INDUSTRIALIZATION, MIGRATION AND
THE INFORMAL SECTOR IN MANAUS

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ABSTRACT

Through the institution of the Free Trade Zone and a strong program of fiscal incentives, the Brazilian government has stimulated significant urban and industrial growth in Manaus, a port city in the Central Amazon. As a result of this "development program," Manaus' economy now combines more traditional with more contemporary forms of capitalist organization. A preliminary analysis of field data collected in 1984 suggests that the productive regimes which attach to the more traditional forms of capitalist organization allocate a higher value to labor than those that attach to the modern, so-called high-tech, sectors of the economy. Thus, with industrial development, Manaus has witnessed a significant growth of the informal sectors of the economy. Structurally, however, the formal and the informal sectors are interdependent. The economic well-being of workers in the informal sector is as dependent upon the low wages paid to workers in the formal sector as are the industries of the latter dependent upon the cheap sources of consumption goods which the informal sector provides, in order to continue to pay low wages to the workers they employ. These data lend support to those theorists who have argued that the formal/informal dichotomy tends to obscure the systemic structural features of developmental change. In respect to labor and households as economic units, these data also suggest perhaps that a theory which conceptualizes survival strategies as constrained decisions among a relatively wide variety of alternative possibilities in different economic sectors may offer conceptual advantages. Such a theory would need to acknowledge the possibility of situations in which formal sector employment in "high-tech" industries is not necessarily preferred to non-industrial employment.

RESUMO

Através da instituição de Zona Franca e de intenso programa de incentivos fiscais, o governo brasileiro estimulou significativo crescimento urbano e industrial em Manaus, uma cidade portuária de Amazônia central. Como resultado desse "programa de desenvolvimento," a economia de Manaus, atualmente, combina formas de organização capitalista tradicionais com as mais contemporâneas. A análise preliminar dos dados de campo, coletados em 1984, sugere que, em termos de setores de economia, os regimes produtivos ligados a formas mais tradicionais de organização capitalista, atribuem maior valor ao trabalho do que aqueles regimes mais modernos, também chamados de alta- tecnologia ("hi-tech"). Assim, com o desenvolvimento industrial, Manaus testemunhou acentuado crescimento dos setores informais da economia. Porém, os setores formal e informal são estruturalmente interdependentes. O bem-estar econômico dos trabalhadores do setor informal é tão dependente dos baixos salários pagos aos trabalhadores pelo setor formal, quanto são as indústrias deste setor dependentes de fontes baratas de bens de consumo, fornecidas pelo setor informal, a fim de que tais indústrias continuem a pagar baixos salários a seus empregados. Esses dados conferem apoio aos teóricos que sustentam que a dicotomia formal-informal tende a obscurecer os contornos sistemáticos e estruturais de mudança provocada pelo desenvolvimento. Quanto a trabalho e família como unidades econômicas, os dados também sugere que, a teoria que concebe as estratégias de sobrevivência como sujeitas à tomada de decisões, entre uma relativamente vasta gama de possíveis alternativas, em diferentes setores de economia, talvez fique em posição de vantagem. Tal teoria necessariamente conhecer a possibilidade de situações em que o emprego no setor formal, em indústrias de alta tecnologia não é necessariamente preferido ao emprego não-industrial.
With Decree-Law 728 in 1967 the Brazilian government instituted a Free Trade Zone and a strong program of fiscal incentives which stimulated significant urban and industrial growth in Manaus, a port city in the Central Amazon and the capital of the State of Amazonas (Mahar 1979; Skillings and Tcheyan 1979). As a result of this development program, according to some counts, the population of Manaus increased 86 percent (Cardoso and Müller 1977). The creation of the Free Trade Zone has combined different forms of capitalism and different modes of production. Concomitant with these developments, there appears to have been a considerable growth in the informal sector of the city's economy.

The purpose of this paper is to explore the relationship between these developments, migration, and some comparative dimensions of their impact on various sectors of the city's industrial economy. The focus of the analysis is the labor process, i.e., the way in which employment in the industrial and associated sectors is organized, valued, and appropriated, and how this seems to have affected living conditions for those who work in the formal and informal sectors. On the basis of the data presented, it is suggested that the households of workers in the informal sector and those of workers in the more traditional industries of the formal sector do not appear to have become as fully incorporated into the consumer economy as have the households of new industrial and white collar workers. However, if workers in the informal sector are somewhat marginal as consumers, they most certainly are integral as producers. Indeed, to a significant degree, the edifice of the urban economy in the Free Trade Zone rests on the foundation provided by petty producers of commodities and services in the informal sector. In general, the analysis lends support to those theorists who have argued that the formal/informal dichotomy, unless carefully used,
tends to obscure the systemic structural features of urban economies that tend to combine different modes of production within the more inclusive process of 'developmental' change.

Theoretical Considerations:

Roberts (1978: 60-87) notes that urban-based industrialization has become the dominant economic force in Latin America. This would seem to be the case in Brazil. Since 1964, the prevailing policy of the Federal Government has been one which generally views the increasing concentration of population in urban centers and in non-agricultural employment as a necessary condition of economic development. However, as far as the industrially employed and other members of the working class are concerned, it is not entirely clear what social, cultural, and political forces urban industrialization has set in motion. Both data and theory seem somewhat divided in this regard.

At the level of theory, the forces of urban industrialization are sometimes as difficult to interpret as they are to track empirically. Two issues particularly have engaged prolonged discussion. One issue has to do with the meaning and significance of 'dependent development' for understanding the dynamics of change in societies which are in the process of acquiring an industrial mode of production (see Cardoso 1977: 7-24; Chilcote 1982: 3-16; and Henfrey 1982). A second issue concerns the impact of dependent industrial development on the labor process and its consequences for the organization and cultural formation of working class populations: i.e., the 'marginalization' thesis (Roberts 1978: 159-77).

In one school of thought, Cardoso (1973) has underscored the dynamics of 'associated-dependent' development (which, in effect, entails
urbanization, industrialization, and widespread penetration by multinationals). Cardoso (1973: 149) further associates this pattern of development with a regressive profile of income distribution, an emphasis on luxury consumer durables as opposed to basic necessities, and the social marginality of large sectors of the working class. Quiliano (1974), perhaps more firmly than Cardoso, draws a linkage between dependent industrial development and marginality. Similarly, Evans (1979: 28-29) has argued that capital intensive technologies and dependent development 'marginalize' the mass of the population both as producers and consumers, and that social and cultural exclusion follow from economic exclusion. Clearly, in this theoretical frame, social and economic marginality are taken to mean the weakening of class organization; marginalized sectors cease to be important in influencing events (Roberts 1978: 159). What is the argument for these propositions?

Although the dependent development-marginality thesis has received some empirical support (Lopes 1964; Rodrigues 1966, Berlinck 1973, 1975), most research seems to throw its validity into question. In several studies relating to Rio, Leeds (1969; 1974; and Leeds 1970; 1976) has shown that the underemployed inhabitants of favelas are very much a part of the urban industrial system. Morse (1971: 162-64) has suggested that the thesis is of limited validity in the case of São Paulo. Based on his analysis of the importance of cheap labor for industrialization in São Paulo, Oliveira (1972) is inclined to agree with Morse. Wells (1976) has shown that in São Paulo the poorest segments of the urban working class form an important market for durable consumer goods and, thus, they are very much a part of the urban-industrial economy. Also in São Paulo, Kowarick (1977) has demonstrated that even the most technologically sophisticated enterprises
make extensive use of semi-skilled and unskilled labor. Epstein (1972; 1973), in reference to squatter settlements in Brasilia, clearly a non-industrial city, and Perlman (1976), based on extensive research in Rio, also question the validity of the marginality thesis. In a more general context, Faria (1978) has presented data suggesting that the marginality theory seriously underestimates the extent to which dependent industrial development generates employment in the urban sector. And finally, while Roberts (1978: 173-74) fully acknowledges the character and significance of dependent development and the political structure of marginality, he nevertheless concludes that the mass of the urban population in Latin America is part of the system and constitutes a potentially mobilizable political force of some significance.

Paralleling these discussions of 'marginality' are discussions relating urbanization and industrialization to the so-called 'informal sector' of the economy. The conceptualization of the informal sector seems to have originated in the 'dual economy' notion as developed by Geertz (1963) in his contrast of the 'bazaar' and 'firms' economies of Indonesia. McGee (1971; 1973) extended further the use of the concept in his analysis of hawkers in Southeast Asian cities. As Bromley (1978b) and others (e.g., Moser 1978; Tokman 1978a) have noted, beginning with Hart's (1973) paper on urban employment in Ghana, the 'two-sector' terminology associated with dualist models of economic activities and enterprises has become the theoretical basis for an extensive literature relating to Third World economies. By Bromley's count (1978b: 1033), since its reification in the International Labour Office's World Employment Programme report on Kenya, the formal/informal dualism has been a central organizing concept in over a hundred subsequent publications.
Conceptualizations of the dualist model and the terminology associated with its use vary considerably in the literature. In its crudest form, as Bromley (1978b: 1033) describes it, the informal sector is characterized by its ease of entry, its reliance on indigenous resources, the family ownership of enterprises, the small scale of operations, its labor intensity, by skills acquired outside the formal school system, and by unregulated competitive markets. Informal sector activities may be largely ignored, regulated, or even actively discouraged by the government. Several observers have found this paradigm useful for purposes of analysis. For example, it has been used in reference to provincial urban economies in Peru (Roberts 1976: 112-20), employment and urban economies in Latin America (Souza and Tokman 1976), shantytown settlers in Mexico (Lomnitz 1977; 1978), street traders in Cali, Colombia (Bromley 1978c), petty commodity production in Dakar (Gerry 1978), food distribution and small shops in Santiago (Tokman 1978b), and entrepreneurship and surplus labor in Nairobi (House 1984). In reference to Brazil, the dualist model has been employed in the analysis of occupational structures (Alessio 1970), employment and earnings (Merrick 1975), urban poverty (Tolza 1976; 1978), autonomous workers (Prandi 1980), female participation in the labor force (Jelin 1980), and urban survival strategies (Vianna 1980).

Empirical studies of the informal sector have generated a great deal of discussion, particularly among economists, regarding both the theoretical validity of economic dualism as an analytical framework and the policy recommendations that issue from studies which have employed it. Many of the issues relating to this discussion are profiled in papers published by Bromley (1978b), Moser (1978), and Tokman (1978a) and appear in a single volume of *World Development*, edited by Bromley (1978a). Criticisms of the
model on the policy side, as Moser (1978: 1042) notes, engage a political controversy about what 'development' should imply for the Third World, what type of society the transition from underdevelopment should lead to, the manner in which development objectives should be accomplished and by whom, and who should benefit from development strategies. On the theoretical side, it seems that despite the broad range of substantive concerns involved in these discussions (e.g., employment and underemployment, modes of production, the possibilities of capital accumulation, the potential for growth of small-scale enterprises, the capacity of such enterprises to absorb surplus labor, income distribution, housing, class formation, to cite but a few), in the final analysis at issue is the structural relationship between various sectors of the economy. Thus, Roberts (1978: 116-24) and Lomnitz (1978; 1982), among others, emphasize that the importance of the small-scale sector is significantly affected by, inter alia, developments relating to the large-scale sector, the organization of the labor market, and the size of middle and upper income markets, and the role of the state in respect to regulation and the provision of services. In a similar vein, Moser (1978) has suggested that a more satisfactory model is one that identifies a continuum of productive activities which seeks to describe the complex linkages and dependent relationships between economic sectors.

Research Focus and Methodology:

Two general questions framed the data collection process. First, has dependent industrial development in Manaus engendered a process of social and cultural differentiation among working class populations, thereby impeding or precluding their autonomous organization as a political class?
And second, has this process of differentiation been significantly affected by the regional social and cultural origins of the populations involved? In pursuing these questions methodologically, the theoretical point of departure was the centrality of the labor process, conceived as the coordinated set of activities and relationships involved in the production of goods and services, in shaping the character of working class populations (Burawoy 1984).

Conceptually, the structural dimensions of Manaus' economy are vertical as well as spatial. Vertically, Manaus is a periphery in relationship to Brazil's industrial South and to the modern world economy. Vertical relationships also make of Manaus a center with reference to the interior of Amazonas and neighboring areas. One concrete expression of these vertical structures takes the form of peripheral industries—industries that are locally capitalized and more or less dependent upon the performance of core industries for their growth and stability. The latter, the core industries, have been largely implanted in Manaus with the creation of the Free Trade Zone. The core industries are new to the region, significantly dependent upon external capital, and almost completely tied to national and international markets.

Corresponding to these vertical dimensions of dependency are its spatial dimensions. In terms of production, the spatial dimensions of dependency are expressed in the mobilization of material resources, including raw materials, capital, and labor. In terms of exchange, they are evident with reference to the relationships between internal and external markets. And, in terms of consumption, the spatial dimensions of dependency are revealed in the social and physical arrangements that attend the provisioning of families and household units in the local economy. Thus,
the spatial dimensions of dependency converge upon the movement of goods, services, and people, particularly the latter, and the extent to which this movement entails corresponding vertical relationships between various sectors of the economy. Logically and empirically, it is only the working class populations that are located in the vortex of these vertical and spatial dimensions of dependency in Manaus.

In light of these considerations, the data collection process gave focus to an in-depth study of a non-random sample of workers selected in reference to different sectors of the economy and to two different modes of production. In the industrial sector, 32 workers were selected for study from electronics firms implanted in Manaus' new Industrial Park. An additional 20 workers were selected from firms in the wood-processing industry. The so-called 'high-tech' electronics firms are divisions of multinational corporations. They are non-traditional in the region and they generally conform to what economists have labeled a monopolistic-capitalistic mode of industrial production. The wood-processing industry, in this case sawmills, is traditional in the Amazon and most firms operating in this sector are family-owned enterprises which exhibit a laissez-faire capitalistic mode of production. A third group of 20 workers was selected for study from the non-industrial service sector of the economy and is comprised of white-collar types, including lower-level functionaries working for government, secretaries, bank clerks, primary school teachers, nurse's aids, and telephone operators. A fourth group of 15 workers was selected in the informal sector and included street vendors, individuals who had various kinds of biscates such as odd-job construction work, television repair work in the home, operating taxis, domestic service, and the like. In addition to these biscateiros, a separate but more
limited study was made of 22 comerciantes (small shopkeepers who ran enterprises out of their homes or had stalls or trays in the daily neighborhood market). This group may also be viewed as operating in the informal sector.

With the use of a schedule consisting of 185 items, many of which were open-ended, in-depth interviews were made and taped with informants selected in these categories. Except for interviews with informants in the informal sector, most of these interviews were conducted in the informants' homes. Questions were structured to elicit, inter alia, information in respect to the informant's migratory history, the migratory history of the informant's family, household composition, the informant's work history from the time of first work experience, the educational background of the informant and family members, household composition, marriage and kinship relations, informant's current occupation, occupation of other family members, union membership and participation, involvement in political activities, informant's income, household income, participation in associational and communal organizations, benefits provided by employer, household purchase of non-consumable goods (furniture, appliances, etc.) and food, health experiences and expenditures, housing conditions, utilization of urban resources, transgenerational patterns of spatial and vertical mobility, and the like. With respect to autonomous workers, additional information was elicited in reference to the capitalization of enterprises, inventory, the employment of family and non-family members, wages paid, market networks, profit margins, overhead, hours of work, and related matters. It should be noted also, that as far as possible, field research was focused in Raiz, an urban barrio of Manaus adjacent to the
Industrial Park where approximately 40,000 workers are employed in the electronics and related industries.

To be considered in the discussion that follows are migratory patterns in relationship to changes in the urban labor market, the employment experiences of workers in the informal sector, and the character of informal sector activities with reference to levels of income and the economy of domestic groups. To underscore characteristic features of the informal sector, comparisons will be drawn between workers in this and the more formal sectors of the economy.

Migration and The Urban Labor Market

Various discussions of the informal sector in the literature link it to migratory patterns stimulated by urban-industrial growth and to the incapacity of new industries to absorb more than a privileged minority of the labor force available (see e.g., McGee 1971, 1973; Singer 1973, 1975; Roberts 1976: 116, 1978: 61-87, 119-24; Oliveira 1980; Alves de Souza 1980). Gerry (1978), Mingione (1983), Conroy (1984), and others, suggest that the growth of the informal sector is the result of survival strategies that are made increasingly necessary by the dominant mode of capitalist development and by a lack of any objective relationship between the rate of profits and the level of wages in the formal sector. Cheap labor in the formal sector generates a demand for goods which can only be met in the informal sector where labor costs are even more depressed. Similarly, Faria (1978) suggests that in Brazil marginal occupations are more likely to predominate in the less dynamic urban centers. In accord with these views, Roberts (1978: 113-18) maintains that the independent basis of the small-scale sector is eroded by increasing urbanization and by the growth of middle-
upper-income markets, developments more commonly associated with what Faria would consider the more dynamic urban centers in Brazil.

Apropos of these discussions, between 1967 (when the Free Trade Zone was established) and 1980, the population of Manaus increased from 254,000 to 634,756—a relative increase of 150 percent. Many observers (see e.g., Bentes 1983), have attributed a significant proportion of this growth to a migratory flow of population stimulated by work opportunities in the new industries of the Free Trade Zone. This movement of population has created a 'surplus' of labor in Manaus. Local observers, including social scientists, social service administrators, journalists, religious leaders, and the like, consider much of this population 'marginalized' and more or less dependent for its material well-being upon work in the 'informal sector.' To the extent that these projections are generally valid, one might expect that urban migration, chronic unemployment, and the depression of wages in the formal sectors of the economy would have contributed significantly to the expansion of the informal sector in Manaus. What is the case for this hypothesis in light of the data collected?

Tables 1 and 2 present figures calculated from census data relating to economically active persons in Amazonas and in Manaus, for various economic sectors and by position in occupation, respectively for 1960 and 1980, the two census periods which bracket the introduction of the Free Trade Zone.
Table 1. Sector of Economic Activity in Amazonas and in Manaus and Position in Occupation of Economically Active Population in Manaus in the Week Previous to 1960 Census (Agriculture, Fishing, and Extractive Activities Excluded).

<table>
<thead>
<tr>
<th>Sector of Activity</th>
<th>Total State</th>
<th>Total Manaus</th>
<th>Position in Occupation of Economically Active in Manaus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Employers</td>
</tr>
<tr>
<td>Industrial</td>
<td>10,874</td>
<td>5,221</td>
<td>74</td>
</tr>
<tr>
<td>Commerce</td>
<td>13,659</td>
<td>6,389</td>
<td>235</td>
</tr>
<tr>
<td>Services</td>
<td>14,931</td>
<td>7,211</td>
<td>26</td>
</tr>
<tr>
<td>Transport &amp;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communications</td>
<td>8,205</td>
<td>4,442</td>
<td>6</td>
</tr>
<tr>
<td>Social Services</td>
<td>5,176</td>
<td>2,537</td>
<td>---</td>
</tr>
<tr>
<td>Other (Not Defined)</td>
<td>3,786</td>
<td>1,997</td>
<td>---</td>
</tr>
<tr>
<td>Total</td>
<td>56,631</td>
<td>27,797</td>
<td>341</td>
</tr>
</tbody>
</table>
Table 2. Sector of Economic Activity in Amazonas and in Manaus and Position in Occupation of Economically Active Population in Manaus in the Week Previous to the 1980 Census (Agriculture, Fishing, and Extractive Activities Excluded).

<table>
<thead>
<tr>
<th>Sector of Activity</th>
<th>Total State</th>
<th>Total Manaus</th>
<th>Position in Occupation of Economically Active in Manaus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Employers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Industrial</td>
<td>93,190</td>
<td>77,485</td>
<td>886</td>
</tr>
<tr>
<td>Commerce</td>
<td>41,094</td>
<td>33,103</td>
<td>1,472</td>
</tr>
<tr>
<td>Services</td>
<td>50,030</td>
<td>40,266</td>
<td>785</td>
</tr>
<tr>
<td>Transport &amp;</td>
<td>17,019</td>
<td>13,665</td>
<td>258</td>
</tr>
<tr>
<td>Communications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Services</td>
<td>25,170</td>
<td>17,357</td>
<td>98</td>
</tr>
<tr>
<td>Other (Not Defined)</td>
<td>8,745</td>
<td>6,009</td>
<td>83</td>
</tr>
<tr>
<td>Total</td>
<td>235,248</td>
<td>187,885</td>
<td>3,582</td>
</tr>
</tbody>
</table>
A comparison of the data presented in Tables 1 and 2 reveals that in the 13-year period following the introduction of the Free Trade Zone, there was a relative increase of almost 576 percent in the economically active population of Manaus. The industrial sector of the economy virtually exploded with an increase of almost 1400 percent. This growth in Manaus' economy was paralleled by a significant increase in the number of employers (950 percent), employees (698 percent), and autonomous workers (346 percent).\textsuperscript{4} Autonomous workers are defined as economically active persons who work for themselves and who, if they employ others, employ only members of the family or household. Autonomous workers may or may not have registered enterprises and they may or may not be registered with INPS (Instituto Nacional Da Previdencia Social).

Whatever the case, autonomous workers comprise the majority of persons economically active in what is generally labeled the informal sector. While the absolute number of autonomous workers increased substantially between 1960 and 1980 (from 9,446 to 42,086), not only was their percentage increase relative to employers and employees significantly lower, but their relative number in the total population of economically active persons actually declined (from 34 to 22 percent) while the number of employees increased (from approximately 61 to 72 percent). This percentage decline of autonomous workers is reflected in all but two sectors of the economy. There has been a slight percentage increase relative to employers and employees in the industrial sector (from 11.3 to 14.8 percent) and a rather more significant increase (from 13 to 30 percent) in the transportation and communications sector. In the commercial and service sectors of the economy, the sectors in which one
might expect a significant increase, the number of autonomous workers
relative to employers and employees has declined. The decline is most
marked in the service sector, indicating a disproportionate increase in
wage employment relative to self-employment. Viewed differently,
however, in 1980 more than 87 percent of all autonomous workers in Manaus
reported enterprises which made them operative in the commercial,
industrial, and service sectors of the urban economy and this finding is not
inconsistent with projections that might be drawn from the structural
linkages which many observers have made between the formal and informal
sectors.

To summarize: as one might hypothesize from the literature, the
number of autonomous workers in Manaus has grown significantly since the
introduction of the Free Trade Zone and the Industrialization of the economy
that followed. Proportionately, however, except in the transportation and
communications sector, the informal sector itself seems to have declined
rather than expanded despite a significant increase in the urban population.
Most immediately, these data pose three questions. First, what precisely
is the relationship between migration and the growth of Manaus’ economy?
Second, are informal sector workers primarily migrants who cannot find
wage employment in the new industrial economy? And third, what are the
economic dimensions of employment in the informal sector relative to
employment in the more formal sector? Consideration will be given to this
third question in the following section.

The best currently available study of the migratory process in
relationship to the establishment of Manaus’ Free Trade Zone is one made by
staff of researchers, Bentes conducted a survey of 2,000 households
stratified by bairros, a two percent sample of all households in the city. Of
the heads of households interviewed, 76.6 percent were migrants and of
this number (1532) 57 percent originated in the state of Amazonas. In
addition to the demographic data collected, Bentes also queried informants
concerning their reasons for migrating to Manaus. Approximately 30
percent of the migrants from whom this kind of information was obtained
(32 percent did not respond to this query) gave economic reasons (usually
related to conditions in their places of origin), reasons of work, or
employment opportunities in the Free Trade Zone. On the basis of these
data, Bentes concluded (p. 92) that migration to Manaus seems to be more
critically related to factors of expulsion than to economic impulses deriving
from the Free Trade Zone.

Despite the quality of Bentes' research, for purposes of this analysis
there are three deficiencies in his report. First, Bentes' sample was
directed towards heads of households and this obviously introduces a male
bias in the data. Second, Bentes did not analyze the mass of data he
collected so as to differentiate between those migrants who came to Manaus
before the Free Trade Zone was established (a great many of whom were
brought to Manaus as young children by their parents, or who came for
personal reasons or reasons of education) and those who migrated to the
city after the Free Trade Zone was established. And third, except for a
brief analysis of occupational status as measured with a scale constructed
by Silva (Bentes 1963:122) using a 20 percent sample of the Brazilian
population as reported in the 1970 census, occupational data are not
analyzed. Fortunately for purposes of the present study, Bentes made
available to the author the raw data collected for that sample of the Manaus
population drawn from Raiz, the bairro in which much of our work was
concentrated. These data provided a systematic sample of households representing approximately 3,900 of the 100,000 households included in Bentes’ study.

The data from Raiz indicate that approximately 79 percent of its household heads are migrants. Of these migrants, 58 percent arrived in Manaus in the years before the Free Trade Zone was established in 1967. Table 3 presents the number and percentage distribution of migrants who arrived in Manaus before and after 1967, and of non-migrants, by the occupational position of household heads in Bairro Raiz.

<table>
<thead>
<tr>
<th>(Row Pct.)</th>
<th>Migrants</th>
<th>Non-Migrants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Col Pct.)</td>
<td>Before 1967</td>
<td>After 1967</td>
<td></td>
</tr>
<tr>
<td>(Tot. Pct.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td>14 (44)</td>
<td>12 (37)</td>
<td>6 (19)</td>
</tr>
<tr>
<td></td>
<td>(42)</td>
<td>(50)</td>
<td>(40)</td>
</tr>
<tr>
<td></td>
<td>(19)</td>
<td>(17)</td>
<td>( 8)</td>
</tr>
<tr>
<td>Autonomous</td>
<td>17 (58)</td>
<td>6 (21)</td>
<td>6 (21)</td>
</tr>
<tr>
<td></td>
<td>(52)</td>
<td>(25)</td>
<td>(40)</td>
</tr>
<tr>
<td></td>
<td>(24)</td>
<td>( 8)</td>
<td>( 8)</td>
</tr>
<tr>
<td>Retired and Other</td>
<td>2 (18)</td>
<td>6 (55)</td>
<td>3 (27)</td>
</tr>
<tr>
<td></td>
<td>( 6)</td>
<td>(25)</td>
<td>(20)</td>
</tr>
<tr>
<td></td>
<td>( 3)</td>
<td>( 8)</td>
<td>( 4)</td>
</tr>
<tr>
<td>Total</td>
<td>33 (46)</td>
<td>24 (33)</td>
<td>15 (21)</td>
</tr>
</tbody>
</table>
As Table 3 shows, 40 percent of the household heads interviewed by Bentès in Bairro Raiz are autonomous workers. This percentage is higher than for the general population (22 percent in 1980) and suggests that significant differences may exist among the working class populations of different bairros in Manaus. This observation aside, it is important to note that 79 percent of the autonomous workers in Bairro Raiz are migrants and the vast majority of these (74 percent) arrived in Manaus before the Free Trade Zone was established. Among migrants, wage employees are much more likely to have arrived in Manaus after 1967 than autonomous workers. When one checks further into the migrant status of these autonomous workers, at the time they were interviewed in 1979 no less than 87 percent had more than 18 years of residence in Manaus and 52 percent had lived in the city for more than 23 years. In other words, despite the fact that four out of every five autonomous workers in Bairro Raiz are migrants, a truly substantial majority of these migrants were residents of the city for a considerable number of years prior to the implanting of the Free Trade Zone.

At this juncture it is useful to briefly consider the migratory status and occupational position of workers selected for in-depth study. A comparison of these data with those of the Raiz sample is instructive; it is summarized in Table 4.
Table 4. Number and Percentage Distribution of Migrants
Before and After 1967, and of Non-Migrants, by
Occupational Position: Purposive Sample.

<table>
<thead>
<tr>
<th>(Row Pct.)</th>
<th>Migrants</th>
<th>Born in Manaus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Col. Pct.)</td>
<td>Before 1967</td>
<td>After 1967</td>
<td></td>
</tr>
<tr>
<td>Autonomous Workers</td>
<td>6 (38)</td>
<td>8 (50)</td>
<td>2 (12)</td>
</tr>
<tr>
<td>(24)</td>
<td>(27)</td>
<td>(6)</td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td>19 (26)</td>
<td>22 (31)</td>
<td>31 (43)</td>
</tr>
<tr>
<td>(76)</td>
<td>(73)</td>
<td>(94)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25 (28)</td>
<td>30 (34)</td>
<td>33 (38)</td>
</tr>
</tbody>
</table>

In the Raiz sample, 79 percent of the interviewees were migrants. In the purposive sample shown in Table 4, only 62 percent are migrants. Since the proportion of employees to autonomous workers was pre-selected, the percentage distribution of these groups is not a matter of note. It is also not surprising that 57 percent of the employees interviewed were migrants and that more than half of these migrants arrived in Manaus after the implanting of the Free Trade Zone in 1967. More significant, however, is the fact that 94 percent of the interviewees who happened to be born in Manaus turned out to be employees and 88 percent of the autonomous workers selected turned out to be migrants. Only two of the 16 autonomous workers more or less selected at random off the streets of Manaus were born in the city. Among those who are migrants, almost as many (43 percent) arrived in the city some years prior to 1967 as the number (57 percent) who arrived after 1967.
A further breakdown of the purposive sample by migrant status and sector of economic activity is also instructive. Among the 32 electronics workers interviewed, no less than 63 percent were born in Manaus. Among the 11 who are migrants, only 6 (55 percent) came to Manaus after 1967. All of the workers interviewed in the wood-processing industry were migrants. However, one of the two firms under study came to Manaus from the state of Parana in response to the economic incentives of the Free Trade Zone. As a matter of policy, this firm recruits almost all of its workers from Parana. Thus, half of the workers interviewed in the wood-processing industry migrated to Manaus after 1967. Finally, with respect to white collar workers, more than half (55 percent) were born in Manaus and more than half of the remainder (55 percent) migrated to Manaus after 1967.

What do these different studies seem to reveal about the migratory process, the urban labor market, and the informal sector of the urban economy in relationship to the establishment of the Free Trade Zone in 1967? First, the migratory process affecting urban growth in Manaus seems to have been well underway prior to the industrialization that followed upon the implanting of the Free Trade Zone. The expulsive factors affecting this process in the interior of Amazonas are not well understood and are in need of more research, but these factors seem to be every bit as important in the movement of population as the economic opportunities which have been attributed to developments in the Free Trade Zone.6

Second, with population growth, the informal sector of the economy has also grown, but it does not seem to have grown disproportionately to other sectors of economic activity. As far as the labor process is concerned, and in terms of the economically active population, the
proportion of autonomous workers, except perhaps in a few bairros, is not significantly larger today than it was in 1960. In terms of census data, the Bentes survey, the SHAM study of seven housing conjuntos, and in terms of our own in-depth study of a select group of workers, the number of autonomous workers relative to the number of wage employees has remained relatively stable since 1960 and this is rather surprising in face of the unemployment, the high inflation, and the severe economic recession that has gripped Manaus since 1980.

Third, the migratory process is significantly related to different sectors of the economy and to occupational position, but it is not related in the way that one might have anticipated in terms of projections issuing from theoretical discussions in the literature. These projections appear to be correct insofar as they suggest that autonomous workers, in comparison to wage employees, are disproportionately represented among the migrant population. However, contrary to these projections, at least in Manaus, the population of autonomous workers does not seem to be disproportionately comprised of recent migrants, or of previously unemployed individuals, or of individuals who cannot obtain work in the formal sector. By and large, autonomous workers in Manaus seem to be more often early migrants who have lived many years in the city and who arrived before the creation of the Free Trade Zone. They are people who know the city and the potential for various markets in different areas of the city. Among the 16 workers included in our in-depth study, only one resorted to a "biscate" because of a loss of employment in the formal sector. The remainder elected this line of work in preference to seeking employment in the formal sector and all but three reported that they would not be inclined to give up this work in favor of employment in the formal
sector. By way of contrast, wage employees are more likely to be counted among recent migrants or among workers born in Manaus. In fact, among the 33 workers included in the study who were born in Manaus, 94 percent are employees.

These findings invite one to consider more closely some of the economic dimensions of work in the informal sector in comparison to other sectors of economic activity.

Economic Dimensions:

As previously noted, the dualist model juxtaposes two types of economy, two systems of production, or two sectors of economic activity. Regardless of the terminology or emphasis, the formal sector is generally depicted as internationally-based, involving hegemonic forms of capitalistic production, and characterized by capital-intensive techniques, the production or distribution of goods for sophisticated markets, high wage rates relative to other sectors, and access to whatever range of benefits may be provided by employers and/or government. Contrastively, the informal sector is characterized by small-scale forms of production, indigenous ownership, the use of local inputs, production or exchange for low-income markets, labor-intensive techniques, a low demand for skills, low wages, and an insufficiency of access to social benefits.

It is often stated, but deserving of repeated emphasis, that by virtue of its character the informal sector is extremely heterogeneous. Clearly, our small sample of autonomous workers in Manaus cannot be construed as representative of the population involved in this complex and heterogeneous sector of activity. The sample can only depict what we learned about 16 'biscates' and 22 'comerciantes' (and their respective
enterprises and households) classed in this category relative to other categories of workers included in the study. And, in the present context, the focus is primarily on incomes, social origins, and certain aspects of their respective households economies. Table 5 presents income data in respect to this sample.
Table 5. Distribution of Purposive Sample by Economic Sector, Occupational Position and Number of Minimal Salaries.

<table>
<thead>
<tr>
<th>Economic Sector and Occupational Position (Row Pct) (Col. Pct.)</th>
<th>1</th>
<th>2</th>
<th>3-5</th>
<th>6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electronics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technicians</td>
<td>0</td>
<td>2(29)</td>
<td>4(57)</td>
<td>1(14)</td>
<td>7(100)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(33)</td>
<td>67(100)</td>
<td>(22)</td>
<td></td>
</tr>
<tr>
<td>Laborers</td>
<td>19(76)</td>
<td>4(16)</td>
<td>2(8)</td>
<td>0</td>
<td>25(100)</td>
</tr>
<tr>
<td></td>
<td>(100)</td>
<td>67(100)</td>
<td>33(78)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19(59)</td>
<td>6(19)</td>
<td>6(19)</td>
<td>1(3)</td>
<td>32(100)</td>
</tr>
<tr>
<td><strong>Wood Processing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technicians</td>
<td>0</td>
<td>0</td>
<td>2(100)</td>
<td>0</td>
<td>2(100)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(50)</td>
<td>(10)</td>
<td></td>
</tr>
<tr>
<td>Laborers</td>
<td>9(50)</td>
<td>7(39)</td>
<td>2(11)</td>
<td>0</td>
<td>18(100)</td>
</tr>
<tr>
<td></td>
<td>(100)</td>
<td>(100)</td>
<td>50(90)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9(45)</td>
<td>7(35)</td>
<td>4(20)</td>
<td>0</td>
<td>20(100)</td>
</tr>
<tr>
<td><strong>White Collar</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functionaries</td>
<td>2(15)</td>
<td>1(8)</td>
<td>4(31)</td>
<td>6(46)</td>
<td>13(100)</td>
</tr>
<tr>
<td></td>
<td>(25)</td>
<td>(50)</td>
<td>100(100)</td>
<td>(65)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>6(86)</td>
<td>1(14)</td>
<td>0</td>
<td>0</td>
<td>7(100)</td>
</tr>
<tr>
<td></td>
<td>75(100)</td>
<td>50(90)</td>
<td></td>
<td>(35)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8(40)</td>
<td>2(10)</td>
<td>4(20)</td>
<td>6(30)</td>
<td>20(100)</td>
</tr>
<tr>
<td><strong>Autonomous</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vendors</td>
<td>5(42)</td>
<td>3(25)</td>
<td>4(33)</td>
<td>0</td>
<td>12(100)</td>
</tr>
<tr>
<td></td>
<td>(45)</td>
<td>(33)</td>
<td>(27)</td>
<td>(32)</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>3(75)</td>
<td>0</td>
<td>1(25)</td>
<td>0</td>
<td>4(100)</td>
</tr>
<tr>
<td></td>
<td>27(100)</td>
<td>6(10)</td>
<td></td>
<td>(10)</td>
<td></td>
</tr>
<tr>
<td>Comerciantes</td>
<td>3(14)</td>
<td>6(27)</td>
<td>10(45)</td>
<td>3(14)</td>
<td>22(100)</td>
</tr>
<tr>
<td></td>
<td>(27)</td>
<td>(67)</td>
<td>(67)</td>
<td>(100)</td>
<td>(58)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11(29)</td>
<td>9(24)</td>
<td>15(39)</td>
<td>3(8)</td>
<td>38(100)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>47(43)</td>
<td>24(22)</td>
<td>29(26)</td>
<td>10(9)</td>
<td>110(100)</td>
</tr>
</tbody>
</table>
As Table 5 reveals, among the 110 informants interviewed, the proportion of autonomous workers reporting one minimal salary (29 percent) is significantly lower than it is for all other economic sectors included in the field study. Forty percent of white collar workers, 45 percent of sawmill workers, and 59 percent of electronics workers report earning only one minimal salary per month. Except for certain categories of workers in other economic sectors, this pattern of higher earnings for autonomous workers generally holds for all categories of income (only in the case of one comerciant did an informant report earning in excess of 11 minimal salaries). In this particular sample, autonomous workers comprised 46 percent of all the workers interviewed who reported earning three minimal salaries or more. However, as Table 5 also shows, within sectors of economic activity there are significant income variations among workers by occupational position.

In the hegemonic capitalistic sector, as represented by the electronics industry, 92 percent of all laborers earn two minimal salaries or less and 76 percent report earning only one. Only technicians in this industry generally earn three minimal salaries or more and this category of workers is somewhat over-represented in our sample. Between the two electronics firms included in the study, less than 5 percent of 2,223 electronics workers are classed as technicians and promotion into this category is a prospect for very few employees. Moreover, as far as turnover and layoffs are concerned, the status of technician was no more secure than that of laborer.

In the laissez-faire capitalist sector, as represented by two family-owned firms in the wood-processing industry, security of employment was significantly more evident than in the electronics industry. However, there
are very few technicians in this industry and the prospects for promotion even after many years of employment are practically non-existent. In addition, it should be noted that most of the laborers reporting two minimal salaries in this industry were employed by the firm which migrated to Manaus from Parana in response to the creation of the Free Trade Zone, and all of the workers reporting two minimal salaries or more in this firm were recruited in Parana: the few locally recruited workers earned only one minimal salary.

Among white collar workers, the higher incomes (3 minimal salaries or more) are generally earned by functionaries (i.e., government workers). In most cases, the highest paid of these workers are secretaries, bookkeepers and accountants employed by the federal or state governments. This group represented the highest paid category of informants included in the study.

Returning the discussion to autonomous workers and the informal sector, clearly there is a significant pattern of variation among different categories of autonomous workers. Seventy-two percent of autonomous workers who report three incomes or more are comerciantes and 59 percent of comerciantes report three minimal incomes or more. Fifty-five percent of the autonomous workers reporting two minimal salaries or less are street vendors or have "biscates" selling services (repairing watches, televisions, or selling domestic services) and only 41 percent of the comerciantes interviewed reported two minimal salaries or less. In other words, among autonomous workers, individuals who have established themselves in small shops, at home or on the street, or in market stalls in Bairro Raiz, seem to have a significantly higher income potential in the
informal sector than "camelôs" that sell various types of goods from trays on the streets.

Related to these differences in incomes among comerciantes and other categories of autonomous workers are econometric differences in the character of their enterprises. The enterprises of comerciantes, compared to those of vendors, required a more substantial investment in "fixed capital." Their stalls or shops required construction and/or furnishings, electrical installations, and the like. As compared to vendors, most comerciantes also evinced a more substantial investment of capital in inventory and in regular overhead costs. Most of the comerciantes interviewed were licensed and had to pay fees. Some rented their places of business and needed to meet weekly or monthly rents. Those engaged in the sale of perishable goods would consume at home whatever they could of unsold goods, but this did not avoid some overhead costs for spoilage and waste.

The enterprises of most vendors interviewed did not entail much by way of capital investment. At the lower end of these enterprises, a tray, or display board, or styrofoam cooler required an investment of approximately $10,000 cruzelros. A small "vitrine" or display case could be constructed for $30,000 and an insulated "carro de vender picole" could be purchased for perhaps less than $100,000 cruzelros. All of the vendors interviewed were unlicensed and paid no fees. Overhead costs were minimal or non-existent. Inventories were also minimal in that they purchased what they needed from middlemen several times each week. Vendors of perishable goods indicated that they rarely bought more than they could sell in a normal day.
Related to these differences are also differences in the organization of work. The comerciantes interviewed reported that they had to keep relatively regular hours in order to maintain a profit margin and meet fixed and variable costs. Most of the vendors interviewed kept surprisingly regular hours but they did not feel compelled to do so. They indicated that they generally worked when and where they pleased. Those who worked primarily in the central city tended to occupy the same locations almost on a daily basis, but this did not prevent them from moving if they felt they could do better elsewhere. These street vendors generally cleared the streets toward evening and they bent every effort to be at their respective locations on Fridays and Saturdays but, otherwise, social interests and family obligations could take precedence over their hours and days of work.

It is often suggested in the literature that actors and enterprises in the informal sector are highly competitive in comparison to firms organized in the formal sector. This is undoubtedly true, but the nature and character of competition is still another dimension which seems to differentiate the behavior of vendors on the one hand, and comerciantes on the other. In Bairro Raiz, the comerciantes who operated in the same line of goods or services saw themselves as competitors and they had little to do with one another either socially or in business. In fact, they hardly admitted to knowing one another. This was not the case among the vendors. Among vendors, there existed extensive cooperative networks, even among those selling the same kinds of goods and occupying essentially the same street locations. They were competitive, but their competition did not extend to driving one another from the street or out of business. The opposite seemed to be the case. They borrowed capital from one another when there was a need for it. They helped one another become established.
Newcomers were taught the "tricks of the trade" by those who had neighboring trays or display boards. They watched one another's goods in the event that one wanted to leave for an hour or two. On some of these occasions we observed some not hesitating to show potential customers what their "friend" had available as well as what was available on their own boards. They collectively watched for thieves and warned one another of their presence in the street.

As far as competition is concerned, today in Manaus it is primarily merchants and commercial houses that seek to drive "biscateiros" and vendors from the streets. Since 1980, the competition between merchants and vendors has increased substantially as a consequence of the impact which Brazil's severe recession has had on commercial establishments in the formal sector. For example, according to data collected by IBGE and published in _a Noticia_ (one of the newspapers in Manaus), between 1980 and 1984 the number of commercial establishments in Amazonas fell from 13,144 to 6,450. Employment in this sector dropped from 36,182 to 15,940. From 1982 to 1984, the mean monthly value of sales declined from U.S. $27,213 to U.S. $18,359 millions. During the same two-year period, no less than 904 commercial houses failed in Manaus. Thus, commercial houses increasingly view street vendors as cutting into their trade.

The strategy adopted by merchants in this regard is to encourage city officials, and the police, to periodically harrass "biscateiros" and force them to register their enterprises, thus making it possible to move them to fixed market places, many of which are out of the way of commercial traffic, particularly the traffic of tourists who come to Manaus to shop primarily for appliances, electronic equipment, and other industrially produced goods which carry heavy import duties when they re-enter the
Brazilian market outside the Free Trade Zone. While shopping for these expensive goods, tourists often buy perfumes, leather goods, costume jewelry, cheap watches, apparel, and other goods from street vendors at prices that are considerably lower than those charged in the commercial houses. In response to harassment by merchants and city officials, some of the vendors interviewed have extended cooperation among themselves to the organization of an Association. The Association has as its main function the employment of legal assistance to defend vendors when they get in trouble with the police or city government. This organization of vendors, however, is in its early stages of development. Judging from the data collected, membership in the Association is not yet large and the Association could not afford to maintain an office in which to conduct its affairs.

Despite the differences noted between vendors and comediantes, most of the vendors interviewed aspired to become comediantes. They considered the enterprises of comediantes more secure, more profitable, and more commanding of status as occupations. They viewed their own enterprises as opportunities, albeit limited, to accumulate the capital necessary to establish "businesses" in which they could derive more profits and larger incomes for themselves and their families. They did not view industrial work as affording this opportunity or as providing the experience needed to deal with people or to manage such enterprises. In fact, of the 16 autonomous workers interviewed in depth, only three would prefer employment in Manaus' Industrial Park to their present work and all three were engaged in the sale of services (a domestic, one television repairman, and a carpenter).
From the data collected, it cannot be known precisely the extent to which the pattern of aspirations expressed by most autonomous workers is realistic. In terms of the more limited data collected in respect to comerciantes, it is clear that there are many avenues of access to the establishment of these somewhat larger enterprises. One involves the availability of space attached to one's home and capital derived perhaps from employed family members, or pensions, or the profit earned from selling a house. Another avenue seems to involve renting a stall and accumulating sufficient capital to purchase it. Still another involves the investment of indemnization payments collected by terminating wage employment. And, in several instances, comerciantes had been vendors working for themselves or working on commission for commercial establishments where they had accumulated sufficient capital to establish their own enterprises. Whether realistic or not, 13 of the 16 non-comerciantes interviewed were neither looking for wage employment nor interested in changing their present line of work.

Clearly, work in the informal sector in Manaus is not economically unrewarding relative to industrial employment. However, the satisfaction which autonomous workers express in regard to their line of work is not entirely related to economic considerations. In interviews, workers were asked what they liked most, and what they liked least, about their work. The responses to these questions disclosed recurrent and seemingly persistent attitudes. Generally, what they liked least was the harassment by public officials, the difficulties of working the streets in inclement weather, and the social ambience of the streets. By the latter, they meant the dangers of being robbed and the disrespect they often received from the general public. However, most of them agreed that they liked working the
streets because of the independence it afforded them. They were their own bosses. What they earned, they felt, was a function of their own initiative. They, and not someone else, were rewarded for their initiative. They did not have to meet schedules or "punch clocks." They did not have to take orders or submit to authority. They did not have to worry about layoffs. They always had a little cash in their pockets and did not have to wait for weekly or monthly wages. They had an opportunity to meet a variety of interesting people from all parts of the country. The work was interesting and challenging. They were not isolated from the city as workers in the Industrial Park were isolated. They had more time to be with family and friends. And, as many stated, they had friends on the streets and looked forward to being with them.

The autonomous workers interviewed were not without experience in the formal sector. Only four of the sixteen cases had never done any other type of work. The remaining 12 (75 percent) had at sometime in their careers worked for wages in industry, commerce, or the public sector (i.e., for government). And just as clearly, they seemed cognizant of the stability of work in the informal sector relative to work in the industrial sector of the economy. The overall validity of this awareness is perhaps best expressed in terms of employment experience. Table 6 presents data relating the distribution of workers by the sectors of economic activity under consideration relative to the number of years for which workers in the purposive sample have been employed.
<table>
<thead>
<tr>
<th>Economic Sector</th>
<th>2 Years or More</th>
<th>3-5 Years</th>
<th>6 Years or More</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics</td>
<td>21 (66)</td>
<td>9 (28)</td>
<td>2 (6)</td>
<td>32 (100)</td>
</tr>
<tr>
<td></td>
<td>(66)</td>
<td>(30)</td>
<td>(8)</td>
<td></td>
</tr>
<tr>
<td>Wood Processing</td>
<td>0</td>
<td>7 (35)</td>
<td>13 (65)</td>
<td>20 (100)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(23)</td>
<td>(50)</td>
<td></td>
</tr>
<tr>
<td>White Collar</td>
<td>5 (25)</td>
<td>8 (40)</td>
<td>7 (35)</td>
<td>20 (100)</td>
</tr>
<tr>
<td></td>
<td>(15)</td>
<td>(27)</td>
<td>(27)</td>
<td></td>
</tr>
<tr>
<td>Autonomous</td>
<td>6 (38)</td>
<td>6 (38)</td>
<td>4 (25)</td>
<td>16 (100)</td>
</tr>
<tr>
<td></td>
<td>(19)</td>
<td>(20)</td>
<td>(15)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>32 (36)</td>
<td>30 (34)</td>
<td>26 (30)</td>
<td>88 (100)</td>
</tr>
</tbody>
</table>

Table 6. Distribution of Workers by Number of Years Employed in Current Source of Employment by Economic Sector.
As can be observed in Table 6, the wood-processing industry has provided the most stable source of employment. Sixty-five percent of the workers interviewed in this industrial sector have worked six years or longer for their present employer and none had worked less than two years. In fact, most of the workers employed by the Parana firm have been with the same "patron" since he moved the company to Manaus more than 13 years ago. It should be noted, however, that work in the sawmills of Manaus is arduous and offers very little prospect for promotion, and salary increments are largely pegged to minimal wage adjustments by the Federal Government.

The white-collar sector, particularly employment in the public sector, represented the second most stable source of employment for the workers interviewed. Seventy-five percent of the interviewees in this sector had been working in their current places of employment for more than three years and 35 percent had been at their present jobs six years or longer. Because of educational demands, however, access to employment in this sector is generally closed to workers with less than eight years of formal schooling. Even clerks in the commercial sector are generally required to have completed the Ginásio, the last four years of primary school. Moreover, as has been noted, employment in the commercial sector has been exceedingly unstable since 1980.

Clearly, the most unstable source of employment today in Manaus is the new industrial sector and this is most especially true for the electronics industry. Sixty-six percent of the workers interviewed in this sector have been with their firms for less than two years and five of the 11 workers reporting more than three years of employment are technicians.
Turnover in the electronics industry is virtually continuous and the majority of workers reporting less than three years of employment in this industry have bounced around from one firm to another. In addition, the electronics industry favors the recruitment of women (approximately 75 percent of the total labor force in this sector are women) and young adults, preferably under the age of thirty. It should also be noted that one of the two companies under study in this sector had a relatively firm, but not publicly announced, policy against the recruitment of migrants from the interior.

Sixty-three percent of the autonomous workers interviewed had been at their present work for more than three years, and half of the remaining six are individuals engaged in the sale of services. It is these same three individuals who reported that they were looking for other work and would prefer employment in the Industrial Park if it were made available to them. Thus, in comparison to wage employment in the new industrial sector, work in the informal sector of Manaus is both relatively rewarding and relatively stable and this seems to be a motivating factor in respect to the decisions taken by the workers interviewed to continue work in this sector of activity.

A final economic dimension of work in the informal sector that perhaps ought to be mentioned concerns the question of benefits. As previously noted, it is frequently mentioned in the literature that workers in the informal sector do not generally have access to the various kinds of benefits which employers and/or government often provide for wage employees in the formal sector. Indeed, employers in Manaus, particularly in the new industrial sector, proclaim an unusual benefit structure as part of the "wage package." In the electronics industry, employers argue that because of the benefits they provide workers, the wage structure of the industry is significantly higher than it appears. Upon
close inspection, except for the Parana firm in the wood-processing industry (which provides excellent housing, water, and electricity for all of its employees), this contention is simply without merit.

In the electronics industry, for example, the benefit structure includes crèche, transportation, a hot noon-day meal, medical coverage and, in some cases, recreational facilities with an organized program of team-sports. Except for crèche and health benefits, workers make a nominal contribution to maintain these benefits. As far as recreational facilities are concerned, where available, the majority of workers interviewed, particularly the women, did not avail themselves of these facilities. Because the vast majority of workers in this industry are women, employers, in part with funds provided by SUFRAMA (Superintendência da Zona Franca de Manaus), have to provide crèche in order to reduce absenteeism. Similarly, because the Industrial Park is situated in a relatively isolated area and at a considerable distance away from most urban neighborhoods, and also because public transportation to this area is extremely limited, employers have to provide workers with transportation in order to reduce tardiness and maintain industrial discipline. The provision of low-cost noon-day meals is linked to the transportation problem and to the fact that most industrial workers must leave their homes at 5-5:30 A.M. in order to catch their buses and they are not returned home until late afternoon or early evening. Whether or not contracts are maintained with private clinics, health benefits are a Federal requirement for employers of registered workers and they are indirectly, if not directly, linked to INPS (Instituto Nacional da Previdencia Social).

With respect to employment in the Industrial Park, the fact of the matter is that there are very few benefits which employers provide that
are not required or in some part subsidized by the government, or that are not made necessary in order to maintain an acceptable level of industrial discipline and worker productivity. And clearly, of all these benefits, most workers considered medical care to be the most important. Outside of the Industrial Park except for a few white collar workers such as bank clerks, the benefit structure of employment in the formal sector is tied completely to Federal programs and regulations.

To what extent do autonomous workers have access to medical care? All but one of the 16 autonomous workers interviewed had access to medical care as provided by INPS. This access was obtained either by independent registration and the payment of regular fees to maintain their registration or, in many cases, access was secured by the worker being listed as a "dependent" of a registered, wage-employed family member. The autonomous workers interviewed, in general, did not consider themselves disadvantaged by the publicized benefit structure of wage employment in the new, so-called, 'high-tech' industries.

Work in the informal sector, even in its more purely economic dimensions, cannot be fully described or adequately understood apart from the social and cultural context in which autonomous workers are enveloped. The most immediate, and perhaps the most critical context in which decisions are taken to enter, remain in, or leave the informal sector has to do with the worker's household structure and economy. Except for a few writers (e.g., Kemper and Foster 1975; Lomnitz 1977; Conroy 1984), insufficient attention has been paid to the relationship between household structure and economy and work in the informal sector. Data in this regard are illuminating in respect to autonomous workers in Manaus.
Household Structure and Economy:

Approximately one-third of the questions included in the interview schedule used in Manaus were queries concerning family histories, patterns of spatial and occupational mobility, work careers within families, household composition, economic interdependencies within households, family income, consumption patterns in respect to household furnishings and food, debt structure, health experiences, medical costs, and the like. In the present context, the discussion will be limited primarily to a consideration of five variables: i.e., family headship, household structure, the employment of family members, family income, and consumption patterns with regard to household furnishings: the latter, it is believed, provide a crude estimate of the living standards achieved by households in those sectors of the economy under discussion. Table 7 presents data relating the distribution of informants with reference to family headship. In the present context, family headship simply refers to that individual considered by household members to be the head of the family and, thus, the main authority figure in the household.
Table 7: Distribution of Workers by Economic Sector and Family Headship: Purposive Sample.

<table>
<thead>
<tr>
<th>Economic Sector</th>
<th>Family Head</th>
<th>Non-Head</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics</td>
<td>10 (31)</td>
<td>22 (69)</td>
<td>32 (100)</td>
</tr>
<tr>
<td></td>
<td>(21)</td>
<td>(54)</td>
<td></td>
</tr>
<tr>
<td>Wood Processing</td>
<td>17 (85)</td>
<td>3 (15)</td>
<td>20 (100)</td>
</tr>
<tr>
<td></td>
<td>(36)</td>
<td>(7)</td>
<td></td>
</tr>
<tr>
<td>White Collar</td>
<td>8 (40)</td>
<td>12 (60)</td>
<td>20 (100)</td>
</tr>
<tr>
<td></td>
<td>(17)</td>
<td>(29)</td>
<td></td>
</tr>
<tr>
<td>Autonomous</td>
<td>12 (75)</td>
<td>4 (25)</td>
<td>16 (100)</td>
</tr>
<tr>
<td></td>
<td>(26)</td>
<td>(10)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>47 (53)</td>
<td>41 (47)</td>
<td>88 (100)</td>
</tr>
</tbody>
</table>

Table 7 reveals significant differences in the distribution of workers by economic sector and family headship. Fifty-three percent of the 88 workers interviewed are heads of households (the reader should be reminded that workers were not selected for interview on the basis of their household status). However, only 31 percent of the workers in the electronics industry and 40 percent of those in white collar employment are heads of households. Contrastively, 85 percent of sawmill workers and 75 percent of the workers in the informal sector are household heads. In the electronics industry, these results are significantly related to the recruitment of women and younger workers. This also tends to be the case for white collar workers, but less so. Nevertheless, the implication of
these data are clear: the authority structure of households does not seem to be as dissociated from work in the informal sector, and in the more traditional industries of the formal sector, as it is from white collar employment or employment in the new industries of the hegemonic capitalistic sector.

Indeed, this dissociation between household authority structure and the control of household income by persons normally thought of as "dependents" is a matter of considerable concern to and is much discussed by various religious leaders, social workers, and teachers who were interviewed during the course of the research. Religious leaders and social service workers, particularly, considered this a major source of family disruption and alcoholism. They even attributed to it the shocking growth which has taken place in recent years in the local market for drugs. In a similar fashion, many of the older male workers interviewed expressed considerable resentment over the fact that employment in the Industrial Park favored women and even teenagers to the exclusion of "family heads." This was also expressed as a matter of some concern by labor leaders who were interviewed. However, the extent to which one can attribute various social ills in Manaus to this dissociation of household authority from household economy cannot be determined from the data collected. What needs to be emphasized for purposes of this analysis is the simple fact that, in contrast to other sectors of the economy, workers in the informal sector, excluding of course the many children who can be counted among street vendors, tend to be household heads.

Without presenting the data in tabula form, it may be noted further that there is a general correspondence between family headship and family structure. Forty-seven percent of the electronics workers interviewed live
with families of orientation. This is the case for 30 percent of the white collar workers, 13 percent of autonomous workers, and only 10 percent of the sawmill workers. More than half of the autonomous workers, 56 percent, live with their families of procreation. The figure is even higher for sawmill workers (75 percent), lower for white collar workers (40 percent), and significantly lower for electronics workers (23 percent). Except for sawmill workers, 15 percent of whom live in households containing patrilineally extended families, there appears to be no significant differences among other categories of workers in this regard. Thirty percent of white collar workers, 28 percent of electronics workers, and 25 percent of autonomous workers live in households containing extended families. Although the numbers are too small to be convincing, it perhaps should be noted that the families of autonomous workers, when extended, tend to be affinally extended by the inclusion of in-laws rather than lineally extended by the inclusion of married descendents.

Given the wage structure that exists for most members of the working class in Manaus, the economic well-being of households is critically dependent upon the number of economically active persons they contain. There are significant variations in this regard across the economic sectors under discussion. Table 8 presents the distribution of sample households by economic sector and the number of economically active persons they contain in addition to the informants interviewed.
Table 8. Distribution of Households by Number of Economically Active Persons in Addition to Informants and by Economic Sector.

<table>
<thead>
<tr>
<th>Economic Sector</th>
<th>0 (Row Pct.)</th>
<th>1 (Row Pct.)</th>
<th>2 (Row Pct.)</th>
<th>3 or More (Row Pct.)</th>
<th>Total (Col. Pct.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics</td>
<td>6 (19)</td>
<td>8 (25)</td>
<td>10 (31)</td>
<td>8 (25)</td>
<td>32 (100)</td>
</tr>
<tr>
<td></td>
<td>(21)</td>
<td>(28)</td>
<td>(63)</td>
<td>(53)</td>
<td></td>
</tr>
<tr>
<td>Wood Processing</td>
<td>13 (65)</td>
<td>3 (15)</td>
<td>0</td>
<td>4 (20)</td>
<td>20 (100)</td>
</tr>
<tr>
<td></td>
<td>(46)</td>
<td>(10)</td>
<td></td>
<td>(27)</td>
<td></td>
</tr>
<tr>
<td>White Collar</td>
<td>6 (30)</td>
<td>10 (50)</td>
<td>4 (20)</td>
<td>0</td>
<td>20 (100)</td>
</tr>
<tr>
<td></td>
<td>(21)</td>
<td>(34)</td>
<td>(25)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomous</td>
<td>3 (19)</td>
<td>8 (50)</td>
<td>2 (12)</td>
<td>3 (19)</td>
<td>16 (100)</td>
</tr>
<tr>
<td></td>
<td>(11)</td>
<td>(28)</td>
<td>(12)</td>
<td>(20)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>28 (32)</td>
<td>29 (35)</td>
<td>16 (18)</td>
<td>15 (17)</td>
<td>88 (100)</td>
</tr>
</tbody>
</table>

As can be seen from Table 8, no less than 68 percent of all working class households included in the purposive sample contained at least one or more economically active persons in addition to the interviewee. However, more than half (56 percent) of the households of electronics workers included in the study contained two or more economically active persons. This figure drops to 31 percent among autonomous workers and 20 percent among sawmill and white collar workers. Only among sawmill workers is there a significant number of households (65 percent) which contain no additional economically active persons.

Two conclusions appear to be supported by these data. First, upwardly mobile households, for example the households of white collar
workers, economically engage more than one household member. And second, the survival strategy of lower income households is to economically engage in the labor market as many household members as possible. Thus, in rank order, the households of electronics workers contain more actively employed members than those of autonomous workers, and the households of both these groups report more economically active members than the households of sawmill workers and white collar workers.

To continue the analysis of the informal sector, it is a matter of some significance to determine more precisely what role the informal sector plays in the income strategies of households. More specifically, is there some evidence to indicate that the informal sector provides income opportunities of some significance to most working class households? Table 9 presents data relating the distribution of additional workers in the households of informants, by the economic sector of informants, and according to whether or not these additional workers are self-employed (autonomous) or work for wages.
Table 9. Distribution of Additional Workers in Households of Informants by Wage Employment or Self-employment and by Economic Sector of Informants.

<table>
<thead>
<tr>
<th>Economic Sector of Informant</th>
<th>Self-Employed (Autonomous)</th>
<th>Wage Employed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics</td>
<td>13 (23)</td>
<td>44 (77)</td>
<td>57 (100)</td>
</tr>
<tr>
<td>Wood Processing</td>
<td>4 (27)</td>
<td>11 (73)</td>
<td>15 (100)</td>
</tr>
<tr>
<td>White Collar</td>
<td>5 (28)</td>
<td>13 (72)</td>
<td>18 (100)</td>
</tr>
<tr>
<td>Autonomous</td>
<td>10 (48)</td>
<td>11 (52)</td>
<td>21 (100)</td>
</tr>
<tr>
<td>Total</td>
<td>32 (29)</td>
<td>79 (71)</td>
<td>111 (100)</td>
</tr>
</tbody>
</table>

In Table 9 it can be observed that 29 percent of the 111 additional workers included in the households of interviewees are self-employed workers occupied in the informal sector. This percentage is slightly higher than the 22 percent reported for the general population of Manaus in 1980 (see Table 2) and it is lower than the 40 percent emerging in Bentzes' sample for Raiz (see Table 3), but it falls well within the range of variation that one might expect when comparing a relatively small purposive sample of 88 households to samples of these larger populations. Nevertheless, it is instructive to note that a significantly larger percentage of autonomous workers are located in the households of informants who also are autonomous workers than in the households of informants working in the more formal sectors of the economy. Still, more than half the households
of autonomous workers contain persons who work for wages in the formal sector.

In terms of numbers, if not always in terms of income, wage employment in the formal sector is by a wide margin much more important to the economy of the households under study. However, it is a matter of some significance that work in the informal sector represents an important source of income for a substantial number of the households under study. Without presenting tabula data in this regard, it may be noted that of the 60 households in the sample which contained more than one economically active worker, 40 percent included at least one self-employed worker in the informal sector. It should also be noted that the distribution of these households does not differ significantly by the informant's sector of economic activity. Among the households of the white collar workers with more than one economically active person, 36 percent included an autonomous worker. Respectively, the percentage is 38 for the households of electronics workers, 43 for sawmill workers, and 46 for autonomous workers. In sum, despite the importance of wage employment in the urban economy created by the Free Trade Zone, the informal sector as a structural dimension of household economy is of such widespread significance among the urban population that it cannot be theoretically ignored.

Still another way to consider the contribution of the informal sector to household economy is to focus attention exclusively on those households which contain at least one autonomous worker. These households, 34 in number, comprised almost 39 percent of the 88 households that were included in the purposive sample as a consequence of selecting workers for interview in relationship to different sectors of the economy and different
modes of production. Self-employed workers in these households comprised slightly more than half, 53 percent, of the 91 persons reported to be economically active. This group of autonomous workers contributed 60 percent of the 148 minimal salaries which constituted the total income of these 34 households. To state the matter differently, in exactly half of the 34 households under discussion, autonomous workers were reported to have contributed more than 50 percent to the total household income and in only 6 percent of the households did they contribute less than 25 percent.

Clearly, despite the creation of the Free Trade Zone and the formation of a new industrial economy, perhaps even because of the inflated prices which have accompanied this process of economic "development," working class households in Manaus overwhelmingly pursue a multiple income strategy. Moreover, the informal sector figures significantly in the playing out of this strategy. As has been shown, a large number of households include one or more workers who are economically active in the informal sector and they make a substantial contribution to the household economy. However, the question remains: as far as family incomes are concerned, how well do the households of autonomous workers fare in comparison to those of workers in other economic sectors? Table 10 presents the distribution of household income by the economic sector of informants in the purposive sample.
Table 10. Distribution of Household Income by Economic Sector of Informants in Purposive Sample.

<table>
<thead>
<tr>
<th>Economic Sector of Informant</th>
<th>Number of Minimal Salaries in Household</th>
<th>3-5</th>
<th>6 or More</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics</td>
<td>2 (6)</td>
<td>4 (13)</td>
<td>16 (50)</td>
<td>10 (31)</td>
</tr>
<tr>
<td>(Col. Pct.)</td>
<td>(25)</td>
<td>(16)</td>
<td>(31)</td>
<td>(40)</td>
</tr>
<tr>
<td>Wood Processing</td>
<td>2 (10)</td>
<td>11 (55)</td>
<td>6 (30)</td>
<td>1 (5)</td>
</tr>
<tr>
<td>(25)</td>
<td>(44)</td>
<td>(11)</td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td>White Collar</td>
<td>0</td>
<td>0</td>
<td>11 (55)</td>
<td>9 (45)</td>
</tr>
<tr>
<td>(25)</td>
<td>(21)</td>
<td></td>
<td>(36)</td>
<td></td>
</tr>
<tr>
<td>Autonomous and Comerciantes</td>
<td>4 (11)</td>
<td>10 (26)</td>
<td>19 (50)</td>
<td>5 (13)</td>
</tr>
<tr>
<td>(25)</td>
<td>(40)</td>
<td>(37)</td>
<td>(20)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8 (7)</td>
<td>25 (23)</td>
<td>52 (47)</td>
<td>25 (23)</td>
</tr>
</tbody>
</table>

It may be recalled from Table 5 that as individuals, autonomous workers comprised 46 percent of all the workers interviewed who reported earning three minimal salaries or more, and that the proportion of autonomous workers reporting only one minimal salary was lower than for any other group. The pattern differs with respect to household incomes. The households of white collar workers fare considerably better than those of other groups. Forty-five percent of these households report incomes in excess of six minimal salaries and 100 percent report incomes in excess of three minimal salaries. Similarly, the households of electronics workers fare better than those of autonomous workers. Among households of the former, 81 percent, as compared to 63 percent of the households of autonomous workers, report incomes of three minimal salaries or more. It should be recalled, however, that electronics workers tend to be
younger and female and their households contain proportionately more economically active persons than those of other groups. Still, a significantly higher percentage of households among autonomous workers report substantially higher incomes than among sawmill workers who are employed in the more traditional sector of the formal economy. It also needs to be emphasized that the higher household incomes among autonomous workers are generally associated with the activities of comerciantes who are more firmly established in the informal sector than are street vendors.

The contrast between the patterns of individual and household incomes, particularly in the context of other data presented with reference to family structure and household organization, seem suggestive of two conclusions in respect to the relationship of household economy and the informal sector. First, work in the informal sector is certainly a strategy widely adopted by individuals who perhaps cannot obtain work in the formal sector and who wish to supplement household incomes that are mainly derived from various forms of wage employment. Based on interviews and observational data, this appears to be a strategy most commonly associated with the households of workers in the electronics and wood-processing industries and households of white collar workers. Combined, only 22 percent of the additional workers in these households are economically active in the informal sector compared to 48 percent of the additional workers in the households of autonomous workers.

Second, in respect to the households of autonomous workers, work in the informal sector appears to be somewhat a strategy of economic mobility. The members of these households choose to work in the informal sector rather than seek employment for wages in the more traditional
Industries of the formal sector—e.g., wood processing, jute, food processing, and the like. Work in these sectors is arduous and relatively unrewarding and opportunities for advancement are practically non-existent. At the same time, these workers also generally prefer the informal sector to wage employment in the new, hegemonic capitalistic, industries of the formal sector. Work in these sectors of the economy is unstable. It commands low wages. It favors women and younger individuals. It does not reward initiative. It offers little opportunity for advancement. Indeed, very few of the workers interviewed in this industrial sector expressed any interest in retaining employment in these factories and many were going to school part-time in the hope of finding something better. Thus, workers who select the informal sector as a strategy of mobility seek not only to supplement household incomes but also to reward their own initiative, to perhaps accumulate sufficient capital to establish themselves more firmly in commerce, the small-scale manufacturing of goods, or the provision of services.

Before terminating the present discussion, it is instructive to briefly consider the standards of living achieved by households. Although a survey was made of food consumption patterns, a consideration of these data is beyond the scope of the present paper other than to note that the variety of foods consumed as well as the consumption of higher cost food items, as might be expected, appears to be related to the level of household income. In the present context, the discussion will be limited to living standards as expressed by the purchase of a few high cost items, only two of which are generally considered to be necessities in Manaus. The data to be discussed are summarized in Table II.
### Table 11. Household Consumption as Measured by the Purchase of Appliances and Other High Cost Items, by Economic Sector of Informant.

<table>
<thead>
<tr>
<th>Household and Other Items</th>
<th>Economic Sector of Informant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Electrons (N=32)</td>
</tr>
<tr>
<td>Gas Stoves</td>
<td>32 (100)</td>
</tr>
<tr>
<td>Refrigerators</td>
<td>32 (100)</td>
</tr>
<tr>
<td>Beds (3 or more)</td>
<td>18 (56)</td>
</tr>
<tr>
<td>Sewing Machines</td>
<td>20 (63)</td>
</tr>
<tr>
<td>Water Filters</td>
<td>15 (47)</td>
</tr>
<tr>
<td>Stereos</td>
<td>20 (63)</td>
</tr>
<tr>
<td>Televisions</td>
<td></td>
</tr>
<tr>
<td>Black and White Color</td>
<td>10 (31)</td>
</tr>
<tr>
<td>Color</td>
<td>22 (69)</td>
</tr>
<tr>
<td>Telephones</td>
<td>9 (28)</td>
</tr>
<tr>
<td>Automobiles</td>
<td>9 (28)</td>
</tr>
</tbody>
</table>

Gas stoves and refrigerators are the only two items listed in Table 11 which are generally considered necessities in Manaus. Not all working class families can afford to purchase one or both of these items. In the purposive sample, two households were without refrigerators but both had access to one owned by relatives. When affordable, beds are preferred to hammocks and very few of the households surveyed were without beds and hammocks. However, well-furnished households, those containing three or more beds, disclose a rank order among the households surveyed which tends to hold for all other items included in the list.
In terms of the consumption of high-ticket, convenience items, the households of autonomous workers (excluding comerciantes for whom these data were not systematically collected), rank at the bottom. Workers in the informal sector are followed in this regard by sawmill workers, electronics workers, and white collar workers. If one can take the purchase of televisions, particularly color sets, stereophonic equipment, telephones, and automobiles as an indication, the households of white collar and electronics workers have moved considerably into the consumption economy which the Free Trade Zone has created. Workers in the traditional industrial sectors, sawmill workers for example, and workers in the informal sector, have been considerably less successful in this regard. Still, 85 percent of the former and 75 percent of the latter own television sets, but few of them can afford color. Automobiles are beyond their economic reach and telephones are simply too luxurious to purchase, install, and maintain.

The inability of workers in the informal sector to penetrate the consumer economy, even among many of the comerciantes interviewed, is not simply a matter of relatively low incomes. Sawmill workers also have relatively low incomes, but proportionately more of them can and do buy beds, stereos, color television sets, and even a few of them have automobiles and telephones. Because of the nature of their economic activities, except for the better established comerciantes, workers in the informal sector do not have access to the credit needed to make these kinds of purchases. They cannot, as electronics workers do, secure credit against monthly paychecks or receive substantial discounts for the "factory" purchase of stereos or color television sets. In regard to this type of access to credit, it needs to be emphasized that 86 percent of the
total labor force of the households of informants employed in the formal sector, as compared to only 30 percent in the households of autonomous workers, are employed for wages and receiving paychecks. And finally, it should be noted, if autonomous workers are in any sense upwardly mobile, they must carefully manage whatever capital they may be able to accumulate. Thus, they tend to forego the purchase of convenience items, even water filters, an item which many higher income workers consider to be virtually a necessity.

Summary and Conclusions:

To summarize: the Free Trade Zone with its Industrial Park and the monopolistic form of capitalism which its new industries enjoin have generated considerable employment in Manaus. By some estimates, more than 40,000 new jobs have been created in the Industrial Park alone. This has attracted large numbers of migrants to Manaus, particularly from the interior of Amazonas, but also from other areas in the region and other regions within the country. However, the migratory flux, particularly within the State of Amazonas, is not simply the result of new employment opportunities having been created in Manaus. The movement of population from the interior of Amazonas to the metropolitan area of Manaus seems to have been well underway before the Free Trade Zone was created. Several factors may be involved. One is the breakdown of the 'aviamento' system by which forest products were extracted and traded through a patron-client network of brokers. Another is the lack of attention paid by the state and federal governments to agricultural development in the interior relative to industrial development in Manaus. And a third certainly involves the
attractiveness of the urban infrastructure in respect to social amenities, particularly medical care and education.

Whatever factors may be involved, the population of Manaus as well as its urban economy have grown substantially since 1967. This growth is marked by a 576 percent increase in the number of economically active persons since 1960. However, the expansion of the urban economy has not been even with respect to the formal and informal sectors. The number of industrially employed workers has grown four times faster than the number of autonomous workers and, despite a 346 percent increase in the latter, the 1400 percent increase in the former has simply redressed the imbalance which existed in favor of the informal sector in 1960. Still, almost 30,000 new workers have been added to the informal sector since the creation of the Free Trade Zone.

In view of the data presented, workers in the informal sector, as compared to white collar workers and workers in the new industrial sector, are overwhelmingly migrants. However, contrary to what might be expected, these workers are not disproportionately recent migrants. As often as not, they are migrants who arrived in Manaus some years before the creation of the new industrial economy and who, because of their urban experience and knowledge, seem to be in a more advantageous position with respect to the informal sector than are recent migrants. In addition, workers in the informal sector are not significantly represented by individuals who engage in these activities because they are unemployed or because they cannot obtain work in the formal sector. On the contrary, they are individuals who, for various reasons, prefer work in the informal sector to wage employment in the more traditional sectors of the industrial economy or in the new industries of the Free Trade Zone.
The explanation of this preference is economic as well social. In terms of individual incomes, workers in the informal sector, even those who are not comerciantes, fare better than do individuals employed in both the new and more traditional sectors of the industrial economy. In addition, they are not particularly disadvantaged by their access to medical, educational, and retirement benefits. At the same time, relative to industrial workers, those in the informal sector are 'independent' and they consider their incomes somewhat more secure. They are not subject to layoffs. They generally have 'money in pocket.' They set their own schedules. They do not have to defer to authority or to the personal prejudices of 'bosses.' Workers in the informal sector seem to like the social ambience of the streets, including the friendship of many of their 'competitors.' Finally, as compared to the industrially employed, workers in the informal sector express mobility aspirations relative to what they are doing and they feel that eventually their initiative will be rewarded.

There appears to be a significant relationship between household structure and economy and work in the formal and informal sectors. Workers in the informal sector, like those employed in the more traditional wood-processing industry, tend to be heads of households. This is less the case for white collar workers, and the opposite tends to be the case for employees in the new industrial sector. With regard to the latter, there seems to exist in Manaus a somewhat problematic dissociation between the economic and authority structures of households. Almost seventy percent of the households included in the study engaged a multiple income strategy in that they contained two or more economically active persons. This multiple income strategy is most strongly associated with the households of wage workers in the new industrial sector. Including informants, more
than half of these households contained three or more economically active persons as compared to only 31 percent of the households of workers in the informal sector.

Related to this multiple income strategy is the contribution of the informal sector to the economy of working class households in general. It is a matter of some significance that 39 percent of the 88 households for which in-depth data were collected included more than one economically active person in the informal sector. These workers comprised more than half of the total number of persons reported to be economically active and they contributed 60 percent to the total income of the households in question. Thus, the informal sector makes a truly significant contribution to the multiple income strategy of working class households independent of whether or not these households contain one or more persons employed for wages. It should be emphasized, however, that the households of informants in the formal sector contained a significantly higher percentage of wage workers than did the households of informants in the informal sector.

Despite this strategy of multiple incomes, the households of informal sector workers and those of workers in the more traditional industries of the formal sector, do not appear to have become as fully incorporated into the consumer economy as have the households of new industrial and white collar workers. The latter enjoy access to credit and can take advantage of discount purchasing in ways that the former cannot. Workers in the informal sector, particularly, have to manage their incomes in order to sustain their enterprises and secure the 'independence' they have and to pursue whatever mobility aspirations they may want to entertain. Independent of their relative marginality as consumers, workers in the
informal sector are very much a part of the labor process. Moreover, they are absolutely essential to the overall structure of the economy that has come into being in Manaus as a consequence of the policies which resulted in the creation of the Free Trade Zone.

From the point of view of the labor process, the Free Trade Zone has combined different forms of capitalism and different modes of production. In it, there exist new industries based on monopoly capitalism. These industries, electronics for example, have been organized by multinational firms with an infusion of international capital. They have neither forward nor backward linkages in the region. They enjoin various modes of advanced industrial production based on the low-skilled assemblage of imported components. In some instances, their final products are exported to Brazil’s industrial South for testing and quality control, returned to Manaus, and then re-exported to national and international markets. These industries, and the modes of production they enjoin, exist in Manaus only because of the incentive structures provided by government and the availability of cheap labor.

There also exist in Manaus industrial laissez-faire forms of capitalism that developed mainly in reference to the processing of forest products—timber, food, and the like. These have passed through various stages of development, including the addition of new technologies, but they remain essentially competitive and locally owned and controlled. With the creation of the Free Trade Zone, these industries have expanded to service the needs of the new industrial economy and the growing population of Manaus. However, they remain organized as they have always been organized, and they have accomplished their expansion by retaining a depressed wage
structure in relationship to the internal markets which the Free Trade Zone
has created.

The entire superstructure of the developmental process in Manaus has
created a vast market for white collar employment in both the private and
public sectors. Relative to other sectors, these workers are generally
well-paid. However, except for a few functionaries, the wages these
workers command are not sufficient to provide the basis for a new 'middle
class.' They are clearly wage employees and they must resort to the
multiple income strategy of most households in order to pursue their
mobility aspirations and participate, as they do, in the new consumer
economy.

To a significant degree, the edifice of the urban economy in the Free
Trade Zone rests on the foundation provided by petty commodity producers
operating in the informal sector. This form of capitalism exists alongside
the others: indeed, the one depends upon the other at this stage of
dependent development. The street vendors and comerciantes, the small-
scale producers of goods and services, are as dependent upon the low
wages paid in the new and traditional sectors of the economy as the latter
are dependent upon the cheap sources of services and commercial goods
produced in the informal sector. In order to maintain the wages they pay at
a low level. If workers in the informal sector are somewhat marginal as
consumers, they most certainly are integral as producers. From the point
of view of production, the overall structure of this system is integrated.
However, to be part of this system is to culturally adapt, and the system is
differentiated as well as differentiating. It seems to be profiling itself in
this regard among the working class populations we have studied. Whether
or not this cultural process serves to fracture working class populations in
a stratificational or in a political sense is a matter to be considered in another context.

In conclusion, these data seem to lend support to those theorists who have argued that the formal/informal dichotomy, unless carefully used, tends to obscure the systemic structural features of developmental change. If one considers the labor process in relationship to the overall structure of the urban economy, work in the informal sector must be viewed as one of a series of alternative strategies made available by that structure and elected in response to a variety of circumstances affecting household units. Such circumstances include migratory status, household composition, domestic cycles, access to capital, educational experiences, and mobility aspirations, to name but a few.

However, in closing it should be noted that the findings reported here are not entirely consistent with those reported by other observers for various countries of Latin America. Thus, from a comparative point of view, these findings pose questions that are not easily resolved. It is entirely possible that these findings are peculiar to the Free Trade Zone. Alternatively, given the role of the State in relationship to labor organizations and the provision of medical and other services, the informal sector in various Brazilian cities may have acquired characteristics somewhat different from those reported for other Latin American countries. In addition, one must be aware that most of the literature relating to this subject is based on field studies that were made in the sixties and seventies, before the depressions and debt crises of the eighties. Clearly, more comparative data are needed to resolve many of the issues posed by discussions of this subject.
Endnotes

1 Caroline O.N. Moser (1978) presents an excellent review of many of the studies made by economists who employ the formal/informal model in their analysis of Third World poverty and employment.

2 This particular design for the research was inspired by Quijano's (1974) theory of marginality.

3 As many critics of the dualist model have noted, it is difficult to define precisely which economic activities, particularly on the basis of occupation, belong to the 'formal' and informal sectors. This is certainly true in Manaus and particularly in reference to biscoiteiros. We found little referential agreement among informants in this regard. Some suggested a biscoiteiro was simply an odd-jobber; others that he was an unregistered worker. Some considered that the category mainly comprised vendors who did not remain in one place, registered or not. Some informants considered comerciantes biscoiteiros. Census data relating to mão-de-obra appear to submerge all these distinctions under the category 'autonomous worker,' independent of registration or the economic sector in which work is classified. For analytical purposes, it has not been decided how best to handle this problem of classification. Except for a small population of independent professionals, the vast majority of 'autonomous workers' in Manaus, including the comerciantes we interviewed, are operating in what might be called the 'informal sector.' Thus, for comparative purposes, this paper follows the census classification employed by IBGE.

4 The census count of autonomous workers in Manaus reported in 1980 received independent confirmation in a study conducted by SHAM (Sociedade de Habitação do Estado do Amazonas) in 1978. Of the 5,336 household heads interviewed by SHAM in the seven public housing schemes under its supervision, 68.4 percent were employees and 18.7 percent were autonomous workers. Since these housing developments are not places where independent professionals are inclined to live, this figure for autonomous workers compares favorably with the 22.4 percent reported in the 1980 census.

5 It needs to be emphasized that this sample of workers is not entirely comparable to Bentos' sample for Bairro Raiz. Workers included in the study were purposively selected in reference to modes of production. They were selected independent of sex and whether or not they happened to be household heads. As a consequence, the age representation of the population is younger than that of Bentos' Raiz sample and this is not unrelated to the migratory status of informants. Moreover, the
purposive sample did not include persons economically inactive because of unemployment or retirement.

6. Among the post-1967 migrants included in the purposive sample, there was very little expression of interest in someday returning to their places of origin. This particular finding is not fully supported by an independent study of female workers employed in one sector of the wood-processing industry and recently completed by Edilo Arnaud Ferreira Moura (FUA/NAEA). Personal communication.

7. At the time research was conducted in Manaus in 1984, one minimal salary equaled approximately $96,000 cruzeiros. Because of inflation, over a period of five months the value of one minimal salary depreciated from approximately U.S. $59 to $37.
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