars, 38 percent work in construction, 27 percent work in transport, and 17 percent work in trade. Alternatively, 62 percent (of the nonbeggars) are semi-skilled (e.g., drivers and masons) or unskilled (e.g., porters and labourers) production workers, 18 percent are service workers (mainly at small

hotels and restaurants), and 13 percent are agricultural workers (mainly herders tending animals for sale in the city).⁶

The street dwellers earn sufficient income to meet their basic needs. On average, per month, they earn Rs.300 which is 2.6 times the estimated minimum necessary income for an adult urban male (to meet basic food, clothing, and housing needs) in 1975, Rs.115 [17, p. 57]⁷. Although beggars earn less income than other street dwellers, on average, per month, they earn Rs.203 which is 1.8 times the minimum necessary income. These comparisons regard the decision to remit income to dependents outside Rawalpindi City as endogenous to the individual and just one of the many decisions implicit in the allocation of personal income between competing needs, basic or otherwise. However, even if the amount remitted is regarded as an exogenous decision (perhaps, because it is necessary to maintain the basic needs of dependents outside Rawalpindi City), the average, per month, disposable or unremitted income, Rs.156, is still 1.4 times the minimum necessary income; comparable magnitudes for beggars and nonbeggars are also 1.4.

⁶As noted in the previous section, though, the occupational and industrial distributions are not necessarily representative.

⁷The official exchange rate of the rupee for the dollar in 1975 was Rs. 9.00 = \$ 1.00.

Seventy percent of the street dwellers indicate poverty as their reason for lack of housing, while 20 percent feel that their working conditions necessitate a lack of housing and the remaining 10 percent feel that they do not need housing. Surprisingly, no street dweller indicates an inability to find housing despite the likely difficulty in finding economical housing for a single person. Except for dormitory or sharing arrangements, housing is not ordinarily divisible beyond one room but even a one-room dwelling is a relative luxury for a single person: the nonstreet dweller survey shows that the average person occupies only a third of a room. However, the distinction between the ability to afford available housing and the ability to find affordable housing is subtle and probably cannot be measured directly by an opinion response to an open-ended question. Therefore, a cautious acceptance of this result is that 70 percent of the street dwellers consider themselves too poor to afford available but not necessarily economical (in the context of basic needs) housing.

Nevertheless, even with an upward adjustment to the estimated minimum necessary income which allows for the likely higher rent for available housing, street dwellers still earn sufficient income to meet their basic needs. Evidence from the nonstreet dweller survey shows that

single-person households, on average, occupy 1.2-room dwellings at a monthly rental of Rs.38.^o This housing expense is three times the expense estimated for economical housing / 17, p.54/ and, when regarded as a basic need, raises the minimum necessary monthly income for an adult urban male to Rs.145. A comparison of gross incomes shows that, on average, street dwellers earn 2.1 times this amount and beggars earn 1.4 times the amount; a comparison of disposable or unremitted incomes shows that, on average, both beggars and nonbeggars earn 1.1 times the amount. Street dwellers, therefore, earn sufficient income to afford available housing and meet their other basic needs.

^o Single-person households constitute 6.8 percent of all households enumerated in the nonstreet dweller survey. This figure is comparable to the proportion of single-person households in urban areas reported by the 1960 national census, 7 percent / 1. p. 47/.

B. Comparative Profiles

The nonstreet dweller survey provides comparative information for 1,641 nonstreet dwellers in the labour force. Table 4 presents frequency distributions for beggars, other street dwellers, and nonstreet dwellers. Although the subgrouping yields relatively few observations for the beggars group, the group has strikingly different frequency distributions which merit isolation. With five exceptions, the distributions of the three groups are significantly different at the 95 percent probability level by application of the chi square test for all variables.⁹ Generally, therefore, all three groups have dissimilar profiles.

⁹The exceptions are the distributions between beggars and other street dwellers for: technical education, weekly hours worked, time for more work, skills, dependents in city, and province of origin.

Table 4

Percentage Distribution of Rawalpindi Labour Force

Characteristic (1)	Street Dwellers		Nonstreet Dwellers (4)
	Beggars (2)	Others (3)	
1. Age: In Years:			
14 or less	0.0	3.7	3.8
15 - 24	3.4	32.2	23.5
25 - 34	8.6	25.3	23.4
35 - 44	17.2	18.8	21.2
45 - 54	19.0	14.3	16.5
55 - 64	25.9	4.0	8.0
65 or more	25.9	1.7	3.6
average (years)	52.9	31.4	35.0
2. Sex:			
Male	82.8	99.2	93.1
Female	17.2	0.8	6.9
3. Marital Status:			
Single	29.3	45.7	33.6
Married	20.7	47.4	62.2
Widowed	36.2	5.3	3.8
Divorced	13.8	1.6	0.4
4. Education:			
Unschoolled	94.8	71.4	35.3
Incomplete Primary	3.4	15.5	9.2
Primary (plus)	1.7	12.3	23.6
Secondary (plus)	0.0	0.8	31.9
5. Technical Education:			
Yes	0.0	6.1	28.9
No	100.0	93.9	71.1

Table 4 (Continued)

(1)	(2)	(3)	(4)
6. Employment Status:			
Unemployed	0.0	0.4	5.4
Self-employed	0.0	36.3	29.7
Employer	0.0	0.8	3.7
Employee	0.0	38.0	49.2
Casual Worker	0.0	24.1	1.3
Apprentice	0.0	0.0	2.2
Unpaid Family Helper	0.0	0.4	8.5
Beggar	100.0	0.0	0.0
7. Weekly Hours Worked: ^{1,2,3}			
0	0.0	0.4	5.4
1 - 29	0.0	0.0	2.7
30 - 39	7.4	2.0	6.9
40 - 49	3.7	19.3	41.4
50 - 59	33.4	39.3	16.7
60 - 69	29.6	20.1	15.1
70 or more	25.9	18.9	11.8
average (hours)	60.0	58.0	48.2
8. Time for More Work? ¹			
Yes	0.0	11.8	23.5
No	100.0	88.2	76.5
9. Years Since Migration to Rawalpindi City:			
0	5.2	42.9	0.7
1	10.3	9.8	1.6
2	10.3	5.3	1.2
3	10.3	8.2	1.3
4	8.6	6.5	1.8
5 or more	51.8	26.9	54.3
Never Migrated	3.5	0.4	39.1

Table 4 (Continued)

(1)	(2)	(3)	(4)
10. Skills:			
Yes	1.7	7.8	41.3
No	98.3	92.2	58.7
11. Occupation: ^{4,5}			
White Collar	0.0	2.9	25.8
Sales	0.0	4.5	24.9
Service	0.0	18.0	11.2
Agriculture	0.0	12.6	2.1
Production	0.0	62.0	36.0
12. Industry: ⁵			
Agriculture	0.0	12.7	1.7
Manufacturing	0.0	3.3	14.5
Construction	0.0	37.7	4.2
Trade	0.0	17.2	26.9
Transport	0.0	26.6	12.7
Other	0.0	2.5	40.0
13. Province of Migration: ⁶			
NWFP	52	52	28
Punjab	45	37	63
Other	3	11	9
14. Gross Income, Rs./month: ^{7,8,9}			
0	0.0	0.4	5.9
1 - 149	13.8	2.1	7.0
150 - 249	55.2	18.0	13.5
250 - 349	31.0	44.7	23.3
350 - 449	0.0	21.7	16.6
450 - 549	0.0	7.4	12.2
550 - 999	0.0	5.3	15.4
1,000 or more	0.0	0.4	6.1
average (Rs./month)	203.1	323.4	415.8
Log Variance (numbers)	0.1	0.3	2.4

Table 4 (Continued)

(1)	(2)	(3)	(4)
15. Dependents in City:			
0	98.3	98.8	11.3
1	1.7	1.2	12.5
2 or more	0.0	0.0	76.2
average (persons)	0.0	0.0	3.4
16. Dependents outside City:			
0	63.8	10.2	87.3
1-4	29.3	40.0	10.4
5-9	6.9	44.9	2.2
10+	0.0	4.9	0.1
average (persons)	1.1	4.5	0.3
17. Remittance Home, Rs./month:			
0	63.8	10.6	87.3
1 - 49	1.7	0.0	1.9
50 - 99	6.9	4.5	3.5
100 - 149	10.4	19.6	2.4
150 - 199	8.6	17.6	2.4
200 - 249	8.6	26.5	1.5
250 - 299	0.0	11.0	0.1
300 or more	0.0	10.2	0.9
average (Rs./month)	46.5	166.8	26.9
18. Remittance/Income:			
0	63.8	10.6	87.4
.1 - .24	3.4	0.8	6.9
.25 - .49	8.6	20.4	4.3
.50 - .74	24.2	60.4	1.3
.75 or more	0.0	7.8	0.1
average (proportion)	0.2	0.5	0.0

Table 4 (Continued)

(1)	(2)	(3)	(4)
19. Number of Visits Home per Year: ¹⁰			
0	41.4	6.9	-
1 - 2	20.7	10.2	-
3 - 5	19.0	23.7	-
6	3.4	12.7	-
12	15.5	46.5	-
20. Reason for Lack of Housing: ^{2,10}			
Poverty	94.8	63.5	-
Work	1.7	23.8	-
Do not know	3.5	12.7	-
21. Sample Size (persons)	58	245	1,641

- Notes:
1. Column 2 excludes 31 observations due to missing information.
 2. Column 3 excludes 1 observation due to missing information.
 3. Column 4 excludes 2 observations due to missing information.
 4. White collar consists of professional, technical, administrative, managerial and clerical occupations.
 5. Column 4 excludes 100 observations due to missing information.
 6. NWFP denotes the North West Frontier Province.
 7. Excludes unpaid family helpers.
 8. Column 4 excludes 18 observations due to missing information.
 9. Log variance is the variance of the natural logarithm of gross monthly income.
 10. No data for column 4.

The beggars, on average, are about 20 years older than either nonbeggars or nonstreet dwellers. They are proportionately more female and proportionately more widowed or divorced, all by at least 10 percentage points. They have proportionately less human capital: less education (by about 20 percentage points), no technical education, and practically no skills. They beg, on average, 60 hours per week which is 12 hours more than what the average nonstreet dweller works but only 2 hours more than what the average street dweller works. They have no time for more begging.

The beggars, relative to nonstreet dwellers, are proportionately more migrant but, relative to other street dwellers, are proportionately less recently migrated, both by about 35 percentage points. On average, they make half as many visits home per year than other street dwellers. Like other street dwellers, they, on average, live alone, but unlike other street dwellers, they, on average, support 75 percent fewer dependents outside Rawalpindi City; in fact, only a third of the beggars support any dependents. Their monthly income, on average, is 46 percent less than that of nonstreet dwellers and 37 percent less than that of other street dwellers. However, as they support relatively few dependents, their average disposable or unremitted income is comparable to that of other street dwellers.

Excluding beggars, the street dwellers, on average, are 4 years younger than nonstreet dwellers. They are proportionately more male (by 6 percentage points) and proportionately more single (by 12 percentage points). Although they have proportionately more human capital (specifically, education) than beggars, relative to nonstreet dwellers they have much less: less education (by 36 percentage points), less technical education (by 23 percentage points), and less skills (by 34 percentage points). Also relative to nonstreet dwellers, they work, on average, 10 more hours per week; and although they are proportionately more casual workers (by 23 percentage points), they are practically all employed and proportionately fewer of them have time for more work (by 12 percentage points). They are proportionately more production workers (by 23 percentage points) or proportionately less white collar and sales workers (by 43 percentage points), and they work proportionately more in construction and transport (by 47 percentage points) or proportionately less in manufacturing and other nonagricultural and nontrade activities (by 49 percentage points).

The street dwellers, excluding beggars, are practically all migrant and relative to either beggars or nonstreet dwellers are more recently migrated (by about 40 percentage points). On average, they make 7 visits per year or at least one every other month. They support (not necessarily fully) slightly more dependents, on average, than nonstreet dwellers but unlike nonstreet dwellers, their dependents live outside

Rawalpindi City and they remit 50 percent of their income for support. Relative to nonstreet dwellers, they as well as beggars are proportionately more migrants from the NWFP (by 24 percentage points). This flow is not surprising as Rawalpindi, although located in the Punjab, is the largest city in northern Pakistan; however, street dwellers being provincial aliens are likely unfamiliar with the Punjabi lifestyle and are therefore likely to face slow social integration in Rawalpindi City.

Evidence suggests that street dwellers are not lifetime migrants. Assume that the gross rate of street dweller immigration to Rawalpindi City is sufficient to have an impact on the overall distribution of lifetime migrants, a reasonable assumption even with a conservative estimate of the population of street dwellers at one percent of the total population. The 1961 national census reports the distribution of lifetime migrants to Rawalpindi City by province of origin as: 28 percent from NWFP, 65 percent from Punjab, and 7 percent from other provinces [8, p. 76]. The distribution for 1961 lifetime migrants is insignificantly different from that for nonstreet dwellers, while the distributions for 1961 lifetime migrants and nonstreet dwellers are significantly different from that for street dwellers, by application of the chi square test. Thus, the evidence suggests that street dwellers are "floating" and not lifetime migrants.

Relative to their basic needs, street dwellers and nonstreet dwellers earn the same income. On average, beggars and other street dwellers earn, respectively, 46 and 14 percent less monthly income than nonstreet dwellers. However, a comparison of disposable incomes relative to minimum necessary incomes adjusted for family size indicates similar ratios for all three groups. Beggars and other street dwellers have an average disposable income 1.4 times the minimum necessary income for an adult male, while nonstreet dwellers have an average disposable income, Rs.389, which is also 1.4 times the minimum necessary income for a family of four (a couple and two children), Rs.284 [17, p. 57]. All three groups--beggars, other street dwellers, and nonstreet dwellers--earn, therefore, sufficient income to meet their basic needs and, moreover, all do so to the same extent.

As in the case of average monthly income, income inequality is lower among street dwellers than nonstreet dwellers, and is relatively lowest among beggars. The log variance of income, a popular inequality measure [4, p. 7], is 0.12 for beggars, 0.27 for other street dwellers, and 2.39 for nonstreet dwellers; if nonearning members of the labour force are excluded from the calculation, the log variances for the respective groups are 0.12, 0.13 and 0.51. The differences in income and income inequality between groups reflect differences in human capital. As already

noted, street dwellers, beggars in particular, have proportionately less human capital than nonstreet dwellers. And, street dwellers, beggars in particular, are relatively more homogeneous with regard to human capital than nonstreet dwellers.

A comparison of wage differentials between selected occupations is possible. Table 5 presents average wages of street dwellers and nonstreet dwellers in 3 occupations with at least minimal representation by both groups. In order to exclude wage differentials due to human capital, wages are averaged only for persons with no education, technical education, or skills.¹⁰ The comparison shows insignificant wage differentials between occupations for either street dwellers or nonstreet dwellers, by application of an F-test of differences between means, and insignificant wage differences by occupation between the two groups, by application of a t-test.¹¹ Apparently, income opportunities in these unskilled occupations do not vary either between or among street dwellers and nonstreet dwellers.

¹⁰ Flat age-earnings profiles are assumed for unskilled persons.

¹¹ Although application of the t and F tests to a nonrandom sample is a violation of assumptions, fortunately, these tests are fairly robust, see 5, pp. 70-1, 107/.

Table 5

Breakdown of Wages by Occupation

Selected Occupations Name	Code ¹	Street Dwellers		Nonstreet Dwellers		Differen in Mean Wages (t) ⁴
		Sample Size ²	Mean Hourly Wage, Rs. ³ (Variance)	Mean Hourly Wage, Rs. ³ (Variance)	Sample Size ²	
Cook/ Waiter	53	8	1.33 (0.23)	1.05 (0.35)	7	0.28 (1.01)
Construction Worker	95	64	1.40 (0.12)	1.32 (0.22)	18	0.08 (0.80)
Labourer	99	17	1.29 (0.41)	1.22 (0.18)	8	0.07 (0.28)
All of the above		89	1.37 (0.18)	1.24 (0.24)	33	0.13 (1.44)

Notes: 1. Codes correspond to the Pakistan Standard Classification of Occupations.

2. Excludes persons with any education, technical education, or skills; also, excludes apprentices, unpaid family helpers, and beggars. The unemployed are necessarily excluded as their occupations are unknown.

3. An analysis of variance to test the hypothesis that mean wages by occupation are different yields an $F = 0.52$ for street dwellers and an $F = 0.77$ for nonstreet dwellers, both of which are insignificant.

4. All values of the t statistic indicate insignificant differences in mean wages.

A more general comparison of wage differentials is also possible for employees with no education, technical education, or skills. It is desirable to exclude the self-employed from the comparison as they have varying amounts of physical capital and earnings from self-employment partly represent returns to such capital. In the comparison, 86 street dwellers have an average hourly wage of Rs. 1.33 with variance 0.16, while 115 nonstreet dwellers have an average hourly wage of Rs. 1.26 with variance 0.37. The wage differential between the two groups is Rs. 0.07 and an application of the t-test yields an insignificant $t = 0.98$. Generally, therefore, excluding differences due to human and physical capital, income opportunities do not vary between street dwellers and nonstreet dwellers.

A comparison of wage differentials for the self-employed must allow for variability in physical capital ownership as earnings from self-employment partly represent returns to such capital. If capital accumulation is a function of time, then the distribution of physical capital among the self-employed roughly parallels their distribution by years of residence in Rawalpindi City so that street dwellers, being recent migrants, would have uniformly negligible amounts of physical capital while nonstreet dwellers would have relatively large but varying amounts of physical capital. A comparison of wages in Table 6 for persons with no education, technical education, or skills, indicates a wage pattern similar to the

Table 6

Breakdown of Wages by Employment Status

Employment Status	Street Dwellers		Nonstreet Dwellers		Difference in Mean Wages (t) ³
	Sample Size ²	Mean Hourly Wage, Rs. (Variance)	Mean Hourly Wage, Rs. (Variance)	Sample Size ²	
Self-Employed ¹	78	1.48 (0.23)	2.07 (4.91)	163	-0.59 (3.24)
Employees	86	1.33 (0.16)	1.26 (0.37)	115	0.07 (0.98)
Difference in Mean Wages (t) ³		0.15 (2.16)	0.81 (4.44)		

- Notes:
1. Excludes the self-employed with employees as these would have substantially more physical capital than the self-employed.
 2. Excludes persons with any education, technical education, or skills; also, excludes apprentices, unpaid family helpers, and beggars. The unemployed are necessarily excluded as their occupations are unknown.
 3. Applications of the t test allow for unequal variances.

expected distribution of physical capital. Among both street dwellers and nonstreet dwellers there are statistically significant wage differentials between the employed and the self-employed but the differential for nonstreet dwellers is five times that for street dwellers; while among the self-employed there is a significant wage differential between street dwellers and nonstreet dwellers, and, moreover, there is a high variance in the wages of these nonstreet dwellers. Therefore, although wage differentials exist among the self-employed these are probably because self-employment activities of street dwellers involve less physical capital than those of nonstreet dwellers.

C. Earnings Functions

A comparison of earnings functions of street dwellers and nonstreet dwellers identifies differences in the determinants of income between the two groups. Simply, an earnings function regresses income on its determinants. Human capital theory specifies income as a quadratic function of job experience and a direct function of human capital [2]; specifically:

$$\ln(W) = a + bA - cA^2 + \sum d_i S_i + u$$

where $\ln(W)$ is the natural logarithm of an individual's gross hourly wage; A , the individual's age, is a measure of job experience; S_i , a set of dummy variables indicating the individual's level of schooling, are a measure of human capital; u is a disturbance error; and a , b , c , and d_i , are

regression coefficients.¹² Since the survey data contain unpaid family helpers and the self-employed, it is necessary to allow for two determinants of unearned income: the number of unpaid family helpers employed by an individual, *Helpers*, and a dummy variable, *Employer*, equal to unity if the individual is self-employed with employees; their expected effects on income are positive as the productivity of unpaid family helpers is positive and capital accumulation by the self-employed with employees is likely substantial and so yields an observable positive return. As male sex preference is a characteristic of nearly all labour markets, a final dummy variable, *Female*, equal to unity for females (and therefore with an expected negative effect on income) is included in the earnings function.

Table 7 presents an earnings function for the pooled sample of street dwellers (excluding beggars) and nonstreet dwellers. The sample includes all earners and the unemployed but not unpaid family helpers or apprentices; note that inclusion of the unemployed is an implicit adjustment to the regression coefficients for the probability of unemployment. The regression includes all principal variables (*A*, *S*), *Female*, *Helpers*, and *Employer*), a dummy variable, *Street Dweller*, equal to unity for street dwellers, and all interactions between the principal

¹²As the street dweller sample is not necessarily random, application of least squares regression could be problematic if the distribution of *u* is not independent with zero mean and constant variance. Although there is no reason to believe that this assumption is violated, the robust property of least squares estimation is nonetheless reassuring.

Table 7

Earnings Function for Street and Nonstreet dwellers

Variable ¹	Mean	Standard Deviation	Coefficient	t ²
Ln(W)	0.522	0.6		
A ₂	35.739	13.9	0.0689	15.63
A ²	1472.228	1131.6	-0.0007	13.26
S ₂ =Incomplete Primary	0.101	0.3	0.0867	1.75
S ₃ =Primary	0.218	0.4	0.1442	3.98
S ₄ =Secondary	0.241	0.4	0.5052	14.56
S ₅ =College or higher	0.051	0.2	0.9333	15.77
Female	0.052	0.2	-0.4040	7.25
Helpers	0.080	0.3	0.2691	7.35
Employer	0.036	0.2	0.4698	6.90
Street Dweller (SD)	0.143	0.3	0.5890	2.81
A * SD	4.487	12.1	-0.0232	1.92
A ² * SD	166.410	555.1	0.0002	1.15
S ₂ * SD	0.022	0.1	-0.1270	1.23
S ₃ * SD	0.018	0.1	-0.1840	1.71
S ₄ * SD	0.001	0.1	0.1450	0.40
Female * SD	0.001	0.1	-0.1758	0.48
Helpers * SD	0.001	0.1	-0.0717	0.14
Employer * SD ³	0.001	0.1	-0.3105	0.85
Intercept			-1.1220	
R ²			0.3785	
F			58.8169	
Sample Size ³			1,710.	

- Notes: 1. S₁= no schooling, is excluded to avoid linear dependence and S₅*SD is excluded as there are no observations for this category.
2. The critical value of the t at the 90 percent probability level is 1.64.
3. Sample excludes beggars, apprentices, and unpaid family helpers.

variables and Street Dweller. The regression is significant and all principal variables have significant coefficients with expected signs.¹³ The interaction variables for all principal variables except age and primary level schooling are insignificant indicating that the effects of the principal variables (except age and primary level schooling) on income do not differ between street dwellers and nonstreet dwellers.

The differential effects of age and primary level schooling on income indicate three earnings characteristics of street dweller activity. First, unlike for nonstreet dwellers, primary education has an unobservable effect on the income of street dwellers.¹⁴ Second, the age-income profile for street dwellers is flatter and peaks earlier than that for nonstreet dwellers, (see Figure 1).¹⁵ And third, for ages up to 35 years, the age-income profile for street dwellers lies above that for nonstreet dwellers, while for later years it lies below. These characteristics indicate that street dweller activity, relative to nonstreet dweller activity, requires little capital and generates little capital but yields high current income.

¹³For a discussion of the individual determinants of income for the nonstreet dweller sample, see / 6,7 /.

¹⁴For street dwellers, the coefficient for primary level schooling is $-0.03979 (= 0.14419 - 0.18398)$ and it is insignificantly different from zero with a $t = 0.63$.

¹⁵For details on the construction of the age-income profile, see / 6, p. 153 /.

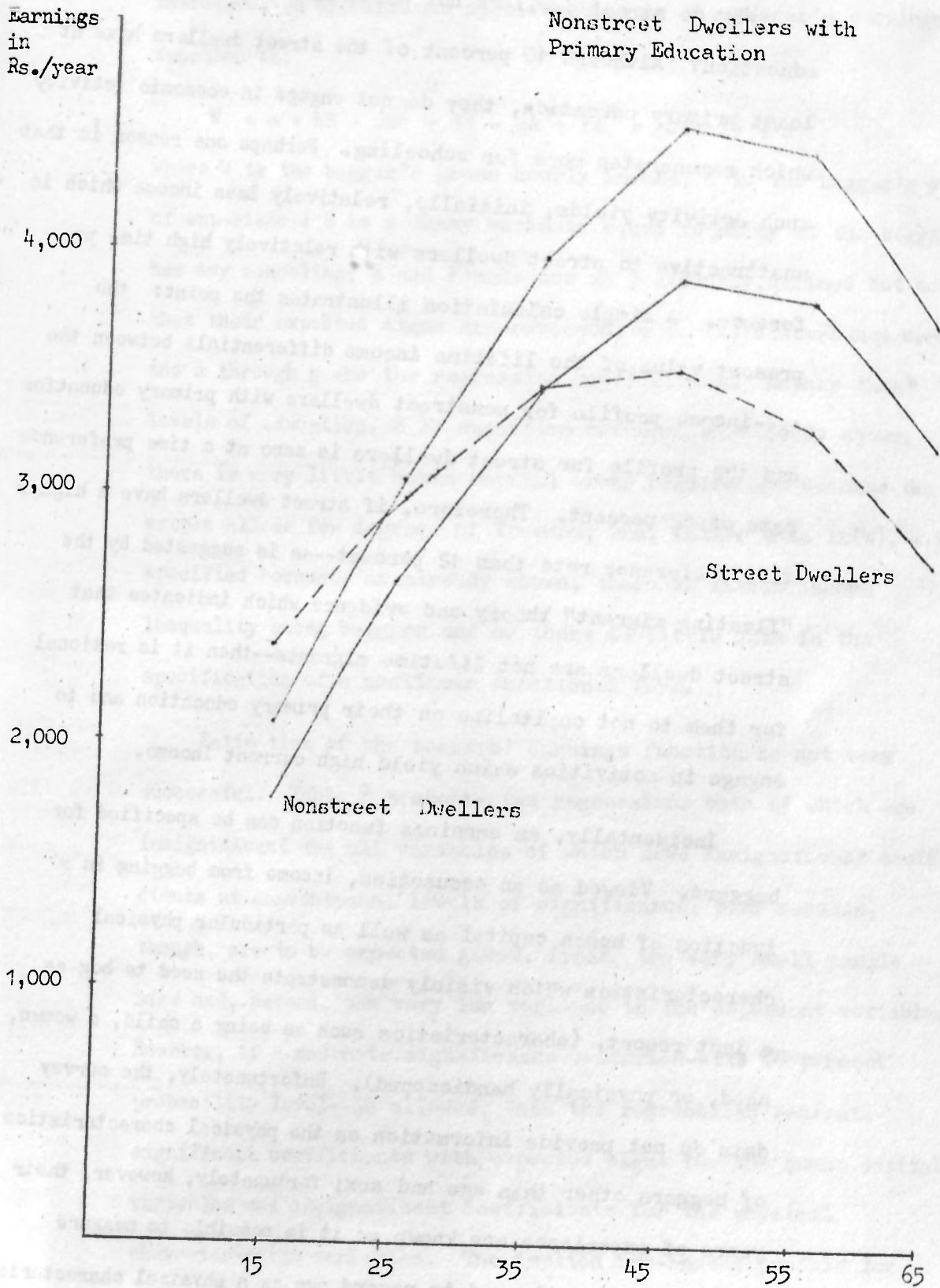


Figure 1
Male Age - Earnings Profiles

Why do street dwellers not capitalize on their primary education? Although 10 percent of the street dwellers have at least primary education, they do not engage in economic activity which remunerates more for schooling. Perhaps one reason is that such activity yields, initially, relatively less income which is unattractive to street dwellers with relatively high time preference. A simple calculation illustrates the point: the present value of the lifetime income differentials between the age-income profile for nonstreet dwellers with primary education and the profile for street dwellers is zero at a time preference rate of 12 percent. Therefore, if street dwellers have a higher time preference rate than 12 percent--as is suggested by the "floating migrant" theory and evidence which indicates that street dwellers are not lifetime migrants--then it is rational for them to not capitalize on their primary education and to engage in activities which yield high current income.

Incidentally, an earnings function can be specified for beggars. Viewed as an occupation, income from begging is a function of human capital as well as particular physical characteristics which visibly demonstrate the need to beg as a last resort, (characteristics such as being a child, a women, aged, or physically handicapped). Unfortunately, the survey data do not provide information on the physical characteristics of beggars other than age and sex; fortunately, however, their years of experience are known so it is possible to measure experience directly and to regard age as a physical characteristic.

Therefore, an appropriate specification of the beggar's earnings function is:

$$W = a + bE - cE^2 + dS - eA + fA^2 + gFemale + u$$

where W is the beggar's gross hourly income; E is the beggar's years of experience; S is a dummy variable equal to unity if the beggar has any schooling; A and Female are as previously defined but note that their expected signs are reversed; u is the disturbance error; and a through g are the regression coefficients. Rather than levels of education, S is specified because, as already shown, there is very little human capital among beggars and because the sample allows few degrees of freedom; and, rather than $\ln(W)$, W is specified because, as already shown, there is little income inequality among beggars and so there is little gain in the specification of a nonlinear functional form.

Estimation of the beggars' earnings function is not very successful. Table 8 presents two regressions both of which are insignificant and all variables of which have insignificant coefficients at conventional levels of significance; poor results, though, are to be expected given, first, the very small sample size and, second, the very low variance in the dependent variable. However, if a moderate significance criterion--the 60 percent probability level--is allowed, then the regressions indicate significant coefficients with expected signs for the human capital variable and insignificant coefficients for the physical characteristics variables. The implied age-income profile for beggars is flatter than that for other street dwellers or nonstreet

dwellers but having some education--the sample average for those with education is 3 years of schooling--raises a beggar's wage rate by about 20 percent, at the mean level of experience. Begging, therefore, could be viewed as any other free entry occupation in which income is determined by the human capital variables, experience and education.

Table 8

Earnings Functions for Beggars

Variable	Mean	Standard Deviation	Coefficient (t) ¹	
W	0.9	0.3		
E	14.6	13.1	0.0116 (1.13)	0.0123 (1.17)
E ²	381.0	564.5	-0.0003 (1.16)	-0.0003 (1.17)
S	0.1	0.2	0.2180 (1.30)	0.1595 (0.86)
A	52.9	16.4		-0.0092 (0.75)
A ²	3,065.7	1,804.9		0.0001 (0.76)
Female	0.2	0.4		-0.0709 (0.70)
Intercept			0.8055	1.0515
R ²			0.0069	-0.0287
F			1.1321	0.7354
Sample size			58.	58.

Note: 1. The critical value of the t at the 60 percent probability level is 0.85.

D. Assessment

To conclude this section, an overall assessment of street dweller behaviour is desirable. Relative to nonstreet dwellers and other street dwellers, the beggars most closely conform to the predictions of "culture of poverty" theory. Relatively, the beggars are old, largely widowed or divorced, males and females who live alone; they have little contact with persons outside Rawalpindi City (either through recent migration, dependents, visits, or remittances); they have negligible human capital; and they beg long hours to earn the lowest income. Although they earn sufficient income to meet their basic needs, only one of the beggars earns more monthly income than the average nonbegging street dweller. Given their age and lack of capital, clearly beggars have no other income earning opportunity but to beg.

The data indicate distinct profiles for beggars and other street dwellers. Unlike beggars, other street dwellers do not conform to the predictions of "culture of poverty" theory. They are younger than beggars and predominantly single or married males. Like beggars, they live alone but, unlike beggars, they maintain frequent contact with persons outside Rawalpindi City through recent migration, dependents, visits, and remittances. Like beggars, they lack human capital and work long hours out; unlike beggars, they face numerous income earning opportunities and these on average, do not differ from those faced by nonstreet dwellers with equivalent levels of capital accumulation.

The street dwellers, excluding beggars, do not appear to conform to the prediction of "informal sector" theory that work necessitates street dwelling. Although generally engaged in informal sector activities, they are not particularly engaged in activities that could necessitate street dwelling. Relative to nonstreet dwellers, they are only slightly more self-employed and only slightly more engaged in service-related activities; and, they are slightly less employed in the trade industry. Even the subgroup of street dwellers who indicate work as their reason for lack of housing are not particularly engaged in such activities.¹⁶ For that matter, the latter subgroup is not engaged in any activity in which remaining street dwellers are not equally engaged so there is no indirect evidence to indicate that their reason for lack of housing is in fact attributable to work.

Also, the street dwellers do not appear to exhibit search behaviour. No street dweller indicates an inability to find housing; moreover, available housing, if uneconomical for single persons, is nonetheless affordable by street dwellers. Unemployment among street dwellers is negligible, and the proportion who feel that they have time for more work, 10 percent, is less than half of that for nonstreet dwellers,

¹⁶ Although not reported, the employment status, occupational, and industrial distributions for persons who lack housing due to work do not significantly differ from those for persons who lack housing due to perceived poverty, by application of the chi square test.

24 percent. Although, relative to nonstreet dwellers, street dwellers are proportionately more casual workers this need not imply that recent migrants can only find casual employment and hence lack the job tenure necessary to rent fixed assets as housing, of course, this could also imply that street dwellers simply prefer the flexible working conditions of casual employment; in fact, evidence suggests no barriers to the entry of recent migrants in full-time employment: a breakdown of years since migration by employment status for street dwellers indicates no significant difference between the mean years since migration of casual workers and full-time workers.¹⁷ The street dwellers, therefore, do not appear to exhibit either house- or job-search behaviour.

The street dwellers, excluding beggars, generally conform to the predictions of the "floating migrant" theory. Being recent migrants, they are by implication short-term street dwellers. Evidence suggests that they eventually leave Rawalpindi City and do not become lifetime migrants. Also, evidence suggests that they exhibit high time preference by engaging in economic activity which yields high current income and generates little capital for higher future income. Certainly, their ties outside Rawalpindi City (dependents, visits, and remittances) are sufficiently strong to suggest a commitment to

¹⁷The breakdown is: 5.13 years (with variance 38.86) for 59 casual workers and 4.07 years (with variance 41.65) for 91 full-time workers. The difference, 1.06 years, is insignificant with a $t = 1.00$.

rural living, while their ties within Rawalpindi City (provincial alien status, lack of housing, no fixed assets, low propensity to consume, and wage, in particular, casual employment) are sufficiently weak to suggest no apparent commitment to urban living.

Do the street dwellers' rural ties weaken with the duration of urban residence? Viewed as endogenous variables, the amount of remittances and the number of visits and dependents that they choose to send, undertake, or support outside Rawalpindi City are each a function of monthly gross income, marital status, and the number of years since migration, while the number of visits is also a function of the distance of the district of migration from Rawalpindi City. Table 9 presents regression estimates of the three functional relationships; all regressions are significant and all yield significant coefficients with expected signs (for all variables except one) and elasticities less than one. The exception is the insignificance of being married in the decision of the number of dependents that street dwellers support outside Rawalpindi City; the insignificance suggests that street dwellers support dependents by choice and not necessity. In any case, the low elasticities indicate that rural ties do not substantially weaken with the duration of urban residence.

Table 9
Regressions of Street Dwellers' Rural Ties

Variable	Coefficient/(t)/Elasticity ¹ for Regressions:		
	Visits per year	Monthly Remittances (Rs.)	Number of Dependents Supported
Monthly Income (Rs.)	0.01 (2.18) 0.21	0.47 (13.75) 0.90	0.01 (4.21) 0.40
Years Since Migration	-0.11 (2.42) -0.06	-2.88 (4.15) -0.07	-0.12 (4.54) -0.11
Distance of Migration (miles)	-0.02 (3.27) -0.19		
If Married (= 1, 0 otherwise)	2.07 (3.66)	42.38 (4.83)	-0.21 (0.62)
Intercept	6.86	9.07	3.32
R^2	0.16	0.57	0.13
F	12.41	106.40	13.13
Sample size ²	241	241	241

Notes: 1. Elasticities are measured at the mean.

2. Sample excludes beggars, nonmigrants, and migrants from India.

The final remark is cautionary and qualifies the preceding assessment. As noted earlier, there is an identification problem in determining whether endogenous or exogenous factors explain the transient nature of street dwelling. Endogenous or demand factors such as a lack of commitment to urban living explain the street dwellers' weak urban ties. However, so too could exogenous or supply factors such as lack of economical housing for single persons or regular employment opportunities; and, to the extent that supply factors explain street dwelling, successful search behaviour would explain the transient nature of street dwelling. Therefore, although there is indirect evidence which indicates that street dwellers do not exhibit search behaviour, it is important to observe that the data do not provide a direct answer to the identification problem.

V. Conclusion

Among street dwellers, beggars constitute a distinct group which survives in a "culture of poverty". The beggars are old, largely widowed or divorced, males and females who live alone; they have little contact with persons outside Rawalpindi City; they have negligible human capital; and they beg long hours to earn the lowest income. Although they earn sufficient income to meet their basic needs, only one of the beggars-- of those surveyed--earns more monthly income than the average nonbegging street dweller. Given their age and lack of capital and family ties, clearly beggars have no other income earning opportunity but to beg. Beggars are indeed the poorest of the poor.

Specific policy guidelines are necessary for beggars.

Given their uncompetitive position in the labour market, employment policy would generate few income earning opportunities for beggars. Given their social isolation, general cooperative or community administered welfare programs would also generate few benefits for beggars. Generally, the powerlessness of beggars as an economic or social interest group denies them access to public revenue and public services. Therefore, without specific policy guidelines urban poverty policy will not reach and have an impact on beggars.

Four specific guidelines are appropriate. First, given the beggars' lack of locational and familial ties, relocation measures (such as zoning ordinances and city "clean-up" campaigns) will be unsuccessful unless income sources which substitute for begging are made available, this implies that relocation policy must be accompanied by rehabilitation or welfare policy. Second, given the advanced age of beggars, rehabilitation policy is an expensive alternative to simple welfare policy. Third, as long as welfare policy is acceptable it is important to recognize that begging itself is a welfare instrument and as such is a highly efficient one: it achieves income transfers from persons able to pay to the needy without the involvement of intermediaries such as the government; public policy, therefore, should recognize that beggars are enterprising workers-- the more experienced and educated earn more--and should allow them to beg their own income without hindrance with the realization that the more they earn the lower is the need for supplementary government welfare policy.

Fourth, in addition to such a laissez faire policy of non-interference with begging as an economic activity, supplementary government welfare policy should ensure that existing welfare measures which provide public services (such as health and transport) and general subsidy programs (such as the ration shop system) are specially accessible to the aged and, hence, beggars.

A final remark on beggars. From the perspective of future research, it is important to understand the dynamics which lead to the socio-economic isolation of beggars. Specifically, it is important to determine whether persons become beggars by accident and misfortune or by distinct social mechanisms and institutions such as, perhaps, informal sector employment which provides no old-age social security and permits no saving for retirement. If the former, then the proportion of beggars over time will remain constant. If the latter, then the proportion of beggars over time would possibly rise at an increasing rate and this rise would have adverse implications for the expenditure burden of future welfare policy.

The summary for nonbeggars is much brighter. These street dwellers constitute a fairly homogeneous group of rural labourers interested in temporarily sharing the gains of urban living. They are younger than either beggars or nonstreet dwellers and predominantly single or married males. Like beggars, they live alone but, unlike beggars, they maintain frequent contact with persons outside Rawalpindi City. They are short-term street

dwellers and evidence suggests that they eventually leave Rawalpindi City.

These street dwellers are not the poorest of the poor. Like beggars, they lack human capital and work long hours but, unlike beggars, they face numerous income earning opportunities and these, on average, do not differ from those faced by nonstreet dwellers with equivalent levels of capital accumulation. There is, therefore, no evidence of separate labour markets for street dwellers and nonstreet dwellers. The former, however, do exhibit high time preference by engaging in economic activities (such as construction and transport) which yield high current income and generate little capital for higher future income. Also, the former exhibit a low propensity to consume by remitting, on average, half their gross income to dependents outside Rawalpindi City; in fact, their average disposable income is no higher than that of beggars and is just sufficient to meet their basic needs.

Although these street dwellers can afford housing, they choose to dwell in streets. Four behavioural characteristics suggest that their preference for housing relative to their preference for other things is low: the first is their low overall propensity to consume; the second is their short-term commitment--on average, only two years--to urban living; the third is the frequency of their visits--on average, at least once every other month--outside Rawalpindi City; and the fourth is their lack of dependents in Rawalpindi City. From the supply perspective, additional reasons are provided by the quantity and quality of available housing in

Rawalpindi City. Quantitatively, available housing is designed for families and is a relative luxury for single persons: on average, a single person occupies only a third of a room while a single-person dwelling consists of 1.2 rooms; qualitatively, 22 percent of available dwellings are substandard / 11/. Given their characteristics and the available supply of housing, their choice to dwell in streets is not surprising.

The policy importance of these street dwellers is threefold. They are, simultaneously, instruments for the implementation of growth, distribution, and population policies. Their availability ensures an elastic supply of labour to the industrial sector, an objective of growth policy. Their remittances, and expenditures during visits, channel gains of urban growth to the rural sector and so contribute to the equalization of sectoral incomes, an objective of distribution policy. And, their short-term migrant status ensures that their temporary urban migration does not further raise the already very high rate of net migration to urban areas, an objective of population policy.

As a welfare policy, should there be incentives for street dwellers to acquire housing? Although housing is conventionally classified as a basic need, it is important to note that consumption patterns which identify basic needs are not always generalizable. In the case of these street dwellers, possession of housing is an inadequate and misleading measure of poverty. At worst, they are simply the more visible of those with

inadequate living conditions--twenty-two percent of the nonstreet dwellers also have inadequate living conditions; most likely, they are marginally better off to the extent that they have the choice to dwell in streets--a choice not available to nonstreet dwellers given their dependents and other characteristics. There is sufficient doubt, therefore, whether demand factors justify the provision of housing, even at a nominal price, to street dwellers.

As an urban renewal policy, should these street dwellers be required to acquire housing? Of course, there is a social cost, measured in terms of congestion and pollution, to street dwelling. However, this cost must be considered relative to the costs of implementing the policy as well as the costs which would arise from its successful implementation. If successful, the policy would necessarily reduce the flow of remittances and other income to the rural sector (by raising the marginal rate of consumption in urban areas) and it would most likely increase the street dwellers' probability of lifetime urban migration (by reducing their rural ties). Although the net social cost or benefit of the policy is unknown, these are sufficient reasons to not recommend compulsory housing for street dwellers.

Instead of housing, government policy should focus on the employment needs of street dwellers. Generally, employment opportunities in unskilled production should be expanded. In particular, labour hiring policies and tenure rules should be

modified to favour the employment of short-term migrants. It is important to note that street dwellers do not directly compete for the same jobs as nonstreet dwellers (as they appear to favour activities which yield relatively greater current income) and so carefully designed labour policies could be Pareto optimal for all labourers. As an overall policy, therefore, temporary urban residence should not be a barrier to entry in urban employment.

Employment policy designed for street dwellers should focus exclusively on wage employment. Street dwellers are largely employed as wage labour. Reasons for this concentration are two: first, lack of physical capital is a barrier to entry in self-employment; second, lack of a commitment to urban living prevents capital accumulation. Street dwellers who are self-employed are in activities which require negligible physical capital: they earn not much more than the employed but much less than self-employed nonstreet dwellers. As policies which alleviate the physical capital constraint are expensive and not largely demanded by street dwellers, it is cost-effective for employment policy to focus exclusively on wage employment promotion.

A final remark on street dwellers. Street dwellers enter rapidly growing industries. Sixty-two percent of the street dwellers are engaged in construction and transportation. These industries are the most rapidly growing production industries in Rawalpindi City. Street dwellers, therefore, may well be the critical input in urban industrial growth.

References

1. Afzal, Mohammad. The Population of Pakistan. Islamabad: Pakistan Institute of Development Economics, 1974.
2. Becker, Gary S. Human Capital. New York: Columbia University Press, 1974.
3. Beier, George, Anthony Churchill, Michael Cohen, and Bertrand Renaud. "The Task Ahead for the Cities of the Developing Countries." World Bank Staff Working Paper No. 209. July 1975.
4. Chiswick, Barry R. Income Inequality. New York: Columbia University Press, 1974.
5. Edwards, Allen L. Statistical Methods. New York: Holt, Rinehart and Winston, Inc., 1973.
6. Hamdan, Khalil A. "Education and the Income Differential: An Estimation for Rawalpindi City." The Pakistan Development Review. Vol. XVI, No. 2. Summer 1977.
7. Haque, Nadeem Ul. "An Economic Analysis of Personal Earnings in Rawalpindi City." The Pakistan Development Review. Vol. XVI, No. 4. Winter 1977.
8. Helbock, Richard W. "Differential Urban Growth and Distance Considerations in Domestic Migration Flows in Pakistan." The Pakistan Development Review. Vol. XIV, No. 1. Spring 1975.
9. International Labour Organization. Employment, income and equality: A strategy for increasing productive employment in Kenya. Geneva: ILO Publications, 1972.
10. Joshi, Heather, Harold Lubell, and Jean Mouly. Abidjan: Urban Development and Employment in the Ivory Coast. Geneva: ILO Publications, 1976.
11. Manan, Jahan Zeb and M. A. Mahmood. "Hedonic Price Estimation of Urban Residential Services: A Case Study of Rawalpindi City." Seminar Paper No. 33. Pakistan Institute of Development Economics. May 1978.

12. Mazumdar, Dipak. "The Urban Informal Sector." World Bank Staff Working Paper No. 211. July 1975.
13. Papanek, Gustav F. "The Poor of Jakarta." Economic Development and Cultural Change. Vol. 24, No. 1. October 1975.
14. Kew, Alan. "Without Regard for Persons: Queuing for Access to Housing and Employment in Port Moresby." Development and Change. Vol. 6, No. 2. April 1975.
15. Wade, Robert. "A Culture of Poverty?" IDS Bulletin. Vol. 5, No. 2/3. October 1973.
16. _____ . "Culture of Poverty Revisited." IDS Bulletin. Vol. 5, No. 3. September 1976.
17. Wasay, Abdul. "An Urban Poverty Line Estimate." The Pakistan Development Review. Vol. XVII, No. 1. Spring 1977.

B.A.
18578

This work is licensed under a
Creative Commons
Attribution – NonCommercial - NoDerivs 3.0 Licence.

To view a copy of the licence please see:
<http://creativecommons.org/licenses/by-nc-nd/3.0/>