

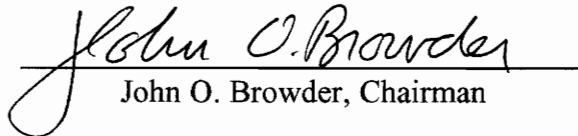
**THE GROWTH AND CHARACTERISTICS
OF PERI-URBAN COMMUNITIES:
A CASE STUDY IN JAKARTA, INDONESIA**

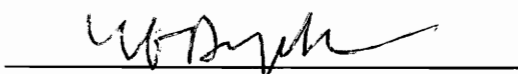
by

Ridhwan Basaib

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in partial fulfillment of the requirements for the degree of
Master
in
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APPROVED:


John O. Browder, Chairman


Robert G. Dyck


Anna Hardman

December, 1991

Blacksburg, Virginia

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**THE GROWTH AND CHARACTERISTICS
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Committee Chairman: John O. Browder
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(ABSTRACT)

This study attempts to examine the major socioeconomic characteristics and the composition of peri-urban communities, and explains the determinants of intra-metropolitan mobility associated with peri-urban growth in Jakarta, Indonesia. In the first part of the analysis, the findings suggest that most of peri-urban residents are migrants involved in intra-metropolitan mobility. Peri-urban migrants are usually selected from the better socioeconomic status than peri-urban nonmigrants and urban in-migrants in general. Among the six socioeconomic variables examined in this study, education, occupational status, and income seem to have had significant influence on the different orientation between peri-urban migrants and urban in-migrants in general.

In the second part of the analysis, the findings suggest that the classical pull-push hypotheses and the concepts of income differentials between places provide inadequate explanation to the process of intra-metropolitan mobility. This study has shown that in the process of intra-metropolitan mobility associated with peri-urban growth, economic explanations in terms of labor movement are less explanatory than social and behavioral explanations. From the distinction between strategies adopted by households in their moving decisions, a conclusion was drawn that intra-metropolitan mobility is largely a process of social status enhancements or upward mobility.

The analysis also conclude that the process of intra-metropolitan mobility associated with peri-urban growth in Jakarta may be partially explained by the macro structural changes in the metropolitan economy as the result of larger changes in the global economy over the last ten years. Dramatic changes in land utilization and values in Jakarta may reflect advanced capitalist system that characterizes the recent urban development process in Jakarta.

Finally, this paper suggest that further research on peri-urban growth in Jakarta is needed. The research should be designed and directed toward a larger coverage and a more comprehensive analysis of micro as well as macro data on social, political, economic, and behavioral aspects of the population. This research is essential in order to formulate appropriate policies aimed at obtaining balanced distribution between resources and investments, on the one hand, and the population on the other.

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ABBREVIATIONS AND GLOSSARY

<i>adat</i>	customary law
AID (USAID)	United States Agency for International Development
ASEAN	Association of South-East Asian Nations
BAKOPPUR	(<i>Badan Koordinasi Penertiban dan Pengendalian Urbanisasi</i>) Urbanization Control Co-ordinating Board
BPS	(<i>Biro Pusat Statistik</i>) Central Bureau of Statistics
<i>desa</i>	village (in rural areas)
ESCAP	Economic and Social Commission for Asia and the Pacific
Jabotabek	Jakarta, Bogor, Tangerang and Bekasi
<i>Jakarta dalam angka</i>	Jakarta in figures
<i>Jakarta Barat</i>	West Jakarta (district)
<i>Jakarta Pusat</i>	Central Jakarta (district)
<i>Jakarta Selatan</i>	South Jakarta (district)
<i>Jakarta Timur</i>	East Jakarta (district)
<i>Jakarta Utara</i>	North Jakarta (district)
<i>kampung</i>	village (in urban areas)
<i>kecamatan</i>	primary sub-district
<i>kelurahan</i>	secondary sub-district
<i>kota</i>	city or town (urban areas)

<i>Laporan Tahunan</i>	Annual Report
LEKNAS	(<i>Lembaga Ekonomi dan Sosial Nasional</i>) National Institute of Economic and Social Research
LIPI	(<i>Lembaga Ilmu Pengetahuan Indonesia</i>) Indonesian Institute of Sciences
OECD	Organization for Economic Co-operation and Development
NUDS	National Urban Development Strategy
RT	(<i>Rukun Tetangga</i>) - the smallest administrative unit, on the average consists of about 40 dwelling units or households
RW	(<i>Rukun Warga</i>) - administrative unit above the RT and below the <i>kelurahan</i> , on the average consists of about 10 RTs
SARSA	Systems Approach to Regional Income and Sustainable Resource Assistance
<i>Supas</i>	Intercensal Survey
UNDP	United Nations Development Program
VPI & SU	Virginia Polytechnic Institute and State University

Chapter 1: **INTRODUCTION**

Rural-urban migration has been a major focus of the studies of urbanization and urban growth. This is hardly surprising, since one of the major spatial transformations of the nineteenth and twentieth centuries has been the shift of population from rural to urban locations. This type of migration stream has been playing an increasingly vital role in the growth of urban areas of developing countries and in the composition of their populations. An examination of four ASEAN (Association of Southeast Asian Nations) countries census data shows that the relative contribution of migration to urban growth has substantially risen during the most recent intercensal period (Ogawa, 1985).

Rural-urban migration is perhaps the most frequently mentioned in the literature of population movements contributing to urbanization, but it is certainly not the only movement. One study indicates that persons migrating directly from rural areas to capital cities in Latin America constitute only a small fraction of total migrants to those cities, while the highest proportion is composed of people who come from other urban centers (Urzua, 1981). This finding suggests that the relative importance of rural-urban and urban-urban movements in urbanization appears to vary from region to region, and even from country to country. However, when the problem is the growth and decline of certain areas within the metropolitan area, intra-metropolitan population movement may acquire

special importance. Unfortunately, knowledge about this particular type of population movement in developing countries is generally inadequate.

A neglected area of migration research in developing countries is the dynamics of intra-metropolitan growth and change. This does not have to do only with the relative role of in-migration in the growth of metropolitan population, but also with the internal redistribution of metropolitan population. It is insufficiently realized, however, that in the fast-growing cities of developing countries, urban district and sub-district populations can decline as well as increase. Redistribution of population, both from outside the city into particular sections of the metropolis, and internally within the metropolis, can lead to some important changes in population size, structure, and its socioeconomic characteristics with consequences that need to be adequately planned for.

For the purpose of planning urban development and the distribution of the population within the metropolitan area, knowledge of the pattern of population mobility is needed. The aim of this study is to contribute to the knowledge of population mobility in Indonesia by exploring the pattern of intra-metropolitan mobility, which is seen as an important phenomenon in explaining the growth of peri-urban Jakarta.

I.1. General Observations

Traditionally, in the period of modernization, population in developing countries flowed from rural areas to urban areas. This population flow is also true for Indonesia where since its independence in 1945 massive rural population contributes to about half the population increase in urban areas (Hugo, 1987). According to the 1980 census,

Jakarta alone had attracted 48 percent of the total interprovincial migrants to urban areas over the period 1970 - 1980 (Hamer, 1986). This urban in-migration continued in spite of attempts to stem the flow of migrants to the city by the local authorities, through the closed-city policy¹⁾ adopted in Jakarta during the 1970s (Harris, 1979; Hugo, 1981); their attempts largely failed. Many researchers believe that rural-urban migration is still a continuing process in most large Third World cities including Jakarta. Studies on urbanization in Indonesia have suggested the continuing process of rural-urban migration to Jakarta (Hugo, 1978; ESCAP, 1981; Ogawa, 1985; Clarke, 1985; Hamer, 1986; Hugo, 1987). In fact, during the last five year period (1984 - 1989), 460,339 new incoming migrants were registered and considered qualified as residents of Jakarta²⁾ (BAKOPPUR, 1990).

In recent years, however, a few empirical observations have shown that in the last decade (1980 - 1989) there has been an indication of an inversion³⁾ in this pattern of population movement, particularly in Jakarta. Three important phenomena in population movement in Jakarta have been observed: (1) In the last ten years there has been a

¹⁾ One of the best known attempts to prohibit the entry of migrants to the city is found in Jakarta. In 1970, the Governor of Jakarta declared Indonesia's capital as a closed city as one in a series of policies designed by his administration to stem the influx of migrants, which has continued apace since Indonesia gained independence in 1945.

²⁾ The regulations require new in-migrants wishing to settle in Jakarta to register and deposit a sum equivalent to twice the return fare to their village of origin (minimum Rp 10,000). If after 6 months the in-migrant can establish a permanent job and place of residence, the money is returned and he can purchase an identity card and become a qualified resident of Jakarta.

³⁾ Urban inversion is "a trend in which long-time urban dwellers move out to the fringe to economize on low land rents or to capitalize on new opportunities for land speculation and informal enterprise expansion that have been reduced by the high land rents and the 'modernization' of economic activity in the center city" (Browder, et al., 1991:3).

significant decline in population growth (in some cases, negative growth) of primary sub-districts (*kecamatan*) and secondary sub-districts (*kelurahan*) in and around the central urban areas; (2) Primary sub-districts and secondary sub-districts of the peripheral areas of Jakarta (along the metropolitan administrative boundary) are growing faster than those areas nearer to the center (see Appendix A for complete figures); and (3) Many central urban residents are moving toward the peripheral areas of the city (Alatas, et al., 1988; Sandy, 1990). These observations lead me to suspect that despite the continuing process of rural-urban migration there has been a shift from the traditional flows of population in metropolitan Jakarta.

It is my observation that concomitant with this inversion in the traditional flows of population there is also a break in the traditional motivation of migrants. Past migration studies in general emphasized the importance of economic factors in the decision to migrate. Studies at the household level as well as studies of aggregate data in some developed and developing countries found that migration rates were closely associated with wage rates, unemployment rates and changes in employment. These studies cited variables like perceived level of unemployment and wage levels as central to the individual's decision to migrate (Lowry, 1966; Todaro, 1976; Preston, 1979; Ploch and Cook, 1982). Although income-related factors are the primary motivation for population movement, particularly rural-urban migration, those involved in the present migration inversion have indicated other motivations for population movement. For instance, people move for educational purposes, in search of a better environment, forming a new household by marriage, housing preferences and so forth. Given the

variety of reasons for population movement, I suspect that there is a new phase in the determinants of the continuing process of urbanization and migration in Jakarta.

Some studies of aggregated data in the United States have documented the reduction in the association of migration rates and various economic variables (Lichter and Fuguitt, 1982). Thus, migration to areas of destination has been found to no longer as closely tied to economic factors as it once was. These noneconomic reasons or factors for migrating have been grouped together under the term "quality of life" (Lichter and Fuguitt, 1982). In these studies, quality of life is defined as simply an amenity or ecological factor.

While this migration inversion phenomenon or "suburbanization" has long occurred in most developed countries, this thesis presents some recent empirical observations of Jakarta and tries to situate the explanation of intra-metropolitan mobility in relation to peri-urban growth within the context of some theories of urban migration and urbanization. An understanding of the causes, determinants and consequences of intra-metropolitan population mobility is thus central to a better understanding of the nature and character of the contemporary migration pattern, the development process and the formulation of appropriate policies to influence this process.

I.2. A Brief Review of Population Mobility Research in Indonesia

Hugo (1987) has pointed out that very little is known about the patterns of population mobility in post-independence Indonesia and even less of the processes that are shaping them. The major reason for the lack of research into nation-wide and regional

patterns of population mobility is the virtual absence of comprehensive and reliable mobility statistics. Most of the research have been highly descriptive in nature and sheds little light on the causes of movement.

Works concerned with migration in Indonesia have focused on three themes. First, and most intensively studied of these, is transmigration. It is the name given to the resettlement of Javans in the less densely populated islands of Indonesia. Most of these studies have concentrated on describing the evolution of government sponsored programs of transmigration. A second theme is the study of the mobility characteristics of particular ethnic groups, particularly by anthropologists. Third, there are studies concerned with rural-urban migration and urbanization. Most of these studies consider general trends in urbanization and urban growth and deal only very indirectly with processes of rural-urban population mobility. The most comprehensive studies of this kind were found from research conducted by the National Institute of Economic and Social Research, Indonesia Institute of Sciences (LEKNAS-LIPI) in 1973 and 1983; by Hugo in 1975 (published in 1978); and by United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) in 1981.

In 1973 the LEKNAS-LIPI conducted a large migration survey which involved samples of migrants living in urban as well as rural areas throughout Indonesia. This survey covered twenty four cities and middle-sized towns and twenty five villages in ten provinces. From the results of this survey Suharso et al. (1976) found that three quarters of the migrants from the urban sample came from rural areas and nearly one fifth of them came from other urban areas, with Jakarta receiving one third of all migrants surveyed.

Results also showed that most of the recorded migration to cities in Indonesia were short distance migration within the same province. The only cities to which most migrants came from different provinces were Jakarta, Bandung and Yogyakarta. There is nothing in this study concerning movement within urban areas.

The study by Hugo (1978) in fourteen West Java villages was based on survey research in 1975 and data gathered from several censuses in Indonesia. This study observed the patterns and processes of population movement between village and cities in one region of Indonesia, namely West Java. The concentration is on population movement from villages to the major metropolitan centers of Bandung and Jakarta. Besides permanent rural-urban migration, this study found several distinct and significant types of nonpermanent mobility. These included commuting over distances of up to 50 kilometers to participate in full time urban-based employment, or irregularly to engage in work supplementary to village-based jobs. More distinctive is circular migration, by which movers do not change their usual place of residence in the village, but are absent at an urban destination for periods longer than a single day. Such movement can be associated with permanent full time employment at the destination, but usually involves nonpermanent work in the informal sector of the urban economy. The bulk of this mobility, however, goes unrecorded in large scale demographic surveys and censuses (Hugo, 1978).

The ESCAP study was undertaken in 1981 and based entirely on secondary data derived from several Indonesian censuses. Similar to Hugo's analysis, the main thrust of the study is in the area of migration and urbanization, with a particular focus on

movements between rural and urban areas. This study examined the major socioeconomic characteristics of migrants, which is a much neglected area of study in Indonesian migration research. This study found that there are significant differences and inequalities between rural and urban areas in Indonesia, especially the widening gap between Jakarta and other regions, rural as well as urban. The major areas of in-migration gain were overwhelmingly in Jakarta through rural-urban movements, and in Lampung through transmigration. There is also an indication of the significance of urban-urban movement to Jakarta, particularly in the late 1970s and early 1980s.

Based on this limited review of the literature on migration and urbanization available in the US and Indonesia, none of the published studies seem to show any indication of the importance of intra-metropolitan population mobility in Jakarta. Moreover, most of the research found in the literature about migrants in Jakarta has been highly descriptive in nature, shedding little light on the pattern or the causes of intra-metropolitan mobility. It is hoped that this study will make a contribution in this area.

I.3. Statement of the Problem

The principal purpose of this thesis is to provide some insight into the patterns and processes of peri-urban growth in Jakarta. The major focus of the study is on urban-to-peri-urban population movements or intra-metropolitan mobility - which is seen as a new and distinctive phenomenon of urban population movements in Third World cities - associated with the growth of peri-urban areas.

This thesis is based on primary data collected by the author through household survey in Jakarta. The major thrust is directed toward an understanding and an explanation of a particular process of peri-urban growth and intra-metropolitan population movement for which there is little knowledge and accurate data. Hugo (1987) has pointed to the absence of suitable general theoretical frameworks within which comprehensive analyses of Third World population mobility can be meaningfully undertaken. A flexible approach is adopted here by which hypotheses concerning the characteristics of peri-urban communities and the determinants of intra-metropolitan mobility are generated and tested with reference to a range of theoretical frameworks.

The central concerns of this thesis are the growth and the characteristics of peri-urban communities. To address these issues, I will look at three aspects of urban growth phenomena in the context of migration and urbanization: (1) Socioeconomic characteristics of the peri-urban population; (2) Recent pattern and determinants of intra-metropolitan mobility; and (3) Spatial characteristics of recent urban/peri-urban development in which people's movements take place. Traditionally, these three aspects are dealt with separately because they deal with different levels of aggregation and different kinds of questions. Since I am interested in the whole phenomenon of intra-metropolitan population mobility and its relationship with the process of peri-urban growth, I will look at them at first as separate issues but then bring them together in a discussion of the phenomenon of peri-urban growth. Specifically, I am interested in two major issues. (1) The selective characteristics of peri-urban population. How do migrants differ among themselves and how do they differ from nonmigrants in their

socioeconomic characteristics? (2) The determinants of intra-metropolitan mobility at both the micro- and macro-level. Can mobility be explained by the fact that many migrants are coming from inside the central city areas? Do peri-urban migrants have motives for moving that are different from the general urban in-migrants do?

I.4. Methods and Limitations of the Thesis

This study results from a survey research carried out during a two month stay in Jakarta, in the Summer of 1990. The survey was commissioned by the Virginia Polytechnic Institute and State University (VPI) Steering Committee as part of a comparative study to examine the socioeconomic composition and structure of 'peri-urban' settlements in the Bangkok, Jakarta, and Santiago metropolitan regions. The objectives of the survey were to identify broad patterns of development that may be of programmatic interest to US Agency for International Development (AID) and that might inform local policy toward metropolitan fringe areas, and to identify specific issues warranting more focused research.

The questionnaire used in this survey was developed and prepared by the peri-urban working group in VPI's Urban Affairs and Planning Programs (see Appendix C). Interviews were conducted in 100 households by three graduate students from the University of Indonesia, Jakarta. Three survey sites in a transective area, each representing a settlement of a different age (years following initial settlements) were purposively selected. Within each site individual households were selected using a systematic random sampling procedure. The number of target interviews for each

survey site was set to be about 35 dwelling units or households.

The three survey sites in the sample were predominantly residential. These areas were selected after eliminating sections within each area that were predominantly commercial/industrial, planned unit development, major transport corridors, public facilities, and institutional settings. These areas were not selected randomly, and therefore, were not representative of all peri-urban areas in Jakarta. This is one major limitation of the study. Another limitation is that the small sample size for the area surveyed (a total of 100 households in all three sites) suggests ample caution for purposes of inference. The data also might suffer from inadequate coverage and from response error during interview.

For the purpose of this thesis, only a small part of the survey findings are used in the analysis. The scope of this thesis is much smaller than the broad analysis of peri-urban areas found in the VPI study of peri-urban growth. This is because the focus of this thesis is limited to only a few aspects of peri-urban growth, which are: (1) socioeconomic characteristics of the peri-urban population; (2) recent pattern and determinants of intra-metropolitan mobility; and (3) spatial characteristics of recent urban/peri-urban development in which people's movements take place. In order to cover these three aspects secondary data were consulted.

I.5. Outline of the Thesis

The content of this thesis can be outlined briefly. The first chapter introduces the background of the study, a brief summary of migration research in Indonesia, the purpose

and framework of the analysis, methods and limitations, clarification of concepts and definitions, and the significance of the study.

The second chapter presents a summary of the limited literature that is available. This chapter reviews the literature on the selective characteristics of migration process, the two major theoretical perspectives on migration and urbanization, and a brief examination of research on the determinants of population mobility in Indonesia.

The third chapter presents the description of metropolitan Jakarta and the study area. The description includes the physical setting of Jakarta, the growth of Jakarta, facts on migrants and pattern of migration, and an illustration of the study areas. Chapter four explains the methodology, including the study objectives, site selection and sampling procedures, theses and hypotheses on characteristics of peri-urban communities and the determinants of intra-metropolitan mobility.

Chapter five reports the findings and analyzes the data. The first part examines some major socioeconomic characteristics of peri-urban communities, and the second part examines the determinants of intra-metropolitan mobility both in the micro- and macro-level. Finally, chapter six presents conclusions drawn from the previous analysis, and provides an interpretation and explanation of peri-urban growth in Jakarta.

I.6. Concepts and Definitions

As a first step in analyzing the relationships between migration and urban/peri-urban growth in the context of urbanization, a brief clarification of these concepts is necessary. There is an extensive literature that focuses on the definitional

problems associated with these complex processes. Since the objective of this thesis is limited to an explanation of peri-urban growth and intra-metropolitan population mobility, I will focus on those selected dimensions of peri-urban growth, urbanization, and migration that enable us to isolate, identify, and analyze the major links between these processes.

I.6.1. The Concept of Peri-urban Area

The concept of peri-urban areas is a fairly new one. Clearly, urban expansion is not a new phenomenon but in the last two or three decades the form of this expansion has generally changed. The city used to be a dense complex which expanded around its immediate outskirts. With the development of transportation and communication technologies, urban expansion has been able to spread away and has moved increasingly far from the original urban area. This has resulted in a much larger consumption of land and a considerable extension of the urban-rural interface.

"The impacts of economic growth and physical expansion of the urban area are not confined within urban boundaries; they reach into much wider areas surrounding urban centers, creating so-called "rurban areas", "urban fringe", or "peri-urban areas" (OECD, 1979:9)

While the peri-urban area may retain some characteristics of the rural area, it is subject to major modifications characterized by some changes in its physical and economic factors: changes in the physical structure of the area, especially in terms of the utilization of land; increasing demand for land space and its effects on land prices; an increase in the number and the density of resident population; increasing access of

resident labor force to urban employment (typically through commutation); changes in the environmental conditions such as pollution, ecological balance, etc. (Johnson, 1974; OECD, 1979).

T. G. McGee (1989) explains the process of peri-urban growth in the Asian context, using the Indonesian term: *Kotadesasi*. It is a word that joins *kota* (city/town) and *desa* (village) to make up a word which carries the concept of urban and rural activity occurring in the same geographic territory. Five main features of the process may be delineated. First, it is generally characterized by an increase in a great mixture of nonagricultural activities in areas which were previously largely agricultural. Second, the *kotadesasi* zones are also characterized by extreme fluidity and mobility of the population, not only by commuting to urban centers but also by intense movement of people and goods within the zones. Third, the *kotadesasi* zones are characterized by an intense mixture of land use with agriculture, cottage industry, residential, and other uses existing side by side. Fourth, another feature of the *kotadesasi* zones is the increased participation of females in nonagricultural labor. Finally, these *kotadesasi* zones are to some extent "invisible" or "gray zones" from the point of view of the state authorities. This lack of authority also allows proliferation of squatter housing in these regions (McGee, 1989).

Another popular conception of peri-urban areas in the Third World comes from previous studies on growth of peri-urban areas in Africa and Latin America. These studies suggest that peri-urban settlements are variously viewed, from the negative descriptions such as 'agglomerations of poverty', 'stagnant peasant shanty towns', or 'belts

of misery', to a more positive description, as dynamic incubators of new economic activities that stimulate growth in both urban and rural sectors (Browder et al., 1991).

Studies on peri-urban economic growth in Africa suggest that the characteristics of peri-urban areas vary from country to country. In general, peri-urban areas are usually characterized by rapid population growth and increasing population density; strong social and economic linkages to rural areas as well as urban areas; the importance of agriculture and food supply to urban areas; economically low-income and long-standing urban residents; the importance of informal economic activities; uncertainty on land tenure and property ownership; substandard public services; low rates of formal sector employment; and the predominance of self-built housing (SARSA/USAID, 1990).

In addition, despite some similarities, a few significant differences in the conception of peri-urban areas from those African studies were found in Latin American literature, some of which has been drawn from sociological and Marxian political science perspectives. Peri-urban areas in Latin America are more characterized by strong social and economic linkages to central urban areas; various formal and informal economic activities; and the phenomenon of squatter settlements (Browder et al., 1991).

In all the above conceptions, peri-urban areas have been described and defined by their physical, demographic, social and economic characteristics. Based on those conceptions, a general definition of peri-urban areas has been formulated by the author for purposes of this thesis, as follows: peri-urban areas are areas in the periphery of urban agglomerations where physical, demographic, social and economic activities and changes are directly affected by the presence and the expansion of the city.

I.6.2. Migration, Mobility and Migrants

Migration is usually defined as a change of residence entailing a change in the scope of social and economic activities. This definition implies that migration at its simplest, may be understood as the movement of individuals or households from one place to another, on a more or less permanent basis. Specifically, excluded from this definition are tourism and commuting, where the change of residence is transitory and the total round of activities is altered only temporarily. Included within the meaning of migration is a wide range of migration types that involves a wide range of associated socioeconomic change processes (Goldscheider, 1983).

There are three critical aspects of defining what is and is not migration, and they need to be identified in order to understand the conventions that have been followed in censuses, surveys, and other sources of migration research. The first basic aspects of identifying what is to be considered migration or mobility is a change in residence that represents a more permanent form of movement (United Nations, 1970; Shryock and Siegel, 1971).

The second aspect in operationalizing the concept of migration is the time period used to measure movement. The idea is that migration should reflect residential relocation over some significant period of time in order to make a distinction between short-term, nonpermanent movements and the more permanent changes that characterize migration (Long, 1988). However, in much of the Third World migration literature the distinction between permanent and nonpermanent migration may not be as clear as those in some developed countries. Empirical research on rural-urban migration in developing

countries has showed that the permanent characterization of migration is not always followed. In the Southeast Asian context, van den Muijzenberg (1973) used the term 'circo-commuting' to describe the pattern of movement of Filipinos who spent part of the year in their village and part in Manila. In Indonesia, Hugo (1987) noted the importance of what he called 'circular migration' referring to those movements that are not permanent. These kinds of movements are common concepts in Third World migration literature.

The third aspect of defining migration concerns the minimum distance or other measures for distinguishing between migration and purely local moves. The basic idea is that there is a difference between migration and strictly local moving (Long, 1988). In practice, the distinction is usually made by conventions adopted by statistical bureaus or other data gatherers.

"Since the 1960 census, the U.S. Census Bureau has coded migration data in somewhat more detail to allow identification not only of moves within and between counties but also of moves within central cities of metropolitan areas, between central cities and metropolitan fringes, and between metropolitan areas and nonmetropolitan territory" (Long, 1988:11).

The lack of consensus on the various aspects of identifying which moves to call migration has made other researchers suggest the use of more general concepts and terminology that include a variety of movements. However, the most general term here is simply 'mobility', which McGee notes "offers more conceptual breadth encompassing all types of geographic, social, and economic mobility" (1978:219). It includes all kinds of spatial movements, both temporary and permanent, and over various distances. The

notion of mobility helps to avoid the necessity of typologizing movements. For example, most studies of migration in the Third World focus on rural-urban migration, yet other types of movement take place as well. In this thesis the term mobility also refers to intra-metropolitan population movement.

A migrant is generally defined as a person who moves from one administrative unit to another for a specified minimum period of time. In Indonesian population censuses, people are migrants when they move across a provincial boundary and the duration of their stay in the destination province is at least six months. The census data refer solely to migration between provinces and contain no information on the important movements between smaller administrative units within a province. For the purpose of this study the above general definition of migrant is adopted. As long as a person changes residence from one administrative unit to another, regardless to the size and distance between those units, that person could be regarded as migrant.

This study distinguishes a) primary and secondary migrants, and b) recent and long-term migrants. Primary migrants are those of rural origin who reside in the peri-urban area as their first place of stay since their move from rural area. Secondary migrants are those who reside in the peri-urban area as their second or subsequent place of residency since their first move from rural area. There is no consensus on the best or ideal interval over which to measure migration in censuses or surveys. However, in the last two Indonesian censuses there were four questions on population mobility: 1. Place of birth; 2. Duration of stay in present residence; 3. Place of previous residence; 4. Place of residence in the previous census (10 years ago). Based on these questions, a ten-year

period is used in this thesis to make a distinction between recent migrants and long-term migrants. Recent migrants are those primary and secondary migrants who moved to the peri-urban area after the 1980 census (within the last ten-year period from which this study was undertaken). Long-term migrants are those primary and secondary migrants who have resided in peri-urban area before the 1980 census (more than ten years from this study). Nonmigrants are those who reside in peri-urban area since they were born (native residents).

I.6.3. Urbanization

Urbanization, in a demographic sense, is defined as "a process of growing population concentration whereby the proportion of the total population which is classified as urban increases" (Slater, 1986:8). More specifically, for urbanization to occur, urban areas have to grow more rapidly than rural areas whether through higher levels of natural increase, through population transfers to urban areas, or through reclassification of populations and places as urban.

In a much broader sense Bryan Roberts (1978) states that:

"urbanization in its most formal sense merely constitutes the increase of the urban population as compared with the rural one, but it includes and results from far-reaching economic transformations on the national and international plane" (Roberts, 1978:9).

Furthermore he states that "urbanization is essentially the product of capitalist development and expansion" (Roberts, 1978:11).

Another definition of urbanization is given by Castells (1980):

"The term 'urbanization' refers both to the constitution of specific spatial forms of human societies characterized by the significant concentration of activities and populations in a limited space and to the existence and diffusion of a particular cultural system, the urban culture" (Castells, 1980:15).

Furthermore, Castells interprets the phenomenon of urbanization in terms of the 'social production of spatial forms':

"..... the ideological notion of urbanization refers to a process by which a significantly large proportion of the population of a society is concentrated on a certain space, in which are constituted urban areas that are functionally and socially independent from an internal point of view and are in a relation of hierarchized articulation (urban network)" (Castells, 1980:17).

In these definitions, Castells defines the notion of urban (as opposed to rural) as the spatial forms (in the form of built environment) of social organization which are the products of a structure and of social processes, characterized by certain social and functional heterogeneity (Castells, 1980).

I.7. Significance of the Study

The significance of this study is apparent from both policy and theoretical standpoints. Population movement is responsible for cultural diffusion, social and economic change, and can influence urban policies in three ways. First, Goldstein (1976) argues that with the increased homogeneity of fertility rates due to the success of family planning programs in developing countries, migration will become the primary cause of population redistribution. Thus, knowledge of migration and its components is integral to the development of future policies. Second, it is important to know what the

characteristics of the population are, particularly migrants, in areas where the process of growth takes place. Migration affects both areas of origin and destination. If unique characteristics could be detected among migrants and their relative proportion of the total is significant, then changes in both the origin and destination will be affected by migration. As a result, planning policies must be based on the level of different components of the migration stream and the particular demands of these migrants. Third, it is essential to know what makes people move and what draws migrants to an area. If, for example, the characteristics of an area attract secondary migrants but not primary migrants then the area's population composition will be increasingly unique. Thus, planning policies and investment decisions will have to address the potentially varied needs of this population.

Theoretically, this thesis can potentially make some contributions. First it attempts to explain the significance of intra-metropolitan mobility in Jakarta, Indonesia. Second, it attempts to examine the major socioeconomic characteristics and the composition of peri-urban communities. Third, it offers an explanation for changes in the determinants of migration motivated by different level of household economic needs and therefore different strategy. Finally, it offers an explanation for the role of advanced capitalist development in the process of peri-urban growth.

Chapter 2: **LITERATURE REVIEW**

II.1. Selectivity of Migration Process

The substantial difference of the characteristics of migrants and nonmigrants at both their origins and destinations reflects the selectivity of migration process (Lee, 1966). This differential selection of migrants also can affect change in demographic, social and economic characteristics of both the areas of origin and destination, as well as possibly shedding some light on the determinants of migration.

An integral step in determining the role of intra-metropolitan mobility in the growth of peri-urban areas is the investigation of migratory selection, e.g., how the various types of migrants and nonmigrants in the areas of destination differ on various socioeconomic characteristics. Several socioeconomic characteristics have become accepted as correlates to the propensity to migrate and will be considered in the present study. Six of the most mentioned variables are drawn from both studies in developed countries (urban-suburban movements) and developing countries (rural-urban movements) as well as migration studies in general. These variables include: age, education, occupation, household size, income, and formal/informal employment.

Age

One of the most universal factors of migration selectivity is that of age. Findings from previous studies, in general, have found that migration is usually disproportionately selective of the young adult age groups. Migration is generally thought to be an experience of the younger members of the society but this can depend on the type of migrant and direction of migration (Petersen, 1975; Shaw, 1975). Findings from national data on the metropolitan-to-nonmetropolitan stream in the US have found that migrants are older on the average than nonmigrants in destination areas (Lichter and Fuguitt, 1982). Hugo (1987) has found that the census migration data in Indonesia, which include only longer distance, more or less permanent, interprovincial migration shows strong age selectivity. The propensity to move for persons in the younger cohorts is substantially greater than for the rest of the population, both in origins and destinations.

Education

Since it also can be objectively and accurately determined in censuses and surveys, the level of educational attainment is probably one of the best available index of migrants' socioeconomic status, particularly in developing countries. Much of the empirical data from developing countries as well as developed countries suggest, particularly in rural-urban migration, that migrants have higher educational levels than nonmigrants at their points of origin and lower than those at their destination (Shaw, 1975; ESCAP, 1981). Other studies have found that the propensity to migrate increased with the length of schooling (Speare, 1974). Analysis of interprovincial migration data

from Indonesian censuses indicated that average levels of educational attainment are higher among migrants than among nonmigrants in all categories of urban centers and in rural areas (Hugo, 1987).

Occupation

Contemporary migration research in the United States as well as in other developed countries have shown that migration is selective of the more skilled and higher occupational status categories. This finding pertains to migration in general (Shaw, 1975), the metropolitan-to-nonmetropolitan migration and return migration in the US (Lichter, et al., 1985; Miller, 1977). Some similar findings are found in rural-urban migration in Indonesia and India, however, these findings pertain to the comparison between migrants and nonmigrants in their areas of origin (Mantra, 1985; Naidu, 1990).

Household Size

The broader migration literature points to a positive correlation between household size and migration (Petersen, 1975). Migrants tend to have larger families than nonmigrants. Differences in household size among migrants do exist depending on the direction of the migration. DeJong and Humphrey (1976) found that household size was larger for secondary migrants than primary migrants, although household size for both types of migrants was larger than that for nonmigrants at the destination areas. Generally, migration can be prompted by the difference in needs of increasing household size (Petersen, 1975; Brown, 1975). The ESCAP studies in Indonesia found that migrants in urban areas generally have smaller household size than nonmigrants (ESCAP, 1981).

Income

Income, like education and occupation, appears to be consistently related to all forms of migration (Petersen, 1975). Migrants tend to have higher median incomes than nonmigrants at the area of destination. This is generally the case for inter-urban migration and metropolitan-to-nonmetropolitan migration (Miller, 1977; Lichter, et al., 1985; Campbell and Johnson, 1976). Differences in median income should exist between types of migrants to the extent that differences exist in the relative success of migrants (Lansing and Mueller, 1967). In the case of rural-urban migration, Hugo (1978) found from his study in West Java that circular migrants to Jakarta are generally involved in nonpermanent jobs or informal sector and have relatively small amount of incomes.

Formal/Informal Employment

The literature on urban informal sector¹⁾ suggests that urban informal economic activities are positively related to migration and urban migrants (Hart, 1973; Friedmann and Sullivan, 1974; House, 1984). There is a tendency to identify the informal sector employment with the migrant population (Sethuraman, 1976). Secondary migrants referred to as "consolidators" and "status seekers" are those who usually have steady urban employment and are generally quite secure (Turner, 1968).

¹⁾ The informal sector economic activity is usually defined by its distinct characteristics to the formal sector in the urban economy which includes: ease of entry, small scale operation, labor intensive, self employment, low income level, involves no legal contract, petty retail trade and services, irregular and nonpermanent basis for fixed rewards, limited access to formal institutions, and in many cases, beyond the government regulations (Hart, 1973; Sethuraman, 1976; Todaro, 1989).

In summary, previous studies of migration in general indicate that migrants generally have different socioeconomic characteristics from nonmigrants at both their areas of origin and destination. More specific studies of metropolitan-to-nonmetropolitan migration in the US indicate that migrants are usually selected among the older, better educated, higher occupational status, larger household size, and higher incomes than nonmigrants in the areas of destination. On the contrary, studies of rural-urban migration in developing countries, particularly in Indonesia, generally indicate the reverse of the above. Migrants in the areas of destination are usually selected among the younger, less educated, lower occupational status, smaller household size, lower incomes, and more likely to engage in the informal economic activities than nonmigrants.

II.2. Major Theoretical Perspectives on Migration and Urbanization

Two different basic theoretical perspectives about migration in the context of urbanization have been developed in much of the literature: (1) individual decision making approaches, and (2) political economy approaches. The following is a brief review of these theoretical perspectives.

The individual decision making approach considers the causes of migration at the individual level, examining characteristics of those who migrate and their decision making processes. The political economy approaches argue that migratory movements are determined by society-wide and, in many cases, world-wide economic forces that cause the conditions in which people move.

Two different types of analysis result from these differing theoretical perspectives. Those studying individual decision making are concerned with who moves and who does not, and why. Chang, for example, states that "a general theory of migration must be able to answer the following questions: Who are the migrants? Why do they move, stay or return? How and where do they move? When do they move? What are the effects of such actions on the migrants and on others?" (Chang, 1981:304). Large numbers of surveys have addressed such questions in many regions of the world, usually assess the relative importance or difference of "push" and "pull" factors in which economic motivations tend to dominate (Lee, 1966; Lowry, 1966; Shaw, 1975; Richmond and Kubat, 1976; Goldscheider, 1983)

Those concerned with political economy approaches are not only particularly concerned with who moves and who does not, and why, but also with the broad political and economic conditions of the society in which they move. These approaches emphasize how local, regional and national conditions are determined by larger political and economic forces. In general, this view stresses the impact of penetration of the world capitalist economy on peripheral economies. The key feature of modern migration according to these perspectives, is that it consists of the "migration of labor, not of people" (Portes and Walton, 1981:21).

II.2.1. Individual Decision Making Approaches

Research on the determinants of migration and many tenets of this approach are based on the work of Ravenstein (1885 and 1889/1976), Lee (1966), Lewis, Fei and

Ranis (1954, 1961), Todaro (1976) and Lowry (1966). The earliest inquiry into the question of why people move resulted in the following of basic law in Ravenstein's "*The Law of Migration* " (Lee, 1966). Ravenstein stated that:

"In spite of various motives such as political and religious ones that drive people to move, the economic motive is universally dominant. Human migration from areas of poverty to areas of opportunity is a natural response to the spatial differentials of quality of life and economic opportunities" (Ravenstein, 1885/1976:181).

In short, migration behavior is a purposeful and rational search for economic self-improvement. Another premise that Ravenstein elaborated is that "migratory interaction declines with increase in distance between a source and a center of absorption" (Ravenstein, 1885/1976:198). This premise laid the basis for the development of gravity approaches later on (Eldridge, 1965). Moreover, "along with other laws, Ravenstein's basic ideas laid the basis for the classical migration theories, which have stood the test of time and remain the starting point for work in migration theory" (Lee, 1966:188).

Everett S. Lee (1966) is one among those who have amplified and refined Ravenstein's basic laws. He evolved a general theory, which assumes that each origin and destination has a set of positive and negative factors pulling and pushing migrants. The effect of each of these forces will vary with the personality as well as other individual traits (e.g., age, education, income, skill level, sex, race, ethnic group etc.) of different people. In other words, different people can be affected in different ways by the same set

of obstacles. Some general hypotheses that are considered relevant to this thesis are offered by Todaro (1976):

- "For every major migration stream, a counterstream develops (i.e., there will always be return migrants who find that their initial perceptions did not accord with reality or who simply failed to achieve their objectives)" (p:18).
- "The magnitude of the net stream (i.e., stream minus counterstream) will be directly related to the preponderance of minus factors at origin - i.e., origin push factors are relatively more important than destination pull factors" (p:18).
- Migration is selective, i.e., migrants are not random samples of the population at the origin" (p:19).
- "Migrants responding primarily to plus factors at destination tend to be positively selected, i.e., they are of higher quality (more educated, healthier, more ambitious, etc.) than then the origin population at large" (p:19).
- "Migrants responding primarily to minus factors at origin tend to be negatively selected, e.g., most European migrants to North America in the nineteenth and early twentieth century were unskilled rural peasants driven off the land by economic hardship, political and/or religious persecution, etc." (p:19).
- "The degree of positive selection increases with the difficulty of the intervening variables, i.e., the more educated are willing to travel longer distances to find suitable employment opportunities" (p:19).

Implicit in Ravenstein, Lee, and Todaro is the notion that the decision to migrate is a response to either potential pull or push factors of the area of destination and the area of origin. As a general theory this notion implies that migration process will take place when there are some economic differentials between two places. The apparent validity of Lee's hypotheses does not lead us to figure out which pull factors and which push factors at both origin and destination are quantitatively the most important to different

groups and classes of people, therefore, Lee's theory offer little practical policy guidance for decision makers in developing nations (Todaro, 1976).

Another theory explaining urban economic growth was that developed by W. Arthur Lewis (1954) and later formalized and extended by John Fei and Gustav Ranis (1961) which have been referred to as the "dual sector" models. According to these models, the expansion of the modern industrial sector was considered the main prerequisite for economic growth. Such expansion could be obtained if a sufficient labor supply were to be readily available. However, the bulk of the potential labor force was located in the traditional agrarian sector engaged in subsistence production. It was felt that if these laborers could be released from this sector, they could easily be absorbed into the industrial sector, thus facilitating industrial growth (Todaro, 1976). These dual sector models show the importance of labor migration in the development process.

In the Lewis' model, the assumed surplus agricultural labor moves to urban areas because of rural-urban income differences. The free choice of individuals in the market economy facilitates the transfer of labor. Realizing that wages are higher in urban areas, agricultural laborers decide to move, presumably to increase their standard of living. The key assumption of these models is that surplus labor exists in rural areas while there is full employment in the urban areas. Most contemporary researches indicate that the reverse may be true in many developing countries (Todaro, 1976; Riddell, 1978).

Supplementary to these models, is the theory developed by Michael P. Todaro and John Harris. While Lewis' labor-surplus model advocates rural-urban migration, the Harris-Todaro model has been used as a justification for controlling cityward migration

(Ogawa, 1985). Starting from the assumption that migration is based primarily on privately rational economic calculations for the individual migrant despite the existence of high urban unemployment, the Harris-Todaro model postulates that migration proceeds in response to urban-rural differences in expected earnings (Todaro, 1976). It assumes that an individual will move to take up residence elsewhere if he perceives a higher level of expected income (gains) than in his current place of residence. Expected gains are measured by (a) the difference in real incomes between the place of origin and destination, (b) the probability of obtaining employment, and (c) a non-wage component (this includes psychic benefits such as family ties, etc.). The level of migration can be explained in terms of differences in average expected income over time after allowing for the discounted cost of moving. A migrant may anticipate a higher expected income in the destination area even though he is unemployed. According to this model this is still 'rational' as long as expected benefits exceed expected costs. If the expected benefits are large, young migrants may easily justify lengthy period of waiting for a job. This assumption adds some insight into the situation where there are high rates of in-migration to areas of high unemployment. This model also implies not only the standard "push" and "pull" factors of the areas of origin and destination, but also the potential "push-back" of high urban unemployment.

Some researchers claim that high rates of in-migration prompted by the attractive power of large urban centers led to a dysfunctional condition called "overurbanization" (Gibbs and Martin, 1962), or "pseudourbanization" (McGee, 1967). The basic premise of this literature is that urban concentration was proceeding very quickly, while other

indices of development, such as industrialization, lagged behind. Population concentration in large cities was increasing so fast that it was outstripping newly urbanized societies' ability to adjust, absorb, and cope with the human influx. The result was the generation and intensification of serious problems such as poverty, unemployment, inadequate services, social unrest, crime, and political instability in Third World cities (Smith, 1988).

Additional research concerning individual decision of migration is from the work of Ira Lowry (1966). In *"Migration and Metropolitan Growth"* (1966:22) the author argues that ".....the choice of destinations does reflect a knowledge of and interest in labor market conditions there." From this viewpoint, migrants choose destination locations based on economic characteristics of the location and, thus, migration rates can be directly tied to macro-level economic characteristics of a location. Similar to Harris-Todaro's model, Lowry recognizes the importance of rate of unemployment and wage level in explaining the rate of in-migration.

Another theory that explains population movement concerning individual decision making is found in the literature of housing and residential mobility in the U.S. A common assumption underlying residential mobility theory is that people move to improve their housing quality (Speare et al., 1975). Housing conditions repeatedly have emerged as an important predictor of mobility (Goodman, 1976; Newman and Duncan, 1979; Rossi, 1981), and people seldom make a voluntary local move unless there is a positive housing adjustment. Further, the typical voluntary move is to a place that is usually "better" than the previous unit; thus a process of upward mobility through the

housing stock characterizes the majority of moves (Goodman, 1978; Myers, 1983). Yet more than a decade of gentrification and urban renewal-related displacement has been accompanied by an inflationary housing market in the central city in which households with the fewest resources have been faced with involuntary moves (Newman and Owen, 1982; Lee and Hodge, 1984). In general, one would expect householders making involuntary moves to experience lower housing quality than those making voluntary moves. This theory suggests that another type of economic factors, more than just income differential between places, has been the recent determinants of intra-metropolitan mobility, especially in developed countries.

Another important theory of population movement from individual decision making perspectives that could best explain the phenomenon of intra-metropolitan mobility in the Third World is an approach from housing preferences and settlement patterns viewpoint. John C. Turner in his several papers on housing and settlement in Latin America, particularly in Peru, has tried to explain the process of urban settlement in developing countries which concerned urban migrants. He argues that the pattern of settlement and land subdivision exerts the major influence on the economy and development of the city.

"The ineffectiveness of contemporary urban planning and related low-income housing policies in developing areas is, I argue, mainly due to ignorance of residential needs and priorities and to the consequent misunderstanding of the urban settlement process" (Turner, 1968:354).

Turner's theory is basically an explanation of urban settlement process in developing countries characterized by "transitional societies". He used a model that

explains how housing preferences and environmental priorities for these societies (urban migrants) changes over time as their socioeconomic status increased. Therefore, urban growth is explained by the process of settlement which is further explained by the functions of housing.

In his model, housing is defined in terms of 'dwelling environment' and not in terms of 'dwelling structures'. By this he meant that "good housing" is not necessarily of high physical standards usually understood by architects and planners. In this definition, the basic functions of housing are: location, tenure and amenity. Housing preferences are different among different socioeconomic status of the people. Urban settlement process and pattern is then seen as the product of the needs for location, tenure and amenity.

Turner elaborates his explanation through the stages of historical development of the transitional cities (cities in developing countries). In the early stage, the growth of transitional cities is characterized by a relatively slow rate and small scale of rural-urban migration. Given the general characteristics of first-round migrants (the rural poor in general) which he assumed to be those seeking jobs and opportunities in the city, the logical locational choice for them to settle should be in the central areas of the city where jobs and opportunities were available. These migrants - referred to as the "bridgeheaders" tend to be scattered around the central city areas even though they had to live in illegal squatter settlements. Their housing preferences and settlement priority are proximity to the source of jobs.

In the next stage of development, the growth of the city is characterized by very rapid rate and very large scale of rural-urban migration, but still low level of industrial

investment. At this point in time, the earlier migrants from the earlier stage have escalated to consolidation situations - referred to as "consolidators", those who have steady urban employment and are generally quite secure. Their housing preferences and settlement priority moved toward tenure - permanent ownership and residence. Proximity to the inner city is no longer their priority, therefore, some migrants may have moved further to peripheral areas where they can afford to own a plot of land and construct their own dwellings.

In the latest stage of development, the rate of growth of the city slows down and the scale of rural-urban migration become smaller, but the city has grown so large and so fast that the outer ring of the earlier development stages has now become an inner ring. However, the squatter settlements in the central city are fewer and no longer provide cheap, temporary accommodations for the very poor new migrants. In the mean time, the former consolidators may have risen to higher socioeconomic status - referred to as "status seekers", those who have more secured jobs and higher income. Their housing preferences and settlement priority moved toward amenity - modern standard amenity. These people usually expect more than just permanent ownership.

The implication of Turner's theory to the peri-urban growth thesis is that the growth of the peri-urban population can be explained by the people's housing preferences and the process of residential settlement. A significant proportion of people who are currently settled in peri-urban areas are those secondary migrants who have a higher level housing preferences after their experience of living in central urban areas as primary migrants and accumulate savings. As their socioeconomic status increases their housing

preferences also will increase toward ownership and better environment which could be found in peri-urban areas where land prices are generally lower and environmental quality are generally better than in central urban areas.

Finally, there is a theory which suggests a positive correlation between in-migration and intra-metropolitan mobility. This theory is based on studies by geographers who have found that long-distance migration (sometimes called 'total displacement migration') is often followed by subsequent moves within the area (sometimes called 'partial displacement migration') (Roseman, 1971; Adams et al., 1973). The theory is that migration to a metropolitan area is always made with varying degrees of uncertainty, and after moving to an area a household acquires greater knowledge of the area and can achieve through moving a better fit between its needs and aspirations and the available housing and neighborhoods. Therefore, one might expect that the greater the 'total displacement migration', the greater the 'partial displacement migration'.

The last three ideas reviewed here suggest that peri-urban growth and intra-metropolitan mobility can be viewed as another phase in the migration process of urban migrants. This process reflects the population inversion where long-term urban migrants leave the central city areas, which are usually their first destination, to urban fringe or peri-urban areas as their second or subsequent destination in their migration history.

This brief review of major theories of internal migration from individual decision making perspectives should leave the impression that the basic explanatory variables do not differ substantially among them. The differences lie in their emphasis and

interpretations. In summary, there are three types of factors affecting migration: first are factors reflecting the different economic characteristics of areas of origin and areas of destination; second are those intervening between origin and destination which includes the structural characteristics of the economy as a whole, governmental policy and basic changes in technology; and third are those reflecting the characteristics of individual migrants.

II.2.2. Political Economy Approaches

In the latter part of the 1970s another interpretation of urban growth emerged at a time when many observers felt that the high rate of urban population growth was detrimental to advanced capitalist development (Trager, 1988). Some distinguished writers from the neo-Marxist school of thought such as Castells (1980) and Harvey (1978) have attacked the belief that urban form emerges through a neutral process of individual decision making. For Castells and Harvey, urban areas can be understood only in terms of the conflicts between classes which are a direct outcome of the operation of the capitalist mode of production. Urban form, urban issues, urban government, urban ideology can be understood only in terms of the dynamic of the capitalist system. Space is socially determined as the outcome of conflicts between different social classes.

In his paper *"The urban process under capitalism: a framework for analysis"*, David Harvey (1978) sought to ground an understanding of the urban process in the basic features of Marxist political economy: the accumulation of capital and class struggle. These two aspects are complementary and intertwined, but Harvey takes the process of

capital accumulation as his starting point (Procter, 1982). Harvey interpreted the urban pattern of individual countries as at least partially shaped by the flows of international capital. As he points out, capital can be seen to be operating in three circuits. First there is the circuit of 'primary capital' which involves the appropriation of surplus value from labor through direct production processes in capitalist societies. Second, there is a circuit of secondary capital formed by investments in fixed assets and a consumption fund which are defined as 'aids rather than direct inputs' to production and consumption. Within each, a further distinction is made between aids within the production/consumption processes and those aids which act as a physical framework or 'built environment' for production and consumption. Third, there is a tertiary circuit of capital which consists of investment in science and technological research and social expenditures designed to improve the processes of reproduction of future labor power - e.g., education, health care (Procter, 1982; McGee, 1986).

Harvey's main purpose in this analysis is to show how conflict within these circuits of capital can be resolved by shifting the flow of capital investment from one circuit to another (by individual capitalists and by the state). The relationship between economic process and the urban process lies in the construction of a built environment in the circuit of secondary capital and social expenditures to reproduce labor power in the circuit of tertiary capital.

Furthermore, the relationship between the built environment and the reproduction of labor power lies in two propositions: (1) capital investments in future labor power necessarily involve investment in a built environment to house, educate, cure, transport,

entertain the workforce, and (2) the form of that built environment is shaped by class struggle - conflicting class interests between capital and labor, (Procter, 1982). As a consequence capital attempts to control the worker's lives and in part this again involves the construction of a particular form of built environment. The conflicting interests between capital and labor not only take place in the production process but also in the process of reproduction of labor. As the capital dominates labor, this conflict generated the displacement of labor around the built environment, once the reproduction of labor power (Harvey, 1978).

Although there is no explicit treatment of spatial and migrational implications in the urban environment, this theory implies that capital accumulation has a strong relationship to the physical structure, spatial arrangements and form of urban areas. This relationship is developed in the work of David M. Gordon in his paper 'Capitalist development and the history of American cities' in which he attempts to fashion the historical links between capitalism and urban development (Gordon, 1978).

Gordon describes three stages of capitalist development: the commercial, industrial, and corporate stages of accumulating capital. Each of these three stages has a corresponding urban form, the commercial, industrial and corporate city. The link he draws between capital accumulation and urban form is "the struggle between owners and workers over social relations in the capitalist workplace" (Gordon, 1978:28). Cities are shaped by the requirement of capital for a submissive and disciplined workforce. An urban form is developed which functions to achieve this end within the specific exigencies of a form of capital accumulation (Procter, 1982). Thus, for example, as

capital accumulation shifted toward industrial production it was more advantageous to locate factories in the larger rather than smaller cities to make more efficient use of the factory system.

"The segregation of the working class in the large industrial city not only isolated it from middle class moral support but also encouraged class consciousness and thereby class struggle but this in turn stimulated capital's search for an alternative urban form, the suburbanization of the working class and the dilation of class consciousness" (Gordon, 1978:46).

Both Gordon and Harvey wish to introduce class struggle as the political expression of economic relations but for Harvey the emphasis is on displaced class struggle around the dwelling place and associated areas of consumption whilst for Gordon the focus is on class struggle at the point of production (Procter, 1982).

At this point, Gordon's theory may give us some light to the spatial implications for the urban environment of capital accumulation and class struggle. However, it still does not explicitly indicate the population distribution or the migrational implication that we need to explain the growth or decline of urban environment.

Michael P. Smith (1980) in his book *"The city and social theory"* analyzed the role of advanced capitalism in shaping not only the spatial but also the migrational aspect of the urban environment. To Smith, urbanization or urban development concerns the form and function of cities and the distribution of population between regions *and within cities*, that are shaped by capitalist development. He argues that spatial and migrational implications of urban development are shaped by the locational decisions of large corporate firms, by means of the changes of mode of production because of technological

advances in transportation and communication. The tendency of capital is to concentrate and then to move globally to the least expensive points of production.

Because of these largely corporate land-use and investment priorities, the demographic map has changed significantly. The single most important determinant of "why people move" has been shown to be "where the jobs are" (Smith, 1980:239). This means that large enterprises decisions about where work will be available contribute significantly to the pattern of population movement to suburbia and to rural areas.

Within this basic context of employer-created job patterns much room remains for the large capitalist enterprises of land speculation. In the suburbs, investment in housing, and shopping centers has had a major impact on the sprawl pattern of population movement. In the central cities affected by loss of industrial jobs, population, and tax base, the chief governmental response has been to subsidize speculations in office and luxury apartment buildings through "urban renewal". Both speculative ventures have contributed to the spread of people throughout the metropolis - the former intentionally, the latter inadvertently, by converting central cities from place to live to places to do office work and be entertained (Smith, 1980). These kinds of large-scale investments no longer follow population flows but shape the pattern of population movement.

In explaining the spatial and structural characteristics of the urban systems in the Third World, Armstrong and McGee (1985) use the concept of capitalist penetration of Third World societies through accumulation of capital. Third World cities, particularly the large metropolitan areas, are seen as the central places for a process leading to an increasing concentration of financial, commercial, industrial, and decision making. Cities

are also seen as centers of diffusion of Western culture and values, to enhance and promote the end of capital accumulation. In the process, class differentials emerge from economic and social activities to meet the conditions of advanced capitalism, described as 'urban imbalance'. It is a phenomenon accelerated by the concentrated pattern of transnational and national corporate capital accumulation in combination with the modernization strategies of Third World governments. The spatial impact of this process, resulted from a series of social and economic interactions among different class of people, is the creation of settlement hierarchy at the national and regional level as well as within the metropolitan areas. Similar to Smith's analysis, Armstrong and McGee implicitly explain that population movement is the result of *labor movements* which follow the capital flows and create spatial differentials through settlement hierarchy.

The implication of political economy approaches to the peri-urban growth or the intra-metropolitan mobility thesis is that the declining population in the central metropolitan areas and the growing population in peri-urban areas can be explained by the changing pattern of land utilization that is shaped by capital accumulation (capitalist mode of production). This changing pattern will have a significant impact on urban form and functions. Central urban areas will be more characterized by the growing functions of large-scale commercial and corporate forms of capital investment, higher quality requirements for employment opportunities, and a declining function of residential land utilization. On the other hand, peri-urban areas will be more characterized by the growing functions of large-scale industrial and small-scale commercial forms of capital investment, higher employment creation and opportunities, growth of residential land use

and decline of agricultural land use. This pattern is partly due to the progressive development of transportation and communication systems with the use of advanced technology.

My critique of the theoretical approaches discussed above is that both individual decision making and political economy approaches have excessively stressed the importance of economic considerations in terms of labor movement in migration and urbanization. On the one hand, the decision making approach overemphasizes the economic rationality and the free choice of an individual in his decision to move, neglecting other forces that might have significant influence on the decision making process. On the other hand, the political economy approach overemphasizes the macro structural forces in the economy that create the spatial inequality in which people move, neglecting the decision making process of individuals or households as the unit of analysis. At the relatively smaller scale of intra-metropolitan mobility, economic explanations in terms of labor movement may not be the only explanation of the process of population movements. It is likely that other than economic factors such as political, psychological, ecological, cultural and other behavioral factors could have great influence on the moving process.

II.3. Determinants of Population Mobility in Indonesia

Any explanation of population mobility patterns in a country as huge and diverse as Indonesia is very complex. All that can be attempted here is to summarize some of the

major arguments. It is possible to divide the arguments into those which focus upon micro level approach and those which focus upon macro level approach.

II.3.1. Micro-level Approach

Hugo (1981) has pointed out that the major force impelling migration in Indonesian cities is the unequal distribution of the number or range of jobs and educational opportunities. Lipton (1980), in his review of the Third World migration literature, has suggested that the economic push out of rural areas seems to operate with selective force upon two groups within rural communities. This generalization has been shown to have applicability and importance in studies of migrants in Indonesian cities. First, the younger members of wealthier families move to seek further education and eventually high-paying and high-status jobs in the formal sector of the urban economy. They have no chance to fulfill aspirations encouraged by an urban biased educational system within their home village. This group moved into the city by the lack of a suitable range of opportunities rather than by other causes. Members of this group could survive quite comfortably in the village if they decided to remain. The second group comprises those who are forced out of the village by the lack of job opportunities (Hugo, 1978; Suharso, et al., 1976).

The Harris-Todaro migration model postulates that rural-urban migration in Third World contexts is impelled by the expectation of obtaining a higher wage in the city than is currently being received in the village. This certainly applies to the wealthier rural-urban migrants discussed above. The poorer rural-urban migrants, however, tend to

be motivated more by the lack, not of suitable opportunities in the village, but of any opportunity at all. It then becomes a choice not between a current and an expected job, but between no job at all in the village and a chance to obtain a job in the city. In rural Indonesia, particularly Java, there are many contemporary forces in rural areas which are operating to cause such a pattern of movement. Hugo (1978) has shown in West Java, for example, that an increase in rural population is exerting considerable pressure on the absorptive capacity of the rural sector. The increasing economic pressure on members of households in rural Java, who are landless or have a piece of land which is so small that it is not sufficient for the family's needs has been documented in several studies (Temple, 1974; Hugo, 1978; White, 1979). The end result of such pressure is that many among this group of people are being forced to migrate to the city. This finding suggests that the Harris-Todaro explanation of rural-urban population movement is insufficient when applied to the Indonesian context.

The LEKNAS-LIPI field study in 1983 which asked migrants why they have moved and examined the context of migration decision making, have produced findings which also confirm the applicability of Lipton's argument. Most rural-urban migrants in Indonesian cities seems to come from the poorer group of rural populations who are forced out by the economic pressure in rural areas. (Suharso, 1983).

II.3.2. Macro-level Approach

In Indonesia, elements of political economy approach have been employed to explain population mobility. Hugo (1987) has shown that contemporary population

mobility in Indonesia cannot be explained without reference to the formative influence that colonialism has had on the political, economic and social systems of the country. The argument is that the exploitative colonial system, designed to control the local population and expedite the cost-efficient extraction of raw materials, shaped the pattern of population mobility. The concentration of investment in areas of exploitative activity; the extraction of surplus to the mother country; the development of local industrialization; the creation of a dependent economy; and the centralized political system, all have had a formative and persistent influence on the pattern of population mobility (Hugo, 1987).

From the analysis of interprovincial migration in Indonesia, mostly based on census data, the ESCAP study in 1981 shows that the provinces which have attracted most government investments, and are most integrated into the world economy via resource extraction, trade, etc., are the dominant net in-migration areas. Those areas which have received large shares of public and private investments such as metropolitan Jakarta, another larger urban areas in Java and Sumatra, and some outer island provinces which are the centers of major raw materials extraction enterprises or land settlement are usually the most densely populated regions.

By examining the movement of a small group of petty commodity producers in Ujung Pandang, South Sulawesi, Forbes (1981) argues that there is an important theoretical distinction between migration and 'circulation'. He concludes that circulation is:

"..... a result of the incomplete penetration of capital, and also helping to slow the rate of change in Indonesia by helping to preserve petty

commodity and peasant subsistence production. If the wage labor sector should expand, if agriculture should become increasingly capitalized, the circulation may well give way to another form of mobility" (Forbes, 1981:21).

He found that the changing modes of organization in rural areas and the increasing commercialization and capitalist penetration of agriculture since 1970 have led to a very rapid increase in non-permanent movements to urban areas. Migration to large cities on an annual or monthly basis, and to nearby towns on a daily basis has become more common. Furthermore, Forbes argues that non-permanent migration is both the result and cause of inequalities in Indonesian society. Capitalist penetration was shown not only to influence the level and direction of movement but also whether the movement was permanent or temporary in nature.

The two sets of explanations considered so far do not differ in explaining the pattern of migration in Indonesia as a function of inequalities in the distribution and availability of income earning opportunities. The decision making approach sees population movement as a natural response to interregional differences in economic opportunities. The political economy approach emphasizes the underlying causes of the inequalities in opportunities, which are seen as the uneven penetration of capitalism, and suggests that they are the ultimate determinants of the migration pattern.

Chapter 3:

DESCRIPTION OF METROPOLITAN JAKARTA AND THE STUDY AREA

III.1. General Description

The Special Capital Region of Jakarta (*Daerah Khusus Ibukota* or DKI Jakarta) is located in the north coast of West Java (see Figure 1). The population of Jakarta was figured as 6.5 million in 1980 and approximately 8.6 million in 1990. As the metropolitan area covers 656 sq. kilometers, a little more than the Republic of Singapore, the population density is approximately 13,338 persons per sq. kilometer or 133 persons per hectare. The climate is typically tropical with the average temperature of about 27 °C all the year round; and it has two distinct seasons, dry (from April to October) and wet (from November to March).

DKI Jakarta has a special status as one of the twenty seven provinces in Indonesia. Unlike in many other Third World countries with primate cities, the 8.6 million people in Jakarta represent only 8 percent of Java's total population of about 106 million and constitute almost one-fifth of the total urban population of Indonesia (see table 3.1). This city has been growing during the last two decades at about more than 200,000 persons annually. Between 1960 and 1980 the population of Jakarta doubled, and now approximately 5 percent of the total national population lived and worked in this city.

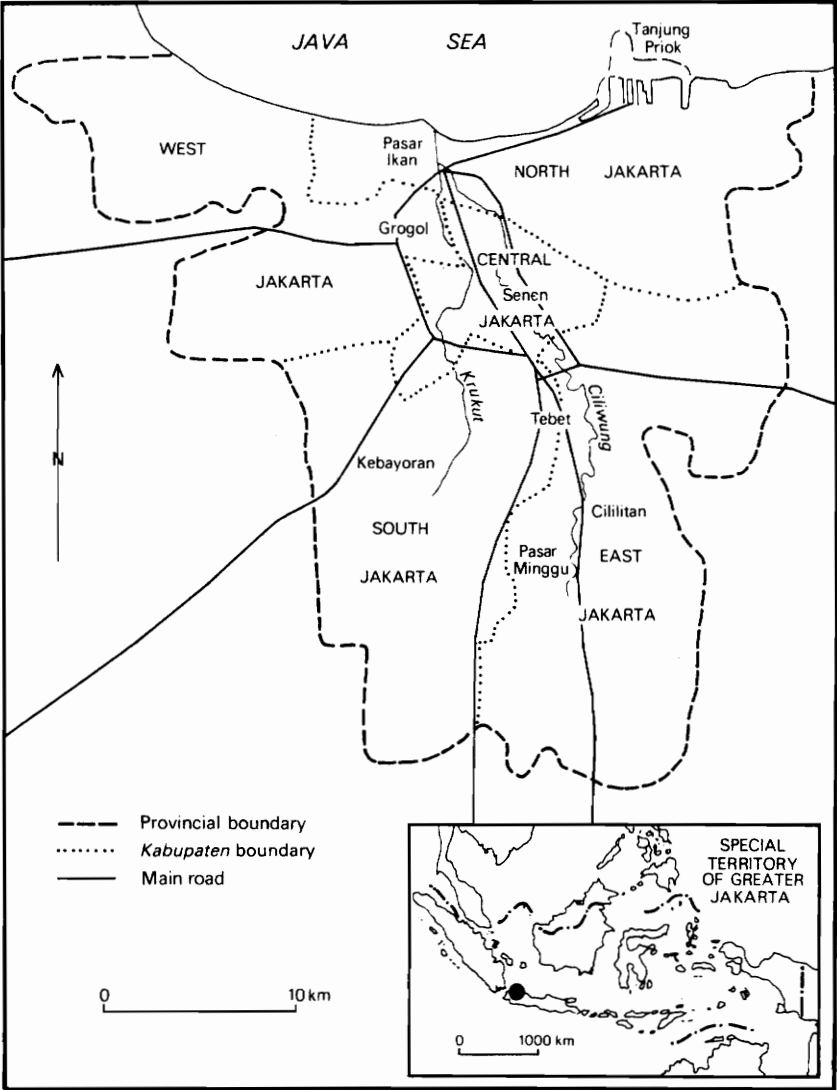


Figure 1: Jakarta Metropolitan Area

Table 3.1
Estimated Total and Urban Population in 1989

	Total Population (^{'000})	Urban Population (^{'000})	Percent Urban
Jakarta	8,655	8,282	95.69
Java	106,270	29,012	27.30
Indonesia	178,700	46,800	26.19

Sources: Kantor Statistik, "Jakarta Dalam Angka", 1990 and BPS, "Statistik Indonesia 1989"

Table 3.2
 Jakarta: Population Growth and Density, 1942 - 1989

Year	Population (^{'000})	Density (persons/sq. km)	Intercensal Growth (annual rate, percent)
1942 Estimate	563	n.a.	n.a.
1948 Estimate	823	n.a.	n.a.
1952 Estimate	1,781	3,036	n.a.
1961 Census	2,973	5,152	7.44
1971 Census	4,579	7,936	5.40
1980 Census	6,503	9,920	4.20
1985 BPS	7,662	11,806	3.56
1989 BPS	8,655	13,338	3.24

Sources: Kantor Statistik, "Jakarta Dalam Angka" 1986 & 1990; BPS, Supas 1985; and Evans (1984).

The population densities shown in table 3.2 exceed those of all other provinces. Given the large part of Jakarta's built up area which is mostly single storey, 13,338 person per sq. kilometer is considered a high density. Naturally, some parts of Jakarta show much higher densities. Since 1975, the city has been administratively organized in 5 districts (*Wilayah Kota*): Central Jakarta, South Jakarta, West Jakarta, North Jakarta and East Jakarta. Each district is divided into primary sub-districts (*Kecamatan*) and each consists of several secondary sub-districts (*Kelurahan*). There are 30 *Kecamatans* and 236 *Kelurahans* in Jakarta (see Figure 2).

Jakarta is not only the largest urban agglomeration in Indonesia but also the seat of central government, the financial, commercial and administrative hub of the country. It is also the center of national and international communications network, the largest center of manufacturing (especially import substituting sectors), the largest port for imports and exports, and the main national seat of cultural and research facilities. Average per capita personal income is higher than other cities in Indonesia, partly a cause and partly an effect of the attraction of the city to better educated, motivated people from all over the country.

The economic primacy of Jakarta is demonstrated by its ability in recent years to attract about more than a third of all private investment in Indonesia (Hill, 1989). This overwhelming attraction for business and employment is likely to increase because of the large local market, the access to other national and international markets, the modern sea and airport facilities, and the availability of other service sector activities. Employment is dominated by such activities (trade and services) which account for about 75 percent of



Figure 2: Jakarta: Districts and Sub-districts

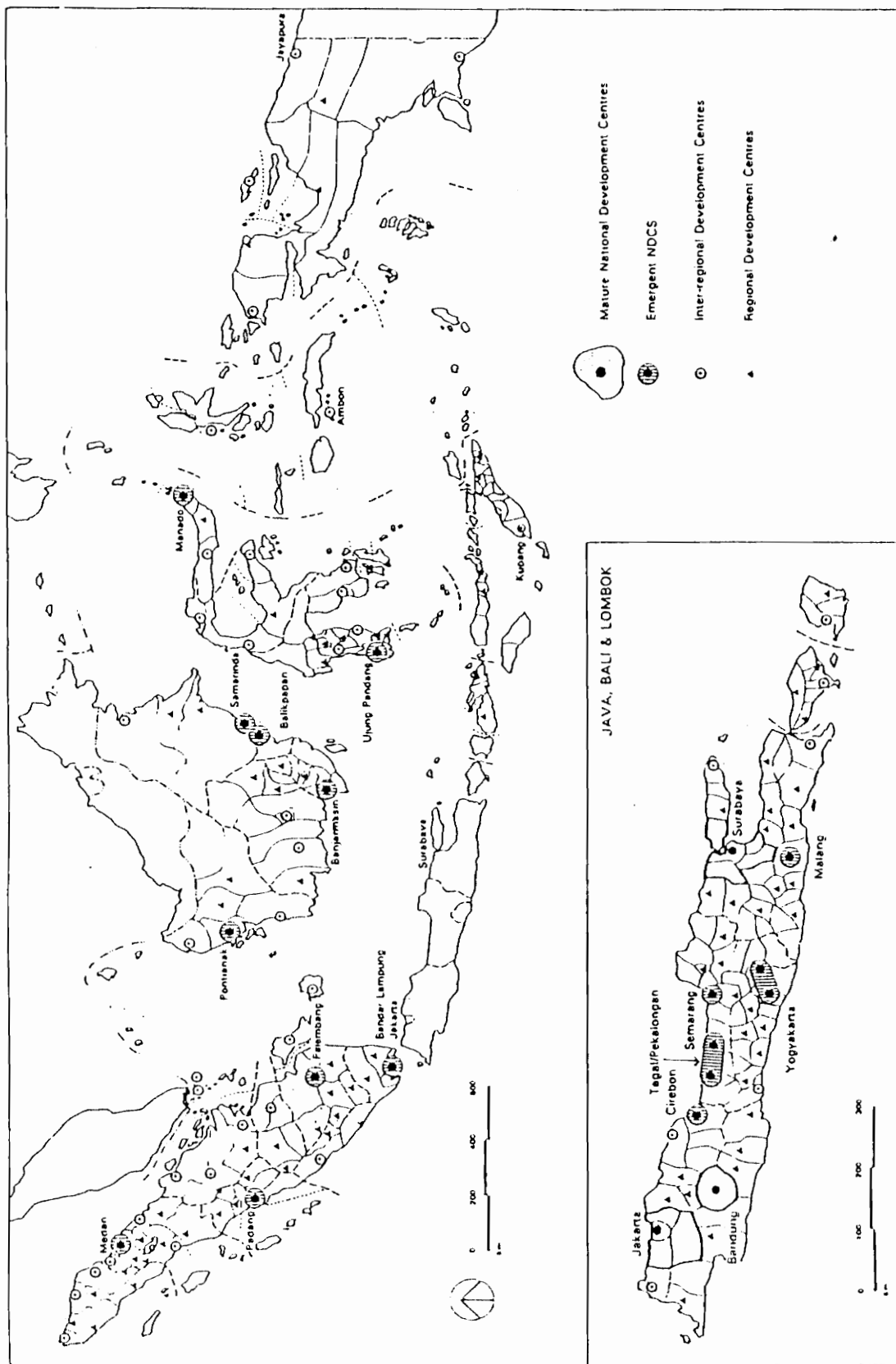


Figure 3. Indonesia: Location of Urban Centers
 Source: National Urban Development Strategy, Department of Public Works, Jakarta, 1987.

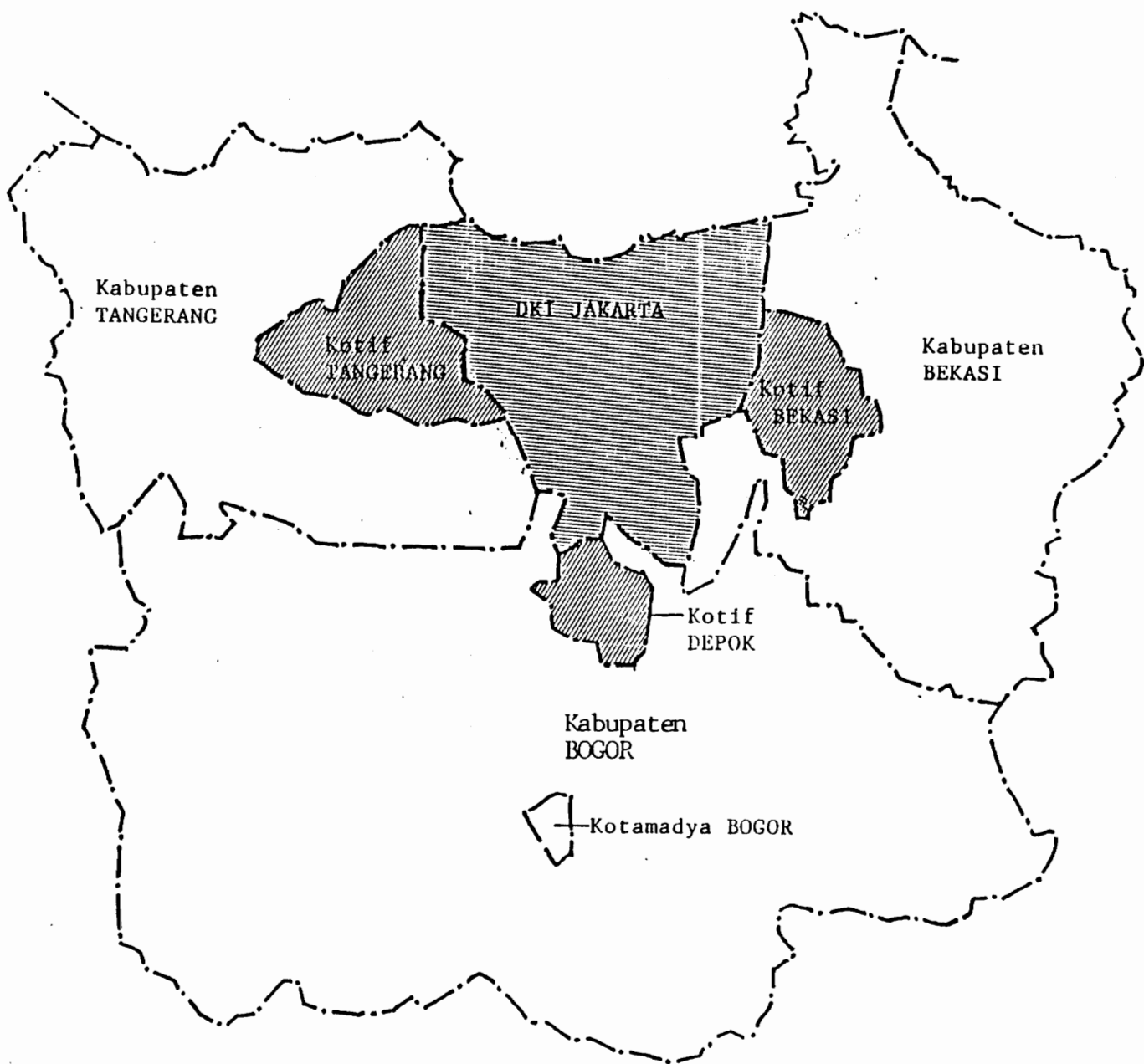


Figure 4: Jakarta and the Surrounding Districts (Jabotabek Region)

all jobs. Government employment accounts for some 13 percent, and manufacturing for only about 10 percent. Just under one-half of all jobs in Jakarta have been classified as informal, of which most are in the trade and services sector (Moeis, 1988).

Even though Jakarta's growth rate is presently the fastest among urban centers in Indonesia, the demographic gap is not substantial. Demographic primacy is not a significant problem in Indonesia compared to many developing countries. Indonesia is fortunate to have a series of competitive growth centers in the large and middle-sized cities. They are well distributed geographically across the archipelago (see Figure 3).

Since 1977, a greater Jakarta Planning region has existed with the acronym 'Jabotabek', Jakarta and the surrounding three West Java districts (*kabupaten*) of Bogor, Tangerang, and Bekasi, plus the municipality of Bogor, which are mostly rural in characteristics (see Figure 4). The Jabotabek region has been the main location of industrial growth in Java. The region has benefitted particularly during the 1970s by an era of import substitution industrial growth (now coming to an end) when a strong location factor was the existence of a large local market as well as the range of attractions and incentives already mentioned.

III.2. The Growth of Jakarta

Jakarta's career as a capital city goes back to the fourteenth century when it emerged as the center of trade with its port located in the mouth of the Ciliwung river. The name of the city was Sunda Kelapa. In 1527 under the authority of King Falatehan of Sunda Kelapa, the name was changed to Jayakarta after the name of the prominent

prince. In 1621 the Dutch took over the city and changed the name to Batavia.

Until the middle of the nineteenth century the physical development of the city was still limited to the north coast of Jakarta. The city functioned as colonial port and administrative center of about 120,000 inhabitants, around 0.8 percent of the population of the so called Netherlands Indies (Abeyasekere, 1987).

The urban area of Jakarta began with 6.1 hectare in 1621 and grew to 107 ha. in 1770, 142 ha. in 1900 in the direction to the South. Its explosive growth began about 1948 after the independence and during the short-lived Dutch reoccupation. The growth of population of the urbanized area has approximately been about 4 - 5 percent annually since 1955. During the last two decades three or four provinces outside Java had a more rapid population growth than Jakarta, but over the entire period since independence in 1945, it has had the highest growth of all. In the 1945 - 1970 period the settlement process continued to spread south by stages from the original river-mouth site, eventually reaching the southern fringe of the present administrative boundary (see Figure 5).

The 1965 - 1985 Master Plan for Jakarta, which was produced with assistance from the UNDP (United Nations Development Program), emphasized physical form and recommended a concentric pattern of spatial growth for the city. However, during the early 1970s, the accelerating rate of urban growth and rural-urban migration had outpaced the ability of the government to control the spatial plan of the city. By the end of the 1970s the government's strategy was to stop Jakarta's population growth (at one stage through a "closed city" policy) and to direct growth instead to a series of somewhat

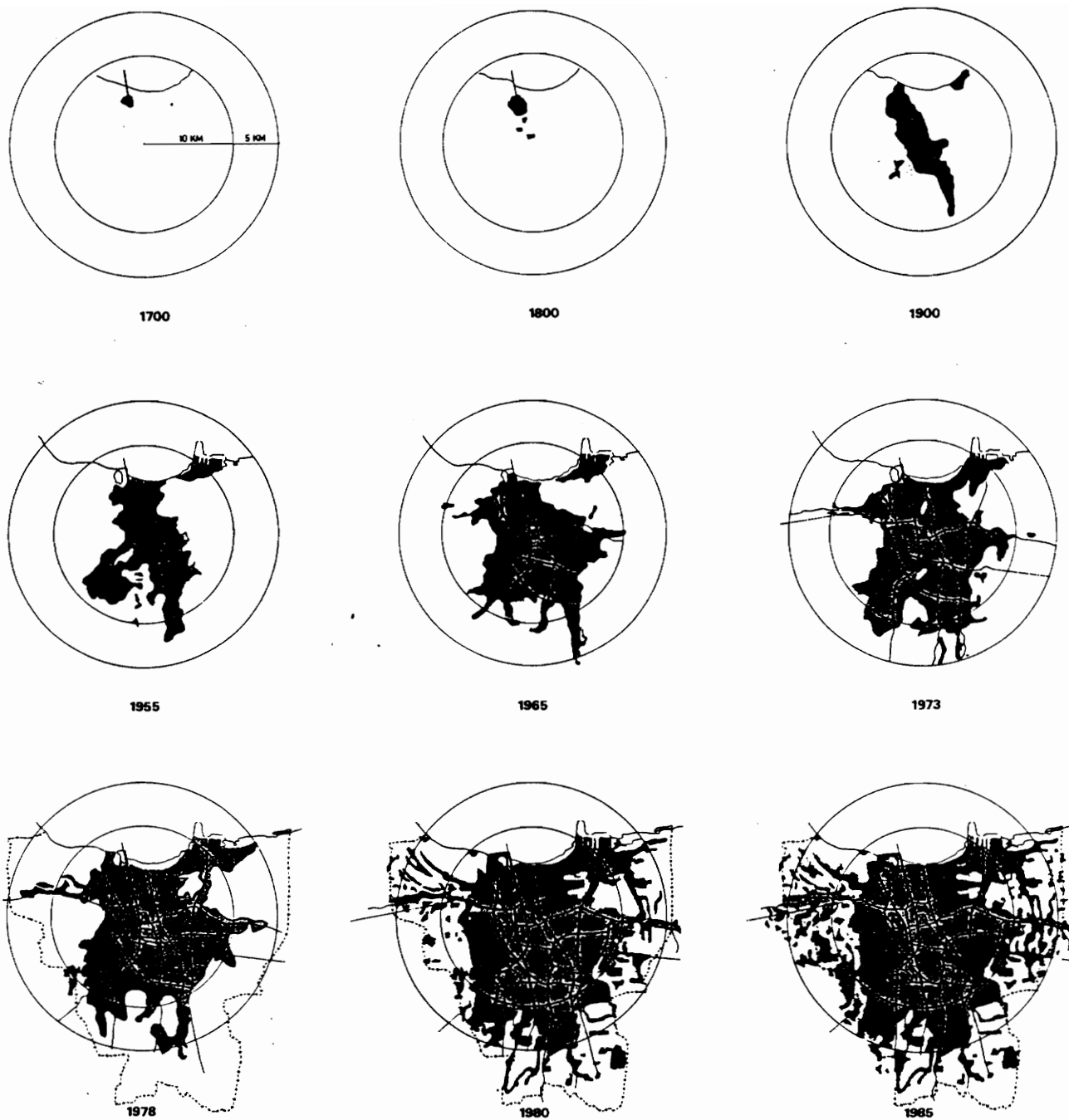


Figure 5: The Growth of Jakarta (1700 - 1985)

distant growth centers supported by the construction of large new arterial roads. At that time there was no coherent plan for any single sector such as housing and residential settlement. One successful attempt at urban planning was the Kampung Improvement Program (KIP), which produced at least some improvements in areas with poor environmental conditions through coordinated investment in central urban infrastructure.

When urban planning and investment became less and less able to catch up with the pressures of rapid urbanization, in 1983 the second Master Plan for Jakarta 1985 - 2005 was issued as the continuation of the previous plan. Under this plan the growth of Jakarta is oriented toward the land use aspects of development which is aimed at expanding the physical growth of the city to the West - East direction and at the same time limiting the growth to the South. During the 1980s this planning policy has some impacts, on the one hand, encouraging the growth of industrial, commercial and residential development in the fringe areas of the West and East Jakarta, on the other hand, reducing the population densities of residential uses in Central Jakarta. As the result, the district of Central Jakarta, which has most of the hotels, banks, department stores and office blocks, now has somewhat fewer residents than it was in 1970s. The growth of peri-urban Jakarta has been increasingly an important phenomenon of the present development process.

III.3. Migration to Jakarta

Jakarta is a region of migrants. This also can be said of such provinces as Lampung and East Kalimantan, but the migrant stream into Jakarta has some special

Table 3.3
 Jakarta: Population by Birthplace, 1961 - 1985
 (percentage of total)

Birthplace	1961	1971	1980	1985
Jakarta and West Java	77.9	76.8	72.8	73.4
Jakarta	51.0	59.9	59.9	60.9
West Java	26.9	16.9	12.9	12.5
Other	19.8	22.4	26.7	26.4
Other Java	14.1	14.9	17.2	17.3
West Sumatra	1.5	1.8	2.2	2.0
North Sumatra	0.9	1.4	2.4	2.5
Other Sumatra	1.5	1.8	2.1	2.1
Other Islands	1.8	2.5	2.8	2.5
Overseas	1.1	0.7	0.4	0.2
Unknown	1.2	-----	0.1	-----
Total	100	100	100	100

Source: Hill (ed.), 1989.

characteristics. The migrants have been particularly diversified in their ethnic and regional origins and have made Jakarta a melting-pot region. They have included a higher proportion of people with higher education compared to migrant streams to agricultural provinces (Pasay, 1985). During the turbulent 1960s, the influx of migrants slowed sufficiently to permit the locally born to rise from 51 to nearly 60 percent of the population (see table 3.3), but this proportion did not rise much in the next 15 years. This in part reflects the declining birthrate, but also shows the continuing strength of the migrant influx (Castles, 1989). The 1980 census recorded 13.7 percent of the population five years of age and older had migrated into Jakarta during the period of 1975 - 1980, while the 1985 intercensal survey (*Supas*) indicated only 9.9 percent in the period of 1980 - 1985 (BPS, 1986). This reflects a decline in the number of new arrivals.

Table 3.3 also shows a significant shift over two decades in the source of long-term migrants to Jakarta. The Outer Island-born have been increasing faster than the Java-born, and those born in the Javanese-speaking East and Central Java have overtaken those from the Sundanese speaking West Java. The Bataks of North Sumatra appear to have overtaken the Minangkabaus of West Sumatra.

Apart from the vast in-migration to Jakarta that successive censuses have recorded, there is also an indication of temporary migration, which is largely unrecorded. In the first place, there is the daily commuting from the rural and partly urbanized fringe areas beyond the administrative border of Jakarta. This has probably been growing rapidly, but as far as is known there are no estimates of its scale (Kuntjoro, 1986). As

well, there would be considerable commuting in the opposite direction as Jakarta residents working in factories beyond the Jakarta border.

There is also what Hugo (1987) calls circular migration. This covers what might be called weekend commuters who return to their village homes every week or fortnight, as well as those who spend much longer periods working in the city but still return to their families at more or less regular intervals determined by agricultural seasons, work rhythms, or religious holidays. (Hugo, 1987). While in the city, mostly in center urban area, such migrants stay in cramped, often communal accommodations, or sometimes in the open. They generally hold a seasonal worker's identity card and do not become part of the registered residents of Jakarta (Jellinek, 1978). As usual in great cities, a tendency for the population to fall in the central areas has appeared. The prevalence of such temporary migration is related to the existence of overwhelming temporary settlements in the central urban area.

III.4. The Study Area

There has been no formal definition about what constitutes a peri-urban area in Jakarta. However, on the maps of 'Jakarta Planning Atlas' there is a boundary line that distinguishes between what has been called as built-up urban areas and urban fringe areas inside the metropolitan boundary. The spatial characteristics of Jakarta urban fringe generally matched with the concept and definition of peri-urban areas discussed in the previous chapter. Based on this information we can figure out which primary and secondary districts in Jakarta are considered peri-urban areas.

More than one-half (52.06 percent) of the total Jakarta metropolitan area is located in areas considered peri-urban, which covered the total of 337.82 sq. kilometers in four of the five districts in Jakarta (see Appendix A for detail). In 1989, the total population of peri-urban Jakarta was 2,185,284 persons or 25.25 percent of the total metropolitan population. The average of total peri-urban population density in 1989 was 6,469 persons per sq. kilometers, compared to 23,483 persons per sq. kilometers in central Jakarta. During the last 15 years, peri-urban population has increased very rapidly in an average growth of almost 12 percent per year. In the last 9 year period (1980 - 1989) the peri-urban population has nearly doubled, from 1,149,780 to 2,185,284 persons or a total of 90.06 percent change.

Kecamatan Pasar Minggu is one of the 7 *kecamatans* in South Jakarta and lies inside the peri-urban area about 12 to 22 kilometers south of Jakarta's urban center (see figure 6). This *Kecamatan* has 12 *kelurahans* in which three of them were selected as the study area. The three *kelurahans* were: Cilandak Timur, Lenteng Agung and Ciganjur. These areas are predominantly residential and some agricultural land uses and were chosen because of their highest growth in term of population change and residential development in the last 15 years, compared to other peri-urban areas. These areas were selected after eliminating sections within each area that are predominantly commercial/industrial, planned unit development, major transport corridors, public facilities and institutional settings (see Survey Site Selection in chapter 4). Figure 7 illustrates some of the physical characteristics of the three sites.

Among the three study sites *Kelurahan* Cilandak Timur is located nearest to the urban center, about 13 kilometers (straight line). The total area is 352.86 hectares where about 11 percent are still in agricultural uses, mostly fruit plantations, and approximately 40 percent of the total area are residential (see table 3.4). In 1970 there were only 8,742 people lived in this area and only 243 residents were recorded as migrants or those who were born outside Jakarta (Pemda DKI, 1970). In 1971 the Indonesian Armed Forces built a new building complex for the Marines that include residential functions for its staffs, which occupied 124 hectares (35 percent) of the area. Since this development, more and more people have come and settled in this area. In 1975 the population was 18,636 persons which is an increase of 113 percent in only five year period (see table 3.5). Another period of dramatic growth is during 1980 - 1985 period where the population nearly doubled (97 percent increase).

About 4 kilometers further to the South is the location of the second study site which is *Kelurahan* Lenteng Agung. The total area is 227.74 hectares where about 25 percent are still in agricultural uses, mostly small family farms of fruit plantations, and approximately 55 percent of the total area is residential land use (see table 3.4). Until 1980 the population increase has not been so dramatic as it was during the 1980s. Along with the construction of the new Jakarta ring road (began in 1982) which passes just outside the administrative boundary of this area it has been gaining population greater than any other *kelurahans* in South Jakarta. During the period 1980 - 1989 the population has increased by 311 percent from 9,931 persons in 1980 to 40,853 in 1989 and the

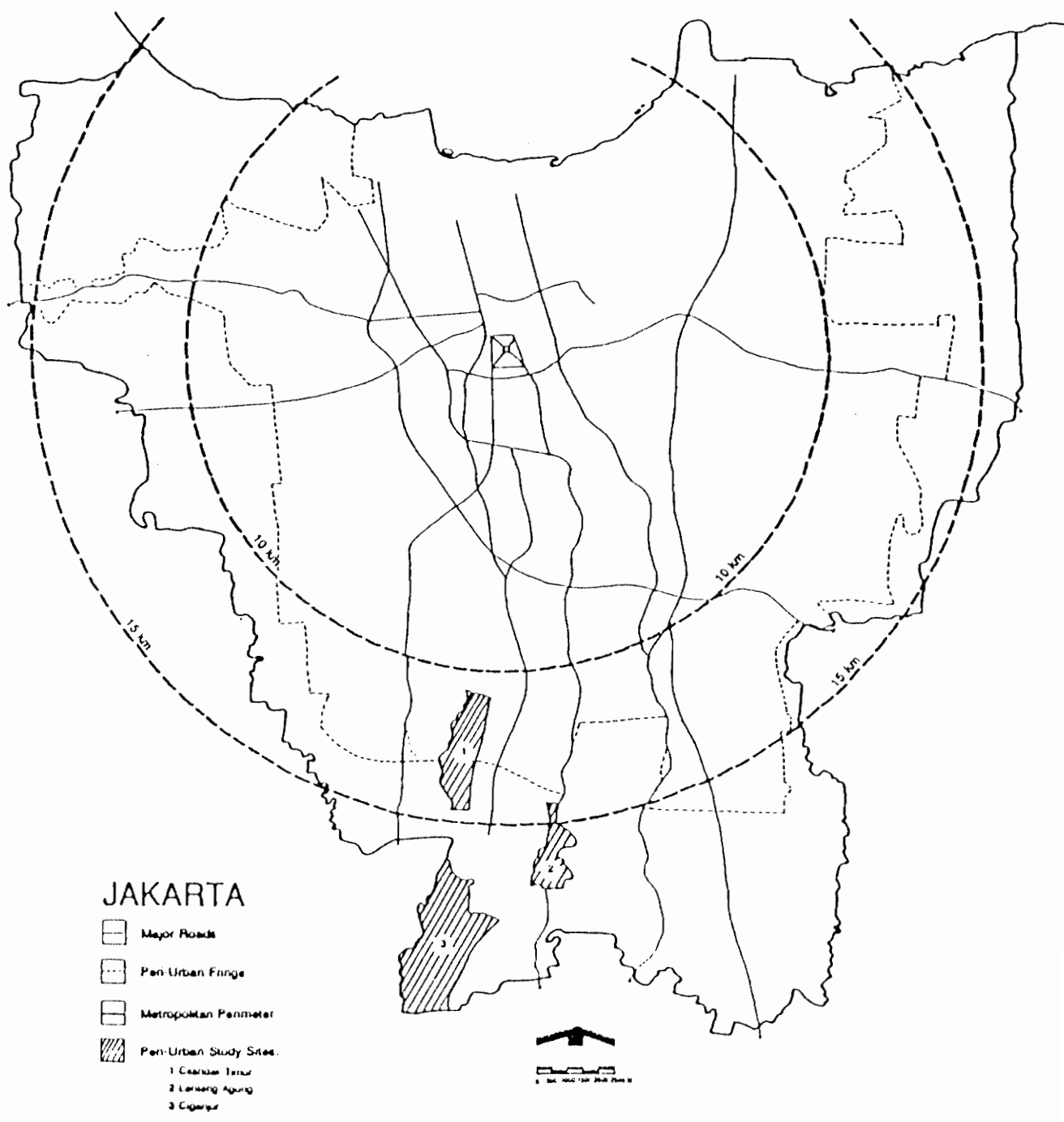


Figure 6: Study Sites in Peri-urban Jakarta

SITE 1: CILANDAK TIMUR AREA

Small store attached to the owner's house is one example of informal sector activities in peri-urban Jakarta.



SITE 2: LENTENG AGUNG AREA

Poorly-planned residential area: a common characteristic of peri-urban Jakarta.



SITE 3: CIGANJUR AREA

Privately-built new housing for middle and higher income people has been an increasing peri-urban phenomenon in Jakarta over the last 10 years.



Figure 7: Pictures of the Study Sites

Table 3.4
Land Use in the Three Study Sites, 1989

Study Sites	Total Area (hectares)	Agricultural (hectares)	Residential (hectares)	Commercial (hectares)	Public Facilities (hectares)	Other (hectares)
Cilandak Timur	352.86	37.66 (10.67%)	141.68 (40.15%)	25.38 (7.19%)	62.10 (17.60%)	86.04 (24.38%)
Lenteng Agung	227.74	56.02 (24.60%)	124.19 (54.53%)	5.32 (2.34%)	26.03 (11.43%)	16.18 (7.10%)
Ciganjur	749.42	452.85 (60.43%)	132.34 (17.66%)	6.98 (0.93%)	31.76 (4.24%)	125.07 (16.69%)

Note: Figures in brackets show the percent of the total area for each land use.

Sources: Kelurahan Cilandak Timur, Lenteng Agung, Ciganjur, "Laporan Tahunan, 1989", Jakarta.

Table 3.5
Population in the Three Study Sites, 1970 - 1989

Study Sites	Population					Density
	1970 (persons)	1975 (persons)	1980 (persons)	1985 (persons)	1989 (persons)	1989 (person/km2)
Cilandak Timur	8,742	18,636 (22.64%)	21,474 (3.05%)	42,227 (19.33%)	50,839 (5.10%)	14,402
Lenteng Agung	4,698	6,433 (7.39%)	9,931 (10.88%)	13,951 (8.10%)	40,853 (48.21%)	17,918
Ciganjur	7,245	9,492 (6.20%)	12,741 (6.85%)	18,852 (9.59%)	36,347 (23.20%)	4,853

Note: Figures in brackets show the annualized rate of growth on each 5 year period
Sources: BPS, "Jakarta Selatan Dalam Angka" 1971,76,81,86,90, Jakarta.

agricultural land area has shrunk significantly from 82.76 hectares (36 percent) to 56.02 hectares (25 percent), being replaced by new settlements.

The third study site which is *Kelurahan* Ciganjur located 5 kilometers further to the South from Lenteng Agung, along the metropolitan border with West Java province. Among the three study sites this area is the least urbanized in its character. The total area of this *kelurahan* is 749.42 hectares which is the largest *kelurahan* in South Jakarta. About 60 percent of this area are still in agricultural uses, mostly small family farms of rice cultivation and fruit plantations, and approximately 18 percent are residential area (see table 3.4). During the four year period (1985 - 1989) the population of this *kelurahan* nearly doubled from 18,852 persons in 1985 to 36,347 persons in 1989 or a 93 percent increase (see table 3.5). In 1983 the University of Indonesia built its new campus in the administrative town of Depok, West Java, which is only about 4 kilometers to the south of Ciganjur. The construction of this very large campus has given the benefit for some areas in Ciganjur in terms of availability of urban infrastructures. Investment in building student's dormitory has been a growing business in this area since more and more students have been moving from Central Jakarta where the old campus reside. Figure 6 shows some photos of the three study sites which gives an illustration of the typical characteristics of peri-urban Jakarta.

Chapter 4: **METHODOLOGY**

IV.1. Study Objectives

As has already been indicated the principal purpose of this study is to provide some insight into the patterns and the processes of peri-urban growth in Jakarta. The major focus of the study is on urban-to-peri-urban population movements or intra-metropolitan mobility - which is seen as a new and distinctive phenomenon of urban population movements in Third World cities - that contributes to the growth of peri-urban Jakarta. The central concern of this thesis is the characteristics of peri-urban communities and their potential role in explaining the growth of peri-urban areas in Jakarta.

Basically, this study is concerned with four general research questions:

1. How do urban in-migration and intra-metropolitan mobility contribute to the growth of peri-urban areas?
2. How do we characterize peri-urban communities in terms of their social and economic attributes?
3. How do we explain the determinants of intra-metropolitan mobility in the larger context of migration process?

4. How can the process of peri-urban growth be explained by the role of advanced capitalist development in the Third World?

Methodologically, this thesis focuses on three aspects of urban growth phenomena in the context of migration and urbanization: (1) The socioeconomic characteristics of the peri-urban population; (2) The recent pattern and determinants of intra-metropolitan mobility; and (3) The spatial characteristics of recent urban/peri-urban development in which people's movements take place. Operationalization of variables and discussion of the data and method have been divided. The first section is on the characteristics of peri-urban communities. The second discusses the determinants of intra-metropolitan mobility in its relationship with the process of peri-urban growth. The third section will be an addition to the second aspect, which is a limited overview of the spatial characteristics of recent urban/peri-urban development in Jakarta.

These three aspects are dealt with separately because they deal with different levels of aggregation and different kinds of questions. However, since I am interested in the whole phenomenon of intra-metropolitan mobility and its relationship with the process of peri-urban growth, I will look at them at first as separate issues but then bring them together in a discussion of the phenomenon of peri-urban growth.

IV.2. Study Site Selection

It was decided by the VPI research working group that for the purpose of the VPI study, a transective survey area (a wedge) in the metropolitan Jakarta should be selected. Within the wedge, three survey sites, characterized as predominantly residential

neighborhoods, should be selected. To identify the selected wedge, the following steps were undertaken:

1. Information about master plan, population and recent development, especially in the peripheral areas of Jakarta, were gathered from the local urban planning officials and other key informants in the Jakarta municipality.
2. Areas which have most of the population growth occurred over the last 15 years were identified and plotted on the city map.
3. The greatest expansion of residential buildings within the plotted areas were further identified and plotted on the map. At this point, the South Jakarta district was selected as the potential study area.
4. Within the South Jakarta district, secondary sub-districts (*kelurahan*) which have most of the population growth were identified and plotted on the map. Areas expected as potential survey sites were visited.
5. The study area (the wedge) was then selected after eliminating those areas characterized by predominantly commercial, planned unit development, major transport corridors, institutional settings, etc.
6. Three sites (*kelurahan*) inside the wedge were identified as three different residential spaces, differentiated by time period of initial settlement (5, 10 and 15 years, more or less). These three areas were selected as the sites of the survey.
7. Within each site (*kelurahan*), information on the characteristics of the area were gathered from each community leader, to further select the smaller administrative unit (RW - *Rukun Warga*) as the survey site. The criteria to select the RW is the

same as the previous selection of *kelurahan* , using maps and aerial photographs. Every RW consists of six to eight RTs. RT (*Rukun Tetangga*) is the smallest administrative unit and is roughly equivalent to a census block which on the average consists of about forty dwelling units or households.

IV.3. Sample Selection

A sampling procedure was applied to gather 100 interviews in the three selected sites (*kelurahan*) inside the wedge. The number of target interviews for each survey site (RW) was set to be about 35 dwelling units or households. In brief, the sampling procedure for the survey sites (RW) can be described as follows:

- First of all, a certain number of target interviews was set up for each survey site, that is, 35 household units.
- Knowing the number of RTs in each survey site (RW), for example 7 RTs, the number of dwelling units/households which should be selected as the target sample in one RT could be found, that is $35 \text{ divided by } 7 = 5 \text{ units}$.
- The sampling interval in each survey site (RW) is then the number of dwelling units/households in each RT, of that RW, divided by number of target sample units in each RT. For example, if one RT consists of 40 dwelling units/households and the target sample units in that RT are 5, the sampling interval in that RT therefore equals $40 \text{ divided by } 5 = 8 \text{ units}$.
- Beginning from the center of each RT, interviews were conducted using systematic random sampling in two opposite directions for every n^{th} (sampling

interval) dwelling units to reach about 4 - 6 households, then move to another RT to complete the target interviews of about 35 in each survey site (RW) inside the *kelurahan* area.

This procedure was continued in the second and third sites (*kelurahan*) inside the wedge until the target interviews of about 100 household units is reached. The questionnaire for the purpose of this survey was developed and prepared by the research team at VPI. Interviewing in each site was carried out over a two month period in July - August 1990. All interviews was done by three graduate students from the University of Indonesia, department of Economics. The interviewers were trained at the university site by the author who was responsible for the execution of the survey operation.

IV.4. Characteristics of Peri-urban Communities.

The first thrust of this Thesis is the identification of the selective characteristics among migrant and nonmigrant populations in the peri-urban areas. In other words, how do migrants differ among themselves and how do they differ from nonmigrants? (see Concepts and Definitions in chapter 1 for definitions of migrants and nonmigrants). Migrants and nonmigrants will be compared on six socioeconomic characteristics: age, education, occupation, household size, income, and formal/informal economic activity. The next step is to establish that migrants and nonmigrants are generally different. This results in the first thesis:

T1: Peri-urban migrants differ among themselves and from nonmigrants on the basis of six different socioeconomic characteristics.

Particular differences among migrants and nonmigrants on each of the six characteristics are hypothesized in twelve hypotheses.

H1: Mean age of secondary migrants is higher than primary migrants and nonmigrants.

H2: Mean age of recent migrants is lower than long-term migrants.

Migrants are generally younger than the population at destination (Shaw, 1975; Petersen, 1975). A disproportionate number of secondary migrants are retirees or are moving after successful first moves and are thus older than first round migrants (Lansing and Mueller, 1967; Turner, 1968).

H3: Mean education of secondary migrants is higher than primary migrants and nonmigrants.

H4: Mean education of recent migrants is higher than long-term migrants.

Migrants tend to have higher median education than nonmigrants (Shaw, 1975; Petersen, 1975). First time movers (first-round/primary migrants) tend to have lower average educational attainment than second-round migrants (Lee, 1974; Miller, 1977). Migrants responding primarily to pull factors at destination tend to be "positively" selected (Lee, 1966).

H5: Occupational status of secondary migrants is higher than primary migrants and nonmigrants.

H6: Occupational status of recent migrants is higher than long-term migrants.

Previous research has shown that second-round migrants tend to be from higher occupational status (Shaw, 1975). First-round migrants tend to be from lower skilled occupations (Miller, 1977).

H7: Mean household size of secondary migrants is larger than primary migrants and nonmigrants.

H8: Mean household size of recent migrants is smaller than long-term migrants.

Migration can be prompted by the difference in needs of increasing household size (Petersen, 1975). Changes in a household demand for space are associated with changes in marital status and family size (Brown, 1975).

H9: Mean income of secondary migrants is higher than primary migrants and nonmigrants.

H10: Mean income of recent migrants is higher than long-term migrants.

Like education and occupation, income has been found to be positively associated with migration (Petersen, 1975). Differences should exist between types of migrants to the extent that differences exist in the relative success of migrants (Lansing and Mueller, 1967). Migrants responding primarily to pull factors at destination tend to be "positively" selected (Lee, 1966).

H11: The proportion of secondary migrants and primary migrants engaged in informal economic activities is higher than nonmigrants.

H12: The proportion of recent migrants engaged in informal economic activities is higher than long-term migrants.

The literature on urban informal sector indicates that urban informal economic activities are positively related to migration and urban migrants (Hart, 1973; Friedmann and Sullivan, 1974; House, 1984). There is a tendency to identify the informal sector with the migrant population (Sethuraman, 1976). Secondary migrants referred to as "consolidators" and "status seeker" are those who usually have steady urban employment and are generally quite secure (Turner, 1968).

IV.5. Determinants of Intra-metropolitan Mobility

The second thrust of the thesis deals with the determinants of intra-metropolitan mobility. A number of studies look at the determinants of net-migration or in-migration in general (Lowry, 1966; Todaro, 1976). Many of the findings of these studies have shown that migration is tied to economic factors whether they be rates of unemployment, wage levels or perceived potential for jobs. The more recent literature, however, has found that migration is decreasingly linked to economic determinants and increasingly associated with noneconomic determinants (Sommers, 1981). This is especially the case with regards to the nonmetropolitan reversal literature (Lichter and Fuguitt, 1982; Williams, 1981; Heaton, et al., 1981). In fact, the reversal has appeared to be such a distinctive phenomenon in this regard and Campbell and Garkovich (1984) have argued that it is an episode of collective behavior and not traditional migration. In addition, the migration reversal literature points out that migrants are drawn primarily for quality of life or noneconomic reasons and less for economic reasons (Campbell and Johnson, 1976; Miller, 1973).

In conceptualizing the determinants of intra-metropolitan mobility from the decision making perspectives, two approaches will be presented. First, a distinction will be drawn between what is known as "push" factors of the area of origin and "pull" factors of the area of destination. This distinction has been recognized in previous studies of the determinants of migration (Ravenstein, 1889/1976; Lee, 1966). However, Todaro (1976) has criticized this approach as it does not explain the relative importance of each push and pull factor to different group of people. Moreover, these push and pull factors in migration may operate together in the decision to move, so people migrate not only because of either push or pull factor but also because of both factors jointly.

The second distinction will be made between economic determinants of migration and noneconomic determinants of migration. This distinction has also been recognized in some studies of the determinants of migration (Sommers, 1981; Williams, 1981; Lichter and Fuguitt, 1982; Myers, 1983). However, the difference between what constitutes an economic determinant and what constitutes a noneconomic determinant of migration has been more confusing than revealing. Much of the literature that has differentiated between economic and noneconomic or 'quality of life' reasons for migrating has not expressed a clear and simple explanation of what exactly constitutes noneconomic factors or quality of life. Rather, some surrogate variables are chosen that are said to represent quality of life, developmental amenity, ecological or environmental quality associated with migration (Campbell and Johnson, 1976; Miller, 1973). These noneconomic factors can include a variety of variables which can potentially fall under the category of economic determinant. It can very easily be argued that these factors are at least in part

dependent upon economic considerations. For instance, the individual who moves to peri-urban areas and cites cheap land and housing or educational purposes or family related as primary motivating reasons for moving could not enjoy their stay without the economic benefit they gain from their decision to move. Thus, what has been referred to as noneconomic factor is usually very closely tied to economic determinants or may be in the form of another level of economic determinants of migration.

In order not to get into the confusion between the concept of economic vs. noneconomic factors, this study proposed a rather different approach, in which an attempt was made to try to distinguish between what is called "survival strategies" and "mobility strategies" (Urzua, 1981). A basic proposition of the approach here suggested that more often the basic unit of analysis for studying migration in developing countries is not the individual taken in isolation but the individual as a member of a household. The household is seen as occupying a position in the economic and social structure that affects both how it is organized and the different strategies it adopts, either to survive or to move upward in the social and economic ladder (Urzua, 1981). Thus, although the decision to move is usually made by an individual, it cannot be explained solely by the social and economic differentials between places of origin and of destination.

Families or households belonging to certain social classes and groups are subject to living conditions that barely allow them to survive, while others have already solved the survival problem and look more to ways to improve their levels of living. The ways in which the household mobilizes its available human, economic and social resources so as to achieve its survival goal are here called survival strategies. The ways in which the

household mobilizes its resources so as to improve its level of living, where survival is not at stake, are here called mobility strategies.

In addition, there is also a common distinction in migration literature between voluntary or rational migration flows and non-voluntary mobility initiated by a force outside the individual's control. In non-voluntary mobility, the range of alternatives from which to choose is usually very small or almost non-existent for the households involved in this kind of movement. In this study, non-voluntary mobility will be considered under the concept of survival strategies.

The latter approach discussed above will result in the second thesis:

T2: Survival strategies are less important than mobility strategies in intra-metropolitan mobility.

Migrants will be compared on the basis of their response to the questions asked in the survey about their main reason to move to peri-urban neighborhood. These responses will be grouped according to their nature into survival and mobility strategies and then tested with the following hypothesis:

H13: The proportion of migrants who moved because of survival strategies is lower than those who moved because of mobility strategies.

At the macro level, a different type of analysis concerning the determinants of intra-metropolitan migration comes from the political economy literature. This view is critical of the individual decision making approaches on the determinants of migration. The latter approach has been criticized as placing too much emphasis on the free choice

of individuals and neglecting the macro-structural forces which create the regional disparities to which migrants respond. Political economy analyses tend to ignore the individuals decision to migrate. The scale of the analyses has shifted away from the individuals. Instead of considering how individuals respond to economic or noneconomic differentials between two places, these analyses focused more on the causes of those differentials (Gilbert and Gugler, 1982). Unfortunately there has not been any empirical study found from this viewpoint that specifically looks at the determinants of intra-metropolitan mobility in the Third World context.

In addition to the analysis on determinants of intra-metropolitan mobility I will also discuss recent changes that are taking place in the structure of Jakarta's urban economy in order to understand and explain the determinants of intra-metropolitan migration at the macro level. Although I will not use specific hypotheses, the analysis will have to rely on the use of aggregate secondary data on that subject. The changes in the determinants of migration process will be explained by the analysis of the rapid changes in the spatial characteristics of recent urban/peri-urban development over the last 10 years indicated by the changing pattern of land use and the changing of land values in Jakarta. These two variables are commonly recognized as indicators in the role of advanced capitalism in shaping urban form (Smith, 1980; Gottdiener, 1985).

IV.6. Variables and Statistical Method

Six socioeconomic variables will be used as dependent variables to determine differences between migrants and nonmigrants. I have selected those variables that the

literature has found to distinguish migrants from nonmigrants: age, education, occupation, household size, income and engagement in formal/informal economic activity. Migrants and nonmigrants, and two distinct categories among migrants (recent and long-term) are crosstabulated with each of the six socioeconomic characteristics.

T-test hypothesis testing method is used in the analysis of the characteristics of peri-urban communities to test the differences between the two means of each set of independent variables. The kinds of questions being asked and the nominal/interval nature of the variables point to T-test statistical technique as a logical choice.

In the first part of the analysis on determinants of intra-metropolitan mobility viewed from individual decision making perspectives, the nominal nature of the variables point to a simple crosstabulation technique as a logical choice. Migrants will be compared by their reasons to move to their present residence in peri-urban Jakarta. Reasons to move are grouped into the push and pull factors and into survival and mobility strategies corresponding to the responses of the questionnaire.

In the second part on determinants of intra-metropolitan mobility viewed from the political economy perspectives, the analysis is based upon data collected from a variety of Central Bureau of Statistics (BPS) publications and annual reports from selected peri-urban kelurahans in Jakarta for the period of 1980 to 1989. A number of variables found in the literature as some surrogate indicators of advanced capitalist development will be presented. These variables include: the rate of residential land use change in central Jakarta, the rate of commercial land use change in central Jakarta, the rate of

agricultural land use change in peri-urban Jakarta, and changes in commercial land value in central Jakarta.

Chapter 5: **DATA ANALYSIS AND FINDINGS**

Results of the data analysis are presented in two parts in this chapter. The first part deals with the socioeconomic characteristics of peri-urban community. The second part deals with the determinants of intra-metropolitan mobility viewed from the individual decision making perspective and from the political economy perspective in an attempt to explain the growth of peri-urban Jakarta.

V.1. Characteristics of Peri-urban Communities

The analysis of the socioeconomic characteristics of peri-urban communities involves crosstabulating six socioeconomic variables with the types of peri-urban population (migrants and nonmigrants). These variables include: age, education, occupation, household size, income and engagement in formal/informal economic activity. The findings will be divided into sections corresponding to the six socioeconomic variables.

V.1.1. Types of Peri-urban Population

Table 5.1 presents a breakdown of the peri-urban population in the three sample sites based on their place of last residence before arrival in these neighborhoods. More

Table 5.1
Place of Last Residence of Peri-urban Residents

Place of Last Residence	Study Sites						Total	
	Cilandak Timur (N)	(%)	Lenteng Agung (N)	(%)	Ciganjur (N)	(%)	(N)	(%)
Peri-urban Study Sites	8	24%	13	38%	6	18%	27	27%
Jakarta:								
Center City Area	17	52%	9	26%	20	61%	46	46%
Former Peri-urban	3	9%	0	0%	1	3%	4	4%
Other Peri-urban	5	15%	8	24%	4	12%	17	17%
Another City	0	0%	2	6%	1	3%	3	3%
Town	0	0%	1	3%	1	3%	2	2%
Village (Rural Areas)	0	0%	0	0%	0	0%	0	0%
Another Country	0	0%	1	3%	0	0%	1	1%
Total	33	100%	34	100%	33	100%	100	100%

than a quarter (27 percent) of the population were lifetime residents, while the vast majority (67 percent) of the present peri-urban residents are migrants who previously resided in Jakarta metropolitan area. Significantly, 94 percent of household heads cited Jakarta as their last place of residence. Only 6 percent of peri-urban residents in the sample areas previously resided outside the metropolitan area; none of them came directly from rural areas as primary migrants. Among the 67 peri-urban residents in the sample areas further distinctions can be made. 68.7 percent of them (46 percent of the total) previously resided in the center city area, 6 percent (4 percent of the total) previously resided in areas which were considered peri-urban areas fifteen years ago, and 25.4 percent (17 percent of the total) came from other peri-urban neighborhoods.

Table 5.1 also shows that there are differences between study sites in terms of where the peri-urban population came from. Fifty two percent of peri-urban residents in Cilandak Timur (located nearest to urban center) came from the center urban areas, whereas about 26 percent of Lenteng Agung's population and 61 percent of Ciganjur's population came from the center city. Considering some factors such as the distance of these three sites to the center city, land and housing values, and also the size or population density of these areas, the differences may suggest that the recent population movement from center to peri-urban areas is characterized by people's preferences on those factors.

Table 5.2 presents a breakdown of the migrational status of peri-urban population in the sample neighborhoods. Twenty seven percent of the population were born and

Table 5.2
 Migrational Status in the Three Study Sites

Migrational Status	Study Sites						Total	
	Cilandak Timur		Lenteng Agung		Ciganjur			
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Nonmigrant	8	24%	13	38%	6	18%	27	27%
Primary Migrant	0	0%	0	0%	0	0%	0	0%
Secondary Migrant:								
Recent Migrant	22	67%	18	53%	23	70%	63	63%
Long-term Migrant	3	9%	3	9%	4	12%	10	10%
Total	33	100%	34	100%	33	100%	100	100%

raised in these neighborhoods and therefore classified as nonmigrants. Six percent of the population came to stay in these neighborhood from areas outside Jakarta, but all of them previously resided in urban environments elsewhere. In the analysis these households and the rest 67 percent of the population will be classified as migrants. Sixty three percent of the population came from urban environment as secondary migrants within the last ten year period (1980 - 1990), and 10 percent of the population are those secondary migrants who have been peri-urban residents in the three study sites for more than 10 years. The predominance of secondary and recent migrants in peri-urban areas reflects not only that the process of peri-urban growth in Jakarta is a recent phenomenon but also it is a process of intra-metropolitan mobility.

These findings suggest that in Jakarta the majority of peri-urban population are migrants and, at least in the sample sites, the peri-urban areas are populated mostly by secondary migrants or long-term urban residents and none of which could be classified as primary migrants that came directly from rural areas. It seems that the principal migration flow is outward from center city area, reflecting a pattern of population inversion. As far as the differences between study sites, the characteristics of each site such as distance to the center city, population density, land and housing values, and the recent urban development policy may have great impact on each individual's decision to move that explains the different composition of the peri-urban population.

V.1.2. Selective Characteristics of Peri-urban Residents

Migrants/Nonmigrants and Recent/Long-term migrants were compared on six

socioeconomic variables traditionally found to be selectivities of migration: age, education, occupation, household size, income and engagement in formal/informal activity. The first thesis (T1) states: Peri-urban migrants differ among themselves and from nonmigrants on the basis of six different socioeconomic characteristics. This thesis establishes that not only migrants and nonmigrants are actually different but also distinction can be made among migrants. The results are presented in a series of tables and analyses. The analysis for the six socioeconomic variables shows that the clear-cut acceptance or rejection of this thesis is not possible. The condition of the thesis dictates that to be accepted, migrants would have to differ on the total of twelve comparisons. It is best to address the thesis pertaining to each of the six socioeconomic variables in turn and then return to this thesis.

Age

Differences between migrants and nonmigrants with regard to age have been adequately established in the literature. Hypothesis 1 attempts to differentiate between migrants and nonmigrants, and hypothesis 2 attempts to make a distinction among migrants themselves. Since primary migrant population is absent from the sample areas this category will not be considered in the analysis. Hypotheses 1 and 2 state:

- H1: The mean age of secondary migrants is higher than that of primary migrants and nonmigrants.
- H2: The mean age of recent migrants is lower than that of long-term migrants.

The data in table 5.3 shows that migrants as a whole do tend to be slightly

Table 5.3
Migrants vs. Nonmigrants: Age of Household Head

Age of HH Head	Migrational Status				Total	
	Nonmigrants		Migrants			
	(N)	(%)	(N)	(%)	(N)	(%)
0 - 20 Years	0	0%	0	0%	0	0%
21 - 30 Years	4	15%	8	11%	12	12%
31 - 40 Years	7	26%	27	37%	34	34%
41 - 50 Years	9	33%	22	30%	31	31%
51 - 60 Years	4	15%	9	12%	13	13%
61 - 70 Years	3	11%	5	7%	8	8%
71 and Over	0	0%	2	3%	2	2%
Total	27	100%	73	100%	100	100%
Mean	44.59 Years		43.44 Years			

younger than nonmigrants. The mode or modal value of age of migrants falls in the range between 31 - 40 years (37 percent), while for nonmigrants it falls in the range between 41 - 50 years of age (33 percent). Mean age of migrants is found to be 43.44 years, while nonmigrants is 44.59 years. As far as the comparison of migrants category is concerned, the data in table 5.4 shows that recent migrants as a whole tend to be younger than long-term migrants. Mean age of recent migrants is found to be 43 years, while long-term migrants is 46 years. However, our interest in this analysis is not only to show the differences between means of the two groups in the peri-urban population. Our interest is to determine whether these differences are real, in other words, we need to decide whether a difference between the two means is big and significant enough for us to believe that the two samples are from a different populations with different means.

The summary of T-test statistics in table 5.5 shows that the probability that the two means of age of migrants and nonmigrants are equal is 0.6669 (see Appendix B for the complete T-test results). This probability (the observed significance level) tells us that there is 66.7 percent chance that a difference of at least 1.15 years (44.59 minus 43.44 years) would occur when the two population means are really equal. The interpretation that the two means are unequal is obtained when the observed significance level is small. Most of the time, significance levels are considered small if they are less than 0.05 (the threshold to be statistically significant). In this case, the observed significance level of 0.6669 is considered big and the difference is not statistically significant that the two means are unequal. Therefore, we should not reject the null hypothesis that migrants and nonmigrants are from the same population.

Table 5.4
Recent Migrants vs. Long-term Migrants: Age of Household Head

Age of HH Head	Category of Migrants				Total	
	Recent Migrants		Long-term Migrants			
	(N)	(%)	(N)	(%)	(N)	(%)
0 - 20 Years	0	0%	0	0%	0	0%
21 - 30 Years	8	13%	0	0%	8	11%
31 - 40 Years	24	38%	3	30%	27	37%
41 - 50 Years	17	27%	5	50%	22	30%
51 - 60 Years	7	11%	2	20%	9	12%
61 - 70 Years	5	8%	0	0%	5	7%
71 and Over	2	3%	0	0%	2	3%
Total	63	100%	10	100%	73	100%
Mean	43 Years		46 Years			

Table 5.5
Summary of T-test results of the Six Socioeconomic Variables

(The probability of T-value that the two means are equal)

Significant at $p < .05$

Dependent Variables	Independent/Group Variables	
	Nonmigrants/Migrants	Recent/Long-term Migrants
Age of Household Head	0.6669	0.2626
Education of Household Head	0.0000	0.5426
Occupation of Household Head	0.0009	0.0392
Household Size	0.1462	0.0154
Income of Household Head	0.0153	0.9617
Total Household Income	0.0014	0.7989
Existence of Legal Contract	0.0025	0.9920

Note:

The null hypothesis that the two means are equal in the population is rejected if the probability of T-value (the observed significance level) is less than 0.05

Table 5.5 also shows that the observed significance level of the two means of age of recent migrants and long-term migrants is 0.2626 which is still not small enough to be statistically significant, therefore, we should also accept the null hypothesis that recent migrants and long-term migrants are from the same population.

Given the results of the analysis on age, hypotheses 1 and 2 must be rejected. Contrary to the hypotheses, migrants to peri-urban areas in Jakarta appear to be the same or about the same age as nonmigrants, and recent migrants also appear to be about the same age as long-term migrants. In addition, the observed difference of age between recent migrants and long-term migrants is more real than the difference between migrants and nonmigrants even though it is still not statistically significant.

Education

The literature on characteristics of migrants generally argues that migrants have higher education than nonmigrants (Shaw, 1975; Petersen, 1975). Hypothesis 3 follows from this literature, while hypothesis 4 is an attempt to see a significant difference among migrants. The hypotheses 3 and 4 state:

- H3: The mean education of secondary migrants is higher than that of primary migrants and nonmigrants.
- H4: The mean education of recent migrants is higher than that of long-term migrants.

The data in table 5.6 show that migrants as a whole do have a higher mean education than nonmigrants. About 85 percent of migrants have responded that they have their highest educational attainment at least at senior high school level, while only 48

Table 5.6
Migrants vs. Nonmigrants: Education of Household Head

Education of HH Head	Migrational Status				Total	
	Nonmigrants		Migrants			
	(N)	(%)	(N)	(%)	(N)	(%)
No formal education (1)	1	4%	1	1%	2	2%
Elementary School (2)	7	26%	5	7%	12	12%
Junior High School (3)	6	22%	5	7%	11	11%
Senior High School (4)	10	37%	22	30%	32	32%
3 Years College (5)	0	0%	16	22%	16	16%
University (6)	3	11%	24	33%	27	27%
Total	27	100%	73	100%	100	100%
Mean	3.37		4.63			

Table 5.7
Recent Migrants vs. Long-term Migrants: Education of Household Head

Education of HH Head	Category of Migrants				Total	
	Recent Migrants		Long-term Migrants			
	(N)	(%)	(N)	(%)	(N)	(%)
No formal education (1)	1	2%	0	0%	1	1%
Elementary School (2)	4	6%	1	10%	5	7%
Junior High School (3)	5	8%	0	0%	5	7%
Senior High School (4)	18	29%	4	40%	22	30%
3 Years College (5)	12	19%	4	40%	16	22%
University (6)	23	37%	1	10%	24	33%
Total	63	100%	10	100%	73	100%
Mean	4.7		4.4			

percent for nonmigrants. For the comparison between recent migrants and long-term migrants, the data in table 5.7 shows that a very small difference occurred in their educational attainment. About 86 percent of recent migrants responded that they have their highest educational attainment at least at senior high school level, compared to about 90 percent for long-term migrants.

The summary of T-test statistics in table 5.5 shows that the observed significance level of the two means in education of migrants and nonmigrants is 0.0000. It does not mean that the probability is zero, it means that the probability is less than 0.0005 (NCSS prints probabilities to only four decimal places). In this case, the difference is very significant that the two means seem to be unequal in the population, therefore, we should reject the null hypothesis that migrants and nonmigrants are from the same population. Table 5.5 also shows that the observed significance level of the two means in educational attainment between recent migrants and long-term migrants is 0.5426 which indicates a rather high probability that recent migrants and long-term migrants are from the same population.

The results of this analysis lead to the acceptance of hypothesis 3 and the rejection of hypothesis 4. Secondary migrants (in this case, migrants in general) do have a higher mean education than nonmigrants but there is no significant distinction in terms of educational attainment between recent migrants and long-term migrants.

Occupation

The Jakarta peri-urban survey contains detailed information on types of occupation of the 100 sample households. On the basis of this information, more than 30

occupational categories are identified and grouped into 6 general sectorial categories: Primary (agriculture, livestock, extraction); industry (manufacturing); construction; commerce (retail); public services (government); and private services.

Table 5.8 shows the occupations of the household heads by sector. The most frequently cited occupations among household heads was public services (29 percent), and private services (29 percent), followed by commerce (14 percent). Only 7 percent of household heads cited primary sector occupations as their most important economic activity. This is an interesting finding if we notice that agricultural land uses in the three survey sites, and moreover in the whole peri-urban Jakarta, still have a rather significant portion compared with other uses. Yet only a small portion of households in the survey areas cited primary sector as their main income source. However, if we look back to the section on method and limitations of this study, we may realize that in our survey these areas were not selected randomly and hence were not representative of all peri-urban areas in Jakarta.

By using the data on occupation by sector we cannot identify which type of occupation has the higher or lower social status. In order to determine the social status differential by occupation I created a new set of categories and ranked them. On the basis of the original 30 occupational categories identified from the survey, and using other variables such as income, job characteristics, average working hours per week, type of employer, type of payment and prestige attributed to each occupational category, the 30 categories are collapsed into five final categories, assigning category I with the highest status and category V with the lowest (Table 5.9).

Table 5.8
Occupation of Household Head by Sector

Occupational Sector	Study Sites						Total	
	Cilandak Timur		Lenteng Agung		Ciganjur			
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
Primary	1	3%	2	6%	4	12%	7	7%
Industry	1	3%	2	6%	1	3%	4	4%
Construction	4	12%	4	12%	5	15%	13	13%
Commerce	4	12%	6	18%	4	12%	14	14%
Public Services	10	30%	10	29%	9	27%	29	29%
Private Services	12	36%	7	21%	10	30%	29	29%
Other	1	3%	3	9%	0	0%	4	4%
Total	33	100%	34	100%	33	100%	100	100%

The migration literature on characteristics of migrants shows that migrants tend to be from higher occupational status (Shaw, 1975). Consequently, nonmigrants tend to be from lower occupational status. Primary migrants are selected from lower skilled, blue collar occupations while secondary migrants are more likely to be from professional, white collar backgrounds (Long and Hansen, 1977; Miller, 1977). Hypothesis 5 follows from this literature, while hypothesis 6 is an attempt to see a significant difference among migrants. The hypotheses 5 and 6 state:

- H5: The occupational status of secondary migrants is higher than that of primary migrants and nonmigrants.
- H6: The occupational status of recent migrants is higher than that of long-term migrants.

In a sample of 100 households, only 4 percent belong to category I which includes big business, managerial jobs in industry and gazetted government officials (table 5.9). The next category, comprising 32 percent of the sample peri-urban population, includes medium businesses, privately practicing and government employed professionals such as professors, researchers and architects. Comprising 34 percent of the sample peri-urban population which is the median as well as the modal value, category III includes small business, nongazetted government employed (staffs and clerks), retired government officials, school teachers and those employed in the armed forces. In category IV, which comprises 18 percent of the sample peri-urban population, are included the skilled and semi-skilled self-employed workers, those who make and sell food or clothes, motor mechanics and repairmen, and those engaged in petty business

Table 5.9
Migrants vs. Nonmigrants: Occupational Category of Household Head

Occupational Category *)		Migrational Status				Total	
		Nonmigrants		Migrants			
		(N)	(%)	(N)	(%)	(N)	(%)
Category I	(1)	1	4%	3	4%	4	4%
Category II	(2)	3	11%	29	40%	32	32%
Category III	(3)	9	33%	25	34%	34	34%
Category IV	(4)	7	26%	11	15%	18	18%
Category V	(5)	7	26%	5	7%	12	12%
Total		27	100%	73	100%	100	100%
Mean		3.59		2.81			

- *) Category I: Big Business/Managerial/Gazetted Gov't Officials
 Category II: Medium Business/Professionals/Gov't Officials
 Category III: Small Business/Gov't Staff /Clerks/Retiree/Armed Forces
 Category IV: Petty Business/Unorganized Skilled Workers/Self Employed
 Category V: Unskilled/Daily Waged Laborers/Itinerant Salesmen/Other Temporary

Table 5.10
Recent Migrants vs. Long-term Migrants: Occupational Category
of Household Head

Occupational Category *)		Migrational Status				Total	
		Recent Migrants		Long-term Migrants			
		(N)	(%)	(N)	(%)		
Category I	(1)	3	5%	0	0%	3	4%
Category II	(2)	26	41%	3	30%	29	40%
Category III	(3)	23	37%	2	20%	25	34%
Category IV	(4)	8	13%	3	30%	11	15%
Category V	(5)	3	5%	2	20%	5	7%
Total		63	100%	10	100%	73	100%
Mean		2.71		3.40			

- *) Category I: Big Business/Managerial/Gazetted Gov't Officials
Category II: Medium Business/Professionals/Gov't Officials
Category III: Small Business/Gov't Staff /Clerks/Retiree/Armed Forces
Category IV: Petty Business/Unorganized Skilled Workers/Self Employed
Category V: Unskilled/Daily Waged Laborers/Itinerant Salesmen/Other Temporary

such as vending fruits and vegetables. Category V comprises 12 percent of the sample peri-urban population which includes those in unskilled workers and self employed, daily waged and temporary laborers and other temporary occupations usually associated with the informal sector.

Table 5.9 also shows the proportion of the five categories for migrants and nonmigrants. The data shows that migrants as a whole do tend to have higher occupational status than nonmigrants. About 78 percent of migrants have occupation that falls in the first three categories, while about 48 percent of nonmigrants fall in that categories. As far as the comparison of migrants category is concerned, the data in table 5.10 shows that recent migrants as a whole tend to have higher occupational status than long-term migrants. About 83 percent of recent migrants have occupation that falls in the first three categories, compared to only about 50 percent for long-term migrants.

T-test statistics in table 5.5 shows that the observed significance level of the two means in occupational status of migrants and non migrants is 0.0009. In this case the difference is statistically significant that the two means are unequal and we should reject the null hypothesis that migrants and nonmigrants are from the same population. For the two means in occupational status of recent migrants and long-term migrants the observed significance level is 0.0392 which is also indicates a rather low probability that recent migrants and long-term migrants are from the same population.

The results of this analysis lead to the acceptance of both hypotheses 5 and 6. Secondary migrants (in this case, migrants in general) do have higher mean occupational status than nonmigrants and a significant distinction in terms of occupational status can

also be made between recent migrants and long-term migrants in the Jakarta peri-urban population.

Household Size

Very little literature exists pertaining to the relationship between household size and migration. That which does exist is inconclusive. Some research show that migration can be prompted by the needs of increased household size (Petersen, 1975). Other research show that children can be an obstacle to migration. Hypothesis 7 states that migrants' household size will be larger than that of nonmigrants, while hypothesis 8 attempts to see if there is a significant difference among migrants in terms of household size. The hypotheses 7 and 8 state:

H7: The mean household size of secondary migrants is larger than that of primary migrants and nonmigrants.

H8: The mean household size of recent migrants is smaller than that of long-term migrants.

The data in table 5.11 show that migrants as a whole tend to have a slightly smaller household size than nonmigrants. The mean household size of migrants is found to be 6.0 people, while nonmigrants is 6.8. However, the median as well as the mode of household size of migrants and non migrants are both fall in the number of 6 people (about 21 - 22 percent respectively). In the comparison between recent migrants and long-term migrants a larger difference of means is shown in table 5.12. It seems that long-term migrants with the mean of 7.7 have a larger household size than recent migrants with the mean of 5.8 people in their household.

Table 5.11
Migrants vs. Nonmigrants: Household Size

Household Size (Person)	Migrational Status				Total	
	Nonmigrants		Migrants			
	(N)	(%)	(N)	(%)	(N)	(%)
1	0	0%	0	0%	0	0%
2	0	0%	2	3%	2	2%
3	2	7%	7	10%	9	9%
4	1	4%	11	15%	12	12%
5	5	19%	14	19%	19	19%
6	6	22%	15	21%	21	21%
7	3	11%	6	8%	9	9%
8	5	19%	5	7%	10	10%
9	2	7%	3	4%	5	5%
10	1	4%	9	12%	10	10%
11 or More	2	7%	1	1%	3	3%
Total	27	100%	73	100%	100	100%
Mean	6.8		6.0			

Table 5.12
Recent Migrants vs. Long-term Migrants: Household Size

Household Size (Person)	Category of Migrants				Total	
	Recent Migrants		Long-term Migrants			
	(N)	(%)	(N)	(%)	(N)	(%)
1	0	0%	0	0%	0	0%
2	1	2%	1	10%	2	3%
3	7	11%	0	0%	7	10%
4	11	17%	0	0%	11	15%
5	13	21%	1	10%	14	19%
6	14	22%	1	10%	15	21%
7	6	10%	0	0%	6	8%
8	3	5%	2	20%	5	7%
9	1	2%	2	20%	3	4%
10	6	10%	3	30%	9	12%
11 or More	1	2%	0	0%	1	1%
Total	63	100%	10	100%	73	100%
Mean	5.8		7.7			

The summary of T-test statistics in table 5.5 shows that the observed significance level of the two means in household size of migrants and nonmigrants is 0.1462. In this case, the observed significance level is not small enough to be statistically significant that the two means are unequal, therefore, we should not reject the null hypothesis that migrants and nonmigrants are from the same population. For the two means in household size of recent migrants and long-term migrants the observed significance level is 0.0154 which indicates a low probability that recent migrants and long-term migrants are from the same population.

Given the results of the analysis on household size, hypothesis 7 should be rejected while hypothesis 8 should not. Contrary to hypothesis 7, migrants to peri-urban areas in Jakarta appear to have about the same household size as nonmigrants. However, a significant distinction in terms of household size can be made between recent migrants and long-term migrants. Long-term migrants do tend to have larger household size than recent migrants.

Income

The literature on characteristics of migrants has consistently found income, like education and occupation, to be positively related to migration (Petersen, 1975). In the following analysis income will be examine in two forms, income of household head and total household income. Hypothesis 9 states that mean income of migrants will be higher than that of nonmigrants, while hypothesis 10 attempts to see if there is a significant difference among migrants in terms of their mean income. The hypotheses 9 and 10 state:

H9: The mean income of secondary migrants is higher than that of primary migrants and nonmigrants.

H10: The mean income of recent migrants is higher than that of long-term migrants.

The data in tables 5.13 and 5.15 show that migrants as a whole do tend to have higher mean income than nonmigrants. About 21 percent of migrants' household head have monthly income higher than \$250 while only 4% for nonmigrants' household head. In terms of total household income about 42 percent of migrants' households have monthly income higher than \$250, compared to 19 percent for nonmigrants' households. The mean monthly income of migrants' household head is found to be \$178.57 while it is only \$111.63 for nonmigrants' household head. The mean total monthly income of migrants' households is \$285.55 while it is only \$175.25 for nonmigrants' households. As far as the comparison of migrants category is concerned, the data in tables 5.14 and 5.16 show that only small differences were found in the mean monthly income between recent migrants and long-term migrants on both household head and total household incomes. The mean monthly income of recent migrants' household head is found to be \$178.24 while it is \$180.66 for long-term migrants' household head. The mean total monthly income of recent migrants' households is \$287.75 while it is \$271.64 for long-term migrants' households.

The T-test statistics in table 5.5 shows that the observed significance level of the two means in both household head and total household incomes are 0.0153 and 0.0014, respectively. In both cases the observed significance levels are small enough to be statistically significant that the two means are unequal, and we should then reject the

Table 5.13
Migrants vs. Nonmigrants: Income of Household Head

Income of HH Head (Monthly, US\$)	Migrational Status				Total	
	Nonmigrants		Migrants			
	(N)	(%)	(N)	(%)	(N)	(%)
0 - 50	5	19%	5	7%	10	10%
51 - 100	12	44%	19	26%	31	31%
101 - 150	5	19%	20	27%	25	25%
151 - 200	3	11%	7	10%	10	10%
201 - 250	1	4%	7	10%	8	8%
251 - 300	0	0%	3	4%	3	3%
301 - 350	0	0%	3	4%	3	3%
351 - 400	0	0%	2	3%	2	2%
401 - 450	0	0%	2	3%	2	2%
451 - 500	0	0%	0	0%	0	0%
501 - 550	0	0%	0	0%	0	0%
551 or More	1	4%	5	7%	6	6%
Total	27	100%	73	100%	100	100%
Mean	\$111.63		\$178.57			

Table 5.14
Recent Migrants vs. Long-term Migrants: Income of Household Head

Income of HH Head (Monthly, US\$)	Category of Migrants				Total	
	Recent Migrants		Long-term Migrants			
	(N)	(%)	(N)	(%)	(N)	(%)
0 - 50	5	8%	0	0%	5	7%
51 - 100	16	25%	3	30%	19	26%
101 - 150	15	24%	5	50%	20	27%
151 - 200	7	11%	0	0%	7	10%
201 - 250	7	11%	0	0%	7	10%
251 - 300	3	5%	0	0%	3	4%
301 - 350	3	5%	0	0%	3	4%
351 - 400	2	3%	0	0%	2	3%
401 - 450	1	2%	1	10%	2	3%
451 - 500	0	0%	0	0%	0	0%
501 - 550	0	0%	0	0%	0	0%
551 or More	4	6%	1	10%	5	7%
Total	63	100%	10	100%	73	100%
Mean	\$178.24		\$180.66			

Table 5.15
Migrants vs. Nonmigrants: Total Household Income

Total Household Income (Monthly, US\$)	Migrational Status				Total	
	Nonmigrants		Migrants			
	(N)	(%)	(N)	(%)	(N)	(%)
0 - 50	1	4%	3	4%	4	4%
51 - 100	6	22%	8	11%	14	14%
101 - 150	11	41%	13	18%	24	24%
151 - 200	2	7%	7	10%	9	9%
201 - 250	2	7%	11	15%	13	13%
251 - 300	2	7%	0	0%	2	2%
301 - 350	0	0%	7	10%	7	7%
351 - 400	0	0%	4	5%	4	4%
401 - 450	1	4%	3	4%	4	4%
451 - 500	1	4%	3	4%	4	4%
501 - 550	0	0%	3	4%	3	3%
551 or More	1	4%	11	15%	12	12%
Total	27	100%	73	100%	100	100%
Mean	\$175.25		\$285.55			

Table 5.16
Recent Migrants vs. Long-term Migrants: Total Household Income

Total Household Income (Monthly, US\$)	Category of Migrants				Total	
	Recent Migrants		Long-term Migrants			
	(N)	(%)	(N)	(%)	(N)	(%)
0 - 50	3	5%	0	0%	3	4%
51 - 100	5	8%	3	30%	8	11%
101 - 150	12	19%	1	10%	13	18%
151 - 200	6	10%	1	10%	7	10%
201 - 250	10	16%	1	10%	11	15%
251 - 300	0	0%	0	0%	0	0%
301 - 350	6	10%	1	10%	7	10%
351 - 400	4	6%	0	0%	4	5%
401 - 450	2	3%	1	10%	3	4%
451 - 500	3	5%	0	0%	3	4%
501 - 550	3	5%	0	0%	3	4%
551 or More	9	14%	2	20%	11	15%
Total	63	100%	10	100%	73	100%
Mean	\$287.75		\$271.64			

null hypothesis that migrants and nonmigrants are from the same population. In the comparison between recent migrants and long-term migrants, table 5.5 shows that the observed significance level of the two means in both household head and total household incomes are 0.9617 and 0.7989, respectively. Both scores are well above the 0.05 significance level and indicate high probabilities that recent migrants and long-term migrants are from the same population.

The findings of this analysis lead to the acceptance of hypothesis 9 and the rejection of hypothesis 10. Secondary migrants (in this case, migrants in general) do have higher mean income than nonmigrants but we cannot make a significant distinction in terms of mean income between recent migrants and long-term migrants.

Formal/Informal Economic Activity

The last socioeconomic characteristics to be considered is engagement in formal and informal economic activity. The literature on urban informal sector indicates that urban informal economic activities are positively related to migration and urban migrants (Hart, 1973; Friedmann and Sullivan, 1974; House, 1984). There is a tendency to identify the informal sector with the migrant population (Sethuraman, 1976). Based on these arguments hypothesis 11 argues that the proportion of migrants engaged in informal sector will be higher than that of nonmigrants, while hypothesis 12 attempts to see if there is a significant difference among migrants in terms of their engagement in formal and informal activity. Indication of engagement in the formal/informal sector is obtained from the survey, in response with the existence of legal contract.

The hypotheses 11 and 12 state:

H11: The proportion of secondary migrants and primary migrants engaged in informal economic activities is higher than that of nonmigrants.

H12: The proportion of recent migrants engaged in informal economic activities is higher than that of long-term migrants.

The data in table 5.17 shows that migrants as a whole tend to have a higher rate of employment in formal economic activities (indicated by the existence of legal contract between employer and employee) than nonmigrants. About 70 percent of migrants responded "yes" to the question about the existence of legal contract in their jobs while only 37 percent for nonmigrants. As far as the comparison of migrants category is concerned, the data in table 5.18 shows that recent migrants and long-term migrants shared the same rate of employment (about 70 percent) in formal economic activities.

The T-test statistics in table 5.5 shows that the observed significance level of the two means in the existence of legal contract is 0.0025. In this case the probability is statistically significant that the two means are unequal, and we should then reject the null hypothesis that migrants and nonmigrants are from the same population. In the comparison between recent migrants and long-term migrants, table 5.5 shows that the observed significance level of the two means in the existence of legal contract is 0.9920. In this case, the score indicates a very high probability that recent migrants and long-term migrants are from the same population.

The results of this analysis lead to the rejection of both hypothesis 11 and hypothesis 12. Contrary to the statement in hypothesis 11, the proportion of migrants

Table 5.17
Migrants vs. Nonmigrants: Existence of Legal Contract

Existence of Legal Contract	Migrational Status				Total	
	Nonmigrants		Migrants			
	(N)	(%)	(N)	(%)	(N)	(%)
Yes (1)	10	37%	51	70%	61	61%
No (2)	17	63%	22	30%	39	39%
Total	27	100%	73	100%	100	100%
Mean	1.63		1.30			

Table 5.18
Recent Migrants vs. Long-term Migrants: Existence of Legal Contract

Existence of Legal Contract	Category of Migrants				Total	
	Recent Migrants		Long-term Migrants			
	(N)	(%)	(N)	(%)	(N)	(%)
Yes (1)	44	70%	7	70%	51	70%
No (2)	19	30%	3	30%	22	30%
Total	63	100%	10	100%	73	100%
Mean	1.30		1.30			

engaged in informal economic activity is in fact lower than nonmigrants. Migrants in peri-urban Jakarta tend to have higher rate of employment in formal economic activities than nonmigrants. As far as hypothesis 12 is concerned, there is no significant distinction between recent migrants and long-term migrants in terms of their engagement in formal and informal economic activities.

V.2. Determinants of Intra-metropolitan Mobility

V.2.1. Individual Decision-Making Approach

It is difficult to ascertain what factors determine a person's decision to migrate since economic, social, political and psychological influences are involved. A study of migration decision making may begin with a consideration of the motivation for migration, briefly characterized as the proximate causes of the intention to move. Several authors suggest that decision to migrate is a response to either potential 'pull' or 'push' factors of the area of destination and the area of origin (Ravenstein, 1889/1976; Lee, 1966). Some authors suggest that the economic motive is the most important factor in the migration process from the decision making perspectives (Lewis, 1954; Fei and Ranis, 1961; Lowry, 1966; Todaro, 1976). Others believe that economic motives together with other factors influence people to move to another place (Lansing and Mueller, 1967; Haberkorn, 1981). The more recent literature has found that migration is decreasingly linked to economic determinants and increasingly associated with noneconomic determinants (Sommers, 1981; Williams, 1981; Heaton, et al., 1981; Lichter and Fuguitt, 1982; Goodman, 1976 and 1978; Turner, 1968; Myers, 1983). These recent theories

suggest that another type of economic factors, as well as some noneconomic factors have been the recent determinants of intra-metropolitan mobility.

The first part of the analysis on determinants of intra-metropolitan mobility concerning individual decision making approach will examine the responses from questions number 4, 4a, 4b and 4c in the additional section (section VIII) of the survey questionnaire (see appendix C). These questions ask the respondents about their main reason to move to the present neighborhoods in relation to the potential push or pull of the area of origin and the area of destination. It is assumed that every origin and destination area will have positive forces which hold people within the area or pull others to it; negative forces which repel or push people from the area; and zero forces which on balance exert neither an attractive nor a repellent force and toward which people are therefore essentially indifferent (Lee, 1966). This assumption is expressed in question number 4 in the additional section of the questionnaire.

Table 5.19 represents the responses of the 73 sample of migrant households in peri-urban Jakarta to those questions. These responses were identified and grouped into three categories, the 'pull', 'push', and 'other' factors. The responses have been grouped and directed into the pull category if respondent gave preferences to the positive factors of destination area, grouped into the push category if respondent stressed the negative factors of the area of origin, and grouped into other category if respondent did not indicate either positive or negative factors in their decision to move. About 51 percent of migrants responded to the question that can be grouped as the pull factors of peri-urban

Table 5.19
Migrants by Reason to Move by Length of Stay in Peri-urban Neighborhoods
(Pull Factors vs. Push Factors)

Reason to Move	Length of Residence (Years)								Total	
	1 - 5		6 - 10		11 - 15		> 15			
	N	%	N	%	N	%	N	%	N	%
Pull Factors of Destination	24	33%	10	14%	2	3%	1	1%	37	51%
More Job Opportunity	0	0%	0	0%	0	0%	0	0%	0	0%
More Business Opportunity	0	0%	0	0%	0	0%	1	1%	1	1%
More Expected Income	1	1%	0	0%	0	0%	0	0%	1	1%
Better Environment	14	19%	4	5%	1	1%	0	0%	19	26%
Affordable Land/Housing	9	12%	6	8%	1	1%	0	0%	16	22%
Push Factors of the Area of Origin	17	23%	3	4%	1	1%	1	1%	22	31%
Less Job Opportunity	2	3%	1	1%	0	0%	0	0%	3	4%
Less Business Opportunity	7	10%	0	0%	0	0%	0	0%	7	10%
Less Expected Income	0	0%	0	0%	0	0%	0	0%	0	0%
Bad Environment	0	0%	1	1%	1	1%	0	0%	2	3%
Unaffordable Land/Housing	1	1%	0	0%	0	0%	0	0%	1	1%
Rising Cost of Living	1	1%	0	0%	0	0%	0	0%	1	1%
Forced to Move (Against Own Will)	6	8%	1	1%	0	0%	1	1%	8	11%
Other than Push/Pull Factors	5	7%	3	4%	4	5%	2	3%	14	19%
Family Related (marriage, etc.)	1	1%	1	1%	2	3%	0	0%	4	6%
Assignment from Gov't/Employers	2	3%	0	0%	0	0%	0	0%	2	3%
Inheritance	0	0%	1	1%	1	1%	1	1%	3	4%
Stay in Family Owned House	1	1%	1	1%	0	0%	0	0%	2	3%
Educational Purposes	1	1%	0	0%	1	1%	1	1%	3	4%
Total	46	63%	16	22%	7	10%	4	5%	73	100%

Table 5.19
Migrants by Reason to Move by Length of Stay in Peri-urban Neighborhoods
(Pull Factors vs. Push Factors)

Reason to Move	Length of Residence (Years)								Total	
	1 - 5		6 - 10		11 - 15		> 15			
	N	%	N	%	N	%	N	%	N	%
Pull Factors of Destination	24	33%	10	14%	2	3%	1	1%	37	51%
More Job Opportunity	0	0%	0	0%	0	0%	0	0%	0	0%
More Business Opportunity	0	0%	0	0%	0	0%	1	1%	1	1%
More Expected Income	1	1%	0	0%	0	0%	0	0%	1	1%
Better Environment	14	19%	4	5%	1	1%	0	0%	19	26%
Affordable Land/Housing	9	12%	6	8%	1	1%	0	0%	16	22%
Push Factors of the Area of Origin	17	23%	3	4%	1	1%	1	1%	22	31%
Less Job Opportunity	2	3%	1	1%	0	0%	0	0%	3	4%
Less Business Opportunity	7	10%	0	0%	0	0%	0	0%	7	10%
Less Expected Income	0	0%	0	0%	0	0%	0	0%	0	0%
Bad Environment	0	0%	1	1%	1	1%	0	0%	2	3%
Unaffordable Land/Housing	1	1%	0	0%	0	0%	0	0%	1	1%
Rising Cost of Living	1	1%	0	0%	0	0%	0	0%	1	1%
Forced to Move (Against Own Will)	6	8%	1	1%	0	0%	1	1%	8	11%
Other than Push/Pull Factors	5	7%	3	4%	4	5%	2	3%	14	19%
Family Related (marriage, etc.)	1	1%	1	1%	2	3%	0	0%	4	6%
Assignment from Gov't/Employers	2	3%	0	0%	0	0%	0	0%	2	3%
Inheritance	0	0%	1	1%	1	1%	1	1%	3	4%
Stay in Family Owned House	1	1%	1	1%	0	0%	0	0%	2	3%
Educational Purposes	1	1%	0	0%	1	1%	1	1%	3	4%
Total	46	63%	16	22%	7	10%	4	5%	73	100%

areas, 31 percent responded to the push factors of the area of origin and 19 percent gave other responses.

About 33 percent of the total number of migrants who responded to the pull factors of peri-urban areas are recent migrants that reside in peri-urban areas for 5 years or less, and only 4 percent were long-term migrants that have lived in peri-urban areas for more than 10 years. As far as the pull factor response is concerned, the most mentioned reason to move is that peri-urban areas have better environment than their areas of origin (26 percent), and that land and housing in peri-urban areas are affordable (22 percent). Only 2 percent cited income-related economic reasons to move such as more job opportunity, more business opportunity, and expected income in peri-urban areas.

Among those migrants who responded to the push factors of the area of origin 23 percent are recent migrants that reside in peri-urban areas for 5 years or less, and only 2 percent were long-term migrants that have lived in peri-urban areas for more than 10 years. As far as the push factor response is concerned, the most mentioned reason to move is that they were forced to move against their own will (but by their own choice) as the result of gentrification and urban renewal-related displacement in central urban areas (11 percent). About 10 percent cited less business opportunity and 4 percent cited less job opportunity in their place of origin. Four percent of migrants cited bad environment and that land and housing expenses in their place of origin were unaffordable. Only 1 percent (1 person) mentioned he could not afford the rising cost of living in his area of origin.

About 19 percent of peri-urban migrants gave their reasons to move that could not be categorized as either push or pull factors. These include family related reasons, assignment from employers, inheritance, stay in family owned house and for educational purposes. These responses reflected that there are some noneconomic reasons involved in the decision to migrate although one can argue that these responses can also be viewed as another types of economic reasons.

As it has been indicated in the chapter on methodology (chapter four), these push and pull factors ideas have been criticized as not giving an explanation on the relative importance of each push and pull factor to different group of people. A significant proportion of migrants have given other reasons than push and pull factors and this indicates that these factors may operate together in the decision to move. People migrate not only because of either push or pull factor but also because of both factors jointly.

In the next part of the analysis on determinants of intra-metropolitan mobility concerning individual decision making perspective, I will examine the same responses from questions number 4a, 4b and 4c in section VIII of the survey questionnaire (see Appendix C), using a different approach as previously proposed. An attempt is made to try to distinguish between what is called "survival strategies" and "mobility strategies" (see chapter four for explanation of this concept).

The nature of the responses to questions 4a, 4b and 4c in section VIII of the questionnaire can be explained and categorized as follows:

1. Job opportunities, business opportunities and expected income opportunities are all income-related economic factors. Most of these economic factors are given in

response to question number 4b, which asks: Which push factor is the main reason for you to leave your previous residence? The responses were fewer job opportunities, fewer business opportunities, and lower expected income opportunities. Implicit in these responses is the expression of their reasons to move, that is, in order to achieve their economic goal that has been reduced by the economic pressure in their area of origin. It is my own conclusion that these households decided to move to destination areas in order to survive from the economic pressure they might have in their area of origin. Therefore, these income-related economic factors are grouped into the survival strategies.

2. Rising cost of living in the area of origin, is grouped into the survival strategies because this variable may also implies the reason to move in order to survive the economic pressure.
3. Forced to move, may not always be an economic factor but it is certainly an indication of a non-voluntary reason to move. This response may indicate not only to survive from an economic pressure but also social and political pressure individuals or households might have in their area of origin. This response is grouped into the survival strategies.
4. Affordability of land and housing, whether it is given in respond to questions 4a or 4b is grouped into the mobility strategy. Land and/or housing price involves a large amount of money. My assumption here is those who respond to the questions and cited affordability of land and housing as their reason to move are those people or households belonging to a wealthier social group. These households may have

already solved their survival problem and look more to ways to improve their levels of living through shelter enhancement.

5. The same explanation is used in categorizing environmental (ecological) related responses into mobility strategies. Those who cited bad environment in their area of origins or expected better environment in their area of destinations are assumed to be people who want to improve their levels of living. Survival is certainly not at stake and there is a wider range of alternatives open for them.
6. For those who respond to question number 4c, which is an open ended one, cited variables that are neither belong to push nor pull factors of the area of origins and of destinations. These variables include: family related (marriage), assignment from government/employer, stay in family owned house and educational purposes. The nature of these responses is more on mobility strategies rather than survival strategies, even though they can be very easily be argued as at least in part dependent upon economic considerations. There is no indication of the importance of income-related economic factors or any necessity to survive the pressure in the area of origin. These responses are therefore grouped into the mobility strategies.

The proposed approach here will results in the second thesis (T2) which states: Survival strategies are less important than mobility strategies in intra-metropolitan mobility. Migrants are compared on the basis of their response which has been categorized and grouped as the above and then tested using a simple descriptive statistics.

Hypothesis 13 states:

- H13: Proportion of migrants who moved because of survival strategies is lower than those who moved because of mobility strategies.

Table 5.20
Migrants by Reason to Move by Length of Stay in Peri-urban Neighborhoods
(Survival Strategies vs. Mobility Strategies)

Reason to Move	Length of Residence (Years)								Total	
	1 - 5		6 - 10		11 - 15		> 15			
	N	%	N	%	N	%	N	%	N	%
Survival Strategies	18	25%	2	3%	0	0%	1	1%	21	29%
Job Opportunity	2	3%	1	1%	0	0%	0	0%	3	4%
Business Opportunity	8	11%	0	0%	0	0%	0	0%	8	11%
Expected Income	1	1%	0	0%	0	0%	0	0%	1	1%
Cost of Living	1	1%	0	0%	0	0%	0	0%	1	1%
Displacement Related	6	8%	1	1%	0	0%	1	1%	8	11%
Mobility Strategies	31	42%	13	18%	6	8%	2	3%	52	71%
Land and Housing Affordability	10	14%	6	8%	1	1%	0	0%	17	24%
Environmental Related	16	22%	4	5%	1	1%	0	0%	21	29%
Family Related (marriage)	1	1%	1	1%	2	3%	0	0%	4	6%
Assignment from Employers	2	3%	0	0%	0	0%	0	0%	2	3%
Inheritance	0	0%	1	1%	1	1%	1	1%	3	4%
Stay in Family Owned House	1	1%	1	1%	0	0%	0	0%	2	3%
Educational Purposes	1	1%	0	0%	1	1%	1	1%	3	4%
Total	49	67%	15	21%	6	8%	3	4%	73	100%

Table 5.20 shows that significantly 71 percent of the responses can be categorized as those related to mobility strategies while only 29 percent can be categorized as those related to survival strategies. Twenty nine percent of migrants cited environmental related reasons to move to their present neighborhoods, in a sense that these neighborhoods in peri-urban areas are viewed as having better amenity than their places of origin. As much as 24 percent of migrants cited the affordability of land and/or housing in these peri-urban areas which indicates their housing preferences and settlement priority. These data suggest that approximately more than one-half (53 percent) of peri-urban migrants have indicate their settlement priority and housing preferences toward amenity and tenure. Proximity to the inner city is no longer their priority.

As far as the distinction between recent migrants and long-term migrants is concerned, table 5.20 also shows that about 60 percent of migrants to peri-urban Jakarta are recent migrants who moved to these neighborhoods because of mobility strategies while 11 percent are long-term migrants. On the other hand, about 28 percent of migrants to peri-urban Jakarta are recent migrants who moved to these neighborhoods because of survival strategies while only 1 percent (1 person) is a long-term migrant. This means that mobility strategies have been adopted not only by the majority of recent migrants but also by the majority of long-term migrants in their decision to move to peri-urban Jakarta. These findings suggest the acceptance of hypothesis 13.

The results of the analysis show that there is a variety of determinants of intra-metropolitan mobility. Unlike traditional rural-urban migration which is usually

associated with income differentials between places of origin and destination, those involved in the present stage of migration process, in this case, intra-metropolitan mobility, have indicated the importance of other causal factors for population movement. People are now moving not only motivated by the necessities for survival or to gain more income but also by the next phase in their economic life-cycle, to enhance their social and economic status. Mobility strategies seem to have more importance than survival strategies in the process of intra-metropolitan mobility in Jakarta. This analysis seems to support the acceptance of the second thesis.

V.2.2. Political Economy Approach

At the macro level, a different type of analysis concerning the determinants of intra-metropolitan mobility comes from the political economy literature. Instead of considering how individuals respond to economic or noneconomic differentials between two places, these analyses focused more on the structural causes of those differentials (Gilbert and Gugler, 1982). Unfortunately there has not been any empirical study found from this viewpoint that specifically looks at the determinants of intra-metropolitan mobility, particularly in the Third World context.

In addition to the analyses on determinants of intra-metropolitan mobility in Jakarta, I will also discuss the changes that are taken place in the structure of Jakarta's urban economy in order to understand and explain the determinants of intra-metropolitan migration at the macro level. Although I will not use specific hypotheses, the analysis will have to rely on the use of aggregate secondary data on that subject. The changes in

the determinants of migration process will be partially explained by the analysis of the rapid changes in the spatial characteristics of recent urban/peri-urban development over the last 10 years indicated by the changing pattern of land use and the changing of land values in Jakarta.

Data in table 5.21 show that peri-urban population in Jakarta has been growing at the average annual rate of 7.41 percent for the last ten year period. In 1989 the peri-urban population was nearly twice as much as it was in 1980 (90.06 percent change in ten years). In this period, residential land use in central Jakarta has been constantly and significantly decreasing at the rate of 0.67 percent annually or 5.85 percent change in ten years. Every year central Jakarta has lost residential land use at about 19.8 hectares on average. Meanwhile, commercial land use in central Jakarta has been significantly increasing at the rate of 4.37 percent annually or 46.78 percent change in ten years. At the same time, agricultural land use in peri-urban Jakarta has also been constantly and significantly decreasing at even a greater rate of 3.6 percent annually or 28 percent change in ten years for an average of 36.2 hectares per year. It means that every year peri-urban Jakarta has lost its agricultural land use at about 539.6 hectares on average.

Since early 1980s the government has realized that the oil boom era is over. Some large projects in Jakarta such as the construction of Jakarta outer ring road, construction of new government buildings and the development of modern infrastructures throughout the city have been rescheduled and some of them were even cancelled. Until that time, a large part of Jakarta urban development is controlled by the central government and dominated by government owned enterprises. Realizing this down-turn in the economy,

Table 5.21

Changes in Peri-Urban Population and Land Use in Jakarta, 1980 - 1989

Year	Peri-urban Jakarta		Central Jakarta		Central Jakarta		Peri-urban Jakarta	
	Population		Residential Land Use		Commercial Land Use		Agricultural Land Use	
	Person	% Change	Hectares	% Change	Hectares	% Change	Hectares	% Change
1980	1,149,780		2,959.48		697.39		17,308.06	
1981	1,207,589	5.03%	2,951.52	-0.27%	711.98	2.09%	17,126.84	-1.05%
1982	1,273,656	5.47%	2,948.60	-0.10%	733.89	3.08%	16,899.48	-1.33%
1983	1,389,274	9.08%	2,938.91	-0.33%	784.99	6.96%	16,353.76	-3.23%
1984	1,483,431	6.78%	2,936.05	-0.10%	805.43	2.60%	15,651.52	-4.29%
1985	1,612,252	8.68%	2,929.44	-0.23%	833.17	3.44%	15,074.17	-3.69%
1986	1,755,510	8.89%	2,916.90	-0.43%	868.21	4.21%	14,640.71	-2.88%
1987	1,896,520	8.03%	2,871.46	-1.56%	920.77	6.05%	13,942.08	-4.77%
1988	2,068,355	9.06%	2,840.53	-1.08%	954.99	3.72%	13,347.40	-4.27%
1989	2,185,284	5.65%	2,786.29	-1.91%	1,023.61	7.19%	12,451.92	-6.71%
Average Change		7.41%		-0.67%		4.37%		-3.58%
Total Change		90.06%		-5.85%		46.78%		-28.06%

Sources: 1. Kantor Statistik/BPS, "Jakarta Dalam Angka", 1981-1990, Jakarta
 2. "Laporan Tahunan", 1980-1990 (Selected Peri-urban Kelurahan), Jakarta
 3. Kantor Statistik/BPS, "Jakarta Pusat Dalam Angka", 1981-1990, Jakarta

Table 5.22
Commercial Land Value in the Jakarta CBD, 1980 - 1990

Year	Land Price in Nominal Rupiah (Rp/M2)	Nominal Return (%)	Consumer Price Inflation Rate (%)	Real Return (%)	Land Price in Real Rupiah (Rp/M2)
1980	275,000	20.00%	16.00%	3.45%	275,000
1981	330,000	13.64%	7.10%	6.10%	284,483
1982	375,000	10.67%	9.70%	0.88%	350,140
1983	415,000	16.87%	11.50%	4.81%	378,304
1984	485,000	12.37%	8.80%	3.28%	434,978
1985	545,000	10.09%	4.30%	5.55%	500,919
1986	600,000	20.00%	9.20%	9.89%	575,264
1987	720,000	129.17%	9.30%	109.67%	659,341
1988	1,650,000	118.18%	5.60%	106.61%	1,509,607
1989	3,600,000	80.56%	6.10%	70.17%	3,409,091
1990	6,500,000				6,126,296

Sources: 1. Departemen Keuangan, Direktorat Jenderal Pajak, "Laporan Tahunan Nilai Jual Bumi", 1980-1990
2. The Economist Intelligence Unit, "Country Report: Indonesia", 1985 & 1990

the government decided to change its economic policy by encouraging private foreign and domestic investments to drive the economy. The local government are encouraged to increase its revenues through property taxes that have been neglected before. As a result, since 1985 financial businesses have dominated the economy. Service sector such as banking, insurance, stock exchange, real estates and business services like accountancy, advertising, and many kinds of consulting have been growing and dominated the CBD in central city.

The physical and visual impression of this kind of development can be seen in the center city in the form of built environment characterized by modern and luxurious high-rise buildings to accommodate headquarters of large foreign as well as domestic enterprises. White collar employments have increased while informal sector employments have declined in this part of the city. The "Singaporization" of Jakarta has begun, the central city population has declined, and land prices have been increasing significantly. Much of the low-income center city residents, particularly native and long-term residents, take advantage to this situation by offering to give away their legal title of the land or house to received reasonable compensation offered by private developers or land speculators who are interested in purchasing a large block of land. But also many of these low-income center city residents are forced to move involuntarily even though they received compensation as good as those who have moved.

As far as changes in land value is concerned, data in table 5.22 show that land prices for commercial uses in the Jakarta central business district (CBD) have been increasing significantly since 1980. In real terms, the land price per sq. meter (vacant)

has been increasing at the annual average of 38.77 percent during the ten year period. By the year 1989 there has been 1,139.67 percent total price change since it was in 1980. The substantial change of commercial land prices in the Jakarta's most prestigious CBD apparently begin in 1986 along with the government's decision to expand the CBD in order to attract more investment needed for the economy.

What I have referred to as the most prestigious CBD in central Jakarta is a segment of an area in a form of a triangle (in Jakarta it is popular as "The Golden Triangle") surrounded by three major roads. Areas along these three roads have been developed since late 1970s as the sites of modern high-rise office buildings, modern shopping centers, banks, hotels, embassies, and other commercial functions. However, the center of this triangle was residential areas, mostly characterized by high density low-income urban neighborhoods (*Kampungs*¹⁾). In 1983 a large parcel of land was bought and cleared by one of the largest local developers to build a modern office park (the Jakarta Landmark). Since then, more and more parcels of residential land were bought and cleared by large enterprises and land speculators. Some of them have already been built for commercial uses while some others are remained vacant.

The structures of some central city residential neighborhoods cleared to make way for land use change, usually were the homes of low income urban residents who

¹⁾ The term *Kampung* refers to predominantly residential areas which were often rural villages that have been overwhelmed by rapid urbanization and incorporated within the city. These "urban villages", which include low-income as well as middle-income families, are characterized by generally inadequate physical infrastructure and social services. However, many of them are viable communities, and the term *Kampung* is neither synonymous with slums nor squatter settlements where residents have no rights of occupancy. The latter hardly exist in Indonesia since occupancy confers considerable right of possession by "adat" (customary) law.

typically lived in the older portions of central city adjacent to the CBD. The large scale land use decisions and investments of advanced capitalism have meant the decline of residential neighborhood character and social life. This trend in recent urban development has caused evictions, displacement and dislocation among low- and moderate-income residents, either voluntarily or involuntarily, and reduced the social heterogeneity of these neighborhoods by driving out the nonaffluent. This phenomenon may reflect the conflict of social, economic and political interests among different class of people.

The recent phenomena in the center city development of Jakarta seem to be parallel with the growth of peri-urban areas. Population of peri-urban areas has been increasing substantially in the last ten year period, and agricultural land uses in these areas have been shrinking significantly, replaced by residential, commercial and industrial uses. This central - peri-urban phenomenon is one of the characteristics of recent urban development in Jakarta. The data presented in this thesis have shown that peri-urban growth in Jakarta may, in some respects, be explained by the rapid changes in the characteristics of recent urban development. Intra-urban population mobility may not only as the result of individual's decision but also is shaped by the characteristics of recent urban development.

Chapter 6: **SUMMARY AND CONCLUSIONS**

The main purpose of this study is to contribute to our knowledge of a particular type of internal migration associated with peri-urban growth. Two important issues concerning the phenomenon of peri-urban growth within the context of urban migration have been presented and analyzed. An analysis of the characteristics of peri-urban communities and the determinants of intra-metropolitan mobility has highlighted a number of major findings that are significant to the literature of migration and urbanization, particularly in Indonesia. Although some of the hypotheses in the previous analyses have not been supported, a great deal has been learned concerning the characteristics of peri-urban communities in Jakarta. The significance of intra-metropolitan mobility and the determinants of such movement were found to be important in explaining the process of peri-urban growth in Jakarta. The present chapter summarizes the major findings and attempts to relate them to their respective bodies of literature. Finally, a number of general conclusions and suggestion for further research can be drawn from the analyses in this study.

VI. 1. Summary of the Findings

The vast majority of migration studies in the context of Third World urbanization have been focused on rural-urban migration in explaining the process of urban growth.

While rural-urban, and to some extent urban-urban migration are still very important phenomena in virtually all developing countries, this particular study has found that in the process of peri-urban growth, intra-metropolitan mobility presents a better explanation.

The first significant finding in this study is that the majority (73 percent) of peri-urban residents are migrants. This figure includes all types of migrants. However, it is interesting to notice that, at least in the sample areas, the peri-urban population consists mostly of secondary migrants or long-term urban residents, none of whom could be classified as primary migrants that came directly from rural areas. About 86 percent of these secondary migrants are those who have been peri-urban residents for ten years or less. About 68 percent of peri-urban migrants previously resided in the center city areas, while the rest previously resided in other peri-urban areas and other cities or towns. The predominance of secondary and recent migrants in peri-urban areas reflects not only that the process of peri-urban growth in Jakarta is a recent phenomenon but also that it is a process of intra-metropolitan mobility. The absence of primary migrants in this study suggests that rural-urban migration is not a significant factor in the explanation of peri-urban growth in Jakarta.

The first thrust in this Thesis (T1) presents a general argument concerning the six socioeconomic variables adopted in the analysis characterizing peri-urban community. The thesis is: peri-urban migrants differ among themselves and from nonmigrants on the basis of six different socioeconomic characteristics. This thesis was proposed to establish that if there are differences between peri-urban migrants and nonmigrants in their

socioeconomic characteristics, then these differences in orientation of peri-urban migrants could reflect the shift from one to another level of household economic needs. The difference in characteristics among peri-urban migrants can also be an important factor in explaining the determinants of intra-metropolitan mobility on the aggregate level.

Peri-urban migrants are selected from the better educated, higher occupational status and higher incomes of the peri-urban population. Contrary to some prior research in these areas, peri-urban migrants are more likely to have higher rate of employment in formal economic activities than nonmigrants. It is also found that peri-urban migrants do not necessarily come from the older population nor are they more likely to have larger household size than nonmigrants.

In explaining the characteristics and the composition of peri-urban community, this study differentiates migrants into recent migrants and long-term migrants. Long-term migrants consist of households who moved and settled in peri-urban areas prior to 1980 or more than ten years ago. It was hypothesized that since these individuals or households have been settled in peri-urban areas for more than ten years, their characteristics should be more similar to nonmigrants than to migrants in general. This was not the case. In four of the six socioeconomic characteristics compared, long-term migrants as well as migrants in general seem to differ from nonmigrants. The similarity between long-term migrants and nonmigrants occurred in terms of occupation of household head and household size. This means that most of the times, migrants and

nonmigrants in peri-urban areas generally came from a different population, regardless of how long migrants have been settled in the areas of destination.

When peri-urban migrants are broken into two categories, recent migrants and long-term migrants, and these categories are then compared, results show that recent migrants and long-term migrants can be differentiated in two socioeconomic characteristics, but do not necessarily differ in the other four. The two variables that are significant in distinguishing peri-urban migrants are occupation and household size. Recent migrants tend to have higher occupational status and smaller household size than long-term migrants. The possible explanation for this is that recent migrants in peri-urban Jakarta consist mostly of those who already have more secure jobs before they move.

Based on this analysis, a general picture of the peri-urban community can be culled out. The characteristics and the composition of peri-urban migrants do reflect different social and economic orientations than those of peri-urban nonmigrants and urban in-migrants in general. What has been accomplished in this section has been to show that peri-urban migrants actually are different not only from nonmigrants but also from urban in-migrants in general on some of the six socioeconomic characteristics, but not in the ways that all the hypotheses predicted.

In conceptualizing the determinants of intra-metropolitan mobility, two approaches were presented. First, a difference was drawn between what are known as 'push' factor of the area of origin and 'pull' factor of the area of destination. This distinction has been recognized in previous studies of the determinants of migration (Ravenstein, 1889/1976; Lee, 1966). About 51 percent of migrants gave their reason to

move to peri-urban areas that can be grouped under the pull factors of the area of destination, 31 percent responded to the push factors of the area of origin, and 19 percent gave other reasons that could not be grouped under either pull or push factors. These findings suggest that the majority of peri-urban migrants came and settled in peri-urban areas because of some attractions they found in these areas. However, even though the study distinguished between push and pull factors, the relative importance of each cannot be determined. A significant proportion of migrants gave reasons to move that were neither pull nor push factors, which suggest that these push and pull factors in migration may operate together in the decision to move. People migrate not only because of either push or pull factors but also because of both factors jointly.

A second distinction was made in terms of strategies adopted by households in their decision to move (survival vs. mobility strategies). The ways in which the household mobilizes its available human, economic and social resources to achieve its survival goal are here called survival strategies. The ways in which the household mobilizes its resources to improve its level of living or to move upward socially, where survival is not at stake, are here called mobility strategies.

The major difference between the two lies in that survival strategies referred more to the importance of labor migration in the individual decision to move. On the one hand, people choose destination areas based primarily on the necessities for survival in the urban economy or to at least maintain their income level. These strategies were reflected in their responses, for example, expected employment opportunity, expected income increases and expected business opportunities as well as displacement related reasons. On

the other hand, mobility strategies referred more to the importance of residential mobility in the individual decision to move. People in this category choose destination areas based primarily not on the necessities for survival but rather on a higher level of economic considerations. These strategies were reflected in their responses, for example, to buy cheaper land and housing in peri-urban areas or to find better living environment (amenity), which suggest the importance of shelter enhancement.

It was found in this study that 29 percent of peri-urban migrants were those who choose peri-urban areas because of income-related economic factors or forces outside their control (survival strategies). The majority (71 percent) of peri-urban migrants chose peri-urban areas because of non-income-related economic factors as well as some noneconomic factors (mobility strategies) in which about 85 percent of them are recent migrants.

This thesis has shown that peri-urban growth in Jakarta may, in some respect, be explained by the rapid changes in the characteristics of recent urban development. Intra-metropolitan mobility may result not only as the consequence of the individual's decision but also is shaped by the characteristics of recent urban development. The process of peri-urban growth has been explained by the analysis of the rapid changes in the spatial characteristics of urban/peri-urban areas over the last 10 years, indicated by the changing pattern of land use and the changing of land values in Jakarta. These two variables are commonly recognized as indicators in the role of advanced capitalism in shaping urban form (Smith, 1980; Gottdiener, 1985).

The findings in the analysis suggest that there have been some rapid and significant changes in the characteristics of land uses in Jakarta during the last ten year period, especially in the center city. Residential land use in central Jakarta has been shrinking along with the decreasing population. Many center city neighborhoods have been destroyed and converted into office parks, shopping centers, hotels, banks and other commercial functions. At the same time, commercial land use has been growing rapidly along with the increasing value and the modern form of built environment, reflecting the process of capital accumulation through large-scale investments.

VI. 2. General Conclusions

The findings of this study suggest that peri-urban migrants in Jakarta generally share characteristics of migrants involved in urban-suburban migration in the US rather than those of migrants involved in rural-urban migration in Indonesia. Peri-urban migrants seem to be selected among the better socioeconomic status in the population at destinations. Those involved in intra-metropolitan mobility generally have different motivations than those involved in rural-urban migration. It seems that education, occupational status and income have significant influence on changing social values and orientation among peri-urban migrants in Jakarta. The changing social values may have had an impact on their decision to move to peri-urban areas.

The significant majority of peri-urban migrants cited their reasons to move not in terms of income-related economic motives. This finding suggests that although intra-metropolitan mobility can be viewed as a part of the migration process (migration

in general), its explanation cannot be based only in terms of income differentials between two places or in the concepts of labor movement. The best explanation of the determinants of intra-metropolitan mobility seems to come from the concepts of residential mobility. This route was initially taken by Turner (1968), Speare et al. (1975), Goodman (1976) and Rossi (1980).

The identification of two different strategies (survival vs. mobility) connected to the decision to migrate seems to fit with the relatively smaller scale of intra-metropolitan mobility. Economic explanations in terms of labor movement may not be the only explanation of intra-metropolitan mobility associated with peri-urban growth. The movements of some groups of individuals or households such as students, retired persons, institutionilized persons, and other individuals outside the regular labor force, may need other explanations than solely economic. It is likely that other than economic factors such as political, psychological, ecological, cultural and other behavioral factors could have great influence in the moving process. In my view, an intermediate position between the two approaches which would link the examination of structural forces with that of individual behavior might be more rewarding in explaining the phenomenon of peri-urban growth.

As a result, this study argues against the use of employment or income differentials as the only factor in the migration literature to explain the determinants of intra-metropolitan mobility. Economic explanations derived from decision making approaches seem to have little applicability when applied to the explanation of intra-metropolitan mobility in the Indonesian context.

All of the analysis and description about what has been happening in Jakarta in the last ten years seems to be partially fit with the political economy explanation. If we look at David Gordon's theory about the stages of capitalist development, even though Jakarta may not have experienced the sequence of the stages, the recent phenomena in Jakarta's central city may partially reflect the characteristics of a corporate city, which is the third stage of capitalist development. From David Harvey's theory, the displacement of low-income central city residents either voluntarily or involuntarily could be seen as the conflict of interests between capital and labor. From Michael Smith's theory, the change or shift in employment opportunities in the central city, from largely lower-skilled informal sector to a more limited higher-skilled formal sector, could be seen as the driving force for the shift in population movement. Recent rural-urban migrants are no longer moving and settling in the central city because they do not have enough resources to survive in the central urban economy. Meanwhile, long-term migrants who already settled in the center city are beginning to leave because not only they do not have enough resources to stay in the central urban economy, but also in order to maintain their survival. In-migrants to the central city will be highly selective to those who have enough social, economic and political resources.

The two basic aspects of the political economy approach in the process of urban spatial formation are class conflict and capital accumulation. Harvey (1978) and Gordon (1978) have both argued that class conflict and capital accumulation have a strong relationship to the physical structure, spatial arrangements and form of urban areas. This study has shown that the spatial arrangements and urban form of Jakarta, particularly in

the center city, have changed significantly in the past decade. Although this study does not give concrete evidence to support the political economy theory, it has at least shown some of the indicators of advanced capitalism that characterized the recent urban development in Jakarta.

The vast majority of studies on Third World urbanization seems to agree that the historical process of urbanization in these countries is different from the experience of the developed countries. However, this particular study has found that there is at least one similarity in the process of intra-urban population movement between industrialized countries and Indonesia. This kind of migration pattern has not been predicted in the literature of migration research and urbanization in the Third World.

Armstrong and McGee (1985:4) have argued that "the changes in the international economy seem to be leading to increasing divergence and polarization, between countries and within them". However, they also indicate that at least there is one area in which pattern of convergence can be detected, which is the consumption pattern of urban residents that can be seen in the form of built environments, transportation and lifestyles (Armstrong and McGee, 1985). In agreement with their view, based on the whole analyses in this thesis I finally conclude that the recent phenomenon of intra-metropolitan mobility in the process of peri-urban growth in Jakarta is a function of a broader macro-structural changes happening in the metropolitan economy as a result of changes in the global economy over the last 10 years.

VI. 3. Policy Implications

In dealing with migration and urbanization in Jakarta, planners and policymakers have focused on the major rural-urban migration streams and their consequences on formal and informal employment, settlement (housing), and urban infrastructures. This concern is likely to continue, given that Indonesia remains predominantly rural and that moderate to high rates of natural increase among rural populations are usual. Thus, the potential for a continuation of in-migration to Jakarta remains high.

However, as this study has shown, the most recent phenomenon in the process of urbanization in Jakarta is peri-urban growth. While the central city population has been declining, the highest population growth in Jakarta in the last ten-year period has been occurring in peri-urban areas. Despite the continuing process of rural-urban or urban-urban migration to Jakarta, this study has shown the importance of intra-metropolitan mobility in the process of metropolitan expansion. Therefore, considerable attention should also be given to this kind of movement in the making of appropriate policies.

With regard to the role of intra-metropolitan mobility in the process of peri-urban growth, several major policy implications may be inferred from the previous analyses:

1. In the context of enhancing social and economic development in peri-urban areas, the principal aim of such policies presumably is to obtain a balanced distribution between resources and investment, and the population.
2. In terms of distribution of resources and investment in peri-urban areas, policies should be directed toward employment creation and labor absorption. Despite the

significant finding in this study that the majority of peri-urban migrants in the sample areas are long-term urban dwellers who have secure employment, peri-urban areas as a whole will continue to receive new migrants from rural areas. The characteristics of recent development in the central city will no longer provide cheap and easy living arrangements for primary migrants from rural areas. Peri-urban areas are more likely to be the major destinations of urban in-migrants who continuously perceived Jakarta as the place of economic opportunity.

3. In order to have a favorable balance between investment and population in peri-urban areas, social, demographic and economic linkages within these areas should be encouraged. Centers of community activities should be distributed evenly and transportation networks should be developed throughout these areas in order to achieve spatial and economic equality and therefore favorable population and employment distribution.
4. Intra-metropolitan mobility has many positive functions and is essential component of urban development. It fosters the spread of social and economic changes that are part of the development process and reallocates labor and employment opportunities throughout the city and not only in one growth center. Therefore, urban policies should encourage and facilitate the flow of people and investments to peri-urban areas.
5. This study does not assert the significance of economic or income differentials between places as the determinant of intra-metropolitan mobility. Instead, most people involved in intra-metropolitan mobility seem to perceive peri-urban areas as

nice and attractive places to live. The perception of peri-urban areas as an attractive place to live should be maintained. Policies should be directed toward preserving the environmental and ecological balance in peri-urban areas.

VI. 4. Suggestions for Further Research

In general, this study provides limited explanations about the characteristics of peri-urban communities and the determinants of intra-metropolitan mobility associated with the process of peri-urban growth in Jakarta. The survey data used in this study may not be representative of all peri-urban population in Jakarta. In the sample, none of the peri-urban residents could be classified as primary migrants as it is in our definition. The survey site in South Jakarta is a special area with high residential concentration and growth which is not representative of peri-urban Jakarta as a whole. Therefore, in order to provide a balanced view of the general issues affecting the growth of peri-urban areas and specifically intra-metropolitan mobility, further research should be designed to cover a larger sample of population in Jakarta peri-urban areas.

One conclusion is about the relationship between the socioeconomic characteristics of migrants and the determinants of intra-metropolitan mobility. It seems that education, occupational status and income had significant influence on changing social values and orientation among peri-urban migrants in Jakarta. The changing social values may also have had an impact on their decision to move to peri-urban areas. Since the data coverage in this study was limited to only the areas of destination, it is difficult to generalize about this conclusion. In addition, it could not be shown from the data

whether those three variables had a direct relationship to the changing of social values and orientation among peri-urban migrants. To see more clearly the relationship between socioeconomic characteristics of migrants and determinants of intra-metropolitan mobility, specific research with more specific questions and covering both origin and destination areas will be needed.

The data analysis suggested that the majority of peri-urban migrants who choose to live in peri-urban areas are not motivated by income-related economic factors or economic differentials between origin and destination. This important finding certainly challenges the general theory in migration literature and research which places economic motives above the other. However, since the data in this study did not directly examine the broader economic motivation of migrants and were not representative of all peri-urban migrants in Jakarta, further research with a more comprehensive questions on economic variables will be needed to examine this important issue.

In order to understand and explain the determinants of population movement at the macro level, more statistical data on macro-economic and structural factors should be examined and analyzed. For this purpose, a special research that includes a historical analysis of social, economic, political and development process not only in Jakarta but also in other urban centers throughout Indonesia will be needed.

Finally, in order to devise effective urban policies in support of development goals for population redistribution, planners need some detailed knowledge of their client populations and the macro-structural forces that influence movement of people. Without such information planners cannot estimate the size, direction and composition of future

population mobility. Aggregate measures of migratory direction and volume are not enough. Planners need to know in larger detail who the potential migrants are, why they will move, and where they will go. In the absence of such sources of data as in the case of intra-metropolitan mobility in Jakarta, a different well designed survey will be needed. This survey should provide insights into the decision making process by exploring both the structural conditions and the motivations underlying decisions to move.

APPENDIX A
Jakarta: Population and Population Density

JAKARTA: POPULATION BY DISTRICTS, 1975 - 1989

JAKARTA (DISTRICTS)	1975 (person)	1980 (person)	1985 (person)	1989 (person)	1975 - 80 Change (person)	%	1980 - 85 Change (person)	%	1985 - 89 Change (person)	%	1980 - 89 Change (person)	%
CENTRAL JAKARTA	1234257	1180208	1171515	1130924	-54049	-4.38%	-8693	-0.74%	-40591	-3.46%	-49284	-4.18%
%	22.61%	18.33%	15.29%	13.07%								
NORTH JAKARTA	726606	774643	898457	1027037	48038	6.61%	123814	15.98%	128580	14.31%	252394	32.58%
%	13.31%	12.03%	11.73%	11.87%								
WEST JAKARTA	1041224	1325570	1783695	2101272	284346	27.31%	458125	34.56%	317577	17.80%	775702	58.52%
%	19.08%	20.59%	23.28%	24.28%								
SOUTH JAKARTA	1302924	1650143	1897243	2304996	347219	26.65%	247100	14.97%	407753	21.49%	654853	39.68%
%	23.87%	25.63%	24.76%	26.63%								
EAST JAKARTA	1153514	1507038	1910179	2090784	353524	30.65%	403141	26.75%	180605	9.45%	583746	38.73%
%	21.13%	23.41%	24.93%	24.16%								
JAKARTA (TOTAL)	5458525	6437602	7661089	8655013	979078	17.94%	1223487	19.01%	993924	12.97%	2217411	34.44%

Source: Central Bureau of Statistics, 'Jakarta in Figures', 1976, 81, 86, 90, Jakarta

JAKARTA: POPULATION DENSITY BY DISTRICTS, 1975 - 1989

JAKARTA (DISTRICTS)	Area (km2)	1975 pers/km2	1980 pers/km2	1985 pers/km2	1989 pers/km2	1975 - 80 Change pers/km2	%	1980 - 85 Change pers/km2	%	1985 - 89 Change pers/km2	%	1980 - 89 Change pers/km2	%
CENTRAL JAKARTA	48.16	25628	24506	24325	23483	-1122	-4.38%	-181	-0.74%	-843	-3.46%	-1023	-4.18%
%	7.42%												
NORTH JAKARTA	148.34	4898	5222	6057	6924	324	6.61%	835	15.98%	867	14.31%	1701	32.58%
%	22.86%												
WEST JAKARTA	126.15	8254	10508	14139	16657	2254	27.31%	3632	34.56%	2517	17.80%	6149	58.52%
%	19.44%												
SOUTH JAKARTA	138.43	9412	11920	13705	16651	2508	26.65%	1785	14.97%	2946	21.49%	4731	39.68%
%	21.33%												
EAST JAKARTA	187.84	6141	8023	10169	11131	1882	30.65%	2146	26.75%	961	9.45%	3108	38.73%
%	28.95%												
JAKARTA (TOTAL)	648.92	8412	9920	11806	13338	1509	17.94%	1885	19.01%	1532	12.97%	3417	34.44%

Source: Central Bureau of Statistics, 'Jakarta in Figures', 1976, 81, 86, 90, Jakarta

JAKARTA: PERI-URBAN POPULATION BY DISTRICTS, 1975 - 1989

JAKARTA (DISTRICTS)	1975 (person)	1980 (person)	1985 (person)	1989 (person)	1975 - 80 Change (person)	%	1980 - 85 Change (person)	%	1985 - 89 Change (person)	%	1980 - 89 Change (person)	%
CENTRAL JAKARTA	0	0	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%
%	0.00%	0.00%	0.00%	0.00%								
NORTH JAKARTA	16411	16210	20724	23630	-201	-1.22%	4514	27.85%	2906	14.02%	7420	45.77%
%	2.26%	2.09%	2.31%	2.30%								
WEST JAKARTA	246306	348570	511175	712686	102264	41.52%	162605	46.65%	201511	39.42%	364116	104.46%
%	23.66%	26.30%	28.66%	33.92%								
SOUTH JAKARTA	277383	381387	483175	707833	104004	37.49%	101788	26.69%	224658	46.50%	326446	85.59%
%	21.29%	23.11%	25.47%	30.71%								
EAST JAKARTA	283736	403613	597178	741135	119877	42.25%	193565	47.96%	143957	24.11%	337522	83.63%
%	24.60%	26.78%	31.26%	35.45%								
TOTAL PERI-URBAN	823836	1149780	1612252	2185284	325944	39.56%	462472	40.22%	573032	35.54%	1035504	90.06%
% of Urban Jakarta	15.09%	17.86%	21.04%	25.25%								

Source: Central Bureau of Statistics, 'Jakarta in Figures', 1976, 81, 86, 90, Jakarta

JAKARTA: PERI-URBAN POPULATION DENSITY BY DISTRICTS, 1975 - 1989

JAKARTA (DISTRICTS)	Area (km2)	1975 pers/km2	1980 pers/km2	1985 pers/km2	1989 pers/km2	1975 - 80 Change pers/km2	%	1980 - 85 Change pers/km2	%	1985 - 89 Change pers/km2	%	1980 - 89 Change pers/km2	%
CENTRAL JAKARTA	0	0	0	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%
%	0.00%												
NORTH JAKARTA	72.48	226	224	286	326	-3	-1.22%	62	27.85%	40	14.02%	102	45.77%
%	48.86%												
WEST JAKARTA	87.76	2807	3972	5825	8121	1165	41.52%	1853	46.65%	2296	39.42%	4149	104.46%
%	69.57%												
SOUTH JAKARTA	73.27	3786	5205	6594	9661	1419	37.49%	1389	26.69%	3066	46.50%	4455	85.59%
%	52.93%												
EAST JAKARTA	104.31	2720	3869	5725	7105	1149	42.25%	1856	47.96%	1380	24.11%	3236	83.63%
%	55.53%												
TOTAL PERI-URBAN	337.82	2439	3404	4773	6469	965	39.56%	1369	40.22%	1696	35.54%	3065	90.06%
% of Urban Jakarta	52.06%												

Source: Central Bureau of Statistics, 'Jakarta in Figures', 1976, 81, 86, 90, Jakarta

CENTRAL JAKARTA: POPULATION BY SECONDARY DISTRICTS (KELURAHAN), 1975 - 1989

KECAMATAN	1975	1980	1985	1989	1975 - 80	Change	1980 - 85	Change	1985 - 89	Change	1980 - 89	Change
& Kelurahan	(person)	(person)	(person)	(person)	(person)	%	(person)	%	(person)	%	(person)	%
GAMBIR	155490	143405	132146	127294	-12085	-7.77%	-11259	-7.85%	-4852	-3.67%	-16111	-11.23%
Cideng	30829	24064	23374	22973	-6765	-21.94%	-690	-2.87%	-401	-1.72%	-1091	-4.53%
Duri Pulo	38708	37002	36493	36062	-1706	-4.41%	-509	-1.38%	-431	-1.18%	-940	-2.54%
Petojo Utara	29304	26944	25665	22664	-2360	-8.05%	-1279	-4.75%	-3001	-11.69%	-4280	-15.88%
Petojo Selatan	28464	28055	25769	25511	-409	-1.44%	-2286	-8.15%	-258	-1.00%	-2544	-9.07%
Kebon Kelapa	18037	18142	16457	15649	105	0.58%	-1685	-9.29%	-808	-4.91%	-2493	-13.74%
Gambir	10148	9198	4388	4435	-950	-9.36%	-4810	-52.29%	47	1.07%	-4763	-51.78%
SAWAH BESAR	160568	157381	151156	147824	-3187	-1.98%	-6225	-3.96%	-3332	-2.20%	-9557	-6.07%
Manggadua Selatan	43475	42752	45854	47831	-723	-1.66%	3102	7.26%	1977	4.31%	5079	11.88%
Karang Anyar	31115	32835	31681	31895	1720	5.53%	-1154	-3.51%	214	0.68%	-940	-2.86%
Kartini	27859	29021	27535	26306	1162	4.17%	-1486	-5.12%	-1229	-4.46%	-2715	-9.36%
Pasar Baru	31328	28479	22146	18977	-2849	-9.09%	-6333	-22.24%	-3169	-14.31%	-9502	-33.36%
Gunung Sahari Utara	26791	24294	23940	22815	-2497	-9.32%	-354	-1.46%	-1125	-4.70%	-1479	-6.09%
KEMAYORAN	210970	212145	219864	202772	1175	0.56%	7719	3.64%	-17092	-7.77%	-9373	-4.42%
Gunung Sahari Selatan	28884	27143	27859	27656	-1741	-6.03%	716	2.64%	-203	-0.73%	513	1.89%
Kemayoran	22992	23198	20872	18338	206	0.90%	-2326	-10.03%	-2534	-12.14%	-4860	-20.95%
Kebon Kosong	40460	38149	41786	43204	-2311	-5.71%	3637	9.53%	1418	3.39%	5055	13.25%
Serdang	51679	53280	58882	49545	1601	3.10%	5602	10.51%	-9337	-15.86%	-3735	-7.01%
Harapan Mulia	66955	70375	70465	64029	3420	5.11%	90	0.13%	-6436	-9.13%	-6346	-9.02%
SENEN	147379	134216	134678	129853	-13163	-8.93%	462	0.34%	-4825	-3.58%	-4363	-3.25%
Senen	18468	17024	10596	7999	-1444	-7.82%	-6428	-37.76%	-2597	-24.51%	-9025	-53.01%
Kwitang	19679	18366	17840	17692	-1313	-6.67%	-526	-2.86%	-148	-0.83%	-674	-3.67%
Kenari	16210	14593	14490	14574	-1617	-9.98%	-103	-0.71%	84	0.58%	-19	-0.13%
Kramat	33092	30141	30851	30096	-2951	-8.92%	710	2.36%	-755	-2.45%	-45	-0.15%
Paschan	33917	29156	31184	30422	-4761	-14.04%	2028	6.96%	-762	-2.44%	1266	4.34%
Bungur	26013	24936	29717	29070	-1077	-4.14%	4781	19.17%	-647	-2.18%	4134	16.58%
CEMPAKA PUTIH	189417	191025	196752	193073	1608	0.85%	5727	3.00%	-3679	-1.87%	2048	1.07%
Tanah Tinggi	42858	38933	39059	36499	-3925	-9.16%	126	0.32%	-2560	-6.55%	-2434	-6.25%
Johar Baru	36938	35397	35812	34933	-1541	-4.17%	415	1.17%	-879	-2.45%	-464	-1.31%
Gahur	19805	19770	19166	17997	-35	-0.18%	-604	-3.06%	-1169	-6.10%	-1773	-8.97%
Kampung Rawa	22471	18820	19188	17119	-3651	-16.25%	368	1.96%	-2069	-10.78%	-1701	-9.04%
Rawa Sari	25405	24765	22513	23419	-640	-2.52%	-2252	-9.09%	906	4.02%	-1346	-5.44%
Cempaka Putih Barat	24531	31105	35507	36442	6574	26.80%	4402	14.15%	935	2.63%	5337	17.16%
Cempaka Putih Timur	17409	22235	25507	26664	4826	27.72%	3272	14.72%	1157	4.54%	4429	19.92%
MENTENG	125041	115503	117152	117109	-9538	-7.63%	1649	1.43%	-43	-0.04%	1606	1.39%
Kebon Sirih	28625	25167	27170	25722	-3458	-12.08%	2003	7.96%	-1448	-5.33%	555	2.21%
Gondangdia	11258	9496	9077	8773	-1762	-15.65%	-419	-4.41%	-304	-3.35%	-723	-7.61%
Cikini	15292	14405	14132	14248	-887	-5.80%	-273	-1.90%	116	0.82%	-157	-1.09%
Menteng	37875	36155	37677	38620	-1720	-4.54%	1522	4.21%	943	2.50%	2465	6.82%
Pegangsaan	31991	30280	29096	29746	-1711	-5.35%	-1184	-3.91%	650	2.23%	-534	-1.76%
TANAH ABANG	245392	226533	219767	212999	-18859	-7.69%	-6766	-2.99%	-6768	-3.08%	-13534	-5.97%
Kampung Bali	28536	25169	24259	23338	-3367	-11.80%	-910	-3.62%	-921	-3.80%	-1831	-7.27%
Kebon Kacang	31322	27853	26944	26568	-3469	-11.08%	-909	-3.26%	-376	-1.40%	-1285	-4.61%
Kebon Melati	57307	55699	54621	53319	-1608	-2.81%	-1078	-1.94%	-1302	-2.38%	-2380	-4.27%
Potamburan	31456	32188	30951	30452	732	2.33%	-1237	-3.84%	-499	-1.61%	-1736	-5.39%
Karet Tengsin	48767	44252	41972	40885	-4515	-9.26%	-2280	-5.15%	-1087	-2.59%	-3367	-7.61%
Bendungan Hilir	33847	31855	31961	30264	-1992	-5.89%	106	0.33%	-1697	-5.31%	-1591	-4.99%
Gelora	14157	9517	9059	8173	-4640	-32.78%	-458	-4.81%	-886	-9.78%	-1344	-14.12%
CENTRAL JAKARTA												
Total	1234257	1180208	1171515	1130924	-54049	-4.38%	-8693	-0.74%	-40591	-3.46%	-49284	-4.18%

Source: Central Bureau of Statistics, 'Jakarta Pusat Dalam Angka', 1976, 81, 86, 90, Jakarta

CENTRAL JAKARTA: POPULATION DENSITY BY SECONDARY DISTRICTS (KELURAHAN), 1975 - 1989

KECAMATAN	Area	1975	1980	1985	1989	1975 - 80	Change	1980 - 85	Change	1985 - 89	Change	1980 - 89	Change
& Kelurahan	(km2)	pers/km2	pers/km2	pers/km2	pers/km2	pers/km2	%	pers/km2	%	pers/km2	%	pers/km2	%
GAMBIR	7.60	20459	18869	17388	16749	-1590	-7.77%	-1481	-7.85%	-638	-3.67%	-2120	-11.23%
Cideng	1.26	24467	19098	18551	18233	-5369	-21.94%	-548	-2.87%	-318	-1.72%	-866	-4.53%
Duri Pulo	0.72	53761	51392	50685	50086	-2369	-4.41%	-707	-1.38%	-599	-1.18%	-1306	-2.54%
Petojo Utara	1.12	26164	24057	22915	20236	-2107	-8.05%	-1142	-4.75%	-2679	-11.69%	-3821	-15.88%
Petojo Selatan	1.14	24968	24610	22604	22378	-359	-1.44%	-2005	-8.15%	-226	-1.00%	-2232	-9.07%
Kebon Kelapa	0.78	23124	23259	21099	20063	-135	-0.58%	-2160	-9.29%	-1036	-4.91%	-3196	-13.74%
Gambir	2.58	3933	3565	1701	1719	-368	-9.36%	-1864	-52.29%	18	1.07%	-1846	-51.78%
SAWAH BESAR	6.22	25815	25302	24302	23766	-512	-1.98%	-1001	-3.96%	-536	-2.20%	-1536	-6.07%
Manggadua Selatan	1.29	33702	33141	35546	37078	-560	-1.66%	2405	7.26%	1533	4.31%	3937	11.88%
Karang Anyar	0.51	61010	64382	62120	62539	3373	5.53%	-2263	-3.51%	420	0.68%	-1843	-2.86%
Kartini	0.55	50633	52765	50064	47829	2113	4.17%	-2702	-5.12%	-2235	-4.46%	-4936	-9.36%
Pasar Baru	1.89	16576	15068	11717	10041	-1507	-9.09%	-3351	-22.24%	-1677	-14.31%	-5028	-33.36%
Gunung Sahari Utara	1.98	13531	12270	12091	11523	-1261	-9.32%	-179	-1.46%	-568	-4.70%	-747	-6.09%
KEMAYORAN	7.21	29261	29424	30494	28124	163	0.56%	1071	3.64%	-2371	-7.77%	-1300	-4.42%
Gunung Sahari Selatan	1.56	18515	17399	17858	17728	-1116	-6.03%	459	2.64%	-130	-0.73%	329	1.89%
Kemayoran	0.49	46922	47343	42596	37424	420	0.90%	-4747	-10.03%	-5171	-12.14%	-9918	-20.93%
Kebon Kosong	1.24	32629	30765	33698	34842	-1864	-5.71%	2933	9.53%	1144	3.39%	4077	13.25%
Serdang	1.50	34453	35520	39255	33030	1067	3.10%	3735	10.51%	-6225	-15.86%	-2490	-7.01%
Harapan Mulia	2.42	27667	29081	29118	26458	1413	5.11%	37	0.13%	-2660	-9.13%	-2622	-9.02%
SEKEN	4.23	34841	31730	31839	30698	-3112	-8.91%	109	0.34%	-1141	-3.58%	-1031	-3.25%
Senen	0.82	22522	20761	12922	9755	-1761	-7.82%	-7839	-37.76%	-3167	-24.51%	-11006	-53.01%
Kwitang	0.45	43731	40813	39644	39316	-2918	-6.67%	-1169	-2.86%	-329	-0.83%	-1498	-3.67%
Kenari	0.91	17813	16036	15923	16015	-1777	-9.98%	-113	-0.71%	92	0.58%	-21	-0.13%
Kramat	0.71	46608	42452	43452	42389	-4156	-8.92%	1000	2.36%	-1063	-2.45%	-63	-0.15%
Paseban	0.71	47770	41065	43921	42848	-6706	-14.04%	2856	6.96%	-1073	-2.44%	1783	4.34%
Bungur	0.63	41290	39581	47170	46143	-1710	-4.14%	7589	19.17%	-1027	-2.18%	6562	16.58%
CEMPAKA PUTIH	7.07	26792	27019	27829	27309	227	0.85%	810	3.00%	-520	-1.87%	290	1.07%
Tanah Tinggi	0.62	69126	62795	62998	58869	-6331	-9.16%	203	0.32%	-4129	-6.55%	-3926	-6.25%
Johar Baru	1.19	31040	29745	30094	29355	-1295	-4.17%	349	1.17%	-739	-2.45%	-390	-1.31%
Galur	0.27	73352	73222	70985	66656	-130	-0.18%	-2237	-3.06%	-4330	-6.10%	-6567	-8.97%
Kampung Rawa	0.30	74903	62733	63960	57063	-12170	-16.25%	1227	1.96%	-6897	-10.78%	-5670	-9.04%
Rawa Sari	1.25	20324	19812	18010	18735	-512	-2.52%	-1802	-9.09%	725	4.02%	-1077	-5.44%
Cempaka Putih Barat	1.22	20107	25496	29104	29870	5389	26.80%	3608	14.15%	766	2.63%	4375	17.16%
Cempaka Putih Timur	2.22	7842	10016	11490	12011	2174	27.72%	1474	14.72%	521	4.54%	1995	19.92%
MENTENG	6.53	19149	17688	17941	17934	-1461	-7.63%	253	1.43%	-7	-0.04%	246	1.39%
Kebon Sirih	0.83	34488	30322	32735	30990	-4166	-12.08%	2413	7.96%	-1745	-5.33%	669	2.21%
Gondangdia	1.46	7711	6504	6217	6009	-1207	-15.65%	-287	-4.41%	-208	-3.35%	-495	-7.61%
Cikini	0.82	18649	17567	17234	17376	-1082	-5.80%	-333	-1.90%	141	0.82%	-191	-1.09%
Menteng	2.44	15523	14818	15441	15828	-705	-4.54%	624	4.21%	386	2.50%	1010	6.82%
Pegangsaan	0.98	32644	30898	29690	30353	-1746	-5.35%	-1208	-3.91%	663	2.23%	-545	-1.76%
TANAH ABANG	9.30	26386	24358	23631	22903	-2028	-7.69%	-728	-2.99%	-728	-3.08%	-1455	-5.97%
Kampung Bali	0.73	39090	34478	33232	31970	-4612	-11.80%	-1247	-3.62%	-1262	-3.80%	-2508	-7.27%
Kebon Kacang	0.71	44115	39230	37949	37420	-4886	-11.08%	-1280	-3.26%	530	1.40%	-1810	-4.61%
Kebon Melati	1.26	45482	44206	43350	42317	-1276	-2.81%	-856	-1.94%	-1033	-2.38%	-1889	-4.27%
Petamburan	0.90	34951	35764	34390	33836	813	2.33%	-1374	-3.84%	-554	-1.61%	-1929	-5.39%
Karet Tengsin	1.53	31874	28923	27433	26722	-2951	-9.26%	-1490	-5.15%	-710	-2.59%	-2201	-7.61%
Bendungan Hilir	1.58	21422	20161	20228	19154	-1261	-5.89%	67	0.33%	-1074	-5.31%	-1007	-4.99%
Cikora	2.59	5466	3675	3498	3156	-1792	-32.78%	-177	-4.81%	-342	-9.78%	-519	-14.12%
CENTRAL JAKARTA													
Total	48.16	25628	24506	24325	23483	-1122	-4.38%	-181	-0.74%	-843	-3.46%	-1023	-4.18%

Source: Central Bureau of Statistics, 'Jakarta Pusat Dalam Angka', 1976, 81, 86, 90, Jakarta

WEST JAKARTA: POPULATION BY SECONDARY DISTRICTS (KELURAHAN), 1975 - 1989

KECAMATAN & Kelurahan	1975 (person)	1980 (person)	1985 (person)	1989 (person)	1975 - 80 (person)	Change %	1980 - 85 (person)	Change %	1985 - 89 (person)	Change %	1980 - 89 (person)	Change %
KEBON JERUK	118743	181414	293711	427350	62671	52.78%	112298	61.90%	133638	45.50%	245936	135.57%
Sukabumi Udik	10186	15824	21972	24696	5638	55.35%	6148	38.86%	2724	12.40%	8872	56.07%
Sukabumi Ilir	12619	21502	28228	34625	8883	70.39%	6726	31.28%	6397	22.66%	13122	61.03%
Kelapa Dua	6565	10447	16486	20488	3882	59.13%	6039	57.81%	4002	24.27%	10041	96.11%
Kebon Jeruk	16151	24630	34714	44430	8479	52.50%	10084	40.94%	9716	27.99%	19800	80.39%
Duri Kepa	15123	25832	36210	47713	10709	70.81%	10379	40.18%	11502	31.76%	21881	84.71%
Kedoya	17559	25642	48878	74628	8083	46.04%	23236	90.62%	25749	52.68%	48985	191.03%
Kembangan	13200	19156	29846	38967	5956	45.12%	10690	55.81%	9121	30.56%	19811	103.42%
Meruya Ilir	7610	11079	23849	46801	3469	45.58%	12771	115.27%	22951	96.23%	35722	322.44%
Meruya Udik	5230	6694	15040	32125	1464	27.99%	8346	124.68%	17085	113.60%	25431	379.90%
Srengseng	7603	10833	19732	30930	3230	42.49%	8899	82.15%	11197	56.75%	20096	185.51%
Joglo	6897	9774	18754	31948	2877	41.72%	8980	91.87%	13194	70.35%	22173	226.85%
CENGKARENG	181642	254944	338588	436800	73302	40.36%	83644	32.81%	98212	29.01%	181856	71.33%
Duri Kosambi	8656	11095	18510	23157	2439	28.18%	7415	66.83%	4648	25.11%	12062	108.72%
Rawa Buaya	19033	21067	23558	32063	2034	10.69%	2490	11.82%	8506	36.11%	10996	52.19%
Kedaung Kali Angke	14360	22379	23494	26704	8019	55.84%	1114	4.98%	3210	13.66%	4325	19.32%
Kapuk	35985	56981	58655	73947	20996	58.35%	1674	2.94%	15292	26.07%	16967	29.78%
Cengkareng	42410	62374	91546	118505	19964	47.07%	29171	46.77%	26959	29.45%	56130	89.99%
Semanan	14860	17519	27205	32620	2659	17.89%	9686	55.29%	5415	19.90%	15101	86.20%
Kalideres	14460	19725	28119	39045	5265	36.41%	8394	42.56%	10926	38.86%	19320	97.95%
Pegadungan	8318	10827	15635	27718	2509	30.16%	4808	44.41%	12083	77.28%	16891	156.01%
Tegal Alur	16318	24904	40107	48623	8586	52.62%	15203	61.05%	8516	21.23%	23719	95.24%
Kamal	7242	8073	11761	14418	831	11.48%	3688	45.68%	2657	22.60%	6345	78.60%
GROGOL PETAMBURAN	333708	434308	565424	609754	100600	30.15%	131116	30.19%	44331	7.84%	175447	40.40%
Tanjung Duren	37233	57504	69433	75823	20271	54.44%	11929	20.75%	6390	9.20%	18319	31.86%
Tomang	39791	44475	57523	63612	4684	11.77%	13047	29.34%	6090	10.59%	19137	43.03%
Grogol	26804	28687	37347	40141	1883	7.03%	8660	30.19%	2794	7.48%	11454	39.93%
Jelambar	78048	108364	147006	146309	30316	38.84%	38642	35.66%	-697	-0.47%	37945	35.02%
Palmira	62358	85003	113417	129910	22645	36.31%	28414	33.43%	16494	14.54%	44908	52.83%
Slipi	16883	20933	27754	31964	4050	23.99%	6821	32.58%	4210	15.17%	11031	52.70%
Kota Bambu	42952	54049	71279	76994	11097	25.84%	17229	31.88%	5716	8.02%	22945	42.45%
Jati Pulo	29639	35292	41666	45000	5653	19.07%	6373	18.06%	3334	8.00%	9707	27.51%
TAMBORA	253930	292555	376805	398041	38625	15.21%	84250	28.80%	21236	5.64%	105486	36.06%
Kali Baru	23955	29234	36726	41827	5279	22.04%	7491	25.63%	5101	13.89%	12592	43.07%
Dun	37130	44465	58424	64746	7335	19.76%	13959	31.39%	6322	10.82%	20280	45.61%
Tanah Sareal	34334	37847	48637	53327	3513	10.23%	10790	28.51%	4690	9.64%	15480	40.90%
Krendang	23137	26174	33808	36595	3037	13.12%	7634	29.17%	2787	8.24%	10421	39.82%
Jembatan Besi	33559	42004	54525	43979	8445	25.16%	12522	29.81%	-10547	-19.34%	1975	4.70%
Angke	26587	32561	43126	48078	5974	22.47%	10565	32.44%	4953	11.48%	15517	47.65%
Jembatan Lima	25653	27081	35268	38180	1428	5.57%	8187	30.23%	2912	8.26%	11099	40.98%
Tambora	14552	15559	18621	19443	1007	6.92%	3062	19.68%	822	4.42%	3884	24.97%
Pekojan	28852	31050	40762	44532	2198	7.62%	9712	31.28%	3770	9.25%	13482	43.42%
Roa Malaka	6171	6579	6907	7334	408	6.62%	328	4.98%	427	6.18%	755	11.47%
TAMAN SARI	153201	162350	209167	229327	9149	5.97%	46818	28.84%	20160	9.64%	66978	41.26%
Krukut	24013	26570	32650	34004	2557	10.65%	6080	22.88%	1353	4.14%	7433	27.98%
Maphar	22294	23955	29859	32677	1661	7.45%	5904	24.65%	2818	9.44%	8721	36.41%
Taman Sari	21115	21581	27991	31093	466	2.21%	6410	29.70%	3102	11.08%	9512	44.08%
Mangga Besar	16386	16284	18209	19903	-102	-0.62%	1925	11.82%	1694	9.30%	3619	22.22%
Tangki	15764	17293	27373	29818	1529	9.70%	10081	58.29%	2445	8.93%	12526	72.44%
Keagungan	22365	24004	31758	37381	1639	7.33%	7755	32.31%	5622	17.70%	13377	55.73%
Gilodok	12807	13056	15187	16246	249	1.94%	2131	16.32%	1059	6.97%	3190	24.43%
Pinangisia	18457	19606	26138	28205	1149	6.23%	6532	33.32%	2067	7.91%	8599	43.86%
WEST JAKARTA												
Total	1041224	1325570	1783695	2101272	284346	27.31%	458125	34.56%	317577	17.80%	775702	58.52%
*) Secondary districts in peri-urban area												
Source: Central Bureau of Statistics, 'Jakarta Barat Dalam Angka', 1976, 81, 86, 90, Jakarta												

**WEST JAKARTA: POPULATION DENSITY BY SECONDARY DISTRICTS (KELURAHAN),
1975 - 1989**

KECAMATAN	Area	1975	1980	1985	1989	1975 - 80	Change	1980 - 85	Change	1985 - 89	Change	1980 - 89	Change
& Kelurahan	(km2)	pers/km2	pers/km2	pers/km2	pers/km2	pers/km2	%	pers/km2	%	pers/km2	%	pers/km2	%
KEBON JERUK	42.15	2817	4304	6968	10139	1487	52.78%	2664	61.90%	3171	45.50%	5835	135.57%
* Sukabumi Udik	1.57	6488	10079	13995	15730	3591	55.35%	3916	38.86%	1735	12.40%	5651	56.07%
* Sukabumi Ilir	1.60	7887	13439	17642	21640	5552	70.39%	4204	31.28%	3998	22.66%	8202	61.03%
* Kelapa Dua	1.50	4377	6965	10991	13659	2588	59.13%	4026	57.81%	2608	24.27%	6694	96.11%
* Kebon Jeruk	2.69	6004	9156	12905	16517	3152	52.50%	3749	40.94%	3612	27.99%	7361	80.39%
* Duri Kupa	3.86	3918	6692	9381	12361	2774	70.81%	2689	40.18%	2980	31.76%	5669	84.71%
* Ketoya	6.29	2792	4077	7771	11865	1285	46.40%	3694	90.62%	4094	52.68%	7788	191.03%
* Kembangan	7.25	1821	2642	4117	5375	822	45.12%	1475	55.81%	1258	30.56%	2733	103.42%
* Menya Ilir	4.76	1599	2327	5010	9832	729	45.58%	2683	115.27%	4822	96.23%	7505	322.44%
* Menya Udik	2.85	1835	2349	5277	11272	514	27.99%	2928	124.68%	5995	113.60%	8923	379.90%
* Srengseng	4.92	1545	2202	4011	6287	657	42.49%	1809	82.15%	2276	56.75%	4085	185.51%
* Joglo	4.86	1419	2011	3859	6574	592	41.72%	1848	91.87%	2715	70.35%	4562	226.85%
CENGKARENG	55.33	3283	4608	6119	7894	1325	40.36%	1512	32.81%	1775	29.01%	3287	71.33%
* Duri Kosambi	5.03	1721	2206	3680	4604	485	28.18%	1474	66.83%	924	25.11%	2398	108.72%
* Rawa Buaya	4.67	4076	4511	5044	6866	436	10.69%	533	11.82%	1821	36.11%	2355	52.19%
* Kedaung Kali Angke	2.61	5502	8574	9001	10231	3073	55.84%	427	4.98%	1230	13.66%	1657	19.32%
* Kapuk	7.18	5012	7936	8169	10299	2924	58.35%	233	2.94%	2130	26.07%	2363	29.78%
* Cengkareng	8.44	5025	7390	10847	14041	2365	47.07%	3456	46.77%	3194	29.45%	6650	89.90%
* Semanan	5.98	2485	2930	4549	5455	445	17.89%	1620	55.29%	905	19.90%	2525	86.20%
* Kalideres	4.93	2933	4001	5704	7920	1068	36.41%	1703	42.56%	2216	38.86%	3919	97.95%
* Pegadungan	5.95	1398	1820	2628	4658	422	30.16%	808	44.41%	2031	77.28%	2839	156.01%
* Legal Alur	7.78	2097	3201	5155	6250	1104	52.62%	1954	61.05%	1095	21.23%	3049	95.24%
* Kamal	2.76	2624	2925	4261	5224	301	11.48%	1336	45.68%	963	22.60%	2299	78.60%
GROGOL PETAMBURAN	18.83	17722	23065	30028	32382	5343	30.15%	6963	30.19%	2354	7.84%	9317	40.40%
* Tanjung Duren	2.70	13790	21298	25716	28083	7508	54.44%	4418	20.75%	2367	9.20%	6785	31.86%
* Tomang	1.88	21165	23657	30597	33836	2492	11.77%	6940	29.34%	3239	10.59%	10179	43.03%
* Grogol	1.22	21970	23514	30612	32903	1544	7.03%	7098	30.19%	2290	7.48%	9389	39.93%
* Jelambar	5.49	14216	19738	26777	26650	5522	38.84%	7039	35.66%	-127	-0.47%	6912	35.02%
* Palmerah	4.44	14045	19145	25544	29259	5100	36.31%	6400	33.43%	3715	14.54%	10114	52.83%
* Slipi	0.97	17405	21581	28612	32953	4175	23.99%	7032	32.58%	4341	15.17%	11372	52.70%
* Kota Bambu	1.26	34089	42896	56570	61107	8807	25.84%	13674	31.88%	4536	8.02%	18210	42.45%
* Jati Pulo	0.87	34068	40566	47891	51724	6498	19.07%	7325	18.06%	3833	8.00%	11158	27.51%
TANJUBORA	5.48	46338	53386	68760	72635	7048	15.21%	15374	28.80%	3875	5.64%	19249	36.06%
* Kali Baru	0.32	74859	91358	114768	130709	16498	22.04%	23411	25.63%	15940	13.89%	39351	43.07%
* Duri	0.82	45280	54226	71249	78958	8946	19.76%	17023	31.39%	7709	10.82%	24732	45.61%
* Tanah Sareal	0.62	55377	61044	78446	86011	5666	10.23%	17402	28.51%	7565	9.64%	24967	40.90%
* Keadang	0.32	72303	81792	105650	114359	9489	13.12%	23858	29.17%	8709	8.24%	32567	39.82%
* Jembatan Besi	0.55	61016	76370	99137	79961	15354	25.16%	22767	29.81%	-19176	-19.34%	3591	4.70%
* Angke	0.80	33234	40702	53907	60098	7468	22.47%	13206	32.44%	6191	11.48%	19396	47.65%
* Jembatan Lima	0.46	55767	58872	76670	83000	3104	5.57%	17799	30.23%	6330	8.26%	24128	40.98%
* Tambora	0.28	51971	55567	66502	69440	3595	6.92%	10936	19.68%	2937	4.42%	13873	24.97%
* Pekojan	0.78	36990	39808	52259	57092	2818	7.62%	12451	31.28%	4833	9.25%	17284	43.42%
* Roa Malaka	0.53	11643	12414	13032	13838	770	6.62%	619	4.98%	806	6.18%	1424	11.47%
TAMAN SARI	4.36	35138	37236	47974	52598	2098	5.97%	10738	28.84%	4624	9.64%	15362	41.26%
* Krukut	0.55	43660	48310	59365	61825	4650	10.65%	11055	22.88%	2460	4.14%	13515	27.98%
* Mapliar	0.59	37786	40602	50608	55384	2816	7.45%	10006	24.65%	4776	9.44%	14782	36.41%
* Taman Sari	0.68	31051	31737	41164	45725	685	2.21%	9427	29.70%	4561	11.08%	13988	44.08%
* Mangga Besar	0.51	32129	31930	35705	39026	-199	-0.62%	3774	11.82%	3322	9.30%	7096	22.22%
* Tangki	0.37	42605	46737	73982	80590	-1131	-9.70%	27245	58.29%	6609	8.93%	33854	72.44%
* Keagungan	0.32	69891	75012	99245	116815	5121	7.33%	24233	32.31%	17570	17.70%	41803	55.73%
* Glodok	0.38	33703	34358	39966	42753	655	1.94%	5609	16.32%	2786	6.97%	8395	24.43%
* Pinangisia	0.96	19226	20423	27227	29380	1197	6.23%	6804	33.32%	2153	7.91%	8957	43.86%
WEST JAKARTA													
Total	126.15	8254	10508	14139	16657	2254	27.31%	3632	34.56%	2517	17.80%	6149	58.52%

*) Secondary districts in peri-urban area

Source: Central Bureau of Statistics, 'Jakarta Barat Dalam Angka', 1976, 81, 86, 90, Jakarta

NORTH JAKARTA: POPULATION BY SECONDARY DISTRICTS (KELURAHAN), 1975 - 1989

KECAMATAN & Kelurahan	1975 (person)	1980 (person)	1985 (person)	1989 (person)	1975 - 80 (person)	Change %	1980 - 85 (person)	Change %	1985 - 89 (person)	Change %	1980 - 89 (person)	Change %
KEP. SERIBU	10281	9836	13474	14246	-445	-4.33%	3638	36.99%	772	5.73%	4410	44.84%
* Pulau Panggang	2695	2909	3102	3443	214	7.94%	193	6.63%	341	10.99%	534	18.36%
* Pulau Kelapa	3851	3410	5433	5643	-441	-11.45%	2023	59.33%	210	3.87%	2233	65.48%
* Pulau Tidung	2916	2653	3794	3941	-263	-9.02%	1141	43.01%	147	3.87%	1288	48.55%
* Pulau Untung Jawa	819	864	1145	1219	45	5.49%	281	32.52%	74	6.46%	355	41.09%
PENJARINGAN	186092	209467	236118	249067	23375	12.56%	26651	12.72%	12949	5.48%	39600	18.91%
* Kamal Muara	1961	2083	2211	3168	122	6.22%	128	6.14%	957	43.28%	1085	52.09%
* Kapuk Muara	4169	4291	5039	6216	122	2.93%	748	17.43%	1177	23.36%	1925	44.86%
Pejagalan	39047	43715	57678	51811	4668	11.95%	13963	31.94%	-5867	-10.17%	8096	18.52%
Penjarangan	46606	51195	54654	64322	4589	9.85%	3459	6.76%	9608	17.69%	13127	25.64%
Mangga Dua Utara	25555	25720	27004	30103	165	0.65%	1284	4.99%	3099	11.48%	4383	17.04%
Pademangan Barat	34714	47288	52951	54423	12574	36.22%	5663	11.98%	1472	2.78%	7135	15.09%
Pademangan Timur	34040	35175	36581	39024	1135	3.33%	1406	4.00%	2443	6.68%	3849	10.94%
TANJUNG PRIOK	190878.5	185132	226886	277372	-5747	-3.01%	41754	22.55%	50486	22.25%	92240	49.82%
Sunter	25971	24152	52174	82795	-1819	-7.00%	28022	116.02%	30621	58.69%	58643	242.81%
Papanggo	53482	53325	69178	69348	-157	-0.29%	15853	29.73%	170	0.25%	16023	30.05%
Sungai Bambu	28617	29628	25717	30362	1011	3.53%	-3911	-13.20%	4645	18.06%	734	2.48%
Kebon Hawang	46529	45912	49447	66173	-617	-1.32%	3535	7.70%	16726	33.83%	20261	44.13%
Tanjung Priok	36281	32115	30370	28694	-4166	-11.48%	-1745	-5.43%	-1676	-5.52%	-3421	-10.65%
KOJA	230558.5	224781	263317	309138	-5778	-2.51%	38536	17.14%	45821	17.40%	84357	37.53%
Koja Utara	43770	42022	39320	37892	-1748	-3.99%	-2702	-6.43%	-1428	-3.63%	-4130	-9.83%
Koja Selatan	25572	22131	21461	30330	-3441	-13.46%	-670	-3.03%	8869	41.33%	8199	37.05%
Lagoa	57606	53030	56906	54933	-4576	-7.94%	3876	7.31%	-1973	-3.47%	1903	3.59%
Tugu	33038	32849	44353	62610	-189	-0.57%	11504	35.02%	18257	41.16%	29761	90.60%
Rawa Badak	50385	40810	45445	56068	-9575	-19.00%	4635	11.36%	10623	23.38%	15258	37.39%
Kelapa Gading	16021	27661	49060	46748	11640	72.65%	21399	77.36%	-2312	-4.71%	19087	69.00%
Pegangsaan Dua	4167	6278	6772	520557	2111	50.66%	494	7.87%	13785	203.56%	14279	227.45%
CH. INCING	108795.5	145427	158662	177214	36632	33.67%	13235	9.10%	18552	11.69%	31787	21.86%
Kali Baru	32172	45226	45564	46877	13054	40.58%	338	0.75%	1313	2.88%	1651	3.65%
* Cilincing	16214	16046	18896	19826	-168	-1.04%	2850	17.76%	930	4.92%	3780	23.56%
* Senper	47420	65514	68027	75478	18095	38.16%	2513	3.84%	7451	10.95%	9964	15.21%
* Marunda	2503	2556	3913	6136	53	2.12%	1357	53.09%	2223	56.81%	3580	140.06%
* Sukapura	10487	16085	22262	28897	5598	53.38%	6177	38.40%	6635	29.80%	12812	79.65%
NORTH JAKARTA												
Total	726606	774643	898457	1027037	48038	6.61%	123814	15.98%	128580	14.31%	252394	32.58%
*) Secondary districts in peri-urban area												
Source: Central Bureau of Statistics, 'Jakarta Utara Dalam Angka', 1976, 81, 86, 90, Jakarta												

**NORTH JAKARTA: POPULATION DENSITY BY SECONDARY DISTRICTS (KELURAHAN),
1975 - 1989**

KECAMATAN	Area	1975	1980	1985	1989	1975 - 80	Change	1980 - 85	Change	1985 - 89	Change	1980 - 89	Change
& Kelurahan	(km2)	pers/km2	pers/km2	pers/km2	pers/km2	pers/km2	%	pers/km2	%	pers/km2	%	pers/km2	%
KEP. SERIBU	11.80	871	834	1142	1207	-38	-4.33%	308	36.99%	65	5.73%	374	44.84%
• Pulau Panggang	0.98	2750	2968	3165	3513	218	7.94%	197	6.63%	348	10.99%	545	18.36%
• Pulau Kelapa	6.92	557	493	785	815	-64	-11.45%	292	59.33%	30	3.87%	323	65.48%
• Pulau Tidung	1.75	1666	1516	2168	2252	-150	-9.02%	652	43.01%	84	3.87%	736	48.55%
• Pulau Untung Jawa	2.15	381	402	533	567	21	5.49%	131	32.52%	34	6.46%	165	41.09%
PENJARINGAN	41.62	4471	5033	5673	5984	562	12.56%	640	12.72%	311	5.48%	951	18.91%
• Kanal Muara	10.53	186	198	210	301	12	6.22%	12	6.14%	91	43.28%	103	52.09%
• Kapuk Muara	10.06	414	427	501	618	12	2.93%	74	17.43%	117	23.36%	191	44.86%
Pejagalan	3.23	12089	13534	17857	16041	1445	11.95%	4323	31.94%	-1816	-10.17%	2507	18.52%
Penjaringan	3.95	11799	12961	13836	16284	1162	9.85%	876	6.76%	2448	17.69%	3323	25.64%
Mangga Dua Utara	7.71	3315	3336	3502	3904	21	0.65%	167	4.99%	402	11.48%	568	17.04%
Pademangan Barat	3.53	9834	13396	15000	15417	3562	36.22%	1604	11.98%	417	2.78%	2021	15.09%
Pademangan Timur	2.61	13042	13477	14016	14952	435	3.33%	539	4.00%	936	6.68%	1475	10.94%
TANJUNG PRIOK	24.90	7666	7435	9112	11139	-231	-3.01%	1677	22.55%	2028	22.25%	3704	49.82%
Sunter	11.33	2292	2132	4605	7308	-161	-7.00%	2473	116.02%	2703	58.69%	5176	242.81%
Papanggo	3.89	13748	13708	17784	17827	-40	-0.29%	4075	29.73%	44	0.25%	4119	30.05%
Sungai Bumbu	2.36	12126	12554	10897	12865	428	3.53%	-1657	-13.20%	1968	18.06%	311	2.48%
Kebon Bawang	1.73	26895	26539	28582	38250	-356	-1.32%	2043	7.70%	9668	33.83%	11712	44.13%
Tanjung Priok	5.59	6490	5745	5433	5133	-745	-11.48%	-312	-5.43%	-300	-5.52%	-612	-10.65%
KOJA	27.46	8196	8186	9589	11258	-210	-2.51%	1403	17.14%	1669	17.40%	3072	37.53%
Koja Utara	1.45	30186	28981	27117	26132	-1205	-3.99%	-1863	-6.43%	-985	-3.63%	-2848	-9.83%
Koja Selatan	0.83	30810	26664	25857	36542	-4146	-13.46%	-807	-3.03%	10686	41.33%	9878	37.05%
Lagoa	1.58	36459	33563	36016	34768	-2896	-7.94%	2453	7.31%	-1249	-3.47%	1204	3.59%
Tugu	4.23	7810	7766	10485	14801	-43	-0.57%	2720	35.02%	4316	41.16%	7036	90.60%
Rawa Badak	3.25	15503	12557	13983	17252	-2946	-19.00%	1426	11.36%	3269	23.38%	4695	37.39%
Kelapa Gading	9.84	1628	2811	4986	4751	1183	72.65%	2175	77.36%	-235	-4.71%	1940	69.00%
Pegangsaan Dua	6.28	664	1000	1078	3273	336	50.66%	79	7.87%	2195	203.56%	2274	227.45%
CILINCING	42.56	2556	3417	3728	4164	861	33.67%	311	9.10%	436	11.69%	747	21.86%
Kali Baru	2.47	13025	18310	18447	18979	5285	40.58%	137	0.75%	532	2.88%	668	3.65%
Cilincing	8.31	1951	1931	2274	2386	-20	-1.04%	343	17.76%	112	4.92%	455	23.56%
Semper	7.61	6231	8609	8939	9918	2378	38.16%	330	3.84%	979	10.95%	1309	15.21%
Marunda	7.92	316	323	494	775	7	2.12%	171	53.09%	281	56.81%	452	140.06%
Sukapura	16.25	645	990	1370	1778	344	53.38%	380	38.40%	408	29.80%	788	79.65%

NORTH JAKARTA													
Total	148.34	4898	5222	6057	6924	324	6.61%	835	15.98%	867	14.31%	1701	12.58%

*) Secondary districts in peri-urban area

Source: Central Bureau of Statistics, 'Jakarta Utara Dalam Angka', 1976, 81, 86, 90, Jakarta

EAST JAKARTA: POPULATION DENSITY BY SECONDARY DISTRICTS (KELURAHAN), 1975 - 1989

KECAMATAN	1975	1980	1985	1989	1975 - 80	Change	1980 - 85	Change	1985 - 89	Change	1980 - 89	Change
& Kelurahan	(person)	(person)	(person)	(person)	(person)	%	(person)	%	(person)	%	(person)	%
PASAR REBO	143463	207302	294133	368781	63839	44.50%	86830	41.89%	74649	25.38%	161479	77.90%
• Pekayon	14617	20975	28175	31821	6358	43.50%	7200	34.32%	3647	12.94%	10846	51.71%
• Kalisari	6409	8351	11486	15507	1942	30.30%	3135	37.54%	4021	35.01%	7156	85.69%
• Baru	6976	11320	13439	19421	4344	62.27%	2119	18.72%	5982	44.51%	8101	71.57%
• Cijantung	11148	16142	22374	23596	4994	44.79%	6232	38.61%	1222	5.46%	7454	46.18%
• Gedong	15874	22329	32626	34811	6455	40.66%	10297	46.11%	2185	6.70%	12481	55.90%
• Pondok Ronggon	3673	4226	5186	7718	553	15.06%	960	22.72%	2532	48.82%	3492	82.63%
• Cilangkap	3570	4456	6700	9710	886	24.81%	2244	50.36%	3011	44.94%	5255	117.93%
• Munjul	4358	6073	7619	11091	1715	39.34%	1546	25.47%	3472	45.57%	5018	82.64%
• Cipayang	2984	3391	5448	10235	407	13.64%	2057	60.66%	4786	87.85%	6843	201.80%
• Seru	3547	4116	4949	7610	569	16.05%	833	20.23%	2661	53.77%	3494	84.88%
• Bambu Apus	3516	4524	6377	10895	1008	28.67%	1853	40.96%	4518	70.84%	6371	140.83%
• Lubang Buaya	12383	18128	23374	23794	5745	46.39%	5246	28.94%	420	1.80%	5666	31.26%
• Ceger	2639	3414	5427	7793	775	29.36%	2013	58.96%	2366	43.60%	4379	128.27%
• Cibubur	9653	14761	20277	31363	5108	52.91%	5516	37.37%	11086	54.67%	16602	112.48%
• Kelapa Dua Wetan	5562	8570	12132	17068	3008	54.08%	3562	41.57%	4935	40.68%	8498	99.16%
• Ciracas	14477	23661	39135	45129	9184	63.44%	15475	65.40%	5994	15.32%	21469	90.74%
• Rambutan	8991	13815	23342	31019	4824	53.65%	9527	68.96%	7677	32.89%	17204	124.53%
• Susukan	13086	19053	26067	32021	5967	45.60%	7014	36.81%	4134	15.86%	11148	58.51%
KRAMAT JATI	203498	279697	362098	398483	76199	37.44%	82401	29.46%	36385	10.05%	118786	42.47%
• Kampung Tengah	14438	23441	35684	36787	9003	62.36%	12243	52.23%	1103	3.09%	13346	56.93%
• Dukuh	8200	9851	16310	21626	1651	20.13%	6459	65.57%	5316	32.60%	11776	119.54%
• Kramat Jati	21043	27741	34770	44879	6698	31.83%	7029	25.34%	10110	29.08%	17139	61.78%
• Batu Ampar	13641	19929	25070	27676	6288	46.10%	5141	25.80%	2606	10.39%	7747	38.87%
• Bale Kambang	5957	8554	11861	13585	2597	43.60%	3307	38.65%	1724	14.53%	5030	58.80%
• Cililitan	29556	33987	41393	41124	4431	14.99%	7406	21.79%	-269	-0.65%	7137	21.00%
• Cawang	28172	33271	41923	43229	5099	18.10%	8652	26.00%	1306	3.11%	9958	29.93%
• Pinang Ranti	8163	9028	15763	20670	865	10.60%	6735	74.60%	4906	31.13%	11642	128.95%
• Makasar	13884	19365	27175	29879	5481	39.48%	7810	40.33%	2703	9.95%	10514	54.29%
• Kebon Pala	17970	33375	31230	33867	15405	85.72%	-2144	-6.43%	2636	8.44%	492	1.47%
• Halim	32160	43013	54182	52249	10853	33.75%	11168	25.96%	-1932	-3.57%	9236	21.47%
• Cipinang Melayu	10314	18141	26737	32913	7827	75.89%	8596	47.38%	6175	23.10%	14771	81.42%
JATINEGARA	315948	415992	525590	576265	100044	31.66%	109598	26.35%	50675	9.64%	160273	38.53%
• Kampung Melayu	25122	26515	29624	28373	1393	5.54%	3109	11.73%	-1251	-4.22%	1859	7.01%
• Bidaracina	39498	42580	50939	49488	3082	7.80%	8359	19.63%	-1451	-2.85%	6908	16.22%
• Bali Mester	16763	17286	19532	15906	523	3.12%	2247	13.00%	-3626	-18.57%	-1380	-7.98%
• Rawa Bunga	25031	25371	35485	44855	340	1.36%	10115	39.87%	9369	26.40%	19484	76.80%
• Cipinang Cempedak	38591	42254	48678	47423	3663	9.49%	6424	15.20%	-1254	-2.58%	5169	12.23%
• Cipinang Muara	24035	39512	54553	58451	15477	64.40%	15041	38.07%	3897	7.14%	18938	47.93%
• Cipinang Besar	57113	72430	64359	65442	15317	26.82%	-8071	-11.14%	1083	1.68%	-6988	-9.65%
• Pondok Bambu	15749	28343	40684	44838	12594	79.97%	12342	43.54%	4153	10.21%	16495	58.20%
• Klender	26574	39706	43919	50028	13132	49.42%	4213	10.61%	6109	13.91%	10322	26.00%
• Duren Sawit	11481	16763	24750	33501	5282	46.01%	7986	47.64%	8752	35.36%	16738	99.85%
• Pondok Kelapa	8425	11385	21786	31437	2960	35.13%	10401	91.35%	9651	44.30%	20052	176.12%
• Malaka	27566	53848	91282	106525	26282	95.34%	37434	69.52%	15243	16.70%	52677	97.83%
MATRAMAN	171337	186286	213908	201485	14949	8.72%	27622	14.83%	-12423	-5.81%	15198	8.16%
• Pisangan Baru	35724	37122	45061	43276	1398	3.91%	7939	21.39%	-1784	-3.96%	6155	16.58%
• Utan Kayu	61149	70419	85377	78343	9270	15.16%	14959	21.24%	-7034	-8.24%	7925	11.25%
• Kayu Manis	27438	30008	34403	34315	2570	9.37%	4394	14.64%	-88	-0.26%	4306	14.35%
• Pal Meriam	25583	26672	24601	22188	1089	4.26%	-2071	-7.77%	-2413	-9.81%	-4484	-16.81%
• Kebon Manggis	21443	22065	24466	23362	622	2.90%	2401	10.88%	-1104	-4.51%	1297	5.88%
PULO GADUNG	207035	264952	311563	303333	57917	27.97%	46611	17.59%	-8230	-2.64%	38381	14.49%
• Pisangan Timur	44370	47132	52038	49306	2762	6.22%	4906	10.41%	-2732	-5.25%	2175	4.61%
• Cipinang	31498	42114	55480	56428	10616	33.70%	13365	31.74%	948	1.71%	14313	33.99%
• Jatinegara Kaum	12904	17464	20833	23170	4560	35.34%	3369	19.29%	2337	11.22%	5707	32.68%
• Pulo Gadung	6088	8994	12074	23690	2906	47.74%	3080	34.24%	11616	96.20%	14696	163.39%
• Jati Rawanangun	70448	88813	105123	101656	18365	26.07%	16310	18.37%	-3467	-3.30%	12843	14.46%
• Kayu Putih	41727	60436	66015	49083	18709	44.84%	5580	9.23%	-16932	-25.65%	-11353	-18.78%
CAKUNG	112233	152808	202887	242436	40575	36.15%	50079	32.77%	39550	19.49%	89628	58.65%
• Jatinegara	27176	45212	57711	60720	18036	66.37%	12500	27.65%	3008	5.21%	15508	34.30%
• Rawa Teratai	11576	18839	22955	26408	7263	62.74%	4116	21.85%	3453	15.04%	7570	40.18%
• Penggilingan	11385	18153	26542	34305	6768	59.44%	8389	46.21%	7763	29.25%	16152	88.98%
• Pulo Gebang	10994	16590	27425	36877	5596	50.90%	10836	65.32%	9451	34.46%	20287	122.29%
• Ujung Menteng	9162	9723	12374	22274	561	6.13%	2651	27.26%	9900	80.00%	12551	129.08%
• Cakung	41940	44292	55879	61853	2352	5.61%	11587	26.16%	5974	10.69%	17561	39.65%
EAST JAKARTA												
Total	1153514	1507038	1910179	2090784	351524	30.65%	403141	26.75%	180605	9.45%	583746	38.73%

*) Secondary districts in peri-urban area
Source: Central Bureau of Statistics, 'Jakarta Timur Dalam Angka', 1976, 81, 86, 90, Jakarta

EAST JAKARTA: POPULATION DENSITY BY SECONDARY DISTRICTS (KELURAHAN), 1975 - 1989

KECAMATAN & Kelurahan	Area (km ²)	1975 pers/km ²	1980 pers/km ²	1985 pers/km ²	1989 pers/km ²	1975 - 80 pers/km ²	Change %	1980 - 85 pers/km ²	Change %	1985 - 89 pers/km ²	Change %	1980 - 89 pers/km ²	Change %
PASAR REBO	56.48	2540	3670	5208	6529	1130	44.50%	1537	41.89%	1322	25.38%	2859	77.90%
• Pekayon	3.14	4655	6680	8973	10134	2025	43.50%	2293	34.32%	1161	12.94%	3454	51.71%
• Kalisari	2.89	2218	2889	3974	5366	672	30.30%	1085	37.54%	1391	35.01%	2476	85.69%
• Baru	1.89	3691	5989	7110	10276	2298	62.27%	1121	18.72%	3165	44.51%	4286	71.57%
• Cijantung	2.37	4704	6811	9440	9956	2107	44.79%	2630	38.61%	516	5.46%	3145	46.18%
• Gedong	2.65	5990	8426	12312	13136	2436	40.66%	3886	46.11%	824	6.70%	4710	55.90%
• Pondok Ranggon	4.47	822	945	1160	1727	124	15.06%	215	22.72%	566	48.82%	781	82.63%
• Cilaungkap	4.30	830	1036	1558	2258	206	24.81%	522	50.36%	700	44.94%	1222	117.93%
• Munjul	1.90	2294	3196	4010	5837	902	39.34%	814	25.47%	1827	45.57%	2641	82.64%
• Cipayang	3.08	969	1101	1769	3323	132	13.64%	668	60.66%	1554	87.85%	2222	201.80%
• Setu	3.18	1115	1294	1556	2393	179	16.05%	262	20.23%	837	53.77%	1099	84.88%
• Bambu Apus	3.17	1109	1427	2012	3437	318	28.67%	585	40.96%	1425	70.84%	2010	140.83%
• Lubang Buaya	3.72	3329	4873	6283	6396	1544	46.39%	1410	28.94%	113	1.80%	1523	31.26%
• Ceger	3.63	727	940	1495	2147	213	29.36%	554	58.96%	652	43.60%	1206	128.27%
• Cibubur	4.51	2140	3273	4496	6954	1132	52.91%	1223	37.37%	2458	54.67%	3681	112.48%
• Kelapa Dua Wetan	3.37	1650	2543	3600	5065	893	54.08%	1057	41.57%	1464	40.68%	2522	99.16%
• Ciracas	3.93	3684	6020	9958	11483	2337	63.44%	3938	65.40%	1525	15.32%	5463	90.74%
• Rambutan	2.09	4302	6610	11168	14842	2308	53.65%	4558	68.96%	3673	32.89%	8232	124.53%
• Susukan	2.19	5975	8700	11903	13790	2725	45.60%	3203	36.81%	1888	15.86%	5091	58.51%
KRAMAT JATI	34.98	5818	7996	10352	11392	2178	37.44%	2356	29.46%	1040	10.05%	3396	42.47%
• Kampung Tengah	2.03	7112	11547	17578	18122	4435	62.36%	6031	52.23%	543	3.09%	6574	56.93%
• Dukuh	1.98	4141	4975	8237	10922	834	20.13%	3262	65.57%	2685	32.60%	5947	119.54%
• Kramat Jati	1.52	13844	18250	22875	29526	4406	31.83%	4624	25.34%	6651	29.08%	11276	61.78%
• Batu Ampar	2.55	5349	7815	9831	10853	2466	46.10%	2016	25.80%	1022	10.39%	3038	38.87%
• Bale Kambang	1.67	3567	5122	7102	8135	1555	43.60%	1980	38.65%	1032	14.53%	3012	58.80%
• Cililitan	1.80	16420	18882	22996	22847	2462	14.99%	4114	21.79%	-149	-0.65%	3965	21.00%
• Cawang	1.79	15739	18587	23421	24150	2849	18.10%	4833	26.00%	729	3.11%	5563	29.93%
• Pinang Ranti	1.89	4319	4777	8340	10936	458	10.60%	3564	74.60%	2596	31.13%	6160	128.95%
• Makasar	1.85	7505	10468	14689	16151	2963	39.48%	4222	40.33%	1461	9.95%	5683	54.29%
• Kebon Pala	2.30	7813	14511	13578	14725	6698	85.72%	-932	-6.43%	1146	8.44%	214	1.47%
• Itatim	13.07	2461	3291	4146	3998	830	33.75%	855	25.96%	-148	-3.57%	707	21.47%
• Cipinang Melayu	2.53	4077	7170	10568	13009	3094	75.89%	3398	47.38%	2441	23.10%	5838	81.42%
JATINEGARA	33.44	9448	12440	15717	17233	2992	31.66%	3277	26.35%	1515	9.64%	4793	38.53%
• Kampung Melayu	0.48	52338	55239	61716	59111	2902	5.54%	6477	11.73%	-2605	-4.22%	3872	7.01%
• Bidaracina	1.26	31348	33794	40428	39276	2446	7.80%	6634	19.63%	-1152	-2.85%	5483	16.22%
• Bali Mester	0.67	25019	25800	29153	23740	780	3.12%	3353	13.00%	-5413	-18.57%	-2059	-7.98%
• Rawa Bunga	0.88	28444	28830	40324	50971	386	1.36%	11494	39.87%	10647	26.40%	22141	76.80%
• Cipinang Cempedak	1.67	23108	25302	29148	28397	2193	9.49%	3846	15.20%	-751	-2.58%	3095	12.23%
• Cipinang Muara	2.90	8288	13625	18811	20155	5337	64.40%	5186	38.07%	1344	7.14%	6530	47.93%
• Cipinang Besar	2.75	20768	26338	23403	23797	5570	26.82%	-2935	-11.14%	394	1.68%	-2541	-9.65%
• Pondok Bambu	5.02	3137	5646	8104	8932	2509	79.97%	2459	43.54%	827	10.21%	3286	58.20%
• Klender	3.08	8628	12892	14259	16243	4264	49.42%	1368	10.61%	1983	13.91%	3351	26.00%
• Duren Sawit	4.58	2507	3660	5404	7315	1153	46.01%	1744	47.64%	1911	35.36%	3655	99.85%
• Pondok Kelapa	5.72	1473	1990	3809	5496	517	35.13%	1818	91.35%	1687	44.30%	3506	176.12%
• Malaka	4.43	6223	12155	20605	24046	5933	95.34%	8450	69.52%	3441	16.70%	11891	97.83%
MATRAMAN	4.85	35327	38410	44105	41543	3082	8.72%	5695	14.83%	-2562	-5.81%	3134	8.16%
• Pisangan Baru	0.68	52535	54591	66266	63642	2055	3.91%	11675	21.39%	-2624	-3.96%	9051	16.58%
• Utan Kayu	2.17	28179	32451	39344	36103	4272	15.16%	6893	21.24%	-3241	-8.24%	3652	11.25%
• Kayu Manis	0.57	48137	52646	60356	60201	4509	9.37%	7709	14.64%	-154	-0.26%	7555	14.35%
• Pal Meriam	0.65	39358	41034	37847	34135	1675	4.26%	-3187	-7.77%	-3712	-9.81%	-6899	-16.81%
• Kebon Manggis	0.78	27491	28289	31367	29951	798	2.90%	3078	10.88%	-1415	-4.51%	1663	5.88%
PULO GADUNG	15.61	13263	16973	19959	19432	3710	27.97%	2986	17.59%	-527	-2.64%	2459	14.49%
• Pisangan Timur	1.80	24650	26184	28910	27392	1534	6.22%	2726	10.41%	-1518	-5.25%	1208	4.61%
• Cipinang	1.54	20453	27347	36026	36641	6894	33.70%	8679	31.74%	616	1.71%	9294	33.99%
• Jatinegara Kaum	1.23	10491	14198	16937	18838	3707	35.34%	2739	19.29%	1900	11.22%	4640	32.68%
• Pulo Gadung	1.92	3171	4684	6289	12339	1514	47.74%	1604	34.24%	6050	96.20%	7654	163.39%
• Jati Rawamangun	4.75	14831	18697	22131	21401	3866	26.07%	3434	18.37%	-730	-3.30%	2704	14.46%
• Kayu Putih	4.37	9549	13830	15106	11232	4281	44.84%	1277	9.23%	-3875	-25.65%	-2598	-18.78%
CAKUNG	42.48	2642	3597	4776	5707	955	36.15%	1179	32.77%	931	19.49%	2110	58.65%
• Jatinegara	6.60	4118	6850	8744	9200	2733	66.37%	1894	27.65%	456	5.21%	2350	34.30%
• Rawa Teratai	4.10	2823	4595	5599	6441	1771	62.74%	1004	21.85%	842	15.04%	1846	40.18%
• Penggilingan	4.48	2541	4052	5925	7657	1511	59.44%	1873	46.21%	1733	29.25%	3605	88.98%
• Pulo Gebang	6.86	1603	2418	3998	5376	816	50.90%	1580	65.32%	1378	34.46%	2957	122.29%
• Ijwang Menteng	4.43	2068	2195	2793	5028	127	6.13%	598	27.26%	2235	80.00%	2833	129.08%
• Cakung	16.01	2620	2767	3490	3863	147	5.61%	724	26.16%	373	10.69%	1097	39.65%
EAST JAKARTA													
Total	187.84	6141	8023	10169	11131	1882	30.65%	2146	26.75%	961	9.45%	3108	38.73%

*) Secondary districts in peri-urban area
Source: Central Bureau of Statistics, 'Jakarta Timur Dalam Angka', 1976, 81, 86, 90, Jakarta

SOUTH JAKARTA: POPULATION BY SECONDARY DISTRICTS (KELURAHAN), 1975 - 1989

KECAMATAN	1975	1980	1985	1989	1975 - 80	Change	1980 - 85	Change	1985 - 89	Change	1980 - 89	Change
& Kelurahan	(person)	(person)	(person)	(person)	(person)	%	(person)	%	(person)	%	(person)	%
KEBAYORAN LAMA	226771	334306	387802	492016	107535	47.42%	53496	16.00%	104214	26.87%	157710	47.18%
• Pondok Pinang	27367	41255	46389	58694	13888	50.75%	5134	12.44%	12305	26.52%	17439	42.27%
• Kebayoran Lama	53842	82734	96083	111422	28892	53.66%	13349	16.14%	15339	15.96%	28686	34.67%
• Cipulir	21361	33678	38360	44570	12317	57.66%	4682	13.90%	6211	16.19%	10892	32.34%
• Grogol Selatan	32376	43550	47005	56699	11174	34.51%	3454	7.93%	9695	20.62%	13149	30.19%
• Grogol Utara	35283	51275	53504	54938	15992	45.33%	2229	4.35%	1434	2.68%	3663	7.14%
• Bintaro	13357	19418	27782	44003	6061	45.37%	8364	43.08%	16221	58.39%	24585	126.61%
• Pesanggrahan	11390	16146	22499	35631	4756	41.76%	6352	39.34%	13133	58.37%	19485	120.67%
• Petukangan Selatan	8070	10950	13243	21894	2880	35.68%	2293	20.95%	8651	65.33%	10945	99.96%
• Petukangan Utara	11998	17585	23095	35037	5587	46.56%	5510	31.34%	11942	51.71%	17453	99.25%
• Ulu-Jambi	11727	17716	19843	29127	5989	51.07%	2127	12.01%	9285	46.79%	11412	64.42%
PASAR MINGGU	166208	232951	301276	437949	66743	40.16%	68325	29.33%	136672	45.36%	204998	88.00%
• Pasar Minggu	21353	32352	35297	36499	10999	51.51%	2946	9.11%	1202	3.41%	4148	12.82%
• Jati Padang	13700	19670	23509	32273	5970	43.58%	3839	19.52%	8763	37.28%	12603	64.07%
• Ragunan	20267	23868	25554	35225	3601	17.77%	1686	7.06%	9671	37.85%	11357	47.58%
• Cilandak Timur	18636	21474	42227	50839	2838	15.23%	20753	96.64%	8612	20.39%	29365	136.74%
• Pejaten	26541	43519	56827	83181	16978	63.97%	13307	30.58%	26354	46.38%	39662	91.14%
• Ciganjur	9492	12741	18852	36347	3249	34.23%	6111	47.96%	17495	92.80%	23606	185.27%
• Srengseng Sawah	20971	29043	37078	55891	8072	38.49%	8035	27.67%	18813	50.74%	26848	92.44%
• Jagakarsa	10927	14998	19062	29619	4071	37.26%	4064	27.10%	10557	55.38%	14621	97.49%
• Lonteng Agung	6433	9931	13951	40853	3498	54.37%	4020	40.48%	26902	192.83%	30922	311.37%
• Tanjung Barat	17888	25355	28919	37222	7467	41.74%	3564	14.06%	8304	28.71%	11868	46.81%
MAMPANG PRAPATAN	167628	239974	276712	311386	72346	43.16%	36738	15.31%	34674	12.53%	71412	29.76%
• Bangka	13101	22312	23432	26009	9211	70.31%	1120	5.02%	2577	11.00%	3697	16.57%
• Tegol Parang	13987	21830	22724	23367	7843	56.07%	894	4.10%	642	2.83%	1537	7.04%
• Pela Mampang	37575	48994	55414	55340	11419	30.39%	6420	13.10%	-74	-0.13%	6346	12.95%
• Mampang Prapatan	15050	19931	22885	28355	4881	32.43%	2954	14.82%	5470	23.90%	8424	42.27%
• Kuntungan Barat	15120	18951	21479	24848	3831	25.34%	2528	13.34%	3369	15.68%	5897	31.11%
• Kalibata	20765	32169	41089	44478	11404	54.92%	8920	27.73%	3389	8.25%	12309	38.26%
• Rawajati	7049	9420	11566	13260	2371	33.63%	2146	22.78%	1695	14.65%	3841	40.77%
• Duren Tiga	13782	21565	26384	31201	7783	56.47%	4819	22.35%	4817	18.26%	9636	44.69%
• Pengadegan	10076	15105	15068	24115	5029	49.91%	-38	-0.25%	9047	60.05%	9010	59.65%
• Cikoko	7368	10618	11489	14839	3250	44.12%	870	8.19%	3350	29.16%	4220	39.75%
• Pancoran	13755	19077	25182	25573	5322	38.69%	6105	32.00%	392	1.55%	6496	34.05%
KEBAYORAN BARU	189024	214690	247122	254018	25666	13.58%	32432	15.11%	6896	2.79%	39327	18.32%
• Gandaria Utara	32471	43401	54740	60216	10984	33.88%	11339	26.12%	5476	10.00%	16815	38.74%
• Cipete Utara	24632	33009	41008	41917	8377	34.01%	7999	24.23%	908	2.21%	8907	26.98%
• Pulo	17860	15816	18074	14451	-2044	-11.44%	2257	14.27%	-3623	-20.05%	-1366	-8.64%
• Petogogan	17988	18340	20807	21774	352	1.96%	2467	13.45%	967	4.65%	3434	18.72%
• Melawai	8886	8165	7996	8366	-721	-8.12%	-168	-2.06%	369	4.62%	201	2.46%
• Krajan Pela	19414	21079	23543	22975	1665	8.58%	2463	11.69%	-568	-2.41%	1895	8.99%
• Gunung	16804	17625	18461	19754	821	4.89%	836	4.74%	1293	7.00%	2129	12.08%
• Selong	6595	6537	7141	7953	-58	-0.88%	604	9.24%	812	11.37%	1416	21.66%
• Rawa Barat	11582	12129	12690	11608	547	4.72%	560	4.82%	-1082	-8.52%	-521	-4.30%
• Senayan	32846	38587	42662	45004	5741	17.48%	4074	10.56%	2342	5.49%	6417	16.63%
SETIA BUDI	235734	245977	257148	280263	10243	4.35%	11171	4.54%	23114	8.99%	34285	13.94%
• Karet Semanggi	14143	15282	13819	16178	1139	8.03%	-1463	-9.57%	2359	17.07%	896	5.87%
• Kuningan Timur	14877	15209	12594	14245	332	2.23%	-2614	-17.19%	1651	13.11%	-964	-6.34%
• Karet Kuningan	37437	44855	45603	53402	7418	19.82%	748	1.67%	7799	17.10%	8547	19.05%
• Karet	42284	40515	45184	48448	-1769	-4.18%	4668	11.52%	3265	7.23%	7933	19.58%
• Menteng Atas	45496	53400	61864	65408	7904	17.37%	8464	15.85%	3544	5.73%	12008	22.49%
• Pasar Manggis	31141	34134	34194	35764	2993	9.61%	60	0.18%	1570	4.59%	1630	4.78%
• Guntur	28767	28475	31479	34005	-292	-1.02%	3004	10.55%	2527	8.03%	5531	19.42%
• Setia Budi	21589	14108	12412	12811	-7481	-34.65%	-1696	-12.02%	399	3.22%	-1297	-9.19%
TEBET	231973	273905	292069	348632	41932	18.08%	18164	6.63%	56563	19.37%	74728	27.28%
• Menteng Dalam	41670	56240	52885	71769	14570	34.97%	-3355	-5.97%	18884	35.71%	15529	27.61%
• Tebet Barat	30840	32705	35533	42914	1865	6.05%	2828	8.65%	7381	20.77%	10209	31.22%
• Tebet Timur	26924	29222	31077	34068	2298	8.53%	1855	6.35%	2991	9.62%	4846	16.58%
• Kebon Baru	28385	38701	41978	50624	10316	36.34%	3276	8.47%	8647	20.60%	11923	30.81%
• Bukit Duri	38795	44605	50044	57271	5810	14.98%	5439	12.19%	7227	14.44%	12666	28.40%
• Manggarai Selatan	29929	33345	38923	42664	3416	11.41%	5578	16.73%	3741	9.61%	9319	27.95%
• Manggarai	35430	39087	41630	49322	3657	10.32%	2543	6.51%	7692	18.48%	10235	26.19%
CILANDAK	85586	108339	135114	180733	22753	26.59%	26774	24.71%	45619	33.76%	72393	66.82%
• Lebak Bulus	8994	11599	14564	27157	2605	28.96%	2965	25.56%	12593	86.47%	15558	134.13%
• Pondok Labu	12105	14586	18800	33441	2481	20.49%	4214	28.89%	14641	77.88%	18855	129.27%
• Cilandak Barat	32708	42701	52512	68080	9993	30.55%	9812	22.98%	15567	29.65%	25379	59.44%
• Gandaria Selatan	14285	18909	22265	25207	4624	32.37%	3356	17.75%	2942	13.22%	6298	33.31%
• Cipete Selatan	17494	20545	26973	26848	3051	17.44%	6428	31.29%	-125	-0.46%	6303	30.68%

SOUTH JAKARTA												
Total	1302924	1650143	1897243	2304996	347219	26.65%	247100	14.97%	407753	21.49%	654853	39.68%

*) Secondary districts in peri-urban area

Source: Central Bureau of Statistics, 'Jakarta Selatan Dalam Angka', 1976, 81, 86, 90, Jakarta

SOUTH JAKARTA: POPULATION DENSITY BY SECONDARY DISTRICTS (KELURAHAN), 1975 - 1989

KECAMATAN	Area	1975	1980	1985	1989	1975 - 80	Change	1980 - 85	Change	1985 - 89	Change	1980 - 89	Change
& Kelurahan	(km ²)	pers/km ²	pers/km ²	pers/km ²	pers/km ²	pers/km ²	%	pers/km ²	%	pers/km ²	%	pers/km ²	%
KEBAYORAN LAMA	31.00	7315	10784	12510	15871	3469	47.42%	1726	16.00%	3362	26.87%	5087	47.18%
• Pondok Pinang	6.84	4001	6031	6782	8581	2030	50.75%	751	12.44%	1799	26.52%	2550	42.27%
• Kebayoran Lama	2.57	20950	32192	37386	43355	11242	53.66%	5194	16.14%	5968	15.96%	11163	34.67%
• Cipulir	1.94	11011	17360	19773	22974	6349	57.66%	2413	13.90%	3201	16.19%	5615	32.34%
• Grogol Selatan	2.85	11360	15281	16493	19894	3921	34.51%	1212	7.93%	3402	20.62%	4614	30.19%
• Grogol Utara	3.33	10595	15398	16667	16498	4803	45.33%	669	4.35%	431	2.68%	1100	7.14%
• Bintaro	4.56	2929	4258	6093	9650	1329	45.37%	1834	43.08%	3557	58.39%	5392	126.61%
• Pesanggrahan	2.10	5424	7689	10714	16967	2265	41.76%	3025	39.34%	6254	58.37%	9278	120.67%
• Petukangan Selatan	2.11	3825	5189	6276	10376	1365	35.68%	1087	20.95%	4100	65.33%	5187	99.96%
• Petukangan Utara	2.99	4013	5881	7724	11718	1868	46.56%	1843	31.34%	3994	51.71%	5837	99.25%
• Ujungmaja	1.71	6858	10360	11604	17034	3502	51.07%	1244	12.01%	5430	46.79%	6674	64.42%
PASAR MINGGU	41.77	3979	5577	7213	10485	1598	40.16%	1636	29.33%	3272	45.36%	4908	88.00%
• Pasar Minggu	2.79	7653	11596	12651	13082	3942	51.51%	1056	9.11%	431	3.41%	1487	12.82%
• Jati Padang	2.50	5480	7868	9404	12909	2388	43.58%	1536	19.52%	3505	37.28%	5041	64.07%
• Ragunan	5.05	4013	4726	5060	6975	713	17.77%	334	7.06%	1915	37.85%	2249	47.58%
• Cilendak Timur	3.53	5279	6083	11962	14402	804	15.23%	5879	96.64%	2440	20.39%	8319	136.74%
• Pejaten	2.88	9216	15111	19731	28882	5895	63.97%	4621	30.58%	9151	46.38%	13771	91.14%
• Ciganjur	7.49	1267	1701	2517	4853	434	34.23%	816	47.96%	2336	92.80%	3152	185.27%
• Senengseng Sawah	6.75	3107	4303	5493	8280	1196	38.49%	1190	27.67%	2787	50.74%	3977	92.44%
• Jagakarsa	4.85	2253	3092	3930	6107	839	37.26%	838	27.10%	2177	55.38%	3015	97.49%
• Luiteng Agung	2.28	2821	4356	6119	17918	1534	54.37%	1763	40.48%	11799	192.83%	13562	311.37%
• Tanjung Barat	3.65	4901	6946	7923	10198	2046	41.74%	977	14.06%	2275	28.71%	3251	46.81%
MAMPANG PRAPATAN	15.97	10496	15027	17327	19498	4530	43.16%	2300	15.31%	2171	12.53%	4472	29.76%
• Bangka	3.30	3970	6761	7101	7881	2791	70.31%	339	5.02%	781	11.00%	1120	16.57%
• Tegol Parang	1.06	13195	20594	21438	22044	7399	56.07%	844	4.10%	606	2.83%	1450	7.04%
• Pela Mampang	1.62	23194	30243	34206	34161	7049	30.39%	3963	13.10%	-46	-0.13%	3918	12.95%
• Mampang Prapatan	0.78	19295	25552	29339	36352	6257	32.43%	3787	14.82%	7013	23.90%	10800	42.27%
• Kuningan Barat	0.98	15429	19338	21918	25355	3910	25.34%	2580	13.34%	3437	15.68%	6017	31.11%
• Kalibata	2.20	9439	14622	18677	20217	5184	54.92%	4054	27.73%	1540	8.25%	5595	38.26%
• Rawajati	0.67	10521	14059	17262	19792	3539	33.63%	3203	22.78%	2529	14.65%	5732	40.77%
• Duren Tiga	2.45	5625	8802	10769	12735	3177	56.47%	1967	22.35%	1966	18.26%	3933	44.69%
• Pengadegan	0.95	10606	15900	15861	25384	5294	49.91%	-40	-0.25%	9524	60.05%	9484	59.65%
• Cikoko	0.72	10233	14748	15956	20610	4515	44.12%	1209	8.19%	4653	29.16%	5862	39.75%
• Pancoran	1.24	11093	15385	20308	20624	4292	38.69%	4923	32.00%	316	1.55%	5239	34.05%
KEBAYORAN BARU	12.91	14642	16630	19142	19676	1988	13.58%	2512	15.11%	534	2.79%	3046	18.32%
• Gandaria Utara	1.52	21327	28553	36013	39616	7226	33.88%	7460	26.12%	3603	10.00%	11062	38.74%
• Cipete Utara	1.83	13460	18038	22409	22905	4578	34.01%	4371	24.23%	496	2.21%	4867	26.98%
• Pulo	1.27	14063	12454	14231	11378	-1609	-11.44%	1778	14.27%	-2853	-20.05%	-1075	-8.64%
• Petogogan	0.86	20916	21326	24194	25319	410	1.96%	2868	13.45%	1125	4.65%	3993	18.72%
• Melawai	1.26	7052	6480	6346	6639	-572	-8.12%	-134	-2.06%	293	4.62%	159	2.46%
• Kramat Pela	1.23	15784	17138	19140	18679	1354	8.58%	2003	11.69%	-462	-2.41%	1541	8.99%
• Gunung	1.32	12730	13352	13986	14965	622	4.89%	633	4.74%	979	7.00%	1613	12.08%
• Selong	1.40	4711	4669	5101	5681	-41	-0.88%	431	9.24%	580	11.37%	1011	21.66%
• Rawa Barat	0.69	16786	17578	18391	16823	793	4.72%	812	4.62%	-1567	-8.52%	-755	-4.30%
• Senayan	1.53	21468	25221	27884	29415	3753	17.48%	2663	10.56%	1531	5.49%	4194	16.63%
SETIA BUDI	9.05	26048	27180	28414	30968	1132	4.35%	1234	4.54%	2554	8.99%	3788	13.94%
• Karet Semanggi	0.90	15714	16980	15355	17976	1266	8.05%	-1626	-9.57%	2621	17.07%	996	5.87%
• Kuningan Timur	2.15	6920	7074	5858	6626	154	2.23%	-1216	-17.19%	768	13.11%	-448	-6.34%
• Karet Kuningan	1.79	20915	25059	25476	29833	4144	19.82%	418	1.67%	4357	17.10%	4775	19.05%
• Karet	0.94	44983	43101	48068	51541	-1882	-4.18%	4966	11.52%	3473	7.23%	8440	19.58%
• Menteng Atas	0.90	50551	59333	68738	72676	8782	17.37%	9405	15.85%	3938	5.73%	13343	22.49%
• Pasar manggis	0.78	39924	43761	43838	45851	3837	9.61%	77	0.18%	2013	4.59%	2090	4.78%
• Guntur	0.65	44257	43807	48428	52316	-450	-1.02%	4621	10.55%	3888	8.03%	8509	19.42%
• Setia Budi	0.94	22967	15008	13204	13629	-7959	-34.65%	-1805	-12.02%	425	3.22%	-1380	-9.19%
TEBET	9.53	24341	28741	30647	36583	4400	18.08%	1906	6.63%	5935	19.37%	7841	27.28%
• Menteng Dalam	2.58	16151	21799	20498	27818	5647	34.97%	-1300	-5.97%	7319	35.71%	6019	27.61%
• Tebet Barat	1.72	17930	19015	20658	24950	1084	6.05%	1644	8.65%	4291	20.77%	5935	31.22%
• Tebet Timur	1.39	19370	21023	22358	24509	1653	8.53%	1335	6.35%	2152	9.62%	3486	16.58%
• Kebon Baru	1.30	21835	29770	32291	38942	7936	36.34%	2520	8.47%	6651	20.60%	9172	30.81%
• Bukit Duri	1.08	35921	41301	46337	53029	5380	14.98%	5036	12.19%	6692	14.44%	11728	28.40%
• Manggarai Selatan	0.51	58684	65382	76319	83654	6697	11.41%	10937	16.73%	7335	9.61%	18272	27.95%
• Manggarai	0.95	37295	41144	43821	51918	3849	10.32%	2677	6.51%	8097	18.48%	10774	26.19%
CILENDAK	18.20	4703	5953	7424	9930	1250	26.59%	1471	24.71%	2507	33.76%	3978	66.82%
• Lebak Bulus	4.41	2039	2630	3302	6158	591	28.96%	672	25.56%	2856	86.47%	3528	134.13%
• Pondok Labu	3.61	3353	4040	5208	9263	687	20.49%	1167	28.89%	4056	77.88%	5223	129.27%
• Cilendak Barat	6.05	5406	7058	8680	11253	1652	30.55%	1622	22.98%	2573	29.65%	4195	59.44%
• Gandaria Selatan	1.76	8116	10744	12650	14322	2627	32.37%	1907	17.75%	1672	13.22%	3578	33.31%
• Cipete Selatan	2.37	7381	8669	11381	11328	1287	17.44%	2712	31.29%	-53	-0.46%	2659	30.68%
SOUTH JAKARTA													
Total	138.43	9412	11920	13705	16651	2508	26.65%	1785	14.97%	2946	21.49%	4731	39.68%

*) Secondary districts in peri-urban area

Source: Central Bureau of Statistics, 'Jakarta Selatan Dalam Angka', 1976, 81, 86, 90, Jakarta

APPENDIX B
T-test Results

T-Tests

(Two Sample T-Test Results)

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Response: HEADAGE

Group:	MIGRSTAT = nonmigrant		MIGRSTAT = migrants	
Count - Mean	27	44.59259	73	43.43835
95% C.L. of Mean	40.07663	49.10856	40.63127	46.24544
Std.Dev - Std.Error	11.41611	2.197032	12.03119	1.408145

	----- Equal Variances -----		----- Unequal Variances -----	
T Value - Prob.	.431666	0.6669	.4423114	0.6602
Degrees of Freedom		98		50.38452
Diff. - Std. Error	1.15424	2.673919	1.15424	2.609563
95% C.L. of Diff.	-4.152027	6.460506	-4.087238	6.395717

F-ratio testing group variances	1.110659	Prob. Level	0.7475
---------------------------------	----------	-------------	--------

	25	95% Conf. Limit Plots	86
MIGRSTAT=nonmigrant		<---a---	
MIGRSTAT=migrants		<-a-->	

	25	Line Plots	86
MIGRSTAT=nonmigrant	1..2.1.111..2.2.1..213.2...12....11.1..1.....		
MIGRSTAT=migrants	.112.435.51351414223.811.121311.....14.....1.....1		

Enter ┘ to continue, or ESC to quit -->

T-Tests

(Two Sample T-Test Results)

C:\ncss\periurbn

Response: EDUCATE

Group:	MIGRSTAT = nonmigrant		MIGRSTAT = migrants	
Count - Mean	27	3.37037	73	4.630137
95% C.L. of Mean	2.854038	3.886703	4.332697	4.927577
Std.Dev - Std.Error	1.30526	.2511974	1.27483	.1492075

	----- Equal Variances -----		----- Unequal Variances -----	
T Value - Prob.	-4.35929	0.0000	-4.311766	0.0001
Degrees of Freedom		98		46.93825
Diff. - Std. Error	-1.259767	.2889843	-1.259767	.2921695
95% C.L. of Diff.	-1.833242	-.6862907	-1.847548	-.6719848

F-ratio testing group variances	1.048311	Prob. Level	0.8849
---------------------------------	----------	-------------	--------

	1	95% Conf. Limit Plots	6
MIGRSTAT=nonmigrant		<-----a----->	
MIGRSTAT=migrants		<--a-->	

	1	Line Plots	6
MIGRSTAT=nonmigrant	1.....7.....6.....A.....3		
MIGRSTAT=migrants	1.....5.....5.....M.....G.....O		

Enter ┘ to continue, or ESC to quit -->

T-Tests

(Two Sample T-Test Results)

---C:\ncss\periurbn

Response: OCCUPATN

Group:	MIGRSTAT = nonmigrant		MIGRSTAT = migrants	
Count - Mean	27	3.592593	73	2.808219
95% C.L. of Mean	3.150196	4.034989	2.579293	3.037145
Std.Dev - Std.Error	1.118352	.215227	.9811775	.1148381

	----- Equal Variances -----		----- Unequal Variances -----	
T Value - Prob.	3.416124	0.0009	3.215334	0.0025
Degrees of Freedom		98		42.83724
Diff. - Std. Error	.7843733	.2296091	.7843733	.2439477
95% C.L. of Diff.	.3287247	1.240022	.2923616	1.276385

F-ratio testing group variances	1.299159	Prob. Level	0.4227
---------------------------------	----------	-------------	--------

MIGRSTAT=nonmigrant
MIGRSTAT=migrants

1

95% Conf. Limit Plots

<-----a----->

<--a-->

5

MIGRSTAT=nonmigrant
MIGRSTAT=migrants

1

Line Plots

1.....3.....9.....7.....7

3.....T.....P.....B.....5

5

Enter ┘ to continue, or ESC to quit -->

T-Tests

(Two Sample T-Test Results)

---C:\ncss\periurbn

Response: HHSIZE

Group:	MIGRSTAT = nonmigrant		MIGRSTAT = migrants	
Count - Mean	27	6.814815	73	6.041096
95% C.L. of Mean	5.896641	7.732989	5.491934	6.590258
Std.Dev - Std.Error	2.321091	.4466942	2.353711	.275481

	----- Equal Variances -----		----- Unequal Variances -----	
T Value - Prob.	1.464756	0.1462	1.474285	0.1468
Degrees of Freedom		98		48.58041
Diff. - Std. Error	.7737193	.5282241	.7737193	.52481
95% C.L. of Diff.	-.2745168	1.821955	-.2811365	1.828575

F-ratio testing group variances	1.028304	Prob. Level	0.9318
---------------------------------	----------	-------------	--------

MIGRSTAT=nonmigrant
MIGRSTAT=migrants

2

95% Conf. Limit Plots

<-----a----->

<--a-->

13

MIGRSTAT=nonmigrant
MIGRSTAT=migrants

2

Line Plots

.....2....1.....5....6....3....5....2....1.....1.....1

2....7....B....E....F....6....5....3....9.....1

13

Enter ┘ to continue, or ESC to quit -->

T-Tests

(Two Sample T-Test Results)

C:\ncss\periurbn

Response: INCOME

Group:	MIGRSTAT = nonmigrant		MIGRSTAT = migrants	
Count - Mean	27	111.6272	73	178.5687
95% C.L. of Mean	69.07204	154.1824	144.4132	212.7242
Std.Dev - Std.Error	107.577	20.70321	146.3907	17.13373

	----- Equal Variances -----		----- Unequal Variances -----	
T Value - Prob.	-2.166641	0.0327	-2.490983	0.0153
Degrees of Freedom		98		65.507
Diff. - Std. Error	-66.94154	30.89646	-66.94154	26.87354
95% C.L. of Diff.	-128.2541	-5.628964	-120.5946	-13.2885

F-ratio testing group variances	1.851773	Prob. Level	0.0618
---------------------------------	----------	-------------	--------

	27.3224	95% Conf. Limit Plots	595.6284
MIGRSTAT=nonmigrant	<---a--->		
MIGRSTAT=migrants		<---a--->	

	27.3224	Line Plots	595.6284
MIGRSTAT=nonmigrant	.32415112..3..3....1.....	1
MIGRSTAT=migrants	11334418E1311.51..24..1..3....1.21..1.2.....	5

Enter — to continue, or ESC to quit -->

T-Tests

(Two Sample T-Test Results)

C:\ncss\periurbn

Response: TOTINCOM

Group:	MIGRSTAT = nonmigrant		MIGRSTAT = migrants	
Count - Mean	27	175.2479	73	285.5454
95% C.L. of Mean	123.6583	226.8376	242.6408	328.45
Std.Dev - Std.Error	130.4157	25.09851	183.8893	21.52261

	----- Equal Variances -----		----- Unequal Variances -----	
T Value - Prob.	-2.857975	0.0052	-3.335985	0.0014
Degrees of Freedom		98		67.99837
Diff. - Std. Error	-110.2975	38.59287	-110.2975	33.06294
95% C.L. of Diff.	-186.8832	-33.71171	-176.2736	-44.32129

F-ratio testing group variances	1.988169	Prob. Level	0.0380
---------------------------------	----------	-------------	--------

	37.15847	95% Conf. Limit Plots	595.6284
MIGRSTAT=nonmigrant	<-----a----->		
MIGRSTAT=migrants		<-----a----->	

	37.15847	Line Plots	595.6284
MIGRSTAT=nonmigrant	1.11.2231142.1.1...2...1.1.....	1
MIGRSTAT=migrants	1221.23611321.11411432.....1.233..2..1.11...21..1.11....B	B

Enter — to continue, or ESC to quit -->

T-Tests (Two Sample T-Test Results)

C:\ncss\periurbn

Response: LICENSE

Group:	MIGRSTAT = nonmigrant	MIGRSTAT = migrants
Count - Mean	27 1.62963	73 1.30137
95% C.L. of Mean	1.434964 1.824295	1.193571 1.409169
Std.Dev - Std.Error	.4921029 9.470525E-02	.4620285 5.407634E-02

	----- Equal Variances -----	----- Unequal Variances -----
T Value - Prob.	3.099438 0.0025	3.009995 0.0043
Degrees of Freedom	98	45.33074
Diff. - Std. Error	.3282597 .1059094	.3282597 .1090566
95% C.L. of Diff.	.1180874 .538432	.1086541 .5478653

F-ratio testing group variances 1.134421 Prob. Level 0.6988

MIGRSTAT=nonmigrant

MIGRSTAT=migrants

95% Conf. Limit Plots

<-----a----->

12

MIGRSTAT=nonmigrant

MIGRSTAT=migrants

Line Plots

A.....H

Z.....M

12

Enter — to continue, or ESC to quit -->

T-Tests (Two Sample T-Test Results)
C:\ncss\periurbn
Response: HEADAGE
Group: STAYNGBR = RecentMigr STAYNGBR = LngtrmMigr
Count - Mean 63 43.03175 10 46
95% C.L. of Mean 39.83779 46.2257 41.39557 50.60444
Std.Dev - Std.Error 12.68218 1.597804 6.44636 2.038518
T Value - Prob. ----- Equal Variances ----- Unequal Variances -----
Degrees of Freedom 71 24.92111
Diff. - Std. Error -2.968254 4.109102 -2.968254 2.590084
95% C.L. of Diff. -11.16154 5.225032 -8.303028 2.36652
F-ratio testing group variances 3.870426 Prob. Level 0.0174
STAYNGBR=RecentMigr 26 95% Conf. Limit Plots 86
STAYNGBR=LngtrmMigr <---a-->
<----a---->
STAYNGBR=RecentMigr 26 Line Plots 86
STAYNGBR=LngtrmMigr 112.435..5251314222.2211.12112.....14.....1.....1
.....2..1....1.13.....2.....

Enter — to continue, or ESC to quit -->

T-Tests (Two Sample T-Test Results)
C:\ncss\periurbn
Response: EDUCATE
Group: STAYNGBR = RecentMigr STAYNGBR = LngtrmMigr
Count - Mean 63 4.666667 10 4.4
95% C.L. of Mean 4.337366 4.995967 3.632184 5.167817
Std.Dev - Std.Error 1.307546 .1647353 1.074968 .3399347
T Value - Prob. ----- Equal Variances ----- Unequal Variances -----
Degrees of Freedom 71 14.61578
Diff. - Std. Error .2666664 .4358514 .2666664 .3777477
95% C.L. of Diff. -.6023935 1.135726 -.5399068 1.07324
F-ratio testing group variances 1.479528 Prob. Level 0.4480
STAYNGBR=RecentMigr 1 95% Conf. Limit Plots 6
STAYNGBR=LngtrmMigr <---a-->
<-----a----->
STAYNGBR=RecentMigr 1 Line Plots 6
STAYNGBR=LngtrmMigr 1.....4.....5.....I.....C.....N
.....1.....4.....4.....1

Enter — to continue, or ESC to quit -->

T-Tests (Two Sample T-Test Results)

C:\ncss\periurbn

Response: OCCUPATN

Group:	STAYNGBR = RecentMigr		STAYNGBR = LngtrmMigr	
Count - Mean	63	2.714286	10	3.4
95% C.L. of Mean	2.481749	2.946822	2.5616	4.238401
Std.Dev - Std.Error	.923328	.1163284	1.173788	.3711843

	----- Equal Variances -----		----- Unequal Variances -----	
T Value - Prob.	-2.1012	0.0392	-1.762826	0.1057
Degrees of Freedom		71		11.24496
Diff. - Std. Error	-.6857145	.3263443	-.6857145	.388986
95% C.L. of Diff.	-1.336424	-3.500485E-02	-1.539079	.1676503

F-ratio testing group variances 1.616096 Prob. Level 0.3538

STAYNGBR=RecentMigr | 1 95% Conf. Limit Plots 5 |

STAYNGBR=LngtrmMigr | <--a--> <-----a-----> |

STAYNGBR=RecentMigr | 1 Line Plots 5 |

STAYNGBR=LngtrmMigr | 3.....Q.....N.....8.....3 |

STAYNGBR=LngtrmMigr |3.....2.....3.....2 |

Enter ┘ to continue, or ESC to quit -->

T-Tests (Two Sample T-Test Results)

C:\ncss\periurbn

Response: HH SIZE

Group:	STAYNGBR = RecentMigr		STAYNGBR = LngtrmMigr	
Count - Mean	63	5.777778	10	7.7
95% C.L. of Mean	5.219295	6.336261	5.823768	9.576232
Std.Dev - Std.Error	2.217558	.279386	2.626785	.8306624

	----- Equal Variances -----		----- Unequal Variances -----	
T Value - Prob.	-2.483791	0.0154	-2.193345	0.0487
Degrees of Freedom		71		11.59962
Diff. - Std. Error	-1.922222	.7739064	-1.922222	.8763884
95% C.L. of Diff.	-3.465342	-.3791022	-3.832433	-1.201117E-02

F-ratio testing group variances 1.403134 Prob. Level 0.5113

STAYNGBR=RecentMigr | 2 95% Conf. Limit Plots 13 |

STAYNGBR=LngtrmMigr | <--a--> <-----a-----> |

STAYNGBR=RecentMigr | 2 Line Plots 13 |

STAYNGBR=LngtrmMigr | 1....7....B....D....E....6....3....1....6.....1 |

STAYNGBR=LngtrmMigr | 1.....1.....1.....2.....2.....3..... |

Enter ┘ to continue, or ESC to quit -->

T-Tests

(Two Sample T-Test Results)

C:\ncss\periurbn

Response: INCOME

Group:	STAYNGBR = RecentMigr		STAYNGBR = LngtrmMigr	
Count - Mean	63	178.2375	10	180.6557
95% C.L. of Mean	142.285	214.19	54.80287	306.5086
Std.Dev - Std.Error	142.7559	17.98556	176.1981	55.71873

	----- Equal Variances -----		----- Unequal Variances -----	
T Value - Prob.	-4.819096E-02	0.9617	-4.130247E-02	0.9678
Degrees of Freedom		71		11.38672
Diff. - Std. Error	-2.418243	50.18044	-2.418243	58.54961
95% C.L. of Diff.	-102.4748	97.63835	-130.6923	125.8558

F-ratio testing group variances	1.523401	Prob. Level	0.4153
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STAYNGBR=RecentMigr	27.3224	95% Conf. Limit Plots	595.6284
STAYNGBR=LngtrmMigr	<-----a----->		

STAYNGBR=RecentMigr	27.3224	Line Plots	595.6284
STAYNGBR=LngtrmMigr	113244.7A1211.51..24..1..3....1.21..1.1.....4		

Enter ↵ to continue, or ESC to quit -->

T-Tests

(Two Sample T-Test Results)

C:\ncss\periurbn

Response: TOTINCOM

Group:	STAYNGBR = RecentMigr		STAYNGBR = LngtrmMigr	
Count - Mean	63	287.7527	10	271.6393
95% C.L. of Mean	241.8936	333.6118	125.5099	417.7688
Std.Dev - Std.Error	182.0918	22.94141	204.586	64.69578

	----- Equal Variances -----		----- Unequal Variances -----	
T Value - Prob.	.2557413	0.7989	.2347415	0.8184
Degrees of Freedom		71		11.90252
Diff. - Std. Error	16.11334	63.00641	16.11334	68.64293
95% C.L. of Diff.	-109.5174	141.7441	-133.4606	165.6873

F-ratio testing group variances	1.262325	Prob. Level	0.6509
---------------------------------	----------	-------------	--------

STAYNGBR=RecentMigr	39.34426	95% Conf. Limit Plots	595.6284
STAYNGBR=LngtrmMigr	<-----a----->		

STAYNGBR=RecentMigr	39.34426	Line Plots	595.6284
STAYNGBR=LngtrmMigr	121111161122..11414122.....1.313..2....11...21..1.11....9		

Enter ↵ to continue, or ESC to quit -->

T-Tests

(Two Sample T-Test Results)

C:\ncss\periurbn

Response: LICENSE

Group:

STAYNGBR = RecentMigr

STAYNGBR = LngtrmMigr

Count - Mean	63	1.301587	10	1.3
95% C.L. of Mean	1.185075	1.4181	.9549751	1.645025
Std.Dev - Std.Error	.4626334	5.828634E-02	.4830459	.1527525

----- Equal Variances -----

----- Unequal Variances -----

T Value - Prob.	1.002276E-02	0.9920	9.709107E-03	0.9924
Degrees of Freedom		71		12.38394
Diff. - Std. Error	1.587391E-03	.1583787	1.587391E-03	.163495
95% C.L. of Diff.	-.3142095	.3173843	-.3544838	.3576586

F-ratio testing group variances

1.090191

Prob. Level

0.8666

STAYNGBR=RecentMigr

.9549751

95% Conf. Limit Plots

2

STAYNGBR=LngtrmMigr

<-----a----->

<-----a----->

STAYNGBR=RecentMigr

.9549751

Line Plots

2

STAYNGBR=LngtrmMigr

..Z.....J

..7.....3

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APPENDIX C
Survey Questionnaire

SECTION I

First, we want to ask you some questions about how long you have lived in Jakarta and this neighborhood.

[IF RESPONDENT IS HEAD OF HOUSE USE "YOU" IN QUESTIONS]

1. Did you (head of household) grow up (was raised) in Jakarta?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, GO TO QUESTION 2; OTHERWISE ASK 2a-b]

- a. What was the name of the place where he/she grew up?

Name of Place _____

- b. Would you call that place a:

[READ CATEGORIES TO RESPONDENT]

1. _____ Provincial capital city
2. _____ Town
3. _____ Village (rural)
4. _____ Outside of country

2. How many years have you (has the head of the household) lived in Jakarta?

1. _____ Years 9. _____ Don't Know

3. How many years have you (has the head of the household) lived in this neighborhood?

Years _____

4. Before you (head of household) moved into this neighborhood where did you (he/she) live?

1. _____ Always in this neighborhood (since child)
2. _____ Another neighborhood in Jakarta
3. _____ Another city
4. _____ Town
5. _____ Village (rural)
6. _____ Another country

[IF RESPONSE IS "2", ASK QUESTION 4a; OTHERWISE GO TO 5]

- a. Where was that neighborhood? *[ASK FOR NAME OF LOCATION]*

Name _____

5. How often have you changed residences in the last ten years?

Times _____

SECTION II

Thank you for your help on those questions. We would like now to ask some questions about your dwelling and how you acquired it.

6. Excluding the bathroom, how many rooms does your dwelling have?

Rooms_____

7. What is the source of drinking water for the house?

- 1._____ Piped municipal water
- 2._____ Private pump or well (on property)
- 3._____ Neighborhood standpost (standpipe)
- 4._____ Purchase water from neighbor or water carrier
- 5._____ Other [SPECIFY] _____

8. What type of sanitation does this dwelling have?

- 1._____ Connected to city sewer
- 2._____ Toilet with tank
- 3._____ Latrine in yard
- 4._____ Other [SPECIFY] _____

9. Does the dwelling have electricity?

- 1._____ Yes 2._____ No

10. Is there public garbage collection for your dwelling?

- 1._____ Yes 2._____ No 9._____ Don't Know

11. Who owns the dwelling unit?

- 1._____ Member of household
- 2._____ Relative who lives in another dwelling
- 3._____ Private landlord who lives in building
- 4._____ Private landlord who lives elsewhere
- 5._____ Government/city
- 6._____ Other [SPECIFY] _____
- 8._____ Refused
- 9._____ Don't Know

[IF ANSWER IS "1", GO TO QUESTION 12; OTHERWISE ASK 11a-b]

a. What is your monthly rent in local currency?

Rp_____

b. Did you pay an advance, deposit or key fee before occupying this dwelling unit? [IF YES, ASK AMOUNT]

- 1._____ Yes, Amount?_____
- 2._____ No
- 8._____ Refused
- 9._____ Don't Know

12. How did you acquire this dwelling unit?

- 1. _____ Bought or buying
- 2. _____ Gift/inheritance
- 3. _____ Occupied (seized/squatted)
- 4. _____ Other [SPECIFY] _____
- 8. _____ Refused
- 9. _____ Don't Know

[IF RESPONSE IS "1", ASK QUESTION 12a, OTHERWISE GO TO 13]

a. Did you borrow money to buy the dwelling?

- 1. _____ Yes
- 2. _____ No
- 4. _____ Refused
- 9. _____ Don't Know

[IF YES, ASK 12a1), OTHERWISE GO TO 13]

1) What was the source of the loan to buy the house?

- 1. _____ Credit Group
- 2. _____ Relative/Friends (with interest)
- 3. _____ Relative/Friends (no interest)
- 4. _____ Professional moneylender
- 5. _____ Bank
- 6. _____ Other [SPECIFY] _____
- 8. _____ Refused
- 9. _____ Don't Know

13. Did you build the house?

- 1. _____ Self-built completely
- 2. _____ Made additions only
- 3. _____ Did no construction (built by someone)
- 8. _____ Refused
- 9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK QUESTION 13a; OTHERWISE GO TO 14]

a. When you built or made additions, what was the source of labor?

- 1. _____ Members of household only
- 2. _____ Some hired labor
- 3. _____ All hired labor
- 4. _____ Hired a contractor
- 5. _____ Other [SPECIFY] _____
- 8. _____ Refused
- 9. _____ Don't Know

14. Do you hold legal title to the house?

- 1. _____ Yes
- 2. _____ No
- 8. _____ Refused
- 9. _____ Don't Know

15. Do you have tenants that pay rent to you? [IF YES, ASK AMOUNT]

- 1. _____ Yes, Amount per Month? _____
- 2. _____ No
- 8. _____ Refused
- 9. _____ Don't Know

16. Who owns the land on which the dwelling sits?

- 1. _____ Member of household
- 2. _____ Relative who lives elsewhere
- 3. _____ Landlord who lives in building
- 4. _____ Landlord who lives elsewhere
- 5. _____ Government/city
- 6. _____ Other [SPECIFY] _____
- 8. _____ Refused
- 9. _____ Don't Know

[IF RESPONSE IS "1", ASK QUESTION 16a; OTHERWISE GO TO SECTION III]

a. Do you hold legal title to the land?

- 1. _____ Yes
- 2. _____ No
- 8. _____ Refused
- 9. _____ Don't Know

SECTION III HOUSEHOLD INFORMATION

In this section we need to ask a series of questions about members of your household, so we can better understand who lives here, who works, and where they work.

1. How many people live in this dwelling

Number_____

2. How many of this people are family member (related)?

Number_____

[NOTE THE NUMBER IN FAMILY, AND GO TO NEXT PAGE]

INTERVIEWER INSTRUCTIONS FOR SECTION III:

IN THIS SECTION OF THE INTERVIEW YOU WILL BE ASKING QUESTIONS ABOUT FAMILY MEMBERS OF THE HOUSEHOLD. THERE ARE SEVERAL IMPORTANT THINGS TO REMEMBER AS YOU COMPLETE THE SECTION.

- * THE NUMBERING SEQUENCE FOR THIS SECTION IS DIFFERENT FROM THE OTHERS
- * EVERY FAMILY MEMBER WILL HAVE A SEPARATE SHEET OF INFORMATION. WHEN YOU COMPLETE ONE MEMBER, CONTINUE TO THE NEXT MEMBER PAGE UNTIL ALL FAMILY MEMBERS HAVE A SEPARATE SHEET.
- * THERE ARE EIGHT SHEETS INCLUDED WITHIN THE BOOKLET. IF MORE ARE NEEDED, USE THE EXTRAS PROVIDED BUT BE CERTAIN TO ATTACH THEM TO THE INTERVIEW BOOKLET WHEN FINISHED.
- * REMEMBER THAT THE RELATIONSHIP TO BE CODED IS THE RELATIONSHIP BETWEEN A FAMILY MEMBER AND THE HEAD OF THE HOUSEHOLD; NOT THE RELATIONSHIP WITH THE RESPONDENT.
- * WHEN ASKING ABOUT THE JOB, BE CERTAIN TO GET ENOUGH DETAIL SO THE CODER CAN DETERMINE THE TYPE OF OCCUPATION.
- * THE RESPONDENT MAY BE HESITANT ABOUT AVERAGE MONTHLY EARNINGS. TRY TO SECURE AN ANSWER BUT DO NOT PRESS FOR ANSWER IF RESPONDENT IS TOO HESITANT.
- * IF A MEMBER OF THE FAMILY HAS MORE THAN ONE INCOME GENERATING ACTIVITY, BE CERTAIN TO ASK ABOUT ALL JOBS. BE CERTAIN TO PROBE AS TO WHETHER CHILDREN OR OTHERS IN FAMILY WORK IN ANY FAMILY ENTERPRISE EVEN THOUGH THEY ARE NOT PAID.
- * IN ALL FOLLOWING SECTIONS THE TERM HOUSEHOLD MEMBER REFERS ONLY TO FAMILY MEMBERS IN THE DWELLING UNIT.

MEMBER 1 (HEAD OF HOUSEHOLD)

1. What is the age of the head of the household?
Age_____ Refused_____ Don't Know_____
2. Is the head of the household male or female?
Male_____ Female_____
3. Over the last 12 months what type of activities has (he/she) had that generates money for the household? [PRESS FOR A DESCRIPTION OF THE OCCUPATION]
Activity 1_____ Code_____
Activity 2_____ Code_____
Activity 3_____ Code_____
[IF NO JOB OR WORK, GO TO NEXT MEMBER PAGE OR SECTION IV]
4. In the [1st, 2nd, or 3rd] activity, do you work for:
Activity 1_____ Activity 2_____ Activity 3_____
Codes 1. yourself (owner/self-employed) 2. non-family individual
3. family member 4. enterprise < 10 workers
5. enterprise > 10 workers 6. government
7. other [SPECIFY] _____
5. In the [1st, 2nd, and 3rd activity in sequence], how are you (they) paid for the work?
Activity 1_____ Activity 2_____ Activity 3_____
Codes 1. salary 2. wages
3. no pay (family member) 4. yourself (< 10 employees)
5. yourself (> 10 employees) 6. individual job (day worker)
7. sale of goods/services 8. piece work
9. commission 10. other [SPECIFY] _____
6. Where is (are) the work places?
Activity 1_____ Activity 2_____ Activity 3_____
Codes 1. on dwelling property 2. in neighborhood
3. Jakarta CBD 4. elsewhere in Jakarta
5. other cities outside Jakarta 6. rural area
7. other [SPECIFY] _____
7. Would you say that the [1st, 2nd, or 3rd] activity is
Activity 1_____ Activity 2_____ Activity 3_____
Codes 1. permanent 2. day labor
3. seasonal 4. other temporary
8. How many hours in a week do you (they) work at:
Activity 1_____ Activity 2_____ Activity 3_____
9. What is the usual (average) amount of money you (they) make each month from the activity?
Activity 1_____ Activity 2_____ Activity 3_____
10. Are there any legal contracts or licenses involved in these activities?
Activity 1_____ Activity 2_____ Activity 3_____

MEMBER 2

1. What is the relationship of this member of household to the head?
Code_____
- Codes 1. spouse 2. son/daughter 3. brother/sister
4. mother/father 5. grandparent 6. grandchild
7. uncle/aunt 8. other relative 9. in-law
10. other family [SPECIFY] _____
2. What is the age of this person? Age_____Refused_____Don't Know_____
3. Is this person male or female? Male_____Female_____
4. What type of work (activities) has (he/she) had that generates money for the household? [PRESS FOR A DESCRIPTION OF THE OCCUPATION]
Activity 1_____Code_____
Activity 2_____Code_____
Activity 3_____Code_____
[IF NO JOB OR WORK, GO TO NEXT MEMBER PAGE OR SECTION IV]
5. In the [1st, 2nd, or 3rd] activity, do you work for:
Activity 1_____Activity 2_____Activity 3_____
- Codes 1. yourself (owner/self-employed) 2. non-family individual
3. family member 4. enterprise < 10 workers
5. enterprise > 10 workers 6. government
7. other [SPECIFY] _____
6. In the [1st, 2nd, and 3rd activity in sequence], how are you (they) paid for the work?
Activity 1_____Activity 2_____Activity 3_____
- Codes 1. salary 2. wages
3. no pay (family member) 4. yourself (< 10 employees)
5. yourself (> 10 employees) 6. individual job (day worker)
7. sale of goods/services 8. piece work
9. commission 10. other [SPECIFY] _____
7. Where is (are) the work places?
Activity 1_____Activity 2_____Activity 3_____
- Codes 1. on dwelling property 2. in neighborhood
3. Jakarta CBD 4. elsewhere in Jakarta
5. other cities outside Jakarta 6. rural area
7. other [SPECIFY] _____
8. Would you say that the [1st, 2nd, or 3rd] activity is
Activity 1_____Activity 2_____Activity 3_____
- Codes 1. permanent 2. day labor 3. seasonal 4. other temporary
9. How many hours in a week do you (they) work at:
Activity 1_____Activity 2_____Activity 3_____
10. What is the usual (average) amount of money you (they) make each month from the activity?
Activity 1_____Activity 2_____Activity 3_____
11. Are there any legal contracts or licenses involved in these activities?
Activity 1_____Activity 2_____Activity 3_____

SECTION IV

We would like to ask a few questions about any crops or animals you grow for food for your family or for sale.

17. In the last 12 months has someone in the household grown food for consumption or for sale? [PROMPT USING LIKELY ITEMS LIKE VEGETABLES OR FLOWERS]

1. _____ Own consumption
2. _____ Sale
3. _____ Both sale and consumption
4. _____ No

[IF RESPONSE IS "4", GO TO QUESTION 18; OTHERWISE ASK 17a]

- a. Where is (are) the plots of land you use to grow things?

Plot 1 _____ Plot 2 _____ Plot 3 _____

Codes 1. adjacent to house 2. in the same neighborhood
3. edge of city not in neighborhood 4. place outside city

[IF RESPONSE IS "4", ASK QUESTION 1); OTHERWISE GO TO 17b-c]

- 1) Name of Places?

Plot 1 _____ Plot 2 _____ Plot 3 _____

- b. How long does it take you to reach your plots? (hours/minutes)

Plot 1 _____ Plot 2 _____ Plot 3 _____

- c. Which members of the household work the plots or sell produce?
[LIST MEMBERS OF THE HOUSEHOLD BY NUMBER FROM HOUSEHOLD INFORMATION IN SECTION III]

1. _____
2. _____
3. _____

12. In the last 12 months have you or someone in your household raised animals for sale or for your own consumption?

1. _____ Own consumption
2. _____ Sale
3. _____ Both sale and consumption
4. _____ No

[IF RESPONSE IS "4", GO TO SECTION V; OTHERWISE ASK 18a]

- a. What type of animals?

- | | | |
|--------------------------------|------------------|-------------------|
| 1. _____ Goats | 2. _____ Ducks | 3. _____ Chickens |
| 4. _____ Pigs | 5. _____ Rabbits | 6. _____ Birds |
| 7. _____ Other [SPECIFY] _____ | | |

b. Where is (are) the plots of land you use to raise the animals?

Plot 1_____ Plot 2_____ Plot 3_____

Codes 1. adjacent to house 2. in the same neighborhood
3. edge of city not in neighborhood 4. place outside city

[IF RESPONSE IS "4" ASK 18b1); OTHERWISE GO TO 18c]

1) Name of places?

Plot 1_____ Plot 2_____ Plot 3_____

c. How long does it take you to reach your plots? (hours/minutes)

Plot 1_____ Plot 2_____ Plot 3_____

d. Which members of the household used to help raise or sell the animals? [LIST MEMBERS OF THE HOUSEHOLD BY NUMBER FROM HOUSEHOLD INFORMATION IN SECTION III]

1. _____
2. _____
3. _____

SECTION V

One of the issues which we are concerned about is the type and quality of services available to your neighborhood. Therefore, we would now like to ask you a series of questions about the type of services in your community and how satisfied you are with them.

19. Is there a health or medical clinic in your community where you can go and receive general medical treatment? (e.g. visit physician for treatment, received medication, etc.) [IF YES, ASK NAME OF CLINIC]

1. _____ Yes, Name of Clinic _____
2. _____ No
9. _____ Don't Know

[IF RESPONSE IS YES, ASK 19a; OTHERWISE GO TO QUESTION 20]

- a. Have you or someone in your household used the clinic in the last six months?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK 19a1); OTHERWISE GO TO QUESTION 20]

- 1) Based on your experience with the clinic, would you say that the services were:

1. _____ Very Good 2. _____ Good 3. _____ Fair
4. _____ Bad 5. _____ Very Bad 8. _____ No Opinion

20. Is there a health clinic in your community where you can receive information on family planning (birth control)?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK 20a; OTHERWISE GO TO QUESTION 21]

- a. Have you or someone in your household used the clinic in the last six months for this purpose?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK 20a1); OTHERWISE GO TO QUESTION 21]

- 1) Based on your experience with the clinic, would you say that the services were:

1. _____ Very Good 2. _____ Good 3. _____ Fair
4. _____ Bad 5. _____ Very Bad 8. _____ No Opinion

21. Is there a clinic in your community where you can go and receive special health services for children? (e.g., vaccinations, check-ups, immunizations, etc.)

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK 21a; OTHERWISE GO TO QUESTION 22]

- a. Have any children in your household used the clinic in the last six months for care?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK 21a1); OTHERWISE GO TO QUESTION 22]

- 1) Based on their experience would you say that the service there were:

1. _____ Very Good 2. _____ Good 3. _____ Fair
4. _____ Bad 5. _____ Very Bad 8. _____ No Opinion

22. Is there a clinic in your community where one can go and receive information or care while pregnant?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK 22a; OTHERWISE GO TO QUESTION 23]

- a. Has anyone in your household used the clinic in the last six months for prenatal care?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK 22a1); OTHERWISE GO TO QUESTION 23]

- 1) Based on their experience with the clinic, would you say that the services were:

1. _____ Very Good 2. _____ Good 3. _____ Fair
4. _____ Bad 5. _____ Very Bad 8. _____ No Opinion

23. Now I would like to ask you some questions about the schools in the area. Are there any children in the household who attend school?

1. _____ Yes 2. _____ No

[IF NO, GO TO QUESTION 24; OTHERWISE PROCEED TO QUESTIONS 23a-c]

- a. What grades or years are they in school? [INDICATE NUMBER OF CHILDREN]

1. _____ 1 - 6 (elementary) 2. _____ 7 - 12 (secondary)

- b. Where is (are) the school(s) located?

Grades 1 - 6

1. _____ Neighborhood
2. _____ Other

Grades 7 - 12

1. _____ Neighborhood
2. _____ Other

c. How good or bad do you think the school(s) is (are)?

Grades 1 - 6

1. _____ Very Good
2. _____ Good
3. _____ Fair
4. _____ Bad
5. _____ Very Bad

Grades 7 - 12

1. _____ Very Good
2. _____ Good
3. _____ Fair
4. _____ Bad
5. _____ Very Bad

24. Are there any services which are not provided in your neighborhood that would important for you or your family?

Service 1 _____
Service 2 _____
Service 3 _____

25. Is there any public (including privately owned) transportation in your neighborhood? (e.g., bus, opelet, bajaj, etc. but excluding taxi)

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK QUESTIONS 25a-b; OTHERWISE GO TO SECTION VI]

a. How many times in a week do you use it?

_____ Times

b. Do you think it is:

- | | | |
|--------------------|-------------------|---------------------|
| 1. _____ Very Good | 2. _____ Good | 3. _____ Fair |
| 4. _____ Bad | 5. _____ Very Bad | 8. _____ No Opinion |

SECTION VI

In this section of the interview, we would like to ask you about any organizations/associations in your neighborhood.

26. Are there neighborhood associations here? For example, women's groups, sport clubs, food cooperatives or religious associations?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK QUESTION 27; OTHERWISE GO TO SECTION VII]

27. We would like to ask you some questions about the type of neighborhood associations present. Are there food cooperatives in the neighborhood?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK QUESTION 27a; OTHERWISE GO TO QUESTION 28]

- a. How would you describe the participation of members of your family in the cooperative? Are they:

1. _____ Active participants
2. _____ Members but not very active
3. _____ Do not belong
9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK 27a1); OTHERWISE GO TO QUESTION 28]

- 1) Is the leader of the cooperative male or female?

1. _____ Male 2. _____ Female 9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK THE FOLLOWING; OTHERWISE GO TO 28]

What three characteristics would you use to describe this leader. That is, what is it about this person that you believe made him/her the leader of the cooperative?

Characteristic 1 _____
Characteristic 2 _____
Characteristic 3 _____

28. Are there women's associations in the neighborhood?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK QUESTION 28a; OTHERWISE GO TO QUESTION 29]

- a. How would you describe the participation of members of your family in the association? Are they:

1. _____ Active participants
2. _____ Members but not very active
3. _____ Do not belong
9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK 28a1); OTHERWISE GO TO QUESTION 29]

1) Is the leader of the association male or female?

1. _____ Male 2. _____ Female 9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK THE FOLLOWING; OTHERWISE GO TO 29]

What three characteristics would you use to describe this leader. That is, what is it about this person that you believe made him/her the leader of the association?

Characteristic 1 _____
Characteristic 2 _____
Characteristic 3 _____

29. Are there child-care cooperatives in the neighborhood? (non-paid child care service, group run)

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK QUESTION 29a; OTHERWISE GO TO QUESTION 30]

a. How would you describe the participation of members of your family in the cooperative? Are they:

1. _____ Active participants
2. _____ Members but not very active
3. _____ Do not belong
9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK 29a1); OTHERWISE GO TO QUESTION 30]

1) Is the leader of the cooperative male or female?

1. _____ Male 2. _____ Female 9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK THE FOLLOWING; OTHERWISE GO TO 30]

What three characteristics would you use to describe this leader. That is, what is it about this person that you believe made him/her the leader of the cooperative?

Characteristic 1 _____
Characteristic 2 _____
Characteristic 3 _____

30. Are there school associations in the neighborhood?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK QUESTION 30a; OTHERWISE GO TO QUESTION 31]

a. How would you describe the participation of members of your family in the association? Are they:

- 1. _____ Active participants
- 2. _____ Members but not very active
- 3. _____ Do not belong
- 9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK 30a1); OTHERWISE GO TO QUESTION 31]

1) Is the leader of the association male or female?

- 1. _____ Male
- 2. _____ Female
- 9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK THE FOLLOWING; OTHERWISE GO TO 31]

What three characteristics would you use to describe this leader. That is, what is it about this person that you believe made him/her the leader of the association?

Characteristic 1 _____
Characteristic 2 _____
Characteristic 3 _____

31. Are there voluntary, informal crime prevention/neighborhood security organizations in the neighborhood?

- 1. _____ Yes
- 2. _____ No
- 9. _____ Don't Know

[IF RESPONSE IS YES, ASK QUESTION 31a; OTHERWISE GO TO QUESTION 32]

a. How would you describe the participation of members of your family in the organization? Are they:

- 1. _____ Active participants
- 2. _____ Members but not very active
- 3. _____ Do not belong
- 9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK 31a1); OTHERWISE GO TO QUESTION 32]

1) Is the leader of the organization male or female?

- 1. _____ Male
- 2. _____ Female
- 9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK THE FOLLOWING; OTHERWISE GO TO 32]

What three characteristics would you use to describe this leader. That is, what is it about this person that you believe made him/her the leader of the organization?

Characteristic 1 _____
Characteristic 2 _____
Characteristic 3 _____

32. Are there sport clubs in the neighborhood?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK QUESTION 32a; OTHERWISE GO TO QUESTION 33]

a. How would you describe the participation of members of your family in the club? Are they:

1. _____ Active participants
2. _____ Members but not very active
3. _____ Do not belong
9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK 32a1); OTHERWISE GO TO QUESTION 33]

1) Is the leader of the club male or female?

1. _____ Male 2. _____ Female 9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK THE FOLLOWING; OTHERWISE GO TO 33]

What three characteristics would you use to describe this leader. That is, what is it about this person that you believe made him/her the leader of the club?

Characteristic 1 _____
Characteristic 2 _____
Characteristic 3 _____

33. Are there public health (sanitation) boards in the neighborhood?
(voluntary outreach for preventive measures)

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK QUESTION 33a; OTHERWISE GO TO QUESTION 34]

a. How would you describe the participation of members of your family in the board? Are they:

1. _____ Active participants
2. _____ Members but not very active
3. _____ Do not belong
9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK 33a1); OTHERWISE GO TO QUESTION 34]

1) Is the leader of the board male or female?

1. _____ Male 2. _____ Female 9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK THE FOLLOWING; OTHERWISE GO TO 34]

What three characteristics would you use to describe this leader. That is, what is it about this person that you believe made him/her the leader of the board?

Characteristic 1 _____
Characteristic 2 _____
Characteristic 3 _____

34. Are there religious associations in the neighborhood?

1. _____ Yes 2. _____ No 9. _____ Don't Know

[IF RESPONSE IS YES, ASK QUESTION 34a; OTHERWISE GO TO QUESTION 35]

a. How would you describe the participation of members of your family in the association? Are they:

1. _____ Active participants
2. _____ Members but not very active
3. _____ Do not belong
9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK 34a1); OTHERWISE GO TO QUESTION 35]

1) Is the leader of the association male or female?

1. _____ Male 2. _____ Female 9. _____ Don't Know

[IF RESPONSE IS "1" OR "2", ASK THE FOLLOWING; OTHERWISE GO TO 35]

What three characteristics would you use to describe this leader. That is, what is it about this person that you believe made him/her the leader of the association?

Characteristic 1 _____
Characteristic 2 _____
Characteristic 3 _____

35. Are there other important neighborhood groups or associations which we have not mentioned and which exist that you believe are important to this neighborhood?

1. Specify _____
2. Specify _____

SECTION VII

This section of the interview deals with household finances and incomes. Before we ask you these we want to assure you that your answers are confidential and that we do not record your name or address, so nobody will know your responses.

36. Is the money that enters this household from all sources each month usually sufficient to cover your household expenses? (food, shelter, services, transportation)

- 1. _____ Not Enough
- 2. _____ Enough
- 3. _____ More than Enough (Save some)
- 8. _____ Refused
- 9. _____ Don't Know

37. During the last 12 months has anyone in the household borrowed money?

- 1. _____ Yes
- 2. _____ No
- 8. _____ Refused
- 9. _____ Don't Know

[IF RESPONSE IS YES, ASK QUESTION 37a; OTHERWISE GO TO 38]

a. Who lent the money? [READ AND CHECK ALL APPROPRIATE ANSWERS]

- 1. _____ Bank/Commercial Savings Institution
- 2. _____ Credit Group
- 3. _____ Relative, with interest
- 4. _____ Relative, with no interest
- 5. _____ Money lender (professional)
- 6. _____ Others [SPECIFY] _____
- 8. _____ Refused

38. Does anyone in the household have a savings account?

- 1. _____ Yes
- 2. _____ No
- 8. _____ Refused
- 9. _____ Don't Know

[IF RESPONSE IS YES, ASK QUESTION 38a-b; OTHERWISE GO TO SECTION VIII]

a. Where do you normally save your money? [READ AND CHECK ALL APPROPRIATE ANSWERS]

- 1. _____ Bank/Commercial Savings Institution
- 2. _____ Credit Group
- 3. _____ Lend to Relatives with interest
- 4. _____ Lend to Relatives with no interest
- 5. _____ Others [SPECIFY] _____
- 8. _____ Refused

b. Have you used your savings in the past 12 months? [READ AND CHECK ALL APPROPRIATE ANSWERS]

- 1. _____ To buy urban land
- 2. _____ To buy rural land
- 3. _____ To buy automobile
- 4. _____ To buy current dwelling
- 5. _____ To add on to dwelling unit
- 6. _____ To invest in business
- 7. _____ Marriage/funeral
- 8. _____ To pay off debt/loan
- 9. _____ To pay for schooling/training
- 10. _____ To pay taxes
- 11. _____ Loan or give to relatives
- 12. _____ For medical/dental care
- 13. _____ For religious purposes (e.g., the hajj)
- 14. _____ To buy household goods
- 15. _____ Other [SPECIFY] _____
- 88. _____ Refused
- 99. _____ Don't Know

SECTION VIII (Additional)

Finally, we want to ask you some additional questions about your educational attainment and migration history.

1. What is your highest educational level attended?

- 1. _____ No formal education
- 2. _____ Elementary School
- 3. _____ Junior High School
- 4. _____ Senior High School
- 5. _____ Three years college
- 6. _____ University

[IF RESPONDENT IS NOT A NATIVE RESIDENT PLEASE ASK THE FOLLOWING QUESTIONS]

2. Before you (head of household) moved into this neighborhood where did you (he/she) get information about this neighborhood?

- 1. _____ Have stayed in this neighborhood before
- 2. _____ Have visited this neighborhood
- 3. _____ From relative/friends
- 4. _____ From news media (newspaper, tv, etc.)
- 5. _____ Other (SPECIFY) _____

3. Who in your family made the decision to move to this neighborhood?

- 1. _____ Self
- 2. _____ Parents
- 3. _____ Sibling (brother/sister)
- 4. _____ Other relative
- 5. _____ Friend
- 6. _____ Government/employer
- 7. _____ Other (SPECIFY) _____
- 9. _____ Don't Know

4. Which one of the following factors is best describe your main reason to move to this neighborhood? [READ CATEGORIES TO RESPONDENT]

- 1. _____ Some pull factors of this neighborhood
- 2. _____ Some push factors of your last place of residence
- 3. _____ Other factors

[IF RESPONSE IS "1", ASK QUESTION 4a; IF RESPONSE IS "2" ASK QUESTION 4b; OTHERWISE GO TO 4c]

a. Which pull factor that attract you the most to move to this neighborhood? [READ CATEGORIES TO RESPONDENT]

- 1. _____ More job opportunities
- 2. _____ More business opportunities
- 3. _____ More expected income

4. _____ Better environment .
5. _____ Affordable land and/or housing prices
6. _____ Other (SPECIFY) _____

b. Which push factor that repel you the most to leave your last place of residence [READ CATEGORIES TO RESPONDENT]

1. _____ Less job opportunities
2. _____ Less business opportunities
3. _____ Less expected income
4. _____ Bad environment
5. _____ Unaffordable land and/or housing prices
6. _____ Other (SPECIFY) _____

c. What other than pull and push factors that you consider as the main reason to move to this neighborhood? Please Specify

Reason _____

5. What is the status of ownership of land and housing in your previous residence before you move to this neighborhood?

1. _____ Owned the land and the house
2. _____ Owned the house in government's land
3. _____ Owned the house in private landlord's land
4. _____ Rented both the land and the house
5. _____ Owned by government/employer
6. _____ Other (SPECIFY) _____

6. What is the status of ownership of land and housing in your previous residence after you move to this neighborhood?

1. _____ Sold both the land and the house
2. _____ Sold the house
3. _____ Rented the/land
4. _____ Received compensation
5. _____ Gave back to the owner (landlord)
6. _____ Left to family/relative
7. _____ Other (SPECIFY) _____

7. What kind of relationship do you have with the area of your previous residence after you move to this neighborhood?

1. _____ Workplace (job)
2. _____ Business
3. _____ Family/relatives/friends
4. _____ Educational purposes (school)
5. _____ Recreation
6. _____ No specific relationship
7. _____ Other (SPECIFY) _____

8. How frequent do you visit the area of your previous residence after you move to this neighborhood?

- 1. _____ Everyday
- 2. _____ Several days in a week
- 3. _____ Once a week
- 4. _____ Once a month
- 5. _____ Irregular visit

9. How do you compare your last income before you moved to this neighborhood with your income one year after you moved?

- 1. _____ Much better
- 2. _____ Better
- 3. _____ About the same
- 4. _____ Worse
- 5. _____ Much worse

10. How do you compare your living condition in general with what you feel before you moved to this neighborhood?

- 1. _____ Much better
- 2. _____ Better
- 3. _____ About the same
- 4. _____ Worse
- 5. _____ Much worse

END

Thank you very much for your time and assistance in answering these questions. Your responses will be very useful in helping us better understand the current neighborhood situation in Jakarta.

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VITA

Ridhwan Basaib was born in Jakarta on March 21, 1959. He received his Bachelor of Architecture from Institut Teknologi Bandung, Indonesia in 1985. Prior to entering the graduate school, Mr. Basaib has worked in the Jakarta Municipality Planning Department from 1985 to 1988 as an Urban Designer. In the Fall 1988, he entered the University of Wisconsin - Milwaukee to begin his graduate work on Master's degree in Urban and Regional Planning. In the Fall 1989, he transferred to Virginia Polytechnic Institute and State University and entered the Department of Urban Affairs and Planning.

During the Summer of 1990, Mr. Basaib went home to Jakarta to conduct a survey research on peri-urban areas from which the results are partially used in his thesis. His thesis was successfully defended on December 3, 1991. With the completion of his Master in Urban and Regional Planning his plan is to work for either the public or private enterprise that deals with planning in Jakarta, Indonesia.

A handwritten signature in black ink, appearing to read 'Ridhwan Basaib', with a stylized, cursive script.

Ridhwan Basaib