

ion Institute, no. 30

PIU-AAU-255

Agency for International Development  
Library  
Room 1656 NS  
Washington, D.C. 20523

Demographic research in Japan, 1955—70:  
a survey and selected bibliography



EAST-WEST CENTER  
HONOLULU HAWAII

NATIONAL TECHNICAL  
INFORMATION SERVICE

- F150  
200

**THE EAST-WEST CENTER** is a national educational institution established in Hawaii by the United States Congress in 1960. Formally known as "The Center for Cultural and Technical Interchange Between East and West," the federally-funded Center is administered in cooperation with the University of Hawaii. Its mandated goal is "to promote better relations between the United States and the nations of Asia and the Pacific through cooperative study, training, and research."

Each year about 2,000 men and women from the United States and some 40 countries in the Asian-Pacific area exchange ideas and cultural insights in East-West Center programs. Working and studying with a multinational Center staff on problems of mutual East-West concern, participants include students, mainly at the graduate level; Senior Fellows and Fellows with research expertise or practical experience in such fields as government, business administration, or communication; mid-career professionals in nondegree study and training programs at the teaching and management levels; and authorities invited for international conferences and seminars. These participants are supported by federal scholarships and grants, supplemented in some fields by contributions from Asian and Pacific governments and from private foundations.

A fundamental aim of all East-West Center programs is to foster understanding and mutual respect among people from differing cultures working together in seeking solutions to common problems. The Center draws on the resources of U.S. mainland universities and Asian-Pacific educational and governmental institutions, as well as organizations in the multicultural State of Hawaii.

Center programs are conducted by the East-West Communication Institute, the East-West Culture Learning Institute, the East-West Food Institute, the East-West Population Institute, and the East-West Technology and Development Institute. Open Grants are awarded to provide scope for educational and research innovation, including emphasis on the humanities and the arts.

**THE EAST-WEST POPULATION INSTITUTE**, established as a unit of the East-West Center in 1969 with the assistance of a grant from the Agency for International Development, carries out multidisciplinary research, training, and related activities in the field of population, placing emphasis on economic, social, psychological, and environmental aspects of population problems in Asia, the Pacific, and the United States.

Acting Director *Keith E. Adamson*

Publications Officer *Sandra Ward*

**East-West Center, 1777 East-West Road, Honolulu, Hawaii 96822**

## PREFACE

This study was supported by AID Grant/csd 3310 to the School of Public Health, University of Hawaii; by the Japan Society for the Promotion of Science; and by the East-West Population Institute.

The writer wishes to thank Dr. Toshio Kuroda and Dr. Kazumasa Kobayashi, both of the Japan Institute of Population Problems, for their helpful comments. Needless to say, neither bears responsibility for the final product. Thanks are also due to Keiko Ujiie for assistance in compiling the bibliography, to Karen Nishiki and Renee Kojima for clerical help, to Sandra Ward for her editorial assistance, and to Lois Bender for production of the manuscript.

Demographic research in Japan, 1955—70:  
a survey and selected bibliography

*by Y. Scott Matsumoto*

Number 30 • April 1974

PAPERS OF THE EAST-WEST POPULATION INSTITUTE

*i.a*

Y. SCOTT MATSUMOTO is a Research Associate of the East-West Population Institute and Professor of Public Health at the University of Hawaii.

## CONTENTS

Preface	v
Abstract	1
Introduction	1
Research institutions	3
Recent trends in demographic research	4
Demographic studies	5
<i>Fertility</i>	5
<i>Mortality</i>	11
<i>Population and the economy</i>	13
<i>Past and future</i>	21
Summary and conclusion	23
Preface to bibliography	27
Subject index	29
Citations by author	33

---

*ABSTRACT* An overview of demographic research in Japan during the postwar shift from high to low fertility introduces this selected bibliography of works by Japanese scholars. Particular attention is paid to the activities of the Institute of Population Problems and universities, and to major population-related studies. The bibliography, arranged by author, is preceded by a subject index.

---

## INTRODUCTION

During the decade following World War II, demographic research in Japan focused on the problem of excess population. As an immediate aftermath of defeat and destruction, the Japanese people experienced great difficulties in obtaining adequate food, clothing, and housing. Economic pressures and social confusion were severe. The return of 3.5 million members of the demobilized Imperial army and of 3.5 million civilians who had been abroad intensified the pressures on available resources.

Inevitably the birth rate began to rise, while the death rate quickly declined as a result of public health programs. The difference between increased fertility and reduced mortality resulted in the highest rates of natural increase in Japan's history.<sup>1</sup> Demographic studies during the first ten years after the war concentrated on the issues of surplus population, food shortage, unemployment, and a eugenics law that would permit induced abortions.

By 1955 the necessity of restricting population growth had become obvious to the Japanese. Having experienced a postwar "baby-boom" in the midst of a depressed economic situation, couples were strongly motivated to limit their fertility in order to realize their aspirations for a better life. Thus it was the people, not the government, who first took steps to restrict family size.

Prewar vital statistics had documented a gradual reduction in birth rates from the early 1920s to the late 1930s, marking the demographic transition of an urbanizing and industrializing Japan; but this reduction was moderate compared with the dramatic fertility decline beginning in the mid-1950s. The rapidity of Japan's postwar demographic

---

1 In 1948 the rate of natural increase was 21.6 per thousand population.

transition was without historical precedent anywhere. The crude birth rate of 34.3 per thousand in 1947 fell to 17.2 by 1957—a reduction of 50 percent in a single decade. In contrast, Europe's demographic transition, begun in the latter half of the nineteenth century, took more than 50 years to complete.

The year 1955 can be considered a demographic turning point for Japan because for the first time the crude birth rate dropped below 20 per thousand population (to 19.4), and it has since remained below 20, generally fluctuating between 17 and 18. Moreover, in 1955 the death rate set a low record of 7.8 deaths per thousand population. In the following year the net reproduction rate decreased below unity. The mid-1950s also mark the beginning of a dramatic improvement of the Japanese economy, stimulated by the Korean War.

Induced abortion was the primary method of reducing fertility during this period. In 1948 the National Diet passed a Eugenics Protection Law legalizing abortion on medical and eugenic grounds. A year later an amendment to the law established social and economic need as permissible grounds for legal abortion. The largest number of registered abortions (1.17 million) occurred in 1955. Since then, the incidence of induced abortion has steadily decreased while use of contraception, especially the condom, has grown. Currently, 73 percent of all married couples in Japan are reported as using the condom as their primary contraceptive method (Mainichi Population Problems Research Council, *Report on the eleventh national opinion survey on family planning*, 1972:66).

Since the 1950s Japan's demographic profile has shifted from a wide-based age pyramid with sharply angled sides, which is typical of countries having high fertility and low mortality, to a jar-shaped pyramid typical of countries in which both mortality and fertility are low. The combination of this new demographic pattern and the phenomenal growth of a national economy with increased efficiency and higher wages turned Japan into the first non-Western industrial nation. Simultaneously, drastic modifications in the geographical distribution of the population took place. All these changes have focused the attention of Japanese demographers on such problems as the decrease in the size of the younger labor force, the increase in the proportion of older people, and the accelerated pattern of internal migration in Japan.

## RESEARCH INSTITUTIONS

Demographic research in Japan has been conducted primarily by the Institute of Population Problems (IPP), affiliated with the Ministry of Health and Welfare, since its establishment in 1939 and postwar reorganization in 1950. The Institute's staff of approximately 50 persons is divided into three divisions responsible for population policy, migration research, and manpower research. The division of population policy conducts research on population size and trends and on their relevance to population policy and theory; the division of migration research is concerned with population distribution and migratory patterns; and the division of manpower research studies the relationship between the quality of manpower and environmental factors. Research findings are published in two official journals of IPP—*Jinkō mondai kenkyū* [Journal of population problems], which began publication in 1940, and *Jinkō mondai kenkyūjo nempō* [Annual reports of the Institute of Population Problems], first published in 1956, the 1970 edition being the fifteenth of such reports. Both the *Journal* and the *Annual Reports* contain brief English summaries of the Japanese articles. Summaries of field surveys and population data are also reported in their *Research Series* (in Japanese) and in the *English Pamphlet Series*.

The Population Association of Japan, whose membership comprising government demographers and academic researchers numbered 245 in 1970, published its third Japanese edition of the *Archives* in 1955, and the fourth English edition in 1963. This association holds its meetings annually, and summaries of the papers presented at the meetings have been published in its *Bulletin* since 1967. The twenty-second annual meeting took place in 1970.

Mention also should be made of the Study Group on Population Science, which was organized in 1958 by Professor Ryōzaburō Minami of Komazawa University together with Dr. Minoru Tachi, the late director of IPP. This group holds regular seminars and publishes each year a mimeographed journal entitled *Jinkōgaku kenkyūkai kiyō* [Summary reports of the Study Group on Population Science]. It has published several books on special population topics.

The primary sources of population data are the national censuses and vital statistics. The planning, collection, analysis, and publication of the national population censuses—which have been conducted every

five years since 1920--have been the responsibility of the Bureau of Statistics, Office of the Prime Minister. The official census publications in 1960 were issued bilingually in four volumes: (1) *Total Population*, (2) *One-percent Sample Tabulation* (in six parts), (3) *All Japan* (three parts), and (4) *Prefectures* (46 parts).

Data collection and analysis of vital statistics on births, deaths, stillbirths, marriages, and divorces are performed by the Division of Health and Welfare Statistics, Ministry of Health and Welfare (MHW). Except for the years 1944-46, volumes on national vital statistics have been published annually since 1899 in Japan. They appear in two volumes (in Japanese and English): (1) *Births, Deaths, Marriages, and Divorces* and (2) *Causes of Death*. Because the census materials of the Bureau of Statistics and the vital statistics reports of the Health and Welfare Statistics Division are so prolific, it was not possible to include most of them in this bibliography.

#### RECENT TRENDS IN DEMOGRAPHIC RESEARCH

From the mid-1950s to the present, demographic research in Japan has been increasingly concerned with the empirical analysis of demographic phenomena, rather than with population theory. In 1957 demographic research was given a boost by the publication of *Jinkō daijiten* [Population encyclopedia], edited by Ryōzaburō Minami and others, which described the various components of the study of population problems and attempted to formulate a "science of population" as a new interdisciplinary field. It included contributions by such leading authorities as Yūzō Morita, Minoru Tachi, Takuma Terao, and Haruo Mizushima. Also in the same year, Ayanori Okazaki, then director of IPP, published an analysis of the relationship between population and economics in Japan (1957).

In the following year, the publication of Irene Taeuber's *The Population of Japan* (Princeton, New Jersey: Princeton University Press, 1958) further heightened interest among Japanese scholars in critical demographic analysis. This important work examined the demographic transition of Japan in relation to historical, political, social, and economic events accompanying the transition. Specifically, it traced the interrelationships of population and society through the Tokugawa period, Imperial expansion, war, and defeat, to the contemporary situation of the 1950s. *The Population of Japan* has been translated

into Japanese by the Mainichi Newspapers Population Problems Research Council (1964).

In 1960, Tachi published his textbook *Keishiki jinkōgaku* [Formal demography], which represented the first systematic effort in Japan to describe the techniques of demographic analysis and the development of demographic theories. The volume includes several sections on formal demography; explanations of analytical methods for measuring population increase, distribution, and structure; discussions of fertility and mortality that include detailed commentaries on the life table and the net reproduction rate; a chapter on population mobility and migration; and a chapter on population projection. So well received was this book, that in 1963 it was reproduced as a pocket-size volume with the title *Jinkō bunseki no hōhō* [Methods of population analysis]. The abridged version concentrated on life-table construction and the theory of reproduction rates. In 1969 Tachi published *Jinkō mondai no chishiki* [Knowledge of population problems], and he continued to write articles and edit books covering practically every aspect of population until his death in 1972 (see bibliography).

The outstanding characteristic of current demographic research in Japan has been the shift from a concern over population control in a “developing” nation, which dominated Japanese demography in the mid-1950s, to an emphasis on the population structure of a “developed” country. Specifically, attention is being directed toward the social and economic implications of Japan’s aging population and its proportionately smaller working-age population.

## DEMOGRAPHIC STUDIES

The following sections present a brief survey of current Japanese research activities in population studies. The purpose is to introduce the reader to major Japanese demographers, and to indicate the scope and content of demographic research conducted in Japan during the period 1955–70. Because of the diversity and magnitude of the demographic literature it is not possible in this brief overview to include a discussion of, or even a reference to, all publications known to the author.

### *Fertility*

For sheer volume and variety, research on Japanese fertility defies easy summary. The influence of fertility on population structure and

the relationship of population to social and economic variables account for the high degree of interest in fertility demonstrated by government agencies, research institutes, and university scholars in the years following the postwar "baby boom."

Since 1940, the Institute of Population Problems has conducted a series of fertility surveys [shuseianryoku chosa], approximately one survey every five years, for an intensive study of the declining trend in reproduction. The third survey, conducted in 1957, was analyzed by Tatsuo Honda (1958). Hisao Aoki of IPP analyzed the fourth (1962) survey and published his report in four parts in *Jinkō mondai kenkyū* (1964-65): (1) average number of children ever born per couple; (2) extent of childlessness; (3) distribution of couples by number of children ever born, and distribution of births by birth order; and (4) birth intervals. The national sample consisted of approximately 12,000 couples from 35 cities, wards, towns, and villages in 12 prefectures of Japan. This study showed a definite trend toward later marriage and earlier birth of the first child, followed by a small number of births separated by long intervals during the early years of marriage. After ten years of marriage, family formation was completed in most cases. The critical question on future family size concerned the attitude of parents toward having a third child, since a majority of couples planned to have at least two children.

The fifth fertility survey of 1967 was reported by Kazumasa Kobayashi, also in four parts in the *Jinkō mondai kenkyū* (1969-70): (1) average number of children ever born alive per couple, by age of wife and by residence; (2) marital fertility, by marriage cohort and by region; (3) average number of cumulative live births per couple, by birth order and by duration of marriage; parity progression ratios; and birth probability by live birth order and by duration of marriage; and (4) marital fertility, by husband's occupation. This survey covered a total of about 14,000 married couples, with wives less than 50 years old at the time of the survey, in 20 randomly sampled cities, towns, and villages.

Special fertility surveys are also conducted by the Bureau of Statistics Division, MHW. The decennial national census includes a fertility survey based on 1 percent of the population. Special census volumes on fertility (number of children ever born) have been issued for 1950 and 1960 by the Bureau of Statistics; another volume based on the

1970 census is planned. The series *Jinko dōtai shukai keizaimen chōsa hōkoku* [Survey report on the socioeconomic aspects of vital statistics], which is based on sample surveys, is published by the Health and Welfare Statistics Division. It includes the 1962 survey on fertility (1964), 1963 survey on mortality (1965), 1964 survey on births and stillbirths (1967), 1965 survey on infant deaths (1968a), and 1966 survey on marriage (1968b).

Toshio Kuroda of IPP has studied the influence of marriage trends on population movement (1958a, 1958b, 1960). Using a marriage-cohort tabulation of approximately 14,000 couples married since the termination of the war, Kuroda (1960-61) has also analyzed fertility change by duration of marriage, birth order, age at marriage, occupation, and birth spacing. Kazumasa Kobayashi (1956) has reported on the family life cycle and related changes in age and generational composition, drawing on a sample of 230 families in a village in Yamanashi Prefecture.

Shigemi Kōno, formerly a research staff member of IPP and since 1967 on the staff of the Population Division of the United Nations, has presented marriage tables for Japanese couples and life tables by marital status (1960). Two of his major publications (1966a, 1967) present findings from a sample survey conducted in 1965 on social, economic, and psychological factors influencing births among married couples (wives aged 18-39); the studies examine relationships between income and fertility, relationships between living space and fertility, and ratios of couples practicing family planning to those not practicing family planning. Kōno's analysis indicates that duration of marriage plays a major role in determining fertility.

Yōichi Okazaki has also examined the social and economic aspects of Japanese fertility (1968c, 1970b). The effect of marriage and divorce on calculations of the net reproduction rate has been investigated by Naobumi Takagi (1957). Yoshihiro Tsubouchi of Kyoto University has reported on fertility changes from 1920 to 1965 by region (1970).

The ratio of actual births in 1955 to births expected on the basis of age-specific fertility in 1930 and the proportions married among women in 1930 for each prefecture has been reported by Masao Ueda (1959). Ueda has also discussed the increasing number of nuclear families in current Japan (1968b). A simultaneous increase has occurred in the number of households, which are growing more rapidly than the

population itself, indicating an increase in the proportion of nuclear families. Studies of household size have been reported by Kazumasa Kobayashi (1960, 1969, 1970), by Takashi Murai (1965), and by Minoru Tachi, Kiichi Yamaguchi, and Takeharu Kaneko (1968).

In studies of the contemporary Japanese family, Takashi Koyama, a sociologist at Toyo University, has made distinctive contributions (e.g., 1960, 1962, 1964). Kazoku mondai kenkyu-kai [Family Problem Research Group] under Professor Koyama's leadership has also published reports on the current status of the Japanese family, including information on family relationships, with case studies of the urban family (e.g., 1967). In general, however, Japanese social scientists have been prevented from undertaking research on fertility and family planning by a lack of research funds. Little has been reported on the socio-psychological or cultural aspects of fertility, family planning, induced abortion, or contraceptive practices by social and behavioral scientists in Japan.

There are also few critical studies by demographers of the relationships between fertility decline, contraceptive methods, and induced abortion. Nobuo Shinozaki (1963) analyzed 1,710 cases of abortion and sterilization occurring among 10,000 couples in Wakayama Prefecture, and reported on the sources of information about abortion and sterilization, on husband's occupation, and on the incidence of physical disorders following abortion. Shinozaki's primary area of interest has been eugenic aspects of consanguineous marriages (1957, 1959, 1960, 1961). A comprehensive study by Honda (1959b) attempts to measure the extent to which contraception and induced abortion together account for the unprecedented decline in Japan's birth rate after World War II. According to Honda, abortion played a major part in the fertility decline from the period immediately following the war until 1955; by 1958, the combined effects of contraception and sterilization on fertility equaled the effect of abortion on fertility. The proportion of couples using contraception, as compared with induced abortion, to control their fertility is reported by Aoki (1967) to have been 30 percent in 1955, but by the mid-1960s it had increased to approximately 70 percent. Minoru Muramatsu of the Institute of Public Health has found the proportional increase in contraceptive practice relative to abortion to be somewhat less: from 28 percent in 1955 to 49 percent in 1965 (1970).

The best known family planning surveys are the biennial knowledge, attitudes, and practices (KAP) studies conducted since 1950 by the Population Problems Research Council of the Mainichi Newspapers, with the active participation of IPP. For each national survey in this series, approximately 3,000 to 3,800 married women under 50 years of age were selected by a stratified random sampling method. Although there are questions about the field techniques used in the early surveys, the skillful analysis done by Honda on the first five surveys laid a firm basis for continuation of the series by Mainichi. The early surveys documented the extent of knowledge about contraception and the diffusion of contraceptive practice in Japan. Later surveys were expanded to study differential fertility in relation to a number of variables, including socioeconomic status, husband's occupation, working status, level of living, and rural-urban background. The interrelationships between familistic values, family size, and number of additional children desired, as well as the role of contraception and induced abortion in limiting family size, were investigated in later surveys. A summary report in Japanese and in English has been published for each survey. With the completion of the tenth survey in 1969, Mainichi Newspapers published a comprehensive report prepared by members of IPP on fertility and family planning trends in Japan over a span of 20 years (1970). Entitled *Nihon no jinkō kakumei* [Demographic revolution in Japan], the report contains an introductory chapter by Taichi, a summary of the attitudes of parents toward children by Kuroda, a section on changes in family size by Kazumasa Kobayashi, and a section on family planning practices by Yōichi Okazaki. An English version, *Family Planning in Japan*, has been published by the Japanese Organization for International Cooperation in Family Planning (Tokyo, 1972).

Studies of the medical and public health aspects of fertility and family planning have been undertaken by the Department of Public Health Demography of the Institute of Public Health in Tokyo. The department was established in 1948 to study the interrelationships between public health and population growth. It endorses family planning on eugenic and medical grounds.

A leader in family planning studies in Japan has been Dr. Yoshio Koya, director of the Institute of Public Health from the end of the war to his retirement in 1956, and until his recent death president of

the Family Planning Federation of Japan. He and his colleagues at the Institute of Public Health conducted field studies of family planning practices in Japan following World War II. Among their subjects were rural villagers, coal miners in the Joban area (a five-year experimental survey), recipients of public relief in Tokyo, and employees of the Japan National Railways who represented 80,000 families. Other studies focused on induced abortion and sterilization and on motivational aspects of family limitation. A collection of Koya's major papers in English has been published as a monograph, *Pioneering in Family Planning* (1963). Another volume in English, *Harmful Effects of Induced Abortion* (1966), which Koya edited, contains studies by physicians of medical complications arising from abortion; the studies suggest that the incidence of harmful medical effects is low.

Dr. Minoru Muramatsu, chief of the Demography Section of the Institute of Public Health, has been the spokesman of Japan's family planning program for the Western world. Many of his publications have appeared in Western journals (e.g., 1960a, 1960b, 1962, 1969). *Japan's Experience in Family Planning Past and Present* (1967), which he edited, has proved extremely useful to foreign observers. In his latest report (1970), Muramatsu asserts that the number of induced abortions in Japan during 1965 was probably more than 3 million, or 3.7 times the number of officially reported abortions among married women. Regarding the significance of the Institute of Public Health studies, Taeuber has stated: "[It] lies in the fact that they are public health demography in plan, field work, and analysis. Work was done within and under the auspices of the Institute.... All interviews were conducted by doctors; publication was by doctors in medical or health journals. The research was accepted as an appropriate aspect of health service" (Fertility and research on fertility in Japan, *Milbank Memorial Fund Quarterly* 34(2):146, 1956).

In 1966, the Population Problems Inquiry Council, made up of members from the public and private sectors serving as an advisory committee to the Ministry of Health and Welfare, reviewed current demographic trends in Japan. In August 1969 it advised that the government not welcome a high rate of population increase because the country already had over 100 million persons living in conditions of high density. The Council stated that the purpose of Japan's population policy should be to improve the quality of the population rather

than to increase its size. Since the net reproduction rate (NRR) had been less than unity for approximately ten years, however, the Council suggested the desirability of restoring fertility to an NRR of at least one.<sup>2</sup> Shortly after the release of the Council's report Prime Minister Sato initiated a population controversy by publicly calling for an increase in Japan's birth rate. He and other politicians, businessmen, and some journalists had interpreted the Council's statement to mean that Japan's population was declining. IPP promptly tried to clarify the meaning of NRR and indicated that Japan's population would continue to grow for several decades to come.

Government and business leaders continue to advocate higher fertility in order to ensure an adequate future labor force. But the current small family size of slightly over two children on average, the increasing outmigration from the metropolitan centers, and a growing public concern about environmental pollution would seem to indicate that the people of Japan do not necessarily agree with the pronatalists.

### *Mortality*

Improvements in environmental sanitation following World War II contributed to a decline in Japanese mortality. The crude death rate dropped from a prewar level of 17 per thousand to 7. Japan now ranks among the nations having the lowest mortality rates in the world. The improvement was due largely to a decrease in infant mortality and in tuberculosis deaths among adolescents. With the postwar development of public health education and administration and of preventive medicine, diseases associated with advanced age have replaced infectious and communicable diseases as the major cause of death. Based on the mortality experience of 1970, life expectancy is 69.33 years for males and 74.71 years for females.

General trends and characteristics of Japanese mortality have been studied by Kazumasa Kobayashi (with Kaneko, 1966; 1967a) and by Mizushima (1959, 1971). Mortality differentials by prefecture have

---

2 The net reproduction rate represents the average number of daughters that women would have if they were subject to the prevailing age-specific fertility and mortality rates of a given period and the rates did not change. Thus if a population has a young age structure, even an NRR of unity (i.e., an average of one daughter per woman who completes her childbearing years or dies before completing them) will result in population growth.

been evaluated by Taeko Morooka (1970) of Tokyo Women's Medical College and by Shigekazu Hishinuma (1957), an insurance actuary. Death rates vary considerably by prefecture, largely because of differences in age composition. An analytical study designed to evaluate recent mortality trends in Japan has been published in English by Takemune Soda and others (1968).

The numerous special studies on mortality by Shimako Ogino of IPP include analyses of death rates among elderly people (1965a, 1965b), in particular by occupation (1959) and by region (1967). Ogino has also examined infant mortality (1964), perinatal mortality (1969), and maternal mortality (1966). Statistical studies of death by accident (1959) and of suicide (1957) have been reported by Yasuko Sato of the Health and Welfare Statistics Division, MHW.

The improvement of infant and child mortality in Japan during the twentieth century has been remarkable. In 1957 Hiroshi Maruyama of Osaka University published what is probably the first monograph to present a critical analysis of infant mortality in Japan. The analysis, which covers 20 years, compares the incidence of infant deaths (deaths during first year of life) and neonatal deaths (deaths during first month of life).

Gathering statistics from many countries, Professors Mitsuo Segi and Minoru Kurihara of Tohoku University have calculated age-adjusted death rates for 20 selected causes. Their research on cancer mortality has received international recognition. Segi and Kurihara are the principal authors of major works on cancer mortality in Japan (1965) and in 24 countries (1969), mortality for selected causes in 30 countries (1966), and mortality by causes of death by prefectures in Japan (1970).

Minoru Tachi and Seiko Takahashi have tested the proportional mortality indicator of 50 years of age and above, which was proposed by the World Health Organization as a nonmonetary index for comparing living levels worldwide. They found it to be an inadequate index of interprefectural differences in Japan (1965).

The foremost pioneer in the development of Japanese life tables has been Haruo Mizushima of Kyushu University. His *Seimeihyō no kenkyū* [Research on life tables] was published in 1963. With the assistance of Takao Shigematsu of Tottori University, Mizushima has published prefectural life tables for various years (1961, 1964, 1968).

The Division of Health and Welfare Statistics of the Welfare Ministry issues complete life tables for Japan every five years as part of the quinquennial census and has published abridged life tables annually since 1945. Abridged life tables have also been prepared each year since 1948 by IPP and are published in its Research Series. Some of these reports contain comparisons with the life tables computed by the Division of Health and Welfare Statistics. Most include descriptions of the methodology employed. It should also be noted that Masaaki Yasukawa has reported on the construction and calculation of model life tables for Japan (e.g., 1969, with Keijiro Hirooka).

### *Population and the Economy*

The rapid expansion of the Japanese economy in the postwar years has made Japan the third greatest productive power in the world. The development of the economy was accompanied by a rapid shift in the age structure, which has led to increasing concern over a shortage of young workers and a corresponding oversupply of older persons in the labor force. At IPP Yōichi Okazaki has reviewed the relationship between demographic trends and economic growth (1962a, 1966a, 1970a, 1971). With others at IPP, Tachi conducted economic analyses of population growth with reference to conditions for "economic take-off" (with Kuroda, 1959; 1960b), regional distribution of income and population (1959; with Misako Oyama, 1961), and implications of population growth for Southeast Asia (with Yōichi Okazaki, 1965; 1971). Tachi and Takahashi have also utilized the logistic curve as an analytical tool to measure trends in changes of population size (1964). The structure of regional labor force populations has been studied by Kuroda (1964a, 1964b). Tachi, Ueda, and Hidehiko Hama have produced a series of papers analyzing the youth population by region during 1957–59 (1957–59).

The topic of economics and population change has also attracted the research interest of economists in the various Japanese universities. Much of their work has centered on general academic discussions concerning Malthusian and other Western theories of economic growth and population, the optimum theory of population, and the analysis of life table techniques. The emphasis has been on economic analysis rather than on demographic processes.

A major contribution is Masaaki Yasukawa's *Jinkō no keizaigaku*

[Economics of population], first published in 1965, and since revised and enlarged. The analysis reviewed the studies of Malthus, Keynes, and others to describe how demographic perspectives have historically assisted in the analysis of economic systems. Other publications by economists include studies of the population factor in economic processes by Ryoshin Minami (1960), the effects of population growth on economic development by Hiroshi Ohbuchi (1964, 1970), and socio-economic changes and the industrial structure by Tokijirō Minoguchi (1955, 1958, 1959). Changes in employment patterns and wage differentials have been studied by Asao Mizuno (1963, 1970b, 1971). The growth of the labor supply in Japan has been examined by Mataji Umemura (1957, 1964). Keisuke Suzuki has reported on a statistical analysis of the regional characteristics of the labor force (1965, 1970). An excellent report on regional labor migration has been published by Shunsaku Nishikawa (1966).

Kazushi Ohkawa and his colleagues in the Institute of Economic Research, Hitotsubashi University, have published a statistical series on Japanese economic development (1957, 1966). Ichirō Nakayama and Ryōshin Minami have presented a theoretical and economic analysis of optimal population (1959).

Ryōzaburō Minami, who is regarded as the primary Malthus scholar in Japan, has published several books and essays on population theories (1956, 1958, 1963). His student, Minoru Okada, has commented on such Western population theorists as Sauvy, Moore, and Necker (1958, 1966, 1970).

### Labor Force

A major demographic effect of the high rate of economic growth combined with declining fertility over the past two decades has been a growing shortage in the supply of labor. The proportion of the population advancing to higher education has also increased. The number of persons entering the labor force age group began to decline after reaching a peak in 1968. In recent years, the government and employers have become concerned over the manpower shortage.

This concern is reflected in the research activities of the government demographers. Since the mid-1960s the work of various IPP researchers has exhibited growing concern over the projected labor shortage.

Yōichi Okazaki has written most extensively on the theoretical and empirical aspects of Japan's labor force, including manpower projections (1961, 1964, 1965a, 1965b, 1967b, 1968a, 1969). Concerning the transformation of the labor force from agriculture to industry, a cohort analysis by age group by Okazaki (1966b) is noteworthy. Honda has analyzed the employment structure, specifically the proportion of self-employed, family workers, and wage-earners by sex and age (1959a, 1960).

Hama (1962, 1966b) has prepared estimates of the future labor force indicating that by 1980 there will be 3.4 million fewer persons in Japan between ages 15 and 29 than there were in 1965. From 1955 to 1970 the average annual growth rate of the labor force population aged 15 and over was 1.9 percent. According to Hama, the rate will drop to 0.7 percent by 1975, to 0.4 percent by 1980, and to 0.3 percent by 1985.

The male labor force has been evaluated by Kazumasa Kobayashi (1961c, 1962); the female labor force, by Yōichi Okazaki (1967a, 1968b, 1968–69) and also by Eiko Nakano (1967, 1969a, 1969b, 1970). Using the "components technique," Kōno has studied the effect on the labor force participation rate of changes in population by age, marital status, and urban–rural distribution (1959). These studies helped to evaluate the possibilities of greater efficiency and utilization of the total labor force.

Other helpful resources in the study of the current labor force are the periodic publications issued by the various Japanese government agencies. These include the *Statistical Abstract of Japanese Economy* by the Ministry of Finance, the *Economic Survey of Japan* by the Economic Stabilization Board, the *Labor Force Survey* and the *Basic Survey on Employment Structure* by the Bureau of Statistics, and *Labor Statistics* by the Labor Ministry.

The shortage of workers began to be felt after 1970. How the national economy and the various industries of Japan adjust to this shortage remains the critical question. The solution to the problem, in the view of Japanese demographers, is not to increase fertility, but to increase labor productivity. This calls for the more efficient use of manpower, greater participation of female workers, drastic changes in the industrial set-up, and the improved distribution of population.

## Aging of the Population

The proportion of older people in Japan has increased as the result of the rapid decline in fertility during the postwar years and consequent alterations of the age structure. This "aging" of the population is characteristic of other industrialized nations.

Tachi has analyzed changes in the age and sex structure of Japan since the beginning of modernization in 1872 and found that declining fertility rather than declining mortality was responsible for the aging of the population (1956, 1957). Takagi has also examined the influences of births and deaths on aging, finding that Japan followed the demographic pattern of Great Britain with a 45 years' lag (1960). Kazumasa Kobayashi has studied the relationship between mortality rates for the years 1950–65 and the aging of the population (1967c). Changes in mean and median ages by region have been reported by Masao Ueda (1957). When the patterns of age composition in the pre-war years are compared with those of the post-war years, regional differences are generally reduced. Prefectural and geographic variations in longevity in Japan have been studied by Mizushima (1957; with Shigematsu, 1964). Kuroda has investigated socioeconomic aspects of the shifting age structure (1955a, 1955b, 1956).

Aging of the population has brought with it serious problems of social welfare, social insurance, and medical care for the elderly. Compared with industrial investments, investment in social overhead capital has lagged far behind. The publications of Sadamu Watanabe have focused on the economic and social problems of the aged (e.g., 1963) and on needed social provisions for the aged in Japan (1959). Watanabe, who serves as chairman of the Gerontological Association of Japan, has also reviewed the trends in length of life and mortality by causes (1957, 1966). In general, however, social scientists have not exhibited the same degree of interest in considering the social problems of the aged as in studying, say, economic aspects of the labor shortage.

## Internal Migration

Through migration, increasing portions of the growing rural population were transferred to the new urban—industrial centers and from agricultural to nonagricultural occupations. Confronted by a trend of declining rates of growth within the urban population and the labor force,

the national economy became more dependent for its growth upon the effects of migration. The changing labor market in Japan caused a tremendous volume of labor force mobility. Regional redistribution of the population and labor force mobility thus became major areas for demographic analysis. The optimal allocation of population and manpower within Japan is a central concern of many such studies.

Statistics on internal migration, as is well known, are generally very deficient. Japan has two direct measures of internal migration, figures based on the Resident Registration System and data based on the records of the Rice Rationing Law. Hama (1961a) has evaluated the accuracy and completeness of these migration statistics. Interprefectural migration by prefecture and sex is tabulated by the Bureau of Statistics from the Resident Registers. International migration statistics for both Japanese and foreigners who emigrate or immigrate, by age and sex, are compiled by the Judicial System and Research Division of the Ministry of Justice.

Among the Japanese demographers, Kuroda, who is chief of the Division of Migration Research at IPP, has studied most extensively the patterns of internal migration in Japan. His analyses include trends in internal migration (1961b, 1966b, 1967, 1971), concepts and factors in migration (1961a), regional distribution and development (1966a, 1968a, 1969c, 1970b), migratory behavior and modernization (1970b), and migration and vital rates (1962, 1968c). A number of his recent articles formulate a hypothesis of migratory behavior based on the Japanese experience (1969d, 1970a, 1970c). Kuroda asserts that the extremely accelerated internal migration during 1960–65 was the final stage of the traditional rural-to-urban movement, and that a new trend is “return” migration from the large cities and megalopolitan areas back to smaller urban areas, especially to the middle-size cities with populations of 100,000 to 300,000 (1970a: 11). The movement has not been back to the villages, but to the attractive smaller cities in the prefecture of origin that are without the industrial pollution problems of the metropolitan environment. Kuroda has termed this phenomenon a “U-turn” migratory pattern emerging in current Japan. He has contributed to the development of migratory theory as well as an analytical methodology for describing internal migration. Kuroda works with the hope of “promoting [a] comprehensive understanding of population problems in Asia and exploring [the]

feasibility of demographic transition in developing countries" (1969a: 35).

The relationship between population migration and fertility has been an area of special interest to Masao Ueda (1961a, 1967a). He has reported on the relationship between births in prefectures and migration (1964), and has analyzed the interrelations between reproduction and the age-sex structure of migrants (1960, 1961b, 1963, 1966a, 1968a).

Selectivity in interprefectural migration has received analytical attention from Hama (1959, 1969a), Kazumasa Kobayashi (1961a, 1963), and Yamaguchi (1968; with Michiko Yamamoto, 1968, 1969). Using the index of "migration velocity" developed by Professor Donald Bogue and others to measure intensities of migration streams between geographical areas, Shigemi Kōno has analyzed data on resident registration by multiple regression to explore interrelations between the intensities and directions of migration streams and the socioeconomic characteristics of interprefectural migrants (1963a, 1963b). He has applied the same technique to the study of migration to and from megalopolitan areas of Japan (1965).

The hypothesis that migration acts to level off the disparities in the living levels of different geographical areas has been tested by Tachi (with Misako Oyama, 1960; 1964; 1965; with Hisako Misawa, 1969). He concluded from his studies that people tend to migrate from rural, low-income areas to industrializing, higher-income areas.

Outside IPP, human geographers in various universities have been concerned with population distribution. Hiroshi Kawabe of the Tokyo University Institute of Human Geography has had a special interest in the migratory patterns of urban centers in Japan (1961a, 1961b). One of his studies analyzes the structure of net migration and the origin of migrants for each *ku* (ward) in Tokyo (1964). Minoru Kishimoto of Rissho University has examined the process of population concentration in Japan (1968). Statistical data on Tokyo migrants are periodically issued by the Tokyo Metropolitan Government (e.g., 1960). Ryōhei Shimizu has postulated that through the continuing process of internal migration the regional distribution of population will attain an equilibrium at which per capita economic activity in each region will be equalized (1964). By constructing the transition probability matrix for the 46 prefectures of Japan, he computed the population

distribution by prefecture. Keiji Kamiya has also calculated the future population distribution of the 46 prefectures (1963). The hypotheses of Shimizu and Kamiya were based on Markov's chain theory.

### Rural Depopulation

The dynamic movement of population in postwar Japan has been from rural to urban areas. At IPP, Shigeru Hayashi is noteworthy for his contribution to the demographic analysis of changes in the postwar agricultural population (1955b, 1966a, 1969). He has studied the out-flow patterns of the labor force from farming households (1963, 1965, 1967, 1968) and the problem of securing successors of farm households (1964a, 1964b). His reports also include field surveys of individual villages, particularly those where mechanized agriculture has been introduced (1957a, 1957b, 1960, 1961, 1962), and evaluations of the fertility decline among farm households (1956, 1970).

Rural depopulation and agricultural change have also received research attention from agricultural economists in the Japanese universities. The demographic problems of the postwar villages and efforts to solve them are discussed in *Nōson no jinkō* [Population of rural villages], edited by Shigeo Nojiri of Kyoto University (1959). In a study of rural-urban migration (1964), Nojiri has distinguished between an early (prewar) pattern, based on decisions of the family group, and postwar migration, which is based more often on individual decisions influenced by the rapid development of the national economy. Ryōshin Minami has provided an overview and estimates of the extent of migration by the agricultural population (1961b, 1964, 1967).

Yūichi Minakawa, rural sociologist at Chiba University, has reviewed migration of the farm population during the period of rapid economic growth in Japan (1966a, 1967a, 1967b) and devoted attention to the part-time trend of the farming labor force (1963, 1964). The relationship of economic growth, labor supply, and rural population has been studied by Yoshitaka Hatai of Meiji Gakuin University (1962, 1965). He has also analyzed the association between business cycles and the number of farm households (1961). Changes in the composition of farm villages and the decline in the rate of population replacement in rural areas has been discussed by Masakichi Namiki of the Institute of Agricultural Economy (1960). The journal *Nōson jinkō mondai kenkyū* [Research on rural population problems] contains useful

articles on the agrarian population by members of the Nōson jinkō mondai kenkyū kai [Research Association on Rural Population Problems].

### Urban Growth

Corresponding to the rural depopulation following World War II was a rapid growth of urban–industrial regions and metropolitan centers. The population of cities increased from 37.5 percent of the total in 1950 to 63.5 percent in 1960 and 72.2 percent in 1970. In 1969, 50.6 percent of the total population was concentrated in the Tokaido megalopolitan area, which includes the cities of Tokyo-Yokohama, Nagoya, Kyoto, Osaka, and Kobe; this area contains only 18.9 percent of the total land area of Japan. It was in the cities and urbanizing areas that fertility began to decline and age at marriage began to rise.

The increasingly urban milieu has been an important research topic among members of IPP. *Dai-toshi jinkō no sho-mondai* [Problems of the metropolitan population], edited by Tachi, appeared in 1962. Ryōzaburō Minami and Tachi are editors of another text on the theory and analysis of urbanization (1965). Masao Ueda has studied recent demographic changes in the Tokaido megalopolitan area (1967b, 1967c) and prepared a special report on households within dwelling units in the Tokyo-Yokohama area (1965). Kuroda has attempted to follow the migratory behavior within the megalopolitan formations (1965a, 1965b), and Hama has suggested criteria for defining the megalopolitan areas in Japan (1965a, 1966a).

For the 1960 population census, the Bureau of Statistics established the concept of “Densely Inhabited District” (DID) for delineating urbanized areas in order to improve the deficiencies of the past urban–rural classification. DID is defined as an area within a *shi* (city), *machi* (town), or *mura* (village) that comprises a group of contiguous enumeration districts having a combined population of 5,000 or more and a density of 4,000 inhabitants or more per square kilometer. In 1960, DIDs accounted for 43.7 percent of the country’s total population, but only 1.0 percent of its total area. The proportion of the population living in DIDs increased to 48.1 percent in 1965 and to 53.5 percent in 1970, whereas the proportion of DID land area increased only to 1.2 percent of the total in 1965 and 1.7 percent in 1970 (Tachi and Katō, 1971:3). Population change of Japanese cities and their regional

distribution by DID has been examined by Sumiko Uchino (1969a, 1969b). A primary area of investigation by Uchino has been the dietary patterns of urban areas compared with those of rural areas (1962, 1963, 1967, 1968, 1970).

Minoru Miyakawa of Tokyo Women's College has reported on population structure in the wards of Tokyo, Nagoya, Osaka, and Kita-Kyushu by place of origin and by father's occupation (1963). Another study by Miyakawa examines underemployment among workers in small-scale businesses in Tokyo (1957). Shinzō Kiuchi of the University of Tokyo has described the process of urbanization in Japan (1959, 1964). The development of cities in Japan has also been a major research interest of sociologists Eiichi Isomura (1955, 1956, 1965) and Takeo Yazaki (1962, 1963, 1967), but their emphasis is mainly sociological rather than demographic. Relatively little of the research on urban Japan undertaken thus far has explored the relationship between population and pollution problems or the ecological system.

### *Past and Future*

Not even a brief overview of demographic activities in Japan would be complete without mentioning two additional topics. One is the increasing interest in historical demography, which attempts to evaluate the population conditions of the premodern past. The other is the concern about Japan's future population that has led to the development of a methodology for population projections and estimates.

### Historical Demography

A major contribution to historical demographic analysis has been the methodological studies of population and family structure in villages of the Tokugawa Period by Akira Hayami of Keio University (1966-67, 1968, 1970). Hayami systematically utilized religious records, household rosters, and other historical documents found in the villages to reconstruct the demographic past. Works by two other Japanese scholars that describe the population of the Edo and earlier Tokugawa Period are also noteworthy. Naotarō Sekiyama of the Prefectural Kokusai Economic University in Nagasaki, after long years of research, published in 1958 a detailed account of population enumeration during the Tokugawa Period. According to his study, the population increased considerably during the one hundred years prior to 1720,

but population size remained almost constant in the latter half of the Tokugawa Period. Bosen Takahashi of Daito Bunka University has studied the demography of clans in the Tokugawa Period, placing special emphasis on population limitation, primarily through infanticide and induced abortion (1955, 1962).

At IPP, Honda has estimated birth and death rates since the Meiji Restoration from 1845 to 1919 by applying the method of reverse survival ratios (1961). Yoichi Okazaki has published population estimates for the period 1870-1920 by age and sex (1962b). Two reports on an unusual study by Kazumasa Kobayashi, who has combined his demographic and anthropological training, estimate the average length of life on the basis of human skeletal remains; his research covers the millenia from the neolithic Jomon Period to modern times (1964, 1967b).

Yasukawa has made population estimates for the Meiji Period (1963) and with Keijirō Hirooka has constructed model life tables for the Meiji-Taisho era (1970). Historical population records of men and animals of the Higa Clan have been studied by Yuichi Minakawa of Chiba University (1961). Vital rates for the early Meiji Period have been discussed by Morita (1963). The Society for Social Economic History [Shakai keizai shi gakkai] has also engaged in historical population studies; its recent publications include *Keizai shi ni okeru jinkō* [Population in economic history] of 1969.

### Population Projections

The need for population and household projections to guide future economic policies on manpower and industrial redistribution has led to an increased interest in the methodology for deriving demographic projections and in the implications of those projections. Several estimates of the future labor force and of the future population by prefecture have already been mentioned elsewhere in this report.

The IPP has issued five sets of population projections for all Japan, using the conventional cohort survival method, in 1955, 1957, 1960, 1964, and 1969. In 1963 and 1965 it also published future population projections for each of the 46 prefectures. Projections by prefecture have been more complicated than national projections because of the uncertain factor of interregional migration.

The Bureau of Statistics, Office of the Prime Minister, has estimated

the population of each prefecture by age and sex as of October 1 for every intercensal year since 1921 in its *Population Estimate Series*, and the total population as of the first of each month since November 1950 in its *Monthly Reports*. A recent publication traces the history of the government's population estimates during the period 1920-68 and discusses the revisions that have occurred in the method of estimation (Office of the Prime Minister, Bureau of Statistics, *Population estimates of Japan*, Population Estimates Series, no. 36, Tokyo, 1970).

Hama has had a continuing concern with demographic estimation techniques. His studies include estimates of future population by age and sex (1961c, 1964a, 1967b, 1969b), by prefecture (1961b, 1963, 1965b, 1970), by region (1967a), and for particular areas such as Tokyo (1965c, 1967c) and the Tokyo Metropolitan Region (1964b). According to Hama, if demographic trends prevailing in the early 1960s continued, the total population of Japan would reach its peak of about 121.6 million in the year 2005 and thereafter it would decrease (1964a).

Kōno has prepared projections of the number of households in Japan for the period 1960-75 (1961) and for the period 1965-90 by prefecture (1966b). According to the 1960 census, the average household size dropped below five persons for the first time, to 4.52. The 1965 census showed a further decline to 4.08. According to Kōno's projections, under a "moderate" assumption the future household size would be 3.83 in 1970, 3.57 in 1975, 3.36 in 1980, 3.23 in 1985, and 3.13 in 1990 (1971:443).

Stable population theory and intrinsic vital rates have also received attention from Japanese scholars. Kazumasa Kobayashi and other IPP staff members have conducted research on intrinsic vital rates and stable population, including intrinsic rates of increase, average length of generation, and stable age composition (1964). Takagi has published an excellent report on stable population theory (1956), and a group at Kurume University has examined variations in stable population (Koki Abe, Kunio Yano, and Hiroji Esaki, 1971).

#### SUMMARY AND CONCLUSION

The current demographic situation of Japan differs from that of other Asian countries, most of which face the urgent problem of rapid population growth. The Japanese see their demographic growth as being

essentially under control, for the annual rate of natural increase has stabilized at about 1.1 percent per year. With an increasingly educated, affluent, and urbanized population, Japan ranks among the world's most highly industrialized nations. Its demographic concerns, like those of some European countries, are about regional imbalance, manpower deficiency, and social welfare. The proportion of the population entering the productive ages is declining, while that of the aged is increasing. The numbers of women in the reproductive ages will be fewer in 1985 than in 1970. One question occupying population policy-makers is whether a higher population growth rate should be encouraged. Many Japanese social scientists are directing their attention toward the problem of reconciling urbanization and the changing age composition of the population with the optimal allocation of manpower. For this reason, the focus of much demographic research has shifted from the national population as a whole toward specific segments of the population.

The development of population statistics and demographic research in Japan has been an indigenous one, and research analyses are of high standards. Use of Japanese demographic materials by the outsider has been restricted because of the language barrier. Most publications in English by the Japanese have tended to be on general topics. It should also be noted that Japanese demographic research has concentrated on Japan, and only a few studies have been cross-national in scope.

The Institute of Population Problems conducts the most advanced demographic research in Japan. The Institute is unique in being the only governmental agency responsible for all of a nation's official demographic research activities. Its research is continually related to the planning and policy needs of the Japanese government. Although several of the larger universities of Japan have academic researchers who study population from the viewpoint of their specific disciplines, there appears to be no institution within the universities that is exclusively devoted to demographic research and studies.

The censuses and vital statistics of Japan cover a span of a full century. These records appear to be the most accurate available for any country in South or East Asia. In 1871 Meiji Japan established the *Koseki-hō* (registration law), which formalized the use of Tokugawa resident records for population and vital statistics. This system continued, despite its deficiencies, until 1920, when it was replaced with

a modern periodic census modeled after censuses of the West. Vital statistics continued to be gathered by the *koseki* system until after World War II. Detailed population statistics on a broad scale are therefore available for an entire century. An important research undertaking would be the comprehensive analysis of these superb population records. The electronic computer increases the possibility of exploring demographic interrelationships previously considered too complex for analysis. Such an analysis would make possible the historical delineation of major social trends and would be an extraordinary contribution, not only to Japanese population studies, but also to world demography.

INTENTIONALLY

LEFT BLANK

INTENTIONALLY

LEFT BLANK

## PREFACE TO BIBLIOGRAPHY

The bibliography is divided into two parts. The first part is a subject index that classifies by topic the numbered items found in the second part. The second part lists the items by author in alphabetical order with complete citations, and numbers them sequentially. If a given publication covers several subjects, it may be listed in the subject index under more than one topic. A list of headings used for the classification of publications follows:

- Population (general)
  - Demography
    - Fertility
    - Mortality (general)
      - Life tables, life expectancy, aging
      - Age, sex composition
    - Population distribution
    - Internal migration and urbanization
    - Marriage and divorce
    - Population growth and estimates
    - Population theory
    - Population policy
    - Historical demography
    - Regional studies
  - Family planning
    - Family planning (general)
    - Knowledge, attitudes, and practices (KAP) surveys
    - Contraception and abortion
  - Population-related topics
    - Agriculture, land, rural residence
    - Economic and social factors
    - Employment, manpower, and labor force
    - Public health and nutrition
    - Family, household, and social structure

For publications in Japanese only, an English translation of the title is enclosed in brackets. Journals published in Japanese usually provide

**Preceding page blank**

English translations of article titles. Although sometimes awkward, these English translations have been retained without editing in the bibliography. Titles of bilingual publications are cited in Japanese, followed by the English without brackets.

To avoid the repeated translation of titles of Japanese periodicals frequently cited in the bibliography, the English translations are given below:

*Jinkō mondai kenkyū* [Journal of Population Problems]

*Jinkō mondai kenkyūjo nempō* [Annual Reports of the Institute of Population Problems]. This publication includes brief summaries in English of the articles.

*Jinkōgaku kenkyūkai kiyō* [Summary Records of the Study Group on Population Science]

*Nihon jinkō gakkai kaihō* [Bulletin of the Population Association of Japan]

*Nihon jinkō gakkai kiyō* [Archives of the Population Association of Japan]

## SUBJECT INDEX

- Population (general) 86, 164, 190, 215, 218, 247, 290, 295, 296, 310, 318, 324, 367
- Demography*
- Fertility 2, 3, 31, 46, 50, 51, 53, 55, 85, 106, 109, 118, 120, 122, 124, 138–140, 143, 153, 163, 177, 212, 215, 219, 260, 264, 312, 325, 335, 336, 340, 342, 343, 347, 358, 359, 362, 363, 365
- Mortality (general) 55, 102, 108, 109, 123, 124, 126, 153, 163, 165, 203, 207, 210, 230–236, 267–272, 284, 307, 357
- Life tables, life expectancy, and aging 49, 56, 57, 61, 63, 64, 66–68, 70–72, 74, 76, 78, 79, 81, 82, 101, 103, 104, 113, 133–135, 202, 204–206, 208, 233, 287, 288, 307, 313, 333, 334, 354–357, 368
- Age, sex composition 7, 10, 18, 19, 21, 52, 62, 65, 69, 75, 98–100, 250, 308, 335–339, 342, 347, 356
- Population distribution 14, 17, 22, 47, 83, 90, 91, 148, 155, 161, 275, 289, 304, 363
- Internal migration and urbanization 4, 5, 12, 15, 20, 25, 29, 30, 37, 39, 40–45, 48–60, 84, 87–89, 91–93, 96, 97, 100, 115–117, 136, 137, 141–143, 146–162, 176, 179, 182–184, 189, 195, 196, 226, 227, 260, 266, 275, 285, 293, 294, 297, 298, 301, 303, 305, 323, 326, 327, 330, 331, 336–347, 360, 364, 370–372
- Marriage and divorce 113, 125, 136–139, 276–279, 283, 312, 335, 358
- Population growth and estimates 1, 6–11, 13, 14, 16–19, 21, 22, 62, 65, 69, 73, 75, 77, 80, 83, 114, 119, 121, 167, 193, 196, 250, 254, 291, 300, 302, 306, 365, 369

Population theory	1, 109, 174, 178, 180, 181, 185–189, 218, 223, 242–246, 248, 249, 292, 311, 318, 366, 373
Population policy	45, 54, 90, 108, 145, 149, 218, 254, 263, 289, 349
Historical demography	26–28, 55, 101, 103, 170, 187, 202, 209, 241, 273, 274, 314, 315, 369
Regional studies	6, 9, 11, 13, 14, 19, 22, 27, 49, 73, 77, 85, 89, 100, 119, 144, 145, 147, 167–170, 194, 204, 206–208, 226, 232, 235, 271, 293, 294, 304, 308, 309, 323, 325, 327, 328, 330, 331, 334–336, 338, 340–342, 347, 361
<i>Family planning</i>	
Family planning (general)	3, 127, 163, 213–217, 319
KAP surveys	2, 50, 51, 106, 163, 219
Contraception and abortion	3, 53, 128, 212, 214, 216, 280
<i>Population-related topics</i>	
Agriculture, land, rural residence	23–25, 30–47, 94, 97, 110, 170–173, 175–177, 179, 182–184, 214, 224, 225, 227–229, 320–322, 351
Economic and social factors	24, 32–37, 39–41, 83, 107, 118, 120, 122–126, 135, 144, 148, 151, 152, 158, 159, 162, 167, 173, 180, 181, 191, 193, 215, 216, 224, 225, 228, 235, 238–241, 247, 249, 252, 254, 261, 263–265, 274, 275, 289, 291, 293, 294, 300–305, 317, 326, 329, 366, 371, 372
Employment, manpower, and labor force	7, 8, 16, 23, 29, 32, 34, 37, 39–46, 52, 54, 80, 86, 98, 99, 110–112, 144, 145, 166, 171, 173, 175, 179, 192–195, 197–201, 219–222, 226, 230, 237, 248, 251–253, 255–259, 261, 262, 285, 286, 316, 322, 326, 350–353, 362

Public health and nutrition	48, 269–272, 281, 282, 284, 299, 326–329, 332, 355
Family, household, and social structure	15, 28, 31, 38, 43, 44, 56–58, 84, 94, 95, 105, 107, 114, 119, 121, 129–132, 156, 171, 172, 179, 183, 211, 309, 333, 341, 348, 349, 361

**INTENTIONALLY**

**LEFT BLANK**

## CITATIONS BY AUTHOR

Abe, Koki; Kunio Yano; and Hiroji Esaki

- 1 1971 Jinkō sōsu no hendō to antei jinkō [Variation of population and stable population]. *Nihon jinkō gakkai kaihō* (5):26–27.

Aoki, Hisao

- 2 1964–65 Shōwa 37-nen dai 4-ji shussanryoku chōsa kekka no gaiyō [Report of the fourth fertility survey in 1962]. *Jinkō mondai kenkyū*.  
 Part 1 (90):1–54, March 1964.  
 Part 2 (93):19–39, January 1965.  
 Part 3 (95):36–51, July 1965.  
 Part 4 (96):26–35, October 1965.
- 3 1967 Kazoku keikaku no shusshō yokusei kōka ni tsuite [Birth-prevention effect of family planning]. *Nihon jinkō gakkai kaihō* (1):29–31.

Esaki, Hiroji. *See* Abe, Koki; Kunio Yano; and Hiroji Esaki.

Hama, Hidehiko

- 4 1959 Saikin ni okeru jinkō idō tōkei no hikaku kentō [Comparative study of latest statistics of population migration]. *Jinkō mondai kenkyūjo nempō* (4):13–28.
- 5 1961a Kokunai jinkō idō ni kansuru tōkei shiryō no hyōka [Evaluation of the recent statistical data on internal migration]. In Minoru Tachi, ed., *Nihon no jinkō idō* [Population migration in Japan], pp. 79–121. Tokyo: Kokon shoin.
- 6 1961b *Todōfuken-betsu suikei shōrai jinkō (zantei), Shōwa 40-nen oyobi 45-nen* [Future population estimates by prefectures, Japan (provisional) for 1965 and 1970]. Research Series, no. 140. Tokyo: Institute of Population Problems.
- 7 1961c Waga kuni shōrai jinkō ni yoru fuyōkei sū no keisan to sono kekka [The dependency ratio in the future

Hama, Hidehiko (*continued*)

- population of Japan]. *Jinkō mondai kenkyūjo nempō* (6):9–13.
- 8 1962 Waga kuni rōdōryoku jinkō no shōrai suikei: 1960–1970-nen ni tsuite no shisan [An estimate of future labor force in Japan: 1960–1970]. *Jinkō mondai kenkyūjo nempō* (7):9–14.
- 9 1963 Todōfuken-betsu jinkō no shōrai suikei: 1965-nen oyobi 1970-nen [An estimate of future population by prefectures in Japan: 1965 and 1970]. *Jinkō mondai kenkyūjo nempō* (8):16–20.
- 10 1964a Nihon no shōrai jinkō–Shōwa 39-nen 6-gatsu suikei no hōhō to kekka ni tsuite [Future population estimates for Japan by sex and age: estimated in June 1964]. *Jinkō mondai kenkyū* (91):56–63, June.
- 11 1964b Shuto ken chiiki ni okeru shōrai jinkō no suikei [An estimate of the future population in the Tokyo Metropolitan Region]. *Jinkō mondai kenkyūjo nempō* (9):24–29.
- 12 1965a Nihon ni okeru megaloporisu no kakutei [Delimitation of megalopolis based on some criteria in Japan]. *Jinkō mondai kenkyū* (94):11–25, April.
- 13 1965b *Todōfuken-betsu shōrai suikei jinkō, Shōwa 39-nen 10-gatsu 1-nichi suikei, Shōwa 40-nen–70-nen mai 5-nen 10-gatsu 1-jitsu* [Future population estimates by prefectures, Japan: 1965–1995. Estimated in October 1964]. Research Series, no. 164. Tokyo: Institute of Population Problems.
- 14 1965c Tōkyō-to ku-shi-chōson-betsu shōrai jinkō no suikei [Future distribution of the population in the wards, cities, towns and villages of Tokyo]. *Jinkō mondai kenkyūjo nempō* (10):11–14.
- 15 1966a Jinkō daitoshi shūchū no genjō to mondaiten [Present situation and problems of population concentration in the metropolitan regions]. *Jinkō mondai kenkyūjo nempō* (11):6–9.
- 16 1966b Waga kuni rōdōryoku jinkō no genjō to shōrai yosoku [An estimate of future labor force popula-

Hama, Hidehiko (*continued*)

- tion in Japan]. *Jinkō mondai kenkyū* (98):1–15, April.
- 17 1967a Chiiki-betsu shōrai jinkō no dōkō [Projection of regional population]. *Jinkō mondai kenkyū* (101):60–66, February.
- 18 1967b Kihon kōzō no shōrai suikei [Future projections of size and sex-age composition of the population]. *Jinkō mondai kenkyū* (100):34–41, January.
- 19 1967c Tōkyō-to danjo nenrei 5-sai kaikyū-betsu shōrai jinkō no suikei [Future population estimate of Tokyo by sex and five-year age groups: 1970–1985]. *Jinkō mondai kenkyūjo nempō* (12):16–20.
- 20 1969a Shōwa 30-nen ikō fukēn-kan jinkō idō no tokuchō [Characteristics of interprefectural migration since 1955 in Japan]. *Jinkō mondai kenkyūjo nempō* (14):37–41.
- 21 1969b Zenkoku danjo nenrei betsu shōrai suikei jinkō–Shōwa 44-nen 8-gatsu suikei [Future population estimates for Japan by sex and age, estimated in August 1969]. *Jinkō mondai kenkyū* (112):36–45, October.
- 22 1970 Todōfukēn betsu shōrai suikei jinkō–Shōwa 45, 50, 55, 60 kakunen 10-gatsu 1-jitsu [Revised population estimates by prefectures, Japan: 1970, 1975, 1980, and 1985 provisional]. *Jinkō mondai kenkyū* (113):64–67, January.

*See also* *Jinkō mondai kenkyūjo* 1961, 1962, 1963a, 1963b, 1964b, 1965b, 1967b.

Hama, Hidehiko; Masao Ueda; and Shigemi Kōno. *See* *Jinkō mondai kenkyūjo* 1960a and 1960b.

Hama, Hidehiko; Masao Ueda; and Kiichi Yamaguchi. *See* *Jinkō mondai kenkyūjo* 1957b.

## Hatai, Yoshitaka

- 23 1961 Keizai hendō to nōkakosū hendō [Business cycle

Hatai, Yoshitaka (*continued*)

- and the change of the farm households]. *Nōgyō keizai kenkyū* [Journal of Rural Economics] 33(1): 19–34.
- 24 1962 Keizai seichō to nōgyō jinkō [Economic growth and agricultural population]. *Keizai hyōron* [Economic Review] 11(5):84–95.
- 25 1965 Nōson kara mita jinkō toshi-ka [The urbanizing population viewed from the rural villages]. In Ryōzaburō Minami and Minoru Tachi, eds., *Jinkō toshi-ka no riron to bunseki* [The theory and analysis of urbanizing population], pp. 141–175. Tokyo: Keisō shobō.

## Hayami, Akira

- 26 1966–67 The population at the beginning of the Tokugawa Period. *Keio Economic Studies* 4:1–28.
- 27 1968 The demographic analysis of a village in Tokugawa Japan: Kando-shinden of Owari Province, 1778–1871. *Keio Economic Studies* 5:50–88.
- 28 1970 Rekishi jinkōgaku no atarashii hōhō—*family reconstruction ni tsuite* [New methods of historical demography: with reference to family reconstruction]. *Nihon jinkō gakkai kaihō* (4):57–59.

## Hayashi, Shigeru

- 29 1955a *Sengo ni okeru nōson jinkō no shokugyō idō ni kansuru ichi kōsatsu* [An observation of occupational shifts of postwar migration movement of farm-village population]. Research Series, no. 106. Tokyo: Institute of Population Problems.
- 30 1955b *Sengo nōson idō jinkō no idō chiiki betsu idō jōtai ni kansuru bunseki* [An analysis of the postwar migration movement of farm-village population]. Research Series, no. 101. Tokyo: Institute of Population Problems.
- 31 1956 Sengo ni okeru nōminteki tasan no shokeitai [Patterns of fertility in post-war farming households]. *Jinkō mondai kenkyūjo nempō* (1):41–44.

Hayashi, Shigeru (*continued*)

- 32 1957a Ichi kikai-ka nōson ni okeru nōmin no shūrō jōkyō chosa no kekka ni tsuite [On working state of farmers in the mechanized farm village]. *Jinkō mondai kenkyūjo nempō* (2):7-12.
- 33 1957b Kikai-ka nōson ni okeru jinkō shūyō no keitai [On the population supporting capacity in a mechanized farm village]. *Jinkō mondai kenkyū* (69):38-58, October.
- 34 1960 Kazoku no zokuhei-betsu ni mita nōgyō to kengyō jūji jōkyō no kōsatsu [A study on farm and non-farm workers by family status in a mechanized farming village in Japan]. *Jinkō mondai kenkyū* (79):1-24, May.
- 35 1961 Ichi kikai-ka nōson ni okeru jinkō no dōkō [Population trend in a mechanized farming community]. *Jinkō mondai kenkyūjo nempō* (6):51-55.
- 36 1962 Nōgyō kin'raika to nōgyō jinkō [Modernization of agriculture and agricultural population]. *Jinkō mondai kenkyū* (86):1-33, December.
- 37 1963 Nōka rōdōryoku no ryūshutsu keitai-kōdo keizai seichōka ni okeru sono henbō [Patterns of the outflow of labor force of the farmhouse--its transfiguration under high economic growth]. *Jinkō mondai kenkyūjo nempō* (8):34-39.
- 38 1964a Nōka ni okeru kōkeisha kakutei no keitai ni tsuite [Types of securing successors in the farm households]. *Jinkō mondai kenkyūjo nempō* (9):49-53.
- 39 1964b Nōka rōdōryoku no ryūshutsu to kōkeisha kakutei no keitai [An observation of the outflow patterns of farm labor force and the situation of maintenance of successors in farm households]. *Jinkō mondai kenkyū* (91):29-55, June.
- 40 1965 Nōka rōdōryoku no ryūshutsu keitai-chiiki ruikeiteki ichi kōsatsu [A survey on the typical pattern of districts in forms of outflow of the agricultural labor force]. *Jinkō mondai kenkyūjo nempō* (10):22-25.

Hayashi, Shigeru (*continued*)

- 41 1966a Nōgyō jinkō no hendō to rōdōryoku no jukyū kōzō [Decline of agricultural population and demand-supply structure of labor force]. *Jinkō mondai kenkyūjo nempō* (11):22–25.
- 42 1966b Nōka rōdōryoku no ryūnyū keitai--sono jittai to mondaiten [Patterns of inflow of farming labor force- actual conditions and point of problems]. *Jinkō mondai kenkyū* (97):13–24, January.
- 43 1967 Nōka rōdōryoku no gyakuryū to sono mondai [Flow-back of labor force in farming households and its problems]. *Jinkō mondai kenkyūjo nempō* (12):29–33.
- 44 1968 Saikin ni okeru nōka rōdōryoku ryūshutsu kōzō no henbō to sono mondai [Change of outflow of labor force from farming households in recent years and its problems]. *Jinkō mondai kenkyū* (105):21–31, January.
- 45 1969 Nōka rōdōryoku no kokatsu to sono mondai [The exhaustion of agricultural labor force and its problems]. *Jinkō mondai kenkyūjo nempō* (14):61–65.
- 46 1970 Saikin ni okeru nōka no shussho ritsu teika no mondai [Problems of the decline of birth rate of farming households in recent years]. *Jinkō mondai kenkyūjo nempō* (15):15–19.

## Hemmi, Kenzo

- 47 1956 Nōgyō jinkō no koteisei [On the stability of the farm population of Japan]. In Seiichi Tobata and Kazushi Ohkawa, eds., *Nihon no keizai to nōgyō* [Growth of agriculture in the expanding economy of Japan], vol. 1, pp. 124–141. Tokyo: Iwanami shoin.

## Higashida, Toshio

- 48 1971 Toshi jinkō no kankyō eisei [Environmental hygiene of urban population]. *Nihon jinkō gakkai kaihō* (5):70–72

Hirooka, Keijiro, and Masaaki Yasukawa. *See* Yasukawa, Masaaki, and Keijiro Hirooka.

Hishinuma, Shigekazu, and Mitsuru Kadoyama

- 49 1957 Tōhoku roku-ken no seimeihyō ni tsuite [Concerning life tables of six prefectures in Tohoku district]. *Junyōgaku kenkyūkai nempō* [Annual reports of the Gerontological Association of Japan](2):264–265.

Honda, Tatsuo

- 50 1955 Mainichi shimbun-sha jinkō mondai chōsa-kai no sanji chōsetsu ni kansuru dai 3-kai yorōn chōsa [The 3rd public opinion survey on birth control by the Population Problems Research Council, the Mainichi Newspapers]. *Jinkō mondai kenkyū* (62):54–72.
- 51 1958 Kazoku no ōkisa to shite mita saikin no shussanryoku—1957-nen dai 3-ji shussanryoku chōsa kekka no hōkoku [Latest fertility taken as indicator of family size—report on results of the Third Fertility Survey of 1957]. *Jinkō mondai kenkyūjo nempō* (3):24–27.
- 52 1959a Nenrei-betsu shūgyō kōzō no bunseki [An analysis of Japan's employment structure by use of 1955 census tabulations classified by the employed and self-employed and also by sex and age]. *Jinkō mondai kenkyūjo nempō* (4):25–28.
- 53 1959b Senzen sengo no fūfu shussanryoku ni okeru shushō yokusei kōka no bunseki—toku ni chūzetsu to hinin no yokusei kōka ni tsuite [An analysis of the birth control effect in the marital fertility in pre- and postwar Japan—with special reference to the effectiveness of control by induced abortion and contraceptive practice]. *Jinkō mondai kenkyū* (78):1–19, December.
- 54 1960 Saikin no koyō jōsei no gaikan [The latest employment situation]. *Jinkō mondai kenkyūjo nempō* (5):76–81.

Honda, Tatsuo (*continued*)

- 55 1961 Meiji ishin zengo kara no waga kuni jinkō dōtai no saigimmi [Re-examination of vital rates since the Meiji Restoration]. *Jinkō mondai kenkyūjo nempō* (6):1–5.
- 56 1965 Rōjin mondai ni tsuite [On the problem of the aged]. *Jinkō mondai kenkyūjo nempō* (10):1–3.

## Ide, Ichirō

- 57 1968 Jinkō rōnen-ka to shakai hosho seido no shōrai no mondai [On the future problem of aging of population and social security system]. *Nihon jinkō gakkai kaihō* (2):66–68.

Institute of Population Problems (IPP). *See* Jinkō mondai kenkyūjo.

## Isomura, Eiichi

- 58 1955 Daitoshi ni okeru chiiki kōzō no bunseki: toku ni toshinteki chiiki o chūshin ni [An analysis of areal structure in the large city: focus on center areas]. *Toshi mondai* [Urban Problems] 46(9):1–11.
- 59 1956 Urbanization in Japan. In United Nations Economic and Social Council, *Official Records of the Economic Commission for Asia and the Far East*, pp. 1–28. New York, 19 July 1956.

## Isomura, Eiichi, ed.

- 60 1965 *Toshi mondai jiten* [Dictionary of urban problems]. Tokyo: Kajima kenkyūjo shuppankai.

Ito, Mareko; Mitsuo Segi; Minoru Kurihara; and Tsuneaki Matsuyama. *See* Segi, Mitsuo; Minoru Kurihara; Tsuneaki Matsuyama; and Mareko Ito.

## Jinkō mondai kenkyūjo [Institute of Population Problems]

- 61 1955a *Dai 8-kai kansoku seishi jinkō hyō—seimeihyō* [The 8th abridged life table], prepared by Naobumi Takagi. Research Series, no. 109. Tokyo.

Jinkō mondai kenkyūjo [Institute of Population Problems]  
(continued)

- 62 1955b *Danjo nenrei betsu suikei jinkō, Shōwa 30-nen 3-gatsu 1-jitsu suikei* [Population estimates by sex and age, March 1, 1955], prepared by Naobumi Takagi. Research Series, no. 110. Tokyo.
- 63 1956 *Dai 9-kai kansoku seishi jinkō hyō-seimeihyō* [The 9th abridged life table], prepared by Naobumi Takagi. Research Series, no. 117. Tokyo.
- 64 1957a *Dai 10-kai kansoku seishi jinkō hyō-seimeihyō* [The 10th abridged life table], prepared by Naobumi Takagi. Research Series, no. 121. Tokyo.
- 65 1957b *Danjo nenrei betsu suikei jinkō, Shōwa 30-40-nen kan* [Estimated future population for 1955-1965 by age and sex for all Japan], prepared by Masao Ueda, Hidehiko Hama, and Kiichi Yamaguchi. Research Series, no. 118. Tokyo.
- 66 1958 *Dai 11-kai kansoku seishi jinkō hyō-seimeihyō* [The 11th abridged life table], prepared by Naobumi Takagi. Research Series, no. 124. Tokyo.
- 67 1959 *Dai 12-kai kansoku seishi jinkō hyō-seimeihyō* [The 12th abridged life table], prepared by Naobumi Takagi. Research Series, no. 133. Tokyo.
- 68 1960a *Dai 13-kai kansoku seishi jinkō hyō-seimeihyō* [The 13th abridged life table], prepared by Masao Ueda, Hidehiko Hama, and Shigemi Kōno. Research Series, no. 139. Tokyo.
- 69 1960b *Danjo nenrei-betsu suikei jinkō, Shōwa 35-nen 6-gatsu 1-jitsu suikei; Shōwa 30-nen-Shōwa 90-nen* [Future population estimates for Japan by sex and age for October 1 from 1955 to 2015, estimated in June 1960], prepared by Masao Ueda, Hidehiko Hama, and Shigemi Kōno. Research Series, no. 138. Tokyo.
- 70 1961 *Dai 14-kai kansoku seishi jinkō hyō-seimeihyō* [The 14th abridged life table], prepared by Hidehiko Hama. Research Series, no. 143. Tokyo.

Jinkō mondai kenkyūjo [Institute of Population Problems]  
(continued)

- 71 1962 *Dai 15-kai kansoku seishi jinkō hyō-seimeihyō* [The 15th abridged life table], prepared by Hidehiko Hama. Research Series, no. 150. Tokyo.
- 72 1963a *Dai 16-kai kansoku seishi jinkō hyō-seimeihyō* [The 16th abridged life table], prepared by Hidehiko Hama. Research Series, no. 156. Tokyo.
- 73 1963b *Todōfuken-betsu suikei shōrai jinkō, Shōwa 40-nen oyobi 45-nen* [Future population estimates by prefectures, Japan, for 1965 and 1970], prepared by Hidehiko Hama. Research Series, no. 154. Tokyo.
- 74 1964a *Dai 17-kai kansoku seishi jinkō hyō-seimeihyō* [The 17th abridged life tables], prepared by Kazumasa Kobayashi. Research Series, no. 162. Tokyo.
- 75 1964b *Danjo nenrei-betsu shōrai suikei jinkō, Shōwa 39-nen 6-gatsu 1-jitsu suikei, Shōwa 30-nen-Shōwa 90-nen* [Future population estimates for Japan by sex and age for October 1 from 1955 to 2015, estimated in June 1964], prepared by Hidehiko Hama. Research Series, no. 159. Tokyo.
- 76 1965a *Dai 18-kai kansoku seishi jinkō hyō-seimeihyō* [The 18th abridged life table], prepared by Kazumasa Kobayashi. Research Series, no. 166. Tokyo.
- 77 1965b *Todōfuken-betsu shōrai suikei jinkō, Shōwa 39-nen 10-gatsu 1-jitsu suikei, Shōwa 40-nen-70-nen kan mai 5-nen 10-gatsu 1-jitsu* [Future population estimates by prefectures, Japan, 1965-1995, estimated in October 1964], prepared by Hidehiko Hama. Research Series, no. 164. Tokyo.
- 78 1966 *Dai 19-kai kansoku seishi jinkō hyō-seimeihyō* [The 19th abridged life table], prepared by Kazumasa Kobayashi. Research Series, no. 171. Tokyo.
- 79 1967a *Dai 20-kai kansoku seishi jinkō hyō-seimeihyō* [The 20th abridged life tables], prepared by Takeharu Kaneko. Research Series, no. 179. Tokyo.
- 80 1967b *Waga kuni rōdōryoku jinkō no shōrai suikei, danjo nenrei 5-sai kaikyū betsu, Shōwa 40-60 nen kan*

Jinkō mondai kenkyūjo [Institute of Population Problems]  
(continued)

- mai 5-nen 10-gatsu 1-jitsu, Shōwa 41-nen 12-gatsu 1-jitsu suikei* [Estimates of future labor force population in Japan for October 1 from 1965 to 1985 estimated in December 1966], prepared by Hidehiko Hama. Research Series, no. 174. Tokyo.
- 81 1969 *Dai 21-kai kansoku seishi jinkō hyō-seimeihyō* [The 21st abridged life tables], prepared by Kazumasa Kobayashi. Research Series, no. 191. Tokyo.
- 82 1970 *Dai 22-kai kansoku seishi jinkō hyō-seimeihyō* [The 22nd abridged life tables], prepared by Takeharu Kaneko. Research Series, no. 194. Tokyo.

Kadoyama, Mitsuru. See Hishinuma, Shigekazu, and Mitsuru Kadoyama.

Kamiya, Keiji

- 83 1963 Korekara no jinkō bumpai: Shukyoku bumpai to chiiki keizai [Future population distribution: ultimate distribution and regional economy]. *Kinyū jūnaru* [Finance Journal] 4(8):40–43.

Kanekiyo, Hiroyuki

- 84 1970 *Hitto no ugoki to shakaiteki kūkan* [People's movements and social space]. Tokyo: Dai-seidō.

Kaneko, Takeharu

- 85 1967 Todōfuken-betsu hyōjunka shussei ritsu no jidaiteki henka: Taishō 14-nen–Shōwa 35-nen [Changes in prefectural standardized birth rates: 1925–1960]. *Jinkō mondai kenkyūjo nempō* (12):56–60.

See also Jinkō mondai kenkyūjo 1967a, 1970.

Kaneko, Takeharu; Kazumasa Kobayashi; Kiichi Yamaguchi; and Michiko Yamamoto. See Kobayashi, Kazumasa; Kiichi Yamaguchi; Michiko Yamamoto; and Takeharu Kaneko.

Katō, Saburō, and Minoru Tachi. See Tachi, Minoru, and Saburō Katō.

Katō, Toshinobu

- 86 1970 Ajia no jinkō to rōdōryoku [Population and labor force in Asia]. Tokyo: Nihon YMCA dōmei shuppan-bu.

Kawabe, Hiroshi

- 87 1961a Nihon no kokunai jinkō idō [Internal migration of Japan: 1950–1955]. *Chirigaku hyōron* [Geographical Review of Japan] 34(2):42–54.
- 88 1961b Nihon no toshi ni okeru jinkō idō no kōsatsu [Migration to cities in Japan: 1950–1955]. *Chirigaku zasshi* [Journal of Geography] 70(4):16–30.
- 89 1964 The study of the areal differences of migration in Tokyo. *Tōhoku daigaku rika hōkoku, dai 7-shū-chirigaku* [The Science Reports of the Tohoku University, Seventh Series—Geography] (13):79–93.
- 90 1965 Jinkō bumpu no bunseki hōhō to sono ōyō ni tsuite [Some considerations on the methods of population distribution analysis and their application to the Japanese population]. In Tokyo University, Institute of Human Geography, *Proceedings, Series of Human Geography* (1):45–62. Tokyo.

Kishimoto, Minoru

- 91 1968 *Nihon no jinkō shūseki* [Population concentration in Japan]. Tokyo: Kokon shoin.

Kiuchi, Shinzō

- 92 1959 Centrifugal and centripetal urbanization in Japan. In University of Tokyo, Institute of Geography, *Contributions to Geographical Literature* (1):367–371. Tokyo.

Kiuchi, Shinzō, ed.

- 93 1964 *Nihon no toshi-ka* [Urbanization in Japan]. Tokyo: Kokon shoin.

Kobayashi, Kazumasa

- 94 1956 Nōson sōzoku shotai ni okeru kazoku saikuru no

Kobayashi, Kazumasa (*continued*)

- shodankai [On stages of the family cycle in 230 rural families]. *Jinkō mondai kenkyū* (64):15–37, May.
- 95 1960 Kokusei chōsa ni okeru setai tōkei o chūshin to shite [On the household statistics in the census]. *Jinkōgaku kenkyūkai kiyō* (3):21.
- 96 1961a Fūken-kan no jinkō idō [Inter-prefectural migration]. In Minoru Tachi, ed., *Nihon no jinkō idō* [Population migration in Japan], pp. 200–208. Tokyo: Kokon shoin.
- 97 1961b Nōson kara no jinkō idō [Migration from rural areas]. In Minoru Tachi, ed., *Nihon no jinkō idō* [Population migration in Japan], pp. 178–187. Tokyo: Kokon shoin.
- 98 1961c Sangyō betsu danshi shūgyōsha no nenrei kōzō—hendō keikō no hikaku: 1950–1955-nen [The age structure of male employees by industries—comparisons of fluctuations: 1950–1955]. *Jinkō mondai kenkyūjo nempō* (6):40–44.
- 99 1962 Sangyō betsu danshi shūgyōsha no nenrei kōzō: 1955–1960-nen no hendō [Changing age structure of employed males in Japan: 1955–1960]. *Jinkō mondai kenkyūjo nempō* (7):15–19.
- 100 1963 Tōkyō e no jinkō shūchū no suii ni kansuru danjo nenrei kaikyū betsu bunseki: 1920–1960-nen [An analysis by age and sex regarding the trend in population concentration to Tokyo: from 1920 to 1960] *Jinkō mondai kenkyūjo nempō* (8):52–56.
- 101 1964 Jinkotsu no suitei shibō nenrei ni motozuku jumyō kenkyū no jōkyō [Recent studies on length of life based on human skeletal remains]. *Jinkō mondai kenkyū* (90):55–63, March.
- 102 1967a Shibōritsu no suii [Trend of mortality]. *Jinkō mondai kenkyū* (100):82–91, January.
- 103 1967b Shutsudo jinkotsu ni yoru Nihon Jōmon jidaijin no jumyō no suitei [Estimating length of life through human skeletal remains from neolithic Jomon period of Japan]. *Jinkō mondai kenkyū* (102):1–10, April.

Kobayashi, Kazumasa (*continued*)

- 104 1967c Waga kuni no ronon jinko zoka ni taisuru shibo ritsu teika no eikyo: 1950–1965-nen [Mortality decline and growth of old age population in Japan: 1950–1965]. *Jinko mondai kenkyūjo nempō* (12):74–78.
- 105 1969 Zenkoku setai kibo no jidaiteki suii [Secular trends in the size of household in Japan]. *Jinko mondai kenkyū* (111):4–20, July.
- 106 1969–70 Dai 5-ji shussanryoku chosa kekka no bunseki [Report of the fifth fertility survey]. *Jinko mondai kenkyū*.  
 Part 1 (110):1–24, April 1969.  
 Part 2 (112):1–20, October 1969.  
 Part 3 (113):31–47, January 1970.  
 Part 4 (115):1–31, July 1970.
- 107 1970 *Household data in the population census of Japan and some aspects of household changes*. English Pamphlet Series, no. 72. Tokyo: Institute of Population problems.

*See also* Jinkō mondai kenkyūjo 1964a, 1965a, 1966, 1969.

Kobayashi, Kazumasa, and Takeharu Kaneko

- 108 1966 Senzen sengo waga kuni zenkoku shibōritsu no suii [Trend in mortality in the prewar and postwar periods in Japan]. *Jinkō mondai kenkyūjo nempō* (11):47–50.

Kobayashi, Kazumasa; Kiichi Yamaguchi; Michiko Yamamoto; and Takeharu Kaneko

- 109 1964 *Waga kuni no nenji-betsu antei jinkō dōtai ritsu oyobi nenrei kōzō, Taishō 14-nen–Shōwa 35-nen* [Intrinsic vital rates and stable populations for all Japan, 1925–1960]. Research Series, no. 161. Tokyo: Institute of Population Problems.

Kobayashi, Ken'ichi

- 110 1961 *Shūgyō kōzō to nōson kajō jinkō* [Occupational structure and agricultural surplus population]. Tokyo: Ochanomizu shobō.

Kōno, Shigemi

- 111 1958 The Japanese work force: a demographic analysis. Unpublished doctoral dissertation, Brown University, Providence. 235 pp.
- 112 1959 Jinkōgakuteki yōin no rōdōryoku ritsu ni oyobosu eikyō; *component analysis* no shōkai to soreni yoru bunseki [Demographic factors affecting labor force participation rates in Japan; an introduction of “component analysis” and its application]. *Jinkō mondai kenkyūjo nempō* (4):29–34.
- 113 1960 Nihonjin fūfū ni kansuru kekkon no seimeihyō [Marriage table for Japanese couples with life tables by marital status]. *Jinkō mondai kenkyū* (80):25–42, September.
- 114 1961 Waga kuni setaisū no shōrai suihei [Household projections for Japan, 1960 to 1975]. *Jinkō mondai kenkyū* (83):1–13, July.
- 115 1963a Fūken-kan jinkō idō no yōin bunseki: 1956-nen to 1961-nen [Stream analysis of inter-prefectural migration in Japan: 1956 and 1961]. *Jinkō mondai kenkyū* (88):24–51, July.
- 116 1963b *Inter-prefectural migration in Japan, 1956 and 1961: Migration stream analysis*. Bombay: Demographic Training and Research Center.
- 117 1965 Jinkō idō kara mita megoroporisu no tokuchō [Some characteristics of the megalopolitan development in Japan: migration velocity analysis]. *Jinkō mondai kenkyū* (95):11–20, July.
- 118 1966a Shusshōryoku ni oyobosu shakai keizaiteki yōin [Social and economic factors affecting fertility in Japan]. *Jinkō mondai kenkyūjo nempō* (11):39–42.
- 119 1966b *Zenkoku todōfūken betsu setaisū no shōrai suihei, Shōwa 40-nen–65-nen, Shōwa 41-nen 8-gatsu suihei, chūkan hōkoku* [Future projections of number of households for Japan and 46 prefectures, October 1965 to 1990, projected in August 1966, interim report]. Research Series, no. 170. Tokyo: Institute of Population Problems.

Kōno, Shigemi (*continued*)

- 120 1967 *Shusshōryoku ni oyobosu shakai shinriteki yōin* [Social and psychological factors affecting fertility in Japan]. Research Series, no. 175. Tokyo: Institute of Population Problems.
- 121 1971 Population and household projections for the development programming in Japan. In Minoru Tachi and Minoru Muramatsu, eds., *Population problems in the Pacific*, pp. 433–444. Tokyo: Eleventh Pacific Science Congress.

*See also* Jinkō mondai kenkyūjo 1960a, 1960b.

Kōsei-shō, daijin kambō tōkei chōsa-bu [Welfare Ministry, Secretariat, Statistical Bureau]

- 122 1964 *Jinkō dōtai shakai keizai-men chōsa hōkoku: shusshō, Shōwa 37-nendo* [Survey report on the socioeconomic aspects of vital statistics: births, 1962]. Tokyo.
- 123 1965 *Jinkō dōtai shakai keizai-men chōsa hōkoku: shibō, Shōwa 38-nendo* [Survey report on the socioeconomic aspects of vital statistics: deaths, 1963]. Tokyo.
- 124 1967 *Jinkō dōtai shakai keizai-men chōsa hōkoku: shusshō oyobi shizan, Shōwa 39-nendo* [Survey report on the socioeconomic aspects of vital statistics: births and stillbirths, 1964]. Tokyo.
- 125 1968a *Jinkō dōtai shakai keizai-men chōsa hōkoku: kon'in, Shōwa 41-nendo* [Survey report on the socioeconomic aspects of vital statistics: marriage, 1966]. Tokyo.
- 126 1968b *Jinkō dōtai shakai keizai-men chōsa hōkoku: nyūji shibō, Shōwa 40-nendo* [Survey report on the socioeconomic aspects of vital statistics: infant deaths, 1965]. Tokyo.

Koya, Yoshio

- 127 1963 *Pioneering in family planning: A collection of papers on the family planning programs and research con-*

Koya, Yoshio (*continued*)

*ducted in Japan*. Tokyo: Japan Medical Publishers, with assistance of Population Council, New York. 173 pp.

## Koya, Yoshio, ed.

- 128 1966 *Harmful effects of induced abortion*. Tokyo: Family Planning Federation of Japan, Medical Committee.

## Koyama, Takashi

- 129 1960 *Gendai kazoku no kenkyū* [Studies of the contemporary family]. Tokyo: Kobundo. 573 pp.
- 130 1962 *Kazoku kōsei no henka* [Changes in family structure]. *Jimbun gaku* (29).
- 131 1964 Changing family composition and the aged in the Japanese family. *International Journal of Comparative Sociology* 5(2):155–161.
- 132 1967 *Gendai kazoku no yakuwari kōzō* [Role structure of the contemporary family]. Tokyo: Baifūkan.

Kurihara, Minoru; Mitsuo Segi; and Tsuneaki Matsuyama. *See* Segi, Mitsuo; Minoru Kurihara; and Tsuneaki Matsuyama.

Kurihara, Minoru; Mitsuo Segi; Tsuneaki Matsuyama; and Mareko Ito. *See* Segi, Mitsuo; Minoru Kurihara; Tsuneaki Matsuyama; and Mareko Ito.

Kurihara, Minoru; Mitsuo Segi; and Yasuo Tsukahara. *See* Segi, Mitsuo; Minoru Kurihara; and Yasuo Tsukahara.

## Kuroda, Toshio

- 133 1955a *Kōnenka genshō no jinkōgaku-teki kenkyū* [Demographic investigations on the problems of aging population]. *Jinkō mondai kenkyū*.  
Part 1 (61):8–62, August.  
Part 2 (62):10–42, December.
- 134 1955b *Kōnenka jinkōgaku no kihon mondai* [Fundamental questions on demography of aging]. Research Series, no. 104. Tokyo: Institute of Population Problems.

Kuroda, Toshio (*continued*)

- 135 1956 Nenrei genshō no jinkōgakuteki shakai keizaigakuteki kōsatsu-shū to shite Nihon no jijitsu ni tsuite [Some demographic, socio-economic aspects of aging, particularly concerned with the case of Japan]. *Jūnyōgaku kenkyūkai nempō* [Annual reports of the Japan Gerontological Association] (1):20–30.
- 136 1958a Jinkō hendō yōin to shite no kekkon no dōkō ni kansuru ichi kenkyū [A study of the trend of marriage as a factor influencing population movement]. *Jinkō mondai kenkyūjo nempō* (3):16–20.
- 137 1958b Kekkō hendō no seitaiteki dōtaiteki kansatsu—Nihon ni okeru kekkon no jinkōgaku-teki bunseki [A demographic study on marriage movement in Japan]. *Jinkō mondai kenkyū* (73):1–38, September.
- 138 1958c Kekkō patan no hendo to sono shushōryoku ni oyobosu eikyō no jinkōgaku-teki bunseki—shushōryoku kettei yōin kenkyū puroguramu no ikkan to shite [Marriage pattern and its effects on fertility in Japan—a part of the research program on determining factors of fertility]. *Jinkō mondai kenkyū* (71):1–23, March.
- 139 1960 Nihon jinkō shushōryoku no ichi bunseki—sengo kekkon kōhotō no saiseisan taido no dōkō [An analysis of Japanese fertility—postwar behavior of marriage cohorts]. *Jinkō mondai kenkyūjo nempō* (5):54–58.
- 140 1960–61 Nihon jinkō no shushōryoku ni kansuru kenkyū [A fertility analysis of the Japanese population]. *Jinkō mondai kenkyū*.  
 Part 1 (80):1–24, September 1960.  
 Part 2 (81):1–22, December 1960.  
 Part 3 (82):18–63, March 1961.
- 141 1961a Kokunai jinkō idō no igi to keitai [Basic concepts and various types of internal migration]. In Minoru Tachi, ed., *Nihon no jinkō idō* [Population migration in Japan], pp. 15–34. Tokyo: Kokon shoin.

Kuroda, Toshio (*continued*)

- 142 1961b Saikin ni okeru jinkō idō no dōkō bunseki [Analysis of recent trends in internal migration in Japan]. *Jinkō mondai kenkyūjo nempō* (6):19–23.
- 143 1962 Jinkō idō to shusshōryoku [Migration and fertility]. *Jinkō mondai kenkyūjo nempō* (7):36–40.
- 144 1964a Chiiki rōdōryoku jinkō no kōzō to sono hendō [Structure and change of regional labor force population in Japan]. *Jinkō mondai kenkyū* (92):23–31, September.
- 145 1964b *Rōdōryoku jinkō no chiiki jinkōgaku-teki bunseki* [Regional demographic analysis of labor force population in Japan]. Research Series, no. 160. Tokyo: Institute of Population Problems.
- 146 1965a Jinkō idō kara mita megaroporisu no keisei to sono mondaiten [Demographic approach to megalopolis in Japan: migration behavior in megalopolis]. *Jinkō mondai kenkyū* (95):1–10, July.
- 147 1965b Megaroporisu no jinkōgaku-teki kentō: 3 dai toshiken ni okeru jinkō idō mitsudō no hikaku. [Demographic check of megalopolis in Japan: comparison of population migration in the three big metropolitan areas]. *Jinkō mondai kenkyūjo nempō* (10):4–6.
- 148 1966a Jinkō idō, jinkō chiiki bumpu no hendō to chiiki kaihatsu [Internal migration, regional distribution of population and regional development in Japan—recent change and its implications]. *Jinkō mondai kenkyūjo nempō* (11):14–17.
- 149 1966b Jinkō idō no genjō to kenkyū [Present situation and research in internal migration]. *Jinkō mondai kenkyū* (97):50–54, January.
- 150 1967 Jinkō idō no dōkō to tokuchō [Trend and characteristics of migration]. *Jinkō mondai kenkyū* (101):1–6, February.
- 151 1968a Chiiki kaihatsu to jinkō idō no kankei to konnichi no kadai [Internal migration in relation to regional

Kuroda, Toshio (*continued*)

- development and present problems]. *Nihon jinkō gakkai kaihō* (2):57–58.
- 152 1968b *Rural–urban migration and social mobility in Asia*. English Pamphlet Series, no. 66. Tokyo: Institute of Population Problems.
- 153 1968c Shizen dōtai no gyakuryū to jinkō idō [Reversal of vital rates and internal migration in Japan]. *Jinkō mondai kenkyū* (105):12–20, January.
- 154 1969a *Ajia ni okeru jinkō idō to toshi-ka no tenbō* [Internal migration and urbanization in Asia]. Research Series, no. 188. Tokyo: Institute of Population Problems.
- 155 1969b Jinkō chiiki bumpu kinkōka undō no kasetu to jinkō idō [Equalizing movement of regional distribution of population and migration: a hypothesis]. *Jinkō mondai kenkyūjo nempō* (14):33–36.
- 156 1969c Jinkō idō no kōzōteki henka to jinkō tenkan [Structural change of population migration and population change]. *Jinkōgaku kenkyūkai kiyō* (11):11–12.
- 157 1969d *A new dimension of internal migration in Japan*. English Pamphlet Series, no. 69. Tokyo: Institute of Population Problems.
- 158 1970a *Continuity and transformation of migration behavior in Japan*. English Pamphlet Series, no. 71. Tokyo: Institute of Population Problems.
- 159 1970b Jinkō idō kōdō no kindaika [Transition to modernization in migratory behavior]. *Jinkō mondai kenkyūjo nempō* (15):26–29.
- 160 1970c Jinkō idō no tenkan kasetu [A hypothesis concerning migration behavior based on Japanese experience]. *Jinkō mondai kenkyū* (113):15–30, January.
- 161 1970d Jinkō idō to jinkō bumpu: idō kōdō no tenkan [Internal migration and population distribution: transition in migratory behavior]. *Nihon jinkō gakkai kaihō* (4):12–14.
- 162 1971 Internal migration in relation to economic and social development with special reference to Japan's

Kuroda, Toshio (*continued*)

experience. In Minoru Tachi and Minoru Muramatsu, eds., *Population problems in the Pacific*, pp. 182-186. Tokyo: Eleventh Pacific Science Congress.

Kuroda, Toshio, and Minoru Tachi. *See* Tachi, Minoru, and Toshio Kuroda.

Mainichi shimbun-sha, jinkō mondai chōsa-kai [Mainichi Newspapers, Population Problems Research Council]

- 163 1970 *Nihon no jinkō kakumei* [Demographic revolution in Japan]. Tokyo: Mainichi Newspapers.

Mainichi shimbun-sha, jinkō mondai chōsa-kai [Mainichi Newspapers, Population Problems Research Council], trans.

- 164 1964 *Nihon no jinkō* (translation of Irene B. Taeuber, *The population of Japan*). Tokyo.

Maruyama, Hiroshi

- 165 1957 *Nyūji shibō: Tōkei no kenkyū* [Infant mortality: statistical study]. Nurse's Library, 134. Tokyo: Igaku shoin.

Matsuyama, Tsuneaki; Mitsuo Segi; and Minoru Kurihara. *See* Segi, Mitsuo; Minoru Kurihara; and Tsuneaki Matsuyama.

Matsuyama, Tsuneaki; Mitsuo Segi; Minoru Kurihara; and Mareko Ito. *See* Segi, Mitsuo; Minoru Kurihara; Tsuneaki Matsuyama; and Mareko Ito.

Minakawa, Yūichi

- 166 1955 Kinkō nōson ni okeru kajō rōdōryoku no sonzai keitai [Report of the research on the superfluous labor force in a suburban village]. *Shakaigaku hyōron* [Japanese Sociological Review] 5(2):96-118.
- 167 1956 Aomori kenka no ichi goshin nōgyō chitai ni okeru jinkō zōka no shakai keizaiteki yoken ni tsuite [On the socio-economical factors of the population

Minakawa, Yūichi (*continued*)

- increase in an underdeveloped area in Aomori prefecture]. *Jinkō mondai kenkyū* (63):16–41, March.
- 168 1958 Tōhoku ni okeru ichi sanson no jinkō shiteki kōsatsu [A demographic observation of a small village in the Tohoku area]. *Jinkō mondai kenkyūjo nempō* (3):40–44.
- 169 1959 Tōhoku ni okeru ichi sanson no jinkō shiteki kōsatsu, sono 2 [A demographic observation of a small village in Tohoku area, part 2]. *Jinkō mondai kenkyūjo nempō* (4):45–51.
- 170 1961 Higo-han jin'chiku aratame-chō no jinkōgaku-teki bunseki [Demographic analysis of Higo clan's census record of men and cattle]. *Jinkō mondai kenkyūjo nempō* (6):61–66.
- 171 1963 Nōka rōdōryoku kengyōka no nenrei betsu, zokugara betsu bunseki [Analysis of the part-time trend of the farming labor force by age and status in family]. *Jinkō mondai kenkyūjo nempō* (8):40–46.
- 172 1964 Nōka keieishu, atotsugi kengyōka mondai no chiiki betsu kōsatsu [Analysis of part-time trend of farm householder and his heir in some typical rural communities]. *Jinkō mondai kenkyū* (92):32–42, September.
- 173 1966a Kōdo seichōka ni okeru nōson rōdōryoku ichiba no henka to sono mondai ten [Changes of labor mobility in agriculture through the period of high economic growth of Japan]. *Jinkō mondai kenkyū* (99):16–31, August.
- 174 1966b Mackenroth no Malthus hihan [Comment on Malthus by Gerhardt Mackenroth]. *Jinkō mondai kenkyūjo nempō* (11):71–74.
- 175 1967a *Kōshin chiiki ni okeru nōgyō jinkō no dōkō oyobi shūgyō kōzō no henka* [Trends of agricultural population and changes in employment structure in the underdeveloped areas in Japan]. Research Series, no. 183. Tokyo: Institute of Population Problems.
- 176 1967b Nōka jinkō no idō [Migration of farm population]. *Jinkō mondai kenkyū* (101):7–11, February.

Minakawa, Yūichi (*continued*)

- 177 1967c Nōson jinkō no saiseisanryoku [Reproductivity of rural population]. *Jinkō mondai kenkyū* (101):75–82, February.
- 178 1967d *Oppenheimer no Malthus shugi hihan* [Comment on Malthusianism by Franz Oppenheimer]. Research Series, no. 173. Tokyo: Institute of Population Problems.
- 179 1967e Saikin no rinō keikō ni tsuite [Characteristics of farm-households leaving farming in the underdeveloped areas]. *Jinkō mondai kenkyū* (103):26–36, July.

## Minami, Ryōshin

- 180 1960 Jinkō yōin no keizai bunseki [Economic analysis of the population factor]. *Jinkōgaku kenkyūkai kiyō* (3):11–12.
- 181 1961a Jinkō zōka no keizai bunseki—Malthus no jinkō zōka no meidai ni kansuru oboegaki [Economic analysis of population growth—a note on the Malthusian thesis of population growth]. *Kikan riron keizaigaku* [Economic Studies Quarterly] 12(1):40–48.
- 182 1961b Nōgyō jinkō idō no suikei, 1925–1960 [Estimates of migration of agricultural population, 1925–1960]. *Jinkōgaku kenkyūkai kiyō* (4):21.
- 183 1964 Nōka jinkō idō no suikei to bunseki [Analysis and measurement of farm household population migration]. *Hitotsubashi ronsō* [Hitotsubashi Review] 52(5):85–114.
- 184 1967 Population migration away from agriculture in Japan. *Economic Development and Cultural Change* 15(2), part 1:183–201.

Minami, Ryōshin, and Ichirō Nakayama. *See* Nakayama, Ichirō, and Ryōshin Minami.

## Minami, Ryōzaburō

- 185 1956 *Population theory. An Outlook of Studies on*

Minami, Ryōzaburō (*continued*)

- Population Problems in Japan. Tokyo: Japanese National Commission for UNESCO.
- 186 1958 Gendai no jinkō riron kenkyū [Research in contemporary population theory]. *Jinkōgaku kenkyūkai kiyō* (1):1.
- 187 1963 *Jinkō shisō shi* [History of population thought]. Tokyo: Chikura shobo.
- 188 1965 Malthus tanjo 200-nen o ma ni shite [On the 200th anniversary of Malthus' birth]. *Jinkōgaku kenkyūkai kiyō* (8):1.

## Minami, Ryōzaburō, and Minoru Tachi, eds.

- 189 1965 *Jinkō toshika no riron to bunseki* [The theory and analysis of urbanizing population]. Tokyo: Keisō shobō.

## Minami, Ryōzaburō, et al., eds.

- 190 1957 *Jinkō daijiten* [Population encyclopedia]. Tokyo: Heibon-sha.

## Minoguchi, Tokijirō

- 191 1955 Jinkō to shakai keizai henka to no sōgo kankei [Mutual relations between population and socioeconomic changes]. *Keizai kagaku* [Economic Science] 2(2):39–52.
- 192 1958 The employment problem in Japan in the next ten years. *Annals of the Hitotsubashi Academy* 8(2): 169–175.
- 193 1959 Increasing populations and industrial structures. *Annals of the Hitotsubashi Academy* 10(1):81–90.

Misawa, Hisako, and Minoru Tachi. *See* Tachi, Minoru, and Hisako Misawa.

## Miyakawa, Minoru

- 194 1957 Tōkyō-to ka no sho reesai kigyō jūgyōsha ni kansuru chōsa kekka hōkoku [Summary of the result of an

Miyakawa, Minoru (*continued*)

investigation into the workers in small-scale enterprises in Tokyo district]. *Jinkō mondai kenkyū*.

Part 1 (67):1–18, February.

Part 2 (68):32–41, June.

- 195 1963 Daitoshi jinkō no hasseigen-teki kōsei [Structure of metropolitan population by place of origin and father's industry]. *Jinkō mondai kenkyūjo nempō* (8):57–60.
- 196 1967 Toshi jinkō no saiseisanryoku [Reproductivity of urban population]. *Jinkō mondai kenkyū* (101):82–89, February.

## Mizuno, Asao

- 197 1963 Waga kuni ni okeru jisshitsu chingin no hendō to jinkō sūsei--1900–1960-nen [Change of actual wage in Japan and population trend–1900–1960]. *Jinkōgaku kenkyūkai kiyō* (6):9.
- 198 1965 Rōdōryoku fusoku to chingin kakusa no hendō [Labor shortage and change in wage differentials]. *Jinkōgaku kenkyūkai kiyō* (8):4.
- 199 1970a Rōdōryoku haibun to chingin hendō [Distribution of labor and wage flexibility]. *Nihon jinkō gakkai kaihō* (4):20–21.
- 200 1970b Sangyō kōzō no hendō to koyō, shitsugyō [Changes in industrial structure, employment and unemployment]. *Jinkōgaku kenkyūkai kiyō* (13):4.
- 201 1971 Dai 3-ji sangyō ni okeru shūgyōsha hendō no ichi bunseki [A study on changes in employment in tertiary industries]. *Nihon jinkō gakkai kaihō* (5):13–14.

## Mizushima, Haruo

- 202 1957 Nihon ni okeru jumyō no chihō sa to sono suii [Geographic variation in longevity and its historical change in Japan]. *Jumyōgaku kenkyūkai nempō* [Annual reports of the Gerontological Association of Japan] (2):256–263.

Mizushima, Haruo (*continued*)

- 203 1959 Nihonjin shibōritsu no tokuchō [Characteristics of Japanese mortality]. *Jumyōgaku kenkyūkai nempō* [Annual reports of the Gerontological Association of Japan] (3):119–125.
- 204 1961 *Fuken betsu seimeihyō shū: Taishō 10-nen–Shōwa 31-nen* [A collection of prefectural life tables: Japan 1921–1956]. Osaka: Seimei hoken bunka kenkyūjo.
- 205 1963 *Seimeihyō no kenkyū* [Research on life tables]. Tokyo: Seimei hoken bunka kenkyūjo.
- 206 1968 1965-nen todōfuken betsu seimeihyō [Prefecture life tables, 1965]. *Nihon jinkō gakkai kaihō* (2): 42–43.
- 207 1971 Geographical variation of mortality in Japan. In Minoru Tachi and Minoru Muramatsu, eds., *Population problems in the Pacific*, pp. 136–139. Tokyo: Eleventh Pacific Science Congress.

## Mizushima, Haruo, with Takao Shigematsu

- 208 1964 Todōfuken betsu seimei hyō–1959–1961 [Prefecture life tables in Japan, 1959–1961]. *Jumyōgaku kenkyūkai nempō 10 shūnen kinen tokubetsu henshū* [Memorial issue of the 10th anniversary of the Gerontological Association of Japan], pp. 1–40.

## Morita, Yūzō

- 209 1963 An estimation on the actual birth and death rates in the early Meiji Period of Japan. *Population Studies* 17(1):33–56.

## Morooka, Taeko, and Kimiyo Motai

- 210 1970 Nenrei kaikyū betsu shibō ritsu kan sōkan no nenji sui, 1950-nen yori 1965-nen made [An analysis of chronological changes of the correlation upon age-specific death rates by prefecture, 1950–1965]. *Nihon jinkō gakkai kaihō* (4):25–28.

Motai, Kimiyo. See Morooka, Taeko, and Kimiyo Motai.

## Murai, Takashige

- 211 1965      Setai no bunseki: Shōwa 39-nen no setai kōsei  
[Household analysis: household composition in  
1964]. *Kōsei no shūhyō* [Welfare Index] 12(15):  
48–54.

## Muramatsu, Minoru

- 212 1960a      Effect of induced abortion on the reduction of  
births in Japan. *Milbank Memorial Fund Quarterly*  
38(2):153–166.
- 213 1960b      Family planning practice among the Japanese.  
*Eugenics Quarterly* 7(1):23–30.
- 214 1962      Problems in procuring contraceptive materials in a  
rural area in Japan. In Clyde V. Kiser, ed., *Research  
in family planning*, pp. 111–124. Princeton, New  
Jersey: Princeton University Press.
- 215 1969      Japan: miracle in East Asia. In B. Berelson, ed.,  
*Family planning programs: an international survey*,  
pp. 15–25. New York: Basic Books.
- 216 1970      An analysis of factors in fertility control in Japan.  
*Koshū eisei-in kenkyū hokoku – Bulletin of the  
Institute of Public Health* 19(2):97–107.

## Muramatsu, Minoru, ed.

- 217 1967      *Japan's experience in family planning: past and  
present*. Tokyo: Family Planning Federation of  
Japan.

Muramatsu, Minoru, and Minoru Tachi, eds. See Tachi, Minoru,  
and Minoru Muramatsu, eds.

## Nagai, Tōru

- 218 1960      Waga kuni ni okeru jinkō mondai ni kansuru chōsa  
kenkyū kikan no raireki ni tsuite [History of the  
organizations and study in Japan concerning popula-  
tion problems]. *Jinkō mondai kenkyūjo nempō*  
(5):1–5.

Nakano, Eiko

- 219 1967 Dai 4-ji shussanryoku chōsa ni okeru fujin rōdō no bunseki [An analysis of female labor in the fourth fertility survey]. *Jinkō mondai kenkyūjo nempō* (12):64–67.
- 220 1969a *Fujin rōdō ni kansuru tōkei shiryō* [Selected statistics concerning women workers in Japan]. Research Series, no. 193. Tokyo: Institute of Population Problems.
- 221 1969b Fujin rōdō no dōkō [The trend of female labor]. *Jinkō mondai kenkyūjo nempō* (14):66–69.
- 222 1970 Pāto taimā zōka no haikai [Background of the increasing part-timers]. *Jinkō mondai kenkyūjo nempō* (15):47–50.

Nakayama, Ichirō, and Ryōshin Minami

- 223 1959 *Tekido jinkō* [Optimal population]. Tokyo: Keisō shobō.

Namiki, Masakichi

- 224 1955 Nōka jinkō no sengo jūnen [Farm population in a decade after the war]. *Nōgyō sōgo kenkyū* [Quarterly Journal of Agricultural Economy] 9(4):1–46.
- 225 1960 *Nōson wa kawaru* [The rural villages change]. Tokyo: Iwanami shoten.

Nishikawa, Shunsaku

- 226 1966 *Chiiki-kan rōdō idō to rōdō ichiba* [The labor market and labor migration between regions]. Tokyo: Yuhikaku.

Nojiri, Shigeo

- 227 1964 *Internal migration of rural population in Japan. An Outlook of Studies on Population Problems in Japan*, no. 6. Tokyo: Japanese National Commission for UNESCO.

Nojiri, Shigeo, ed.

- 228 1959 *Nōson no jinkō, atarashii kadai to sono taisaku*

Nojiri, Shigeo, ed. (*continued*)

[Population of rural villages, new problems and countermeasures]. Tokyo: Chūo keizai-sha.

Nōson jinkō mondai kenkyūkai [Research Association on Rural Population Problems]

- 229 n.d. *Nōson jinkō mondai kenkyū* [Research on rural population problems]. Journal, published monthly. Tokyo.

Ogino, Shimako

- 230 1959 Waga kuni no shokugyō betsu shibō kōzō no bunseki [An analysis of mortality structure by occupation in Japan]. *Jinkō mondai kenkyūjo nempō* (4):19–24.
- 231 1964 Nyūji shibō ritsu no suii ni kansuru ichi bunseki [An analysis of the transition in infant mortality]. *Jinkō mondai kenkyūjo nempō* (9):65–68.
- 232 1965a Chiiki betsu ni mita kinnen no rōjin shibō [Regional differences in the recent mortality of the elderly in Japan]. *Jinkō mondai kenkyū* (93):40–48, January.
- 233 1965b Rōjin shibō ni kansuru ichi bunseki [An analysis of the mortality of old people in Japan]. *Jinkō mondai kenkyūjo nempō* (10):54–57.
- 234 1966 Waga kuni no bōsei shibō no kōzō to sono hensen [Trend in maternal mortality in Japan]. *Jinkō mondai kenkyū* (99):47–56, August.
- 235 1967 Shibō ritsu no chiikiteki shakaiteki sai [Regional and social differentials in mortality]. *Jinkō mondai kenkyū* (100):108–114, January.
- 236 1969 Waga kuni shūsanki shibō no saikin no dōkō [Recent trends in perinatal mortality in Japan]. *Jinkō mondai kenkyū* (109):35–52, January.

Ogino, Shimako, and Nobuo Shinozaki. *See* Shinozaki, Nobuo, and Shimako Ogino.

Ohbuchi, Hiroshi

- 237 1964 Rōdōryoku ritsu no tenbō [Survey of labor force rates]. *Jinkōgaku kenkyūkai kiyō* (7):8.

Ohbuchi, Hiroshi (*continued*)

- 238 1970 Kongo no keizai hatten to jinkō yōin [Economic development and population change]. *Jinkōgaku kenkyūkai kiyō* (13):6–7.

Ohkawa, Kazushi

- 239 1957 *Nihon keizai no seichō ritsu* [The growth rate of the Japanese economy]. Tokyo: Iwanami shoten.

Ohkawa, Kazushi, and Henry Rosovsky

- 240 1963 Recent Japanese growth in historical perspective. *American Economic Review* 53(2):578–588.

Ohkawa, Kazushi, et al., eds.

- 241 1966 *Chōki keizai tōkei* [Long-term economic statistics of Japan]. 13 vols. Tokyo: Toyo keizai shimpō-sha.

Okada, Minoru

- 242 1958 Sauvy—seitai kinkō no riron [Sauvy's theory of static level]. *Jinkōgaku kenkyūkai yōin* (1):1.
- 243 1960 Cantillon no jinkō shisō [Population thoughts of Cantillon]. *Jinkōgaku kenkyūkai kiyō* (3):18–19.
- 244 1965 Malthus jinkō seisaku no sai-hyōka [Reevaluation of Malthus' population policy]. *Jinkōgaku kenkyūkai kiyō* (8):7–8.
- 245 1966 18 seiki no demogurafa Moore [The 18th century demographer Moore]. *Jinkōgaku kenkyūkai kiyō* (9):14.
- 246 1970 Necker no jinkō ron [On Necker's population theory]. *Jinkōgaku kenkyūkai kiyō* (13):8–9.

Okazaki, Ayanori

- 247 1957 *Nihon jinkō no bunseki, jinkō to keizai* [Analysis of population of Japan—population and economics]. Tokyo: Toyo keizai shimpō-sha.

Okazaki, Yōichi

- 248 1961 Shūgyō kōzō no riron to jissō [A theoretical and

Okazaki, Yōichi (*continued*)

- empirical study on employment structure]. *Jinkō mondai kenkyū* (83):14–30, July.
- 249 1962a *Jinkō hendō to keizai seichō ni kansuru josetsu* [An introduction to the study of demographic change and economic growth]. Research Series, no. 149. Tokyo: Institute of Population Problems.
- 250 1962b *Meiji shoen iko Taishō 9-nen ni itaru danjo nenrei betsu jinkō suikei ni tsuite* [Population estimates by sex and age from 1870's to 1920]. Research Series, no. 145. Tokyo: Institute of Population Problems.
- 251 1964 Rōdōryoku jukyū baransu no gainen ni tsuite [On the concepts of demand and supply for labor force]. *Jinkō mondai kenkyūjo nempō* (9):35–38.
- 252 1965a Nenrei betsu ni mita shūgyō kōzō to sono henka ni tsuite [Industrial distribution of labor force by age and its change]. *Jinkō mondai kenkyūjo nempō* (10):15–18.
- 253 1965b Rōdōryoku jinkō no hendō to sangyō kōzō no henka ni tsuite [An analysis of the trend of population in labor force and the change of employment structure]. *Jinkō mondai kenkyū* (96):1–11, October.
- 254 1966a Keizai hatten to jinkō zōka [Economic development and population growth]. *Jinkō mondai kenkyū* (97):41–44, January.
- 255 1966b *Nihon no rōdōryoku mondai* [Problems of labor force in Japan]. Tokyo: Kobunsha.
- 256 1967a Joshi rōdōryoku ritsu no saikin no dōkō ni tsuite [On recent trends in female labor force participation rates]. *Jinkō mondai kenkyūjo nempō* (12):25–28.
- 257 1967b Rōdōryoku jinkō no sangyō kan idō [Inter-industrial mobility of labor force]. *Jinkō mondai kenkyū* (101):11–17, February.
- 258 1968a Dai 3-ji sangyō shūgyōsha no suikei hōhō [An analysis of tertiary industry workers]. *Jinkō mondai kenkyūjo nempō* (13):20–24.
- 259 1968b Shūgyō kōzō kara mita joshi rōdō no tokuchō

Okazaki, Yōichi (*continued*)

- [Characteristics of female labor force in employment structure]. *Nihon jinkō gakkai kaihō* (2):10–11.
- 260 1968c *Toshi kekkon cohort no shussihō ruikai* [Patterns of marriage cohort fertility in an urban area]. Research Series, no. 184. Tokyo: Institute of Population Problems.
- 261 1968–69 *Waga kuni no joshi rōdōryoku—shūgyō keitai to sono henka* [Female labor force in Japan—its employment structure and change]. *Jinkō mondai kenkyū*. Part 1 (107):1–12, July 1968. Part 2 (110):15–39, April 1969.
- 262 1969 *Nihon no rōdōryoku mondai ni tsuite* [On the labor problems of Japan]. *Jinkōgaku kenkyūkai kiyō* (11):5.
- 263 1970a *Keizai-teki ririku katei ni okeru jinkō hendō* [Population change in the process of economic take-off]. *Jinkōgaku kenkyūkai kiyō* (12):2–3.
- 264 1970b *Waga kuni shusseiryoku no keizaiteki, shakaiteki bunseki* [An analysis of socio-economic factors affecting fertility in Japan]. *Jinkō mondai kenkyū* (114):21–34, April.
- 265 1971 *Population, education and economic development*. In: Minoru Tachi and Minoru Muramatsu, eds., *Population problems in the Pacific*, pp. 428–432. Tokyo: The Eleventh Pacific Science Congress.

## Okazaki, Yōichi, and Tomi Suda

- 266 1970 *Jinkō idō no kanten kara mita dai toshi ken kyojū keikensha no bunseki* [Analysis of persons who have lived in metropolitan areas, from the demographic viewpoint]. *Jinkō mondai kenkyū* (115):47–56, July.

Okazaki, Yōichi, and Minoru Tachi. *See* Tachi, Minoru, and Yōichi Okazaki.

Oyama, Misako, and Minoru Tachi. *See* Tachi, Minoru, and Misako Oyama.

Satō, Yasuko

- 267 1957 Jisatsu no tōkeiteki kansatsu [A statistical observation of suicide]. *Jinkō mondai kenkyūjo nempō* (2):41–44.
- 268 1959 Jiko shi no tōkeiteki kansatsu [A statistical observation of death by accident]. *Jinkō mondai kenkyū* (75):27–34, March.

Segi, Mitsuo; Minoru Kurihara; and Tsuneaki Matsuyama

- 269 1965 *Cancer mortality in Japan, 1899–1962*. Sendai: Tohoku University School of Medicine, Department of Public Health.
- 270 1969 *Cancer mortality for selected sites in 24 countries, 1964–1965*. Sendai: Tohoku University School of Medicine, Department of Public Health.

Segi, Mitsuo; Minoru Kurihara; Tsuneaki Matsuyama; and Mareko Ito

- 271 1970 *Gen'in betsu ken betsu shibō ritsu, 1953–1967-nen* [Mortality by causes of death and prefectures in Japan, 1953–1967]. Sendai: Tohoku University School of Medicine, Department of Public Health.

Segi, Mitsuo; Minoru Kurihara; and Yasuo Tsukahara

- 272 1966 *Mortality for selected causes in 30 countries, 1950–1961*. Tokyo: Kosei tokei kyokai.

Sekiyama, Naotarō

- 273 1958 *Kinsei Nippon no jinkō kōzō: Tokugawa jidai no jinkō chōsa to jinkō jōtai ni kansuru kenkyū* [Structure of population in preindustrial Japan: study of population enumeration and demographic situation in Tokugawa Era]. Tokyo: Yoshikawa kobun-kan.

Shakai keizai shi gakkai hen [Society for Social Economic History], ed.

- 274 1969 *Keizai shi ni okeru jinkō* [Population in economic history]. Tokyo: Keio tsushin.

Shigematsu, Takao, and Haruo Mizushima. *See* Mizushima, Haruo, with Takao Shigematsu.

Shimizu, Ryōhei

- 275 1964 Waga kuni ni okeru jinkō idō to sangyō no chiiki kōzō [Migration and regional structure of Japanese industries]. *Nōgyō keizai kenkyū* [Journal of Rural Economics] 36(1):1–11.

Shinozaki, Nobuo

- 276 1957 Ketsuzoku kekkon burakujin ni kansuru seitai jinruigakuteki kenkyū [A somatologic anthropological study at a village of intermarriage]. *Jinkō mondai kenkyūjo nempō* (2):13–16.
- 277 1959 Ketsuzoku kekkon buraku no ketsuzoku nōdo no keifuteki kenkyū [Genealogical research about the inbreeding density in the intermarriage community]. *Jinkō mondai kenkyūjo nempō* (4):57–62.
- 278 1960 Ketsuzoku kekkon burakumin no taikei tairyoku no hendō ni tsuite [Research on morphological and physical changes over 13 years in a community of consanguineous marriage]. *Jinkō mondai kenkyūjo nempō* (5):109–114.
- 279 1961 Ketsuzoku kekkon buraku ni kansuru seitai jinruigaku-teki kenkyū [A somatological and genealogical study of the inhabitants of a consanguineous community in Japan]. *Jinkō mondai kenkyū*,  
Part 1 (83):31–70, July.  
Part 2 (84):1–79, December.
- 280 1963 Mutual connection and diffusion of contraception, abortion, and sterilization. *Archives of the Population Association of Japan*, English edition, (4):63–80.
- 281 1968 Jinkō shishitsu to yūsei mondai [Population quality and eugenic problems]. *Jinkō mondai kenkyūjo nempō* (13):57–60.
- 282 1970 Nenrei betsu ni mita jinkō shishitsu no mondai [Consideration by age of the problem of population quality]. *Nihon jinkō gakkai kaihō* (4):14–16.

Shinozaki, Nobuo, and Shimako Ogino

- 283 1963 Sedai betsu ketsuen kankei ni kansuru ichi kōsatsu: dai kōba jūgyōin ni okeru kenkyū [Changing frequency of consanguineous marriages through three generations: a survey on marriages of factory workers and their ancestors]. *Jinkō mondai kenkyū* (89):15–29, November.

Soda, Takemune, et al.

- 284 1968 *Recent retardation of mortality trends in Japan*. U.S. National Center for Health Statistics, Vital and Health Statistics, Series 3, no. 10.

Suda, Tomi, and Yōichi Okazaki. *See* Okazaki, Yōichi and Tomi Suda.

Suzuki, Keisuke

- 285 1965 Rōdōryoku jinkō no chiiki kan ryūdōsei—sono sai-kōsatsu [Inter-regional mobility of labor force population—its re-consideration]. *Jinkōgaku kenkyūkai kiyō* (8):10–11.
- 286 1970 Chiiki-teki rōdōryoku jinkō haibun no kettei kikō [The mechanism of determination of the allocation of labor force]. *Jinkōgaku kenkyūkai kiyō* (13):9–10.

Tachi, Minoru

- 287 1956 Waga kuni jinkō rōnenka no jishōteki kenkyū [A practical research on population aging in Japan]. *Jūmyōgaku kenkyūkai nempō* [Annual reports of the Japan Gerontological Association] (1):8–19.
- 288 1957 Dōji seimeihyō ni okeru saidai heikin yomei ni tsuite—'jūmyō' ni kansuru jinkō tōkeiteki ichi kenkyū [On the longest expectation of life in the current life table—a demographic study on 'life-span']. *Jinkō mondai kenkyūjo nempō* (2):22–25.
- 289 1959 Sengo waga kuni ni okeru jinkō to shotoku no chiiki bumpu no hendō [Changes in the regional distribution of population and income in postwar Japan]. *Jinkō mondai kenkyūjo nempō* (4):1–5.

Tachi, Minoru (*continued*)

- 290 1960a *Keishiki jinkōgaku* [Formal demography]. Tokyo: Kokon shoin.
- 291 1960b *Population trend and economic growth in Japan*. English Pamphlet Series, no. 50. Tokyo: Institute of Population Problems.
- 292 1963 *Jinkō bunseki no hōhō* [Methods of population analysis]. Tokyo: Kokon shoin.
- 293 1964 Regional income disparity and internal migration of population in Japan. *Economic Development and Cultural Change* 12(2):186–209.
- 294 1965 *Regional differences in levels of income and internal migration*. English Pamphlet Series, no. 61. Tokyo: Institute of Population Problems.
- 295 1969 *Jinkō mondai no chishiki* [Knowledge of population problems]. Tokyo: Nihon keizai shimbun-sha.
- 296 1971 *Ajia no jinkō mondai* [Population problems of Asia]. *The Asia Quarterly* 3(1):2–19.

## Tachi, Minoru, ed.

- 297 1961 *Nihon no jinkō idō* [Population migration in Japan]. Tokyo: Kokon shoin.
- 298 1962 *Dai-toshi jinkō no sho-mondai* [Problems of the metropolitan population]. Tokyo: Kokon shoin.

## Tachi, Minoru, and Saburō Katō

- 299 1971 *Population and environmental problems in Japan*. English Pamphlet Series, no. 75. Tokyo: Institute of Population Problems.

## Tachi, Minoru, and Toshio Kuroda

- 300 1959 *Trends in population growth and economic development in Japan*. English Pamphlet Series, no. 49. Tokyo: Institute of Population Problems.

## Tachi, Minoru, and Hisako Misawa

- 301 1962 *Nihon ni okeru kokunai jinkō idō no keizai-teki potential* [Economic potentiality of the internal

Tachi, Minoru, and Hisako Misawa (*continued*)

migration of population in Japan]. *Jinkō mondai kenkyū* (109):1–19, January.

Tachi, Minoru, and Yōichi Okazaki

- 302 1965 Economic development and population growth – with special reference to Southeast Asia. *The Developing Economies* 3(4):497–515.

Tachi, Minoru, and Misako Oyama

- 303 1960 Waga kuni kokunai jinkō idō no potential–jinkō no chiiki bumpu to shotoku no soreto no kankei kara mite [Potential internal migration in Japan–the interrelationship between regional distribution of income and that of population]. *Jinkō mondai kenkyūjo nempō* (5):38–42.
- 304 1961 Shotoku to jinkō to no chiiki bumpu [Regional distribution of income and population]. *Jinkō mondai kenkyū* (82):1–17, March.
- 305 1962 Kokunai jinkō idō no keizai-teki potential to sono kettei yōin [Economic potential of internal migration of population and its determinant]. *Jinkō mondai kenkyūjo nempō* (7):31–35.

Tachi, Minoru, and Seiko Takahashi

- 306 1964 Sengo Nihon no jinkō keikō no logistic bunseki [A logistic analysis of population trend in postwar Japan]. *Jinkō mondai kenkyūjo nempō* (9):1–6.
- 307 1965 50-sai ijō shibō wariai ni kansuru ichi kōsatsu [A study on proportional mortality of 50 years and above]. *Jinkō mondai kenkyūjo nempō* (10):50–53.

Tachi, Minoru; Masao Ueda; and Hidetiko Hama

- 308 1957–59 Seinen-ki jinkō no chiiki-teki bunseki [Regional analysis of youth population]. *Jinkō mondai kenkyū*.  
 Part 1 (69):1–32, October 1957.  
 Part 2 (70):1–20, December 1957.

Tachi, Minoru; Masao Ueda; and Hidehiko Hama (*continued*)

Part 3 (71):34–56, March 1958.

Part 4 (72):31–46, May 1958

Part 5 (73):44–54, September 1958.

Part 6 (74):63–84, December 1958.

Part 7 (75):35–63, March 1959.

Part 8 (76):1–40, May 1959.

Part 9 (77):25–50, August 1959.

Part 10 (78):20–42, December 1959.

Tachi, Minoru; Kiichi Yamaguchi; and Takeharu Kaneko

- 309 1968      Setai kibo to jakkan no jinkōgaku-teki yōin to no  
chiiki-teki sōkan [Regional correlation between  
household size and some demographic factors].  
*Jinkō mondai kenkyūjo nempō* (13):5–10.

Tachi, Minoru, and Minoru Muramatsu, eds.

- 310 1971      *Population problems in the Pacific—new dimensions  
in Pacific demography*. Conveners of the Congress  
Symposium, No. 1, held in 1966. Tokyo: The  
Eleventh Pacific Science Congress.

Tachi, Minoru, and Ryōzaburō Minami, eds. *See* Minami,  
Ryōzaburō, and Minoru Tachi, eds.

Takagi, Naobumi

- 311 1956      Antei jinkō riron ni okeru ichi kōsatsu [A consider-  
ation on the stable population theory]. *Jinkō  
mondai kenkyū* (63):42–49, March.
- 312 1957      Haigū kankei hyō ni yoru jinkō sai-seisan ritsu  
[Reproduction rate of population according to  
marital status table]. *Jinkō mondai kenkyūjo nempō*  
(2):36–40.
- 313 1960      Waga kuni jinkō no rōnenka genshō [Aging of the  
Japanese population]. *Jinkō mondai kenkyūjo  
nempō* (5):24–28.

*See also* *Jinkō mondai kenkyūjo* 1955a, 1955b, 1956, 1957a,  
1958, 1959.

## Takahashi, Bonsen

- 314 1955 *Nippon jinkō-shi no kenkyū* [Research on the history of population in Japan]. Vol. 2. Tokyo: Nippon gakujitsu shinko-kai.
- 315 1962 *Nippon jinkō-shi no kenkyū* [Research on the history of population in Japan]. Vol. 3. Tokyo: Nippon gakujitsu shinko-kai.

Takahashi, Seiko, and Minoru Tachi. *See* Tachi, Minoru, and Seiko Takahashi.

## Terao, Takuma

- 316 1961 Demographic and economic aspects of the economically active population of Japan. *Bulletin de l'Institut International de Statistique* 38(2):325–332.
- 317 1963 Development of backward economy and its demographic factors. *Archives of the Population Association of Japan*, English edition, (4):92–104.
- 318 1969 Nihon no jinkō no genzai to shōrai [The present and future population of Japan]. *Mita gakkai zasshi* [Mita Journal of Economics] 62(8):1–13.
- 319 1970 Kazoku keikaku undō no tenbō [On family planning movements in Japan]. *Jinkōgaku kenkyūkai kiyō* (13):12.

## Tobata, Seiichi

- 320 1956 *Japan's agriculture: farming population*. Japan's Problems Series. Tokyo: Ministry of Foreign Affairs, Public Information and Cultural Affairs Bureau.
- 321 1960 Japan's farming population. *Asian Review* 56(205): 71–80.

## Tobata, Seiichi, ed.

- 322 1956 *Nōgyō ni okeru senzai shitsugyō* [Latent unemployed in rural villages]. Tokyo: Nihon hyoron-sha.

## Tokyo Metropolitan Government

- 323 1960 Tōkyō-to idō jinkō tōkei chōsa hōkoku [Survey report on migrants in Tokyo]. In *Tōkyō-to no jinkō ni kansuru tōkei shiryō* [Statistical materials on the population of Tokyo], pp. 132–139. Tokyo.

## Tomita, Fujio

- 324 1969 Shakaigaku ni okeru jinkō no mondai [The problem of population in sociology]. *Nihon jinkō gakkai kaihō* (3):41–42.

## Tsubouchi, Yoshihiro

- 325 1970 Changes in fertility in Japan by region: 1920–1965. *Demography* 7(2):121–134.

Tsukahara, Yasuo; Mitsuo Segi; and Minoru Kurihara. *See* Segi, Mitsuo; Minoru Kurihara; and Yasuo Tsukahara.

## Uchino, Sumiko

- 326 1962 *Toshi rōdōryoku jinkō no shoku kanshū kōzō* [Socioeconomic characteristics of dietetic custom among urban workers]. Research Series, no. 147. Tokyo: Institute of Population Problems.
- 327 1963 Shoku kanshū kōzō no chiiki kakusa [Regional differentials of dietary custom in selected cities in Japan]. *Jinkō mondai kenkyūjo nempō* (8):78–82.
- 328 1967 Mikaihatsu chiiki ni okeru shoku ishiki no kōzō [Differential attitude in dietary life in the underdeveloped areas]. *Jinkō mondai kenkyū* (103):37–50, July.
- 329 1968 Jinkō no chiiki shakai kaisō betsu ni mita shoku ishiki no kōzō to patan [Structure and pattern of dietary attitudes]. *Jinkō mondai kenkyūjo nempō* (13):65–68.
- 330 1969a Jinkō hendō kōzō kara mita toshi patan to sono bumpu [Patterns of population change of cities and their regional distribution]. *Jinkō mondai kenkyū* (109):20–34, January.

Uchino, Sumiko (*continued*)

- 331 1969b Jinkō hendō patan kara mita toshi no chiiki bumpu no kōzō to tokuchō [Regional distribution of cities according to changing patterns of city population]. *Jinkō mondai kenkyūjo nempō* (14):56–60.
- 332 1970 Chiiki jinkō no shoku kōdō patan—higashi Nihon to nishi Nihon [Differential attitude of regional urban population in dietary behavior]. *Jinkō mondai kenkyū* (115):32–46, July.

## Ueda, Kōzō

- 333 1957 Rōjin taisaku ni suite [Old age welfare programs]. *Junyōgaku kenkyūkai nempō* [Annual reports of the Gerontological Association of Japan] (2):272–276.

## Ueda, Masao

- 334 1957 Waga kuni jinkō kōnenka no chiiki-teki sai [Regional difference in the aging of population of our country]. *Jinkō mondai kenkyūjo nempō* (2):26–30.
- 335 1959 Nenrei betsu shushhō ritsu to yūhaigū ritsu kara mita shusseiryoku teika no chiiki-teki ruikai [Regional patterns of the age-specific fertility and proportions of the married among women in Japan]. *Jinkō mondai kenkyūjo nempō* (4):6–12.
- 336 1960 Todōfuken jinkō no kihon kōzō ni taisuru shushhōryoku teika to jinkō idō no eikyō [Influence of migration and decline of birth rates on age composition in prefectures]. *Jinkō mondai kenkyūjo nempō* (5):29–37.
- 337 1961a Jinkō idō to jinkōgaku-teki kihon kōzō to no kankei [Relationship between population migration and basic demographic structure]. *Jinkōgaku kenkyūkai kiyō* (4):30.
- 338 1961b Todōfuken betsu jinkō no idō junryō ni kansuru kenkyū [Differential net migration by age and sex in prefectures]. *Jinkō mondai kenkyūjo nempō* (6):24–29.

Ueda, Masao (*continued*)

- 339 1963 A study of internal migration and age structure of migrants. *Archives of the Population Association of Japan*, English edition, (4):105–129.
- 340 1964 Todōfuken betsu shusshō to jinkō idō to no kankei ni kansuru ichi kenkyū [A report on the relationship between births in prefectures and population migration]. *Jinkō mondai kenkyū* (92):1–22, September.
- 341 1965 Kyojū kankei kara mita Keihin dai toshi chiiki no gaien-teki kakudai [Expansion of Tokyo-Yokohama metropolitanized area with special reference to households in dwelling houses]. *Jinkō mondai kenkyūjo nempō* (10):7–10.
- 342 1966a Dai toshi ni okeru ryū shutsu-nyū jinkō no nenrei kōzō to shusshō to no kankei ni kansuru kenkyū [An estimation of the age composition of the migrants and number of births expected from those in Tokyo: 1960–1964]. *Jinkō mondai kenkyūjo nempō* (11):10–13.
- 343 1966b Jinkō idō to shusshō to no kankei [Relationship between population migration and births]. *Jinkōgaku kenkyūkai kiyō* (9):5–7.
- 344 1967a Jinkō idō no jinkōgaku-teki eikyō [Demographic influence of migration]. *Jinkō mondai kenkyū* (101):17–27, February.
- 345 1967b Saikin no jinkō hendō ni motozuku megalopolis keisei ni kansuru kenkyū [A study of recent demographic changes toward the formation of megalopolis]. *Jinkō mondai kenkyū* (102):11–29, April.
- 346 1967c Toshi jinkō no shūseki to megalopolis no keisei [Agglomeration of urban population and formation of megalopolis]. *Jinkō mondai kenkyū* (101):48–60, February.
- 347 1968a Jinkō idō to jinkōgaku-teki kihon kōzō, saishussanryoku to no kankei [Interrelation between migration, age structure, and reproduction of the population by prefectures]. *Nihon jinkō gakkai kaihō* (2):44–46.

Ueda, Masao (*continued*)

- 348 1968b Kaku kazoku yori naru setai no dōkō to mondai ten [Nuclear families in recent Japan—their trends and problems]. *Jinkō mondai kenkyūjo nempō* (13):11–15.
- 349 1969 Waga kuni setai kōzō no hendō to mondai ten [Families and households in recent Japan, their trends and problems]. *Jinkō mondai kenkyū* (111):48–69, July.

*See also* Jinkō mondai kenkyūjo 1957b, 1960a, 1960b.

Ueda, Masao; Minoru Tachi; and Hidehiko Hama. *See* Tachi, Minoru; Masao Ueda; and Hidehiko Hama.

## Umemura, Mataji

- 350 1957 Rōdōryoku no kōzō to hendō [The structure and behavior of the labor force]. *Keizai kenkyū* [Economic Review] 8(3):227–233.
- 351 1961 *Chinkin, koyō, nōgyō* [Wages, employment, and agriculture]. Tokyo: Daimeido.
- 352 1962 An analysis of employment structure in Japan. *Hitotsubashi Journal of Economics* 2(2):16–29.
- 353 1964 *Sengo Nippon no rōdōryoku sokutei to hendō* [Labor force of Japan in the postwar period]. Hitotsubashi University Study Series, no. 13. Tokyo: Iwanami shoten.

## Watanabe, Sadamu

- 354 1957 Jūmyō to Nihonjin [The life span of the Japanese]. *Jūmyōgaku kenkyūkai nempō* [Annual reports of the Gerontological Association of Japan] (2):241–255.
- 355 1959 Outline of gerontology in Japan and some aspects of life span and causes of death in the Japanese. *Journal of Gerontology* 14(3):299–304.
- 356 1963 *Jinkō kōzō to rōjin* [Population structure and the elderly in Japan]. Tokyo: Gerontological Association of Japan.

Watanabe, Sadamu (*continued*)

- 357 1966 Jumyō to shibō keitai [Length of life and mortality pattern]. *Japan Journal of Geriatrics* 3(supplement): 78–90.

Yamaguchi, Kiichi

- 358 1967a Kekkō oyobi haigū kankei kōzō no hendō to shushōryoku [Nuptiality and marital status structure affecting fertility]. *Jinkō mondai kenkyū* (100):64–71, January.
- 359 1967b Shō-gaikoku to no hikaku ni okeru waga kuni jinkō no sai-seisanryoku [The population reproductivity of Japan in comparison with other countries]. *Jinkō mondai kenkyū* (104):15–38, October.
- 360 1968 Jūmin tōroku jinkō idō hōkoku ni motozuka jinkō no chiiki kan idō no dōkō [Trends of internal migration in Japan]. *Jinkō mondai kenkyū* (107):43–64, July.
- 361 1969 Setai kibo no fu ken kan bumpu no tokuchō to jakkan no jinkōgaku-teki yōin to no sōkan [Regional correlation between household size and some demographic factors]. *Jinkō mondai kenkyū* (111):21–47, July.
- 362 1970 Saikin no shokugyō betsu danshi shūgyōsha no jinkō saiseisan ni kansuru shuyō shihyō [Occupational differences in male fertility and reproductivity in recent Japan]. *Jinkō mondai kenkyū* (116):40–57, October.

*See also* *Jinkō mondai kenkyū*jo 1957b.

Yamaguchi, Kiichi; Kazumasa Kobayashi; Michiko Yamamoto; and Takeharu Kaneko. *See* Kobayashi, Kazumasa; Kiichi Yamaguchi; Michiko Yamamoto; and Takeharu Kaneko.

Yamaguchi, Kiichi; Minoru Tachi; and Takeharu Kaneko. *See* Tachi, Minoru; Kiichi Yamaguchi; and Takeharu Kaneko.

Yamaguchi, Kiichi, and Michiko Yamamoto

- 363 1968 Fu ken no nenrei betsu jinkō oyobi shushōryoku

Yamaguchi, Kiichi, and Michiko Yamamoto (*continued*)

no hendō ga zenkoku shusshōryoku ni oyoboshita eikyō, Shōwa 35-nen–40-nen [Effects of changes in prefectural population and fertility on the national fertility, 1960–1965]. *Jinkō mondai kenkyū* (108): 27–53, October.

- 364 1969 *Jinkō no chiiki-kan idō ritsu no sui-jūmin tōroku jinkō idō hōkoku ni yoru* [Trends of internal migration (according to) Report on Population Migration based on the Resident Registration]. Research Series, no. 187. Tokyo: Institute of Population Problems.

Yamamoto, Michiko; Kazumasa Kobayashi; Kiichi Yamaguchi; and Takeharu Kaneko. *See* Kobayashi, Kazumasa; Kiichi Yamaguchi; Michiko Yamamoto; and Takeharu Kaneko.

Yamamoto, Michiko, and Kiichi Yamaguchi. *See* Yamaguchi, Kiichi, and Michiko Yamamoto.

Yano, Kunio; Koki Abe; and Hiroji Esaki. *See* Abe, Koki; Kunio Yano; and Hiroji Esaki.

Yasukawa, Masaaki

- 365 1963 Estimates of annual births and of the general fertility rates in Japan, 1890–1920, derived by projecting the census population of 1920 backwards. *Keio Economic Studies* 1:53–88.
- 366 1965 *Jinkō no keizaigaku* [Economics of population]. Tokyo: Shunjū-sha.
- 367 1967 Nihon no jinkō mondai to jinkō kenkyū no dōkō [The population problems of Japan and the trends in population research]. *Mita gakkai zasshi* [Mita Journal of Economics] 60(10):120–132.

Yasukawa, Masaaki, and Keijiro Hirooka

- 368 1969 Nihon no moderu seimeihyō [Model life tables for Japan]. *Nihon jinkō gakkai kaihō* (3):33–35.
- 369 1970 1865-nen ikō 1920-nen ni itaru waga kuni jinkō no

Yasukawa, Masaaki, and Keijiro Hirooka (*continued*)

gyakushin suikei [Population projection from Meiji to Taisho era]. *Nihon jinkō gakkai kaihō* (4):42–43.

Yazaki, Takeo

- 370 1962 *Nihon toshi no hatten katei* [Process and development of the Japanese cities]. Tokyo: Kobun-do.
- 371 1963 *The Japanese city: a sociological analysis*. Translated by David L. Swain. Rutland, Vermont: Japan Publications Trading Co.
- 372 1967 *Social change and the city in Japan*. Tokyo: Japan Publications Trading Co.

Yoshida, Tadao

- 373 1958 Malthus ronsō no fukkatsu to sono haikai [The revival of the Malthus controversy and its background]. *Jinkōgaku kenkyūkai kiyō* (1):2.

PAPERS OF THE EAST-WEST POPULATION INSTITUTE are a continuation of the series *Working Papers of the East-West Population Institute*, previous issues of which are listed on the following pages. The new title and improved format reflect the Institute's desire to bring these *Papers* to the attention of a wider audience. Single copies are available upon request while they remain in print. Because the topics explored in the series are varied and the supply of each *Paper* is limited, individuals are asked to limit requests to those titles of special interest. Institutions conducting research or programs in the field of population may order copies of all *Papers*.

## PAPERS OF THE EAST-WEST POPULATION INSTITUTE

No.

- 1 On the momentum of population growth, by Nathan Keyfitz, September 1970, 26 pp. [Now available as Reprint 6.]
- \*2 Reflections on the family planning policy of Korea, by Hi-Sup Chung, October 1970, 31 pp.
- 3 Husband-wife interaction and family planning acceptance: a survey of the literature, by Florangel Z. Rosario, November 1970, 21 pp.
- 4 How birth control affects births, by Nathan Keyfitz, November 1970, 31 pp. [Now available as Reprint 16.]
- \*5 Neoclassical growth models and the optimum rate of population growth (with applications to underdeveloped countries), by Robert L. Crouch, November 1970, 67 pp.
- 6 Research in Indonesian demography: a bibliographic essay, by Geoffrey McNicoll, December 1970, 51 pp.
- 7 Migration as a means of population control, by Nathan Keyfitz, December 1970, 25 pp. [Now available as Reprint 8.]
- \*8 Estimating recent fertility from data on own children: West Malaysia, 1958–1967, by Lee-Jay Cho, December 1970, 31 pp.
- 9 Linkages of intrinsic to age-specific rates, by Nathan Keyfitz, December 1970, 33 pp. [Now available as Reprint 14.]
- 10 Methods of demographic estimation for statistically underdeveloped areas, by Paul Demeny, January 1971, 149 pp. [Now available as Reprint 17.]
- \*11 A survey of social-psychological variables used in studies of family planning, by Florangel Z. Rosario, February 1971, 28 pp.
- 12 Interpersonal communication and the diffusion of family planning in West Malaysia, by James A. Palmore, Paul M. Hirsch, and Ariffin bin Marzuki, March 1971, 33 pp. [Now available as Reprint 13.]
- \*13 Dual record systems for measurement of fertility changes, by H. Bradley Wells, April 1971, 59 pp.
- 14 Fertility differentials of Japanese women in Japan, Hawaii and California, by Y. Scott Matsumoto, Chai Bin Park, and Bella Z. Bell, May 1971, 29 pp.
- 15 Measuring mortality: a self-teaching guide to elementary measures, by James A. Palmore, May 1971, revised June 1973, 61 pp.
- 16 Measuring fertility and natural increase: a self-teaching guide to elementary measures, by James A. Palmore, May 1971, revised October 1972, 81 pp.
- 17 Population research in the Pacific Islands: a case study and some reflections, by Murray Chapman, September 1971, 41 pp.
- 18 On aggregative economic models and population policy, by Geoffrey McNicoll, October 1971, 87 pp.
- 19 Households, families and friends in a Hawaiian-American community, by Alan Howard, November 1971, 117 pp.
- 20 What mathematical demography tells that we would not know without it, by Nathan Keyfitz, March 1972, 72 pp.
- \*21 Multivariate analysis of areal fertility in Honolulu, by Chai Bin Park, March 1972, 39 pp.
- 22 Population policy under an arbitrary welfare criterion: theory and issues, by W. Brian Arthur, March 1972, 48 pp.
- 23 A model for the age distribution of first marriage, by Griffith M. Feeney, April 1972, 31 pp.
- 24 Optimal population policy, by W. Brian Arthur and Geoffrey McNicoll, May 1972, 54 pp.
- 25 Legal regulation of population movement to, from, and within the United States—a survey of current law and constitutional limitations, by Peter Maggs, June 1972, 58 pp.

\* Out of print.

- 26 **Spatial patterns of socio-economic structure and change in the Philippines, 1939–60**, by Roland J. Fuchs and Telesforo W. Luna, Jr., August 1972, 55 pp.
- 27 **Representation of national and regional political units in a computerized world future model**, by Peter Maggs, October 1972, 51 pp.
- 28 **The demographic situation in Indonesia**, by Geoffrey McNicoll and Si Gde Made Mamas, December 1973, 68 pp.
- 29 **The demographic situation in the Republic of Korea**, by Lee-Jay Cho, December 1973, 52 pp.