

Dimensions of Inequality in Japan: Distributions of Earnings, Income and Wealth between 1984 and 2014*

Sagiri Kitao[†] Tomoaki Yamada[‡]

June 3, 2019

Abstract

Inequality has become a central policy issue across the world. We study trends of inequality in earnings, income and wealth across households in Japan, using the National Survey of Family Income and Expenditure (NSFIE) from 1984 to 2014. We focus on the transition of inequality unconditionally and conditionally across various dimensions of household heterogeneity such as age, cohort, employment and marital status of household heads, sources of income, family size, etc. Inequality in earnings, income and wealth all increased during the last three decades. Changes in earnings and income inequality were mostly driven by demographic shift in the population towards the elderly, who tend to have higher inequality. Wealth inequality rose not only in the aggregate but also among the young, and this is due to a major increase in the fraction of households who own zero or very low wealth across all age groups. Critical factors in understanding inequality trends in Japan that we identified are aging demographics, changes in typical household structure, and macroeconomic trends of the past decades including the financial bubble period and a decades-long slow-down thereafter.

Keywords: Distributions of wealth, earnings and income, inequality, demographic aging, Japanese economy.

JEL Classification: D31, D15, E21

*We would like to thank Daiji Kawaguchi, Chiaki Moriguchi, Masayuki Morikawa, Michio Suzuki, Satoshi Tanaka and participants of the RIETI discussion paper seminar, Meiji University Economics Conference and Okinawa DSGE Conference for valuable comments and suggestions. We gratefully acknowledge permission to use the data from the Statistics Bureau, the Ministry of Internal Affairs and Communications. Kitao acknowledges support from the Research Institute of Economy, Trade and Industry (RIETI), as a Faculty Fellow involved in the project “Fiscal and Social Security Policy under a Low birth Rate and Aging Demographics,” and the research grant provided by the Nomura Foundation. Kitao and Yamada acknowledges financial support from the Ministry of Education, Science, Sports, and Culture, Grant-in-Aid for Specially Promoted Research 15H05692 and Yamada also for Grant-in-Aid for Scientific Research (C) 17K03632.

[†]University of Tokyo, Research Institute of Economy, Trade and Industry (RIETI) and Centre for Applied Macroeconomic Analysis (CAMA). Email: sagiri.kitao@gmail.com.

[‡]Meiji University. Email: tyamada@meiji.ac.jp.

1 Introduction

How a nation's earnings, income and wealth are distributed across households has become a central issue in analyzing dynamics of the aggregate economy. Understanding evolving heterogeneity across households at a micro level is critical in evaluating consequences resulting from changes in various policies and economic environments. This paper uses the National Survey of Family Income and Expenditure (NSFIE) data to study dynamics of inequality across households in Japan over the last three decades, between 1984 and 2014.

Similar studies have been conducted in the U.S., including the work of [Díaz-Giménez et al. \(1997\)](#) and series of updates by [Budría Rodríguez et al. \(2002\)](#), [Díaz-Giménez et al. \(2011\)](#) and [Kuhn and Ríos-Rull \(2016\)](#). These studies use the Survey of Consumer Finance (SCF), which is comparable with the NSFIE, and summarize facts on the U.S. distributions of earnings, income and wealth of households.¹ [Heathcote et al. \(2010\)](#) study trends in inequality at individual and household levels, combining data from the SCF, the Current Population Survey (CPS), the Panel Study of Income Dynamics (PSID) and the Consumer Expenditure Survey (CEX). More recently, [Guvenen et al. \(2019\)](#) use administrative data of the Social Security Administration (SSA) and investigate the nature of idiosyncratic shocks to labor income of individuals in the U.S.

Detailed analyses of micro data describe facts that call for economic models to explain. Increased availability of micro data helped expand empirical and theoretical analysis of forces behind evolving heterogeneity across individuals and households, which are critical in explaining various trends observed in the aggregate economy.² For surveys of macroeconomic models of inequality and distributions, see, for example, [Cagetti and De Nardi \(2008\)](#), [Heathcote et al. \(2009\)](#), [Quadrini and Ríos-Rull \(2014\)](#), [De Nardi and Fella \(2017\)](#), [Ahn et al. \(2017\)](#) and [De Nardi et al. \(2017\)](#).

Japan has been considered as one of the developed countries with relatively mild inequality across households and less extreme concentration of wealth in the top tail of the distribution compared to other countries such as the U.S.³ Studies have, however,

¹[Kuhn and Ríos-Rull \(2016\)](#) compare the National Income and Product Accounts (NIPA) and the SCF data to check the representativeness of the SCF. For the comparison between the NSFIE and the System of National Accounts (SNA) in Japan, see [Sudo et al. \(2012\)](#), for example.

²The special issue of the Review of Economic Dynamics in 2010, "Cross-Sectional Facts for Macroeconomists" is a collection of empirical papers that investigate distributional facts in different countries.

³According to a cross-country analysis of inequality among OECD countries, Japan has the second lowest share of wealth (next to Slovak Republic) held by top 10% (and 5%) wealthiest households ([Balestra and Tonkin 2018](#)).

documented changes in the trend of inequality across various socioeconomic dimensions and explored potential explanations for the phenomena.⁴ [Moriguchi \(2010\)](#) and [Moriguchi and Saez \(2008\)](#) study long-run trends of wage and income inequality using tax return statistics and provide detailed analysis on the dynamics of the concentration in the top tail of the distribution. [Lise et al. \(2014\)](#) survey inequality trends in wage, income and consumption since 1981, using multiple micro databases including the Basic Survey on Wage Structure (BSWS), the Family Income and Expenditure Survey (FIES), the NSFIE and the Japanese Panel Survey of Consumers (JPSC). [Unayama and Ohno \(2017\)](#) use micro data from the NSFIE to construct a household saving data series across different age groups that are consistent with the national accounts (SNA). This paper adds to the literature by carefully examining micro data of earnings, income and financial wealth, using a unified database to characterize trends of inequality over the last three decades and present facts that can be explored further with dynamic micro-founded macroeconomic models and be used in economic and policy analysis.

Our main findings regarding the trends of inequality across households in Japan can be summarized as follows.

1. Inequality in household earnings, income and financial wealth increased over the last three decades, from 1984 to 2014. The Gini index of earnings increased from 0.39 in 1984 to 0.58 in 2014. The index rose from 0.32 to 0.35 for income and from 0.58 to 0.64 for wealth over the same period. The ratio of mean to median rose from 1.07 to 1.29 for earnings, from 1.13 to 1.19 for income and from 1.74 to 2.07 for wealth.
2. The rise in aggregate inequality of earnings and income during the last three decades is largely driven by demographic aging that occurred in the same period. Conditional inequality of earnings and income tends to rise sharply with age and a shift of age distribution towards the elderly increases inequality of the overall population. [Ohtake \(2005\)](#) emphasized the role of aging demographics to account for inequality dynamics between 1970s and 1990s.⁵ We confirm that the trend has continued thereafter. Conditional inequality of earnings and income also increased among working-age households but more mildly than in the aggregate.

⁴See for example, [Ohtake and Saito \(1998\)](#), [Ohtake \(2005\)](#), [Tachibanaki \(2005\)](#), [Oshio \(2010\)](#) and [Moriguchi \(2017\)](#).

⁵[Ohtake and Saito \(1998\)](#) and [Oshio \(2006\)](#) also study the long-term trend of inequality and effects of population aging and declining household size.

We also find that income inequality of households above age 65 has declined sharply since 1980s. This is accounted for by a more comprehensive coverage of the public pension system.

3. The wealth inequality shows a somewhat different trend from that of earnings and income. Age-conditioned Gini coefficients rose sharply among young and middle ages (20s to 50s) since the 1980s, even more sharply than in the aggregate. This is mostly due to a rise in the fraction of households who own zero or very low wealth. There has also been an increase in the level of wealth held by households at the top of the distribution, with an increase by more than 100% above the 70th percentile of the distribution since the 1980s, while the level decreased among households below the 20th percentile. Very wealthy households who own, for example, more than 100 million yen are concentrated among the old. The fraction of such wealthy households is very small among the young and middle-aged.
4. Average levels of earnings and income increased from 1984 until the bubble period of the late 1980s and early 1990s but they have declined since the late 1990s due to an economic slow-down and a shift of the age-distribution to the elderly and retirees. Life-cycle profiles of household earnings and income also shifted down at prime ages of their 20s to 50s.

Average wealth increased from 1984 to 2014 and does not show a decline as the paths of earnings and income do. This is partly because older people hold a larger amount of wealth and a rise in the population share of the elderly raised the average wealth as demographic aging continued during the past three decades. At the same time, the life-cycle profile of wealth has not declined as much as those of earnings and income since the end of the bubble period, which appears to be explained partly by cohort effects.⁶

Critical factors that need to be taken into account in evaluating inequality trends in Japan in particular are three-folds. First, ongoing rapid and massive demographic aging is the driving force of the aggregate trend of inequality. Distributional characteristics strikingly differ across age groups and a shift of weights on different generations gives a rise to dynamic changes in aggregate statistics.

⁶The rise may well be associated with changes in the level of income not explicitly captured in the survey, such as intergenerational bequests and inter vivos transfers. A rise in saving rates (and a decline in consumption) could increase wealth despite a fall in the level of earnings as well.

Second, there has been a major change in household structures and characteristics of household members within age groups. The average size of a household monotonically declined from 3.4 members in 1984 to 2.6 in 2014. It not only reflects the demographic aging and a rise in the fraction of elderly households with fewer members, but also a trend of falling marriage rates and fertility rates. At the same time, there has been a major increase in the fraction of households in which a head's spouse works, driven by a rise in female labor force participation across all age groups observed in the last three decades.⁷

Lastly, macroeconomic trends of the last three decades and business cycles that the Japanese economy experienced explain changes in the overall level of earnings, income and wealth observed during the sample period. A rapid and massive increase in the prices of real estate and financial assets contributed to a rise in household earnings, income and wealth in the late 1980s and early 1990 during the bubble period, but the trend reversed thereafter followed by a decades-long economic slow-down. They affect disposable income of households and form a pattern of inequality not only across time periods but also across cohorts of households who spend their career and a stage of life-cycle to build a stock of wealth under different macroeconomic environments.

2 Japanese Economy between 1984 and 2014

Before we present our data and analysis of household inequality, in this section we describe changes in the economic environment faced by households over the three decades since the 1980s. We focus on changes in demographics, labor market conditions and macroeconomic indicators.

Demographics: One of the major changes that Japan has undergone over the last few decades is a shift in its demographic structure. The increase in population, which began at the start of the Meiji Era in 1860s, continued until after 2000. The population started to fall in 2008, for the first time since 19th century, as shown in Figure 1a, which is based on the Census data.

Life-expectancy continued to rise during recent decades as shown in Figure 1c. The longevity trend alone would increase the population. However, fertility rates in Japan have declined sharply since the 1970s, offsetting possible effects of lower mortality rates.

⁷Although there is some limitation in evaluating individual data given that the NSFIE survey is based on household samples, we make an attempt to analyze changes in inequality in individuals' dimensions as well.

After the first baby boomers, who were born soon after World War II, gave births to children and created the second baby boom, there has not been a rise in fertility rates or anything that would imply an arrival of the third baby boom. Total fertility rate, which is the total number of children born to a woman in her life time if she were subject to the prevailing rates of age-specific fertility in the population, is shown in Figure 1b. It monotonically declined from the mid 1980s to 2005, when it hit the record low of 1.26. It recovered slightly after 2005, but remains below 1.5 as of 2015. A total fertility rate of about 2.1 children per woman is the replacement-level fertility rate, which according to the United Nations Population Division is necessary to keep the population from decreasing. The Japanese total fertility rate has been well below the replacement rate and has even stayed below 1.5 for a prolonged period since the early 1990s.

A rise in life expectancy and retirement waves of the two baby boom generations, coupled with a decline in fertility rates, have contributed to a rapid rise in the old-age dependency ratio, which we define as the ratio of the population at and above age 65 to that aged 20-64. As shown in Figure 1d, the ratio rose from about 0.15 in 1980 to nearly 0.5 in 2015. This rise is expected to continue during coming decades, posing a major challenge to fiscal sustainability in Japan.⁸

At the same time as fertility rates declined sharply, marriage rates also declined. Based on the Vital Statistics of the Ministry of Health, Labour and Welfare (MHLW), Figure 2a shows the average age of the first marriage for males and females, which rose by about 3 and 4 years, respectively. Another major trend in marriage in Japan is a rise in the population fraction of people who have never married during their life-time. Figure 2b shows that about a quarter (25%) of males have never married by age 50, which is a rise from less than 5% in the early 1980s. The fraction also rose for females, from less than 5% in the 1980s to about 14% in 2015.⁹ These trends in fertility, old-age dependency rates and marriage affect the size of households and their sources of income that we will discuss in section 4.

Macro economy: Next, we briefly describe trends of the macro economy and labor market in Japan over the last three decades that households faced during this period.

⁸See for example, [Braun and Joines \(2015\)](#), [Kitao \(2015\)](#) and [İmrohoroğlu et al. \(2016\)](#) for quantitative analysis of the demographic transition and its effects on macroeconomic conditions and fiscal sustainability in Japan.

⁹According to the Japanese Census data, 47.1% of males and 34.6% of females aged 30-34 had never been married in 2015, a sharp increase from 1985 when the rates were 28.2% and 10.4% for males and females, respectively.

Figure 3 shows the level of GDP, in aggregate, per capita and per working age (age 20-64), where levels are normalized to those in 1980.

Output grew rapidly during the economic boom of the so-called “bubble period” from the late 1980s to early 1990s, driven by a rapid and sharp rise in the price of financial assets and real estate. As shown in the right panel of Figure 3, the GDP growth rate was around 4% and even above 6% in some years during the period. Growth, however, plummets into a negative zone by the early 1990s. The economy had not fully recovered to its pre-bubble level when the financial crisis hit the U.S. economy and spread around the world in 2007. The GDP growth rate has remained below 2% since then. Part of the recent decline in aggregate GDP is also explained by the change in the demographics and a decline in the size of the working population. Growth rates of GDP per working-age population therefore lie above that of aggregate GDP and GDP per capita.

With the burst of the financial bubble, the unemployment rate started to rise, as shown in Figure 4a. The unemployment rate, however, did not return to the level of the early 1990s or even to the pre-bubble period of early 1980s. It continued to rise until the early 2000s, even after a moderate economic recovery. Various structural changes in the economy can be attributed to the chronic rise in unemployment observed after the 1990s. Teruyama (2010), for example, shows that the trend increase is explained by a rise in the flow rate from employment to unemployment and that the decomposition analysis points to the importance of an increase in the number of non-regular (*hiseiki*) workers, whose job is less stable and who are more likely to be laid off.

The inflation rate peaked at above 20% in the early 1970s as the world economy was hit by the first oil shock. Inflation started to stabilize in the 1980s before it began to rise from nearly 0% to 3% during the bubble period, as shown in Figure 4b. Stock and land prices rose sharply in the late 1980s, at a rate well above the inflation. Land prices increased by about 150% relative to their level in 1980 and the rise was more significant in the Tokyo metropolitan area, as indicated in the bottom two panels of Figure 4.

Figure 5a shows that the short-term policy rate of the Bank of Japan was set at above 8% in the early 1980s to combat inflation from the oil shocks, and it declined quickly to slightly above 2% in the late 1980s. The decline in the interest rate also fueled lending and real estate investment before the period of financial bubble that followed. The Bank of Japan started to tighten money supply and the rate was raised up to 6% in early 1990s. Upon the burst of the bubble, the Bank of Japan reduced the short-term interest rate target quickly and it has been close to zero percent since the mid-1990s. The yield curve has also flattened during the last 25 years and the interest rate on 10-year government

bonds declined to around 1% in 2015, as shown in Figure 5b.

Labor market: In this section we describe some trends in the labor market in Japan over the last three decades. Figure 6 shows the employment rate, defined as the number of employed individuals divided by population, for male and female across age groups since 1980. The data is based on the Labor Force Survey (LFS) available from the website of the Statistics Bureau. The profiles are inverse U-shaped, rising in the 20s and falling gradually after age 50s. The profile has not changed much for males, though employment rates declined slightly since 1980 among young and middle-aged individuals. For females, there has been a significant increase in employment rates across all age groups. They increased most significantly in the group aged 25-34, rising from about 45% in 1980 to above 70% in 2015. There has also been a large increase in middle and old age groups, though the employment rate above age 65 has not changed as much.

At the same time, the potential labor force in Japan became more educated and skilled as shown in Figure 7.¹⁰ The college entrance rate rose from below 40% in 1990 to above 55%. Although there is not much difference between male and female, more women than men enter a two-year college, and their rate of four-year college entrance is lower than that of men. This difference has shrunk over the last few decades, as shown in Figure 7b.

As discussed above, the fraction of workers working as irregular (*hiseiki*) employment rather than as regular (*seiki*) employment has increased since the 1980s. The former consists of contingent workers and part-time workers, who typically receive lower salaries and face less job security than regular workers. They also tend to have a limited coverage under social security programs provided through and subsidized by employers including the public pension as well as health and long-term care insurances.

As shown in Figure 8a, the number of irregular workers increased rapidly after 1985, based on the data of the LFS. The share of irregular workers has been always much higher among female than male as shown in Figure 8b, but the share for male also increased and has, in fact, more than doubled since the late 1990s.¹¹

Another trend of the labor market in Japan is a steady decline in the self-employment rate, which fell from about 17% of all workers in 1980 to less than 9% in 2015, as shown in Figure 9. The average age of self-employed workers has been rising, and the demographic trend implies a further decrease in the number and fraction of self-employed individuals

¹⁰The data is based on the Report on School Basic Survey of the Ministry of Education, Culture, Sports, Science and Technology.

¹¹The figure shows the fraction of irregular workers among all employed workers.

during coming decades.

3 Data Source and Definition of Variables

In this section we will first describe in detail our data source, the National Survey of Family Income and Expenditure (NSFIE), and its characteristics. We will then present definitions of the key variables of earnings, income and wealth that we compute from the NSFIE survey responses.

All variables are deflated by the consumer price index (all items except fresh food) using 2015 as the base year. The household head is identified in the survey as the self-reported “main earner” (*setainushi*) of each household in the database.

3.1 NSFIE Data

The NSFIE is conducted by the Japanese Statistics Bureau of the Ministry of Internal Affairs and Communication (MIC). The survey started in 1959 and has collected data every five years. In this article, we use data from seven survey years which are available upon request from the MIC: 1984, 1989, 1994, 1999, 2004, 2009 and 2014. We do not top-code or trim the data in any particular dimension and we use all the samples in the analysis with the sample weights, except for a small number of samples with inconsistent and missing data.¹²

The NSFIE collects yearly data on household income, earnings, as well as financial and real assets and liabilities. Consumption data are also available, but respondents report expenditures of consecutive three months from September to November only. Therefore they do not represent annual consumption of households and are not directly comparable with annual data of earnings and income that we use in our analysis.¹³ The NSFIE is not

¹²More precisely, we exclude about 30 samples whose reported total wealth does not match the sum of the amount in asset items. There are also a small number of paired samples with identical household identification numbers in 4 survey years from 1984 to 1999 (246 pairs of samples in 1984, 414 in 1989, 449 in 1994 and 546 in 1999), whose employment status changed during the three-month survey period. We drop and exclude one of the two for each pair in the analysis.

In the NSFIE, some households report only the total income but fail to report the breakdown of income items including items we include in the definition of earnings. Those households are included in the analysis of income and wealth, but not earnings. The numbers of such households are 1,505 in 1984, 2,917 in 1989, 2,340 in 1994, 2,573 in 1999, 4,255 in 2004, 4,038 in 2009 and 4,405 in 2014.

¹³The NSFIE includes both monthly earnings (income) and annual earnings (income). However, since the periods of the monthly earnings (income) are also restricted similarly to consumption expenditures, we focus on annual earnings and income.

a panel data of households and cannot be used to analyze households' mobility as may be done with panel data sets such as the PSID or the National Longitudinal Surveys (NLS) in the U.S.

The NSFIE has a very large sample size, compared to other household surveys, with 55,000 to 60,000 households in each survey year. In 2014, for example, samples were taken from all 791 cities in Japan as well as 212 out of 929 towns and villages. 4,696 sample districts within cities, towns and villages are chosen and 12 households (11 multiple-member households and 1 single-member household) are surveyed in each district. The NSFIE collects data on one-person households and multiple-person households separately. In 2014, for example, the NSFIE sampled 58,300 households including 4,800 one-person households.¹⁴

Other sources of micro data in Japan include the Family Income and Expenditure Survey (FIES), the Keio Household Panel Survey Data (KHPS), the Comprehensive Survey of Living Conditions (CSLC), the Survey on the Redistribution of Income (SRI) and the Japanese Study of Aging and Retirement (JSTAR). The FIES is similar in name to the NSFIE, but the objective of the former is to track a monthly movement of income and expenditures of a smaller number of households nationwide, collecting monthly data on consumption expenditures, income and earnings since 1953. The FIES also has information on household wealth, but these questions were included only after 2002. The sample size of the FIES is about 9,000, significantly less than that of the NSFIE, and the small sample size makes the survey unideal for cross section analysis. The KHPS is a panel survey that was started in 2004 with 4,000 households and 7,000 individuals and poses a similar issue as the FIES in that sample size is not large enough for analysis of the entire population. The CSLC is a household survey and covers items similar to the NSFIE. About 40,000 households are surveyed with questions about income and saving. Unlike the NSFIE, it does not ask questions about expenditure items. The SRI is focused on household gross income and net income after payment of taxes and receipt of transfers. The JSTAR is a panel data set focused on the elderly population in Japan. The survey started in 2007 and aims to be comparable to the Health and Retirement Survey (HRS) in the U.S. and the Survey of Health, Ageing and Retirement in Europe (SHARE) in Europe.

There are also comprehensive surveys conducted on earnings and employment in

¹⁴The Ministry of Internal Affairs and Communications, which handles the NSFIE, announced in October 2018 that they would increase the number of single-member households three-folds in future surveys starting in 2019, which reflects a recent rise in the number of single-member households in the population.

Japan. The Basic Survey of Wage Structure (BSWS) is an establishment-based survey of earnings of employed workers, which surveys about 78,000 establishments that hire at least five individuals and provides detailed information about employees and their wages. The BSWS does not cover individuals working at small firms or self-employed individuals. The Employment Status Survey (ESS) is a survey of households focused on employment status. Unlike the NSFIE, these surveys do not have information about non-wage income or wealth and do not allow researchers to compute joint distributions of earnings, income and wealth.

There are several issues and characteristics about the NSFIE that should be kept in mind for the remainder of this paper. First, as also mentioned above, unlike the PSID or the NLS in the U.S., the NSFIE is not a panel and does not follow the same households over time and it is not designed to study mobility of households across earnings, income and wealth groups over time. Second, there is no survey question about educational background or skills of household members. For employed household heads or spouses, there is no information about the type of employers or occupations. Therefore distributional analysis based on such dimensions is not possible.

Third, the unit of the survey is a household. Households provide detailed information about household earnings, income and wealth, as well as information about earnings and income of household heads and spouses, respectively. Earnings and incomes, however, earned by the rest of the household members are lumped together. Therefore the survey is not an ideal data source for an analysis of earnings and income of individuals. Studies such as [Piketty \(2014\)](#), [Güvenen et al. \(2019\)](#) and [Güvenen et al. \(2018\)](#) use administrative data based on individuals' earnings and other sources of income and our study differs from them.

Fourth, as mentioned above, although the NSFIE collects information on household consumption, the survey is conducted in three autumn months of the year, September, October and November (only October and November for one-person households) and focuses on expenditures in these months. Consumption typically has strong seasonal fluctuations with much spending occurring at the end and beginning of the year as well as around the beginning of a Japanese fiscal year in April and the NSFIE data is not suitable for analysis of annual consumption and the data are not comparable to annual earnings and income data. Therefore we do not study the consumption data of the NSFIE in this paper.¹⁵

¹⁵See [Unayama and Ohno \(2017\)](#) for more on the consumption data of the NSFIE. They make attempts to impute annual consumption of households based on the NSFIE expenditure data and characteristics

Fifth, the NSFIE excludes some samples having particular characteristics. For example, it does not include households operating restaurants and inns on the same premise as their residence or households of foreigners. Also excluded are various types of one-person households: persons under 15 years of age, students and institutionalized individuals in prisons, reform institutions and hospitals, etc.¹⁶

3.2 Definition of Earnings, Income and Wealth

In this section we present the definition of the three variables analyzed in the paper; earnings, income and wealth, which are each computed for households based on the NSFIE data.

The NSFIE collects information on earnings and income, respectively, in three categories: (i) household head, (ii) head's spouse and (iii) the rest of household members summed together. After 1994, the sum of other household members' data is divided into total earnings (and income) of household members below and at-and-above age 65. In computing household statistics, we sum up the numbers of all household members in these three categories. We also compute per adult equivalized values using the OECD scale.

Total income of a household consists of five sources of income: pre-tax labor income, capital income, business income, transfers and other income. Labor income includes annual earnings from a main job and other jobs that each household member holds.

Capital income is a sum of annual interest and dividend income earned on assets including deposits, stocks, bonds and insurance, and income from renting real estate and land.¹⁷ Business income includes income earned from agriculture, forestry and fisheries and other businesses.

Transfer income is the sum of public pension and survivors' benefits, corporate pension and individual pension payments and remittances from family members. Other income includes annual income from other sources such as child-care benefits from the government, in-kind consumption and in-kind benefits provided by employers.

Our definition of income is the sum of all the five items. Earnings are defined as the sum of labor income and business income. Although presumably small, it is possible that some part of business income is earned not by the means of labor but in other ways

of each household, also using the Household Consumption Survey (HCS).

¹⁶For more details about excluded households, see <http://www.stat.go.jp/english/data/zensho/2009/cgaiyo.html>.

¹⁷Capital gains from sales of financial assets such as stocks are not included in capital income. Income from capital gains is not explicitly included in the survey questionnaire.

such as investment, which by definition should be included in capital income. [Kuhn and Ríos-Rull \(2016\)](#), for example, impute a fraction of business income included in earnings as 86 to 93 percent. We include all business income in the definition of earnings, but assigning some fraction to other sources of income such as capital income would not affect the analysis in any significant way because business income is small in Japan and it is much less than in the U.S. as reported by [Kuhn and Ríos-Rull \(2016\)](#), for example, using the SCF data.

Household wealth is computed as the sum of financial assets. Our definition of wealth does not include real assets such as housing and land. Accordingly we exclude debt associated with purchases of real estate.¹⁸ Financial assets consist of bank deposits, corporate and government bonds, stocks, trusted assets (in loans, stocks, bonds and cash), cumulated payments for life insurance and casualty insurance and other types of deposits.

Net wealth is computed by subtracting debt owed by each household from gross assets. The household debt consists of outstanding non-real estate loans including credit card loans for purchases of durable and other goods, education loans, loans from relatives and acquaintances, outstanding loans through cashing services, and other types of loans.

3.3 Summary Statistics

Table 1 reports summary statistics for our NSFIE data. Our analysis is based on seven surveys, in every five years from 1984 to 2014. The sample size in each year ranges from 55,000 to 60,000 households. The weighted fraction of one-person households increased from 17.6% in 1984 to 23.2% in 2014. The average size of households monotonically declined over the three decades, falling from 3.35 members in 1984 to 2.56 in 2014, reflecting the decline in marriage and fertility rates during the past four decades since the 1970s and an increase in the number of retirees, who tend to live in a household with fewer members.

The fraction of married household heads has been falling from 77.7% in 1984 to 67.9% in 2014. During the same period, marriage rates declined sharply as also discussed in section 2. The number of workers in each household has declined since the 1980s, driven by a rise in the number of retirees. Figure 10 displays the average household size by age group of household head in each survey year, showing a trend of declining household size

¹⁸We may include real assets in a future version using a separate data set of the NSFIE that includes real asset information. The information, however, is available only after 1994.

across age groups during the last few decades.

The fraction of households with a female head increased over time, from 12.6% to 20.1%, as shown in the middle section of Table 1. The rise is accounted for by a rise in the number of households headed by elderly female aged 65 and above.

As discussed in section 2, there was a steady increase in female labor force participation rates during the survey periods. The fraction of households in which a spouse of a household head works increased from 46.8% in 1984 to 59.3% in 2014, as shown in Table 1.

Table 1 also reports the distribution in employment status, which is based on the occupation indicator (*shokugyo fugo*) assigned to household heads by the Ministry of Internal Affairs and Communications. Employees include employed workers in both private and public sectors, and both regular and irregular workers. Self-employed workers include merchants and craftsmen, firm owners, workers in agriculture, forestry and fishery sectors, corporate managers, and freelance workers.

The fraction of self-employed workers fell from 27.3% in 1984 to 14.2% in 2014. Part of the decline is explained by a rise in the number of retirees but there was a decline in self-employment rates across age groups, as shown in Figure 11. Self-employment rates fell most significantly among households in their 30s to 50s.

Figure 12a shows the fraction of the households whose heads are employed. The employment rate increased since 1984 across age groups and the rise is most significant among those in their 50s and 60s. Adding the self-employed to the employed, however, as shown in Figure 12b, the trend is less obvious due to a decline in the self-employment rate. The total participation rates are lower in recent years among households aged above 65, compared to 1980s.

As shown in the bottom rows of Table 1, the fraction of households with non-working heads increased rapidly from 8.6% in 1984 to 32.8%. Among households aged below 65, the non-participation rate increased from 3.3% in 1984 to 6.3% in 2004, but declined thereafter, reaching 4.3% in 2014. Unemployment rates show a somewhat similar trend as shown in Figure 4 in section 2.

Figure 13 plots the age distribution of household heads in our NSFIE dataset in 1984, 1994, 2004 and 2014. In 1984, the peak of the age distribution of our household samples is in their late 30s, which consists of the first baby boom generation born immediately after World War II. By 2014, most baby boomers are in their late 60s and many have reached the normal retirement age of 65 and started receiving public pension benefits. The second baby boomers, born in the early 1970s, are in their 20s in the 1990s and

should have started working, though not all will appear immediately in our samples as household heads. The rise in the number of households headed by this generation starts to be seen in 2004 and becomes more visible in 2014.

4 Analysis

4.1 Summary of Inequality: 1984-2014

Figures 14, 15 and 16 show histograms of earnings, income and wealth in selected survey years. Histograms for each variables shifted over time, but the overall characteristics have not changed and difference across three variables remain the same: the distribution of earnings and income is hump-shaped with a large number of zeros for earnings. The wealth distribution has a peak at zero and a long tail.

Figure 14 shows that the fraction of households with zero earnings has increased over time. In 2014, for example, over 35 percent of households report zero earnings, an increase from 10% in 1984. A large part of the increase is accounted for by a rise in the number of retirees. Even though many households earn none, they likely have transfers or other income sources such as pension benefits and asset income. Thus, as Figure 15 shows, the income distribution is less dispersed than that of earnings with the peak no longer at zero. Figure 16 shows that wealth distribution is more unequal and strongly skewed than distribution of earnings and income. This is similar to the difference in distributions of the three statistics in the U.S. as reported, for example, in Kuhn and Ríos-Rull (2016).

Tables 2 to 5 show summary statistics for the three variables of our interest: earnings, income and wealth (gross and net), respectively, for the seven survey years. As shown in Table 2, average earnings increased from 1984 to 1994 and have declined monotonically since then. The path of average income shows a similar trend as shown in Table 3. The rise reflects growth of the economy and an increase in price and wage levels during the bubble period as discussed in section 2. The decline after the 1990s is driven by both a change in demographic composition and a slow-down of the macro economy. Average wealth, as shown in Table 4, increased almost monotonically from 6.9 million yen in 1984 to 14.1 million in 2014.

The range of Gini coefficients of earnings is 0.39-0.58. It is lower for income at 0.32-0.35 and higher for wealth at 0.58-0.64. The Gini coefficient of earnings monotonically rose from 0.39 in 1984 to 0.58 in 2014, a change affected by a rise in the number of retirees who report zero or very low earnings. Income Gini rose from 0.32 in 1984 to 0.35 in 1999

and has remained in the range of 0.34 to 0.35 since then. Wealth Gini has also increased though less mildly than that of earnings, from 0.58 in 1984 to 0.64 in 2014. The ratio of mean to median wealth also increased from 1.74 in 1984 to 2.07 in 2014, as the wealthiest households own a larger fraction of the total wealth of the nation.

As shown in the bottom rows of Tables 2 and 3, the three variables are positively correlated with each other. The correlation between earnings and income declined from 0.88 in 1984 to 0.80 in 2009 and rose to 0.83 in 2014. The correlation between earnings and wealth fell from 0.33 to 0.13 during the same period. The fall, however, is driven by an increase in the number of retired households and the correlations among households aged 25-59 have not declined as much, as shown in the last two rows of Table 2.

Growth rates of earnings, income and wealth from 1984 to 2014, and from 1994 to 2014 at different percentiles are summarized in Table 6. Between 1984 and 2014, earnings decreased up to the 90th percentile and increased slightly at the top percentiles. Earnings rose sharply during the bubble period of the late 1980s and the early 1990s. Comparing the earnings at different percentiles between 1994, after the burst of the bubble, and 2014, the growth rates are negative in all percentiles.

Income shows a similar trend. The level of income above the 90th percentile increased between 1984 and 2014, but comparing between 1994 and 2014, income declined at all percentiles by 16 to 23%. For wealth, the level decreased up to the 20th percentile since 1984 but it increased in the rest of the distribution and it rose by more than 100% above the 70th percentile. Between 1994 and 2014, the growth rates are lower across percentiles, but unlike earnings and income, the wealth increased above the median and rose by 19-27% for those above the 70th percentile.

Figure 17 shows trends of earnings, income and wealth at different percentiles. Income and earnings exhibit a rise in levels during the bubble period of the late 1980s and early 1990s, but the change is mostly visible among households at higher percentiles. Earnings at the 40th percentile show a major decline after 1999, and demographic aging and a rise in the number of retirees partly explain this trend. The wealth level shows a monotonic increase at the upper half of the distribution. A major increase is observed at the very top of the distribution.

Lorenz curves for the distribution of earnings, income and wealth for 1984 and for 2014 are shown in Figure 18. The income Lorenz curve lies above that of earnings because income is more equally distributed than earnings. The Lorenz curve of wealth lies to the right of the other two curves (except for the lower end in 2014) because the wealth distribution is much more skewed than the other two. This pattern has remained the same

since 1984, though the earnings Lorenz curve shifted downwards with a larger fraction of households with zeros because of the demographic aging and an increase in the fraction of retirees. Figure 19 shows Lorenz curves of each variable in different survey years in one plot to visualize the time trend of inequality. Consistent with the increase in Gini coefficients discussed above, the curves shifted to the right in all three variables.

4.2 Rich and Poor: Households Ranked by Percentiles

Tables 7 to 12 show inequality statistics in 1984 and 2014, in which we group household samples according to the quintiles of earnings, income and wealth, respectively, as well as the top 10, 5 and 1% of the population.

As shown in Tables 7 and 8 on earnings, households in the top quintile earn 2.1 to 2.7 times the average and the top 1% earn 4.5 to 6.4 times the average. The tables also report the decomposition of the sources of income for households in each earnings quintile. As explained in section 3.1, some households fail to report the breakdown of their total income and these households are excluded in the computation of the sources of income in all tables. Households with low earnings have a large fraction of their income from transfers. For example in 2014, they earn 91% of income from transfers, while those in the highest quintile receive only 2.9% of income from transfers. The share of capital income is high among households at the top 1%, standing at 31% in 2014, for example. The average share of capital income has decreased since 1980s, reflecting a fall in returns from financial assets.

Income is less concentrated than earnings. Households in the highest quintile receive 1.9 to 2.1 times the average income. The top 1% receive 4.4 to 5.0 times the average. The average income of the top quintile increased from 11.5 million yen in 1984 to 14.3 million yen in 1994, and declined thereafter, reaching 11.6 million yen in 2014. The average age of households in the top 20% of income increased from below 50 in 1984 to 54.0 in 2014. The majority of households in the lowest income quintile are one-person households.

Figure 20 shows the share of income earned by households in the bottom and top quintiles and top 1% between 1984 and 2014. The share of the bottom 20% has not changed much and stayed in the range between 6 and 7%. The share of the top 20% increased from less than 39% in 1984 to above 41% in 2014. The share of the top 1% increased slightly but almost unchanged and remained in the narrow range of 4.4% and 5.0%. Unlike in the U.S., where the income grew the fastest among top earners since the late 1980s until the financial crisis of 2007-2008 (Kuhn and Ríos-Rull (2016)), the

share of the top earners in Japan remained almost unchanged during the post-bubble period. The finding is consistent with [Moriguchi and Saez \(2008\)](#) and [Moriguchi \(2017\)](#), who compared historical concentration of income at the top tail of the distribution and emphasized different experience between the U.S. and Japan during the past decades, due to factors such as the scheme of extremely high executive compensations in the U.S.¹⁹

Wealth is much more concentrated at the top tail than earnings and income, as we have already seen in statistics such as the higher mean-to-median ratios in [Table 4](#). Those in the highest quintile hold 3.0 to 3.2 times the average wealth and the top 1% own 9.3 to 10.3 times the average. The average age of households increases at higher wealth quintile except for the lowest quintile. In 2014, for example, the average age is 52.1 years old in the second quintile and 64.8 years old in the top quintile, implying that the elderly households are the majority in the quintile and they are wealthy on average. The fraction of married household heads also increases in wealth.

[Figure 21](#) shows the share of wealth held by households in the bottom and top quintiles and top 1%. The share of the poorest 20% started low at 1.2% in 1984 and declined even further thereafter, reaching 0.3% in 2014. As we will discuss below in [section 4.4](#) and in [Table 25](#), the fraction of households with zero wealth increased from 5.5% in 1984 to 11.0% in 2014, contributing to a decline in the share of wealth held by households in the lowest quintile, as well as an increase in wealth inequality of the population during the last three decades. The share of wealth held by the richest households increased sharply from 1984 to 1989 but declined dramatically after the burst of the financial bubbles. The share held by the top quintile rose from 61% in 1999 to 65% in 2014. The share of the top 1% continued to decline until 2004 and rose slightly thereafter.

Although the wealth is highly concentrated at the top, we note that the degree of concentration is milder than in many other developed countries. As shown in [Figure 21c](#), the wealthiest 1% held 10.3% of the entire wealth in 1984 and the ratio came down to the same 10.2% in 2014 after changing between 9 and 14% during the past three decades. According to [Balestra and Tonkin \(2018\)](#), a study of wealth distribution across OECD countries, the top 1% households own 42.5% of the total wealth in the U.S.,

¹⁹[Moriguchi \(2017\)](#) studies the long-term trend of income inequality in Japan and presents detailed analysis of not only the top tail but also the bottom tail of the income distribution. She argues that rising income inequality since 1980s in Japan is characterized by rising relative poverty and further impoverishment of low-income households, concentrated among those headed by the elderly, single mothers, irregular workers and individuals not in the labor force. As discussed below, our finding that rising wealth inequality is explained not only by demographic aging but also by a rise in the relative size of households with zero or little wealth is in line with her findings that the poor has become even poorer during the last few decades, contributing to a rise in overall inequality.

23.7% in Germany, 18.6% in France, and 20.5% in U.K. Some other countries have lower concentration, such as Australia at 15.0%, Italy at 11.7% and Greece at 9.2% but all OECD countries with reported statistics show higher concentration at the top 1% than in Japan, except for two countries, Slovak Republic and Greece.

4.3 Joint Distribution

One of the benefits of the NSFIE compared to other data sources is that it provides information about all of earnings, income and wealth of the same households and enables us to study their joint distribution.

Tables 13 to 16 display joint distribution of earnings and wealth for the entire population in the first and last survey years, 1984 and 2014. We partition the population into deciles of earnings and wealth, and indicate the average earnings, income and wealth of households in each of the 100 ($= 10 \times 10$) bins. Typical households are at the median of the distribution, which is between the fifth and sixth deciles of earnings and wealth. Note that the first rows are combined when there are more than 10% of households who have zero earnings. For example, the first two rows are combined in Table 13 and four rows are combined in Table 15 since more than 30% of households report zero earnings in 2014. Tables 14 and 16 show the percentage of the population in each of the earnings-wealth decile combinations.

Tables 14 and 16 show positive correlation between earnings and wealth, with a larger mass in bins on and near the main diagonal. The large mass in the upper right corner, that represents households who have zero or very low earnings and high wealth are mostly retired households. There is also a large number of individuals in the bottom right corner, with the highest level of both earnings and wealth. Tables 13 and 15 also indicate a degree of correlation among earnings, income and wealth within each decile of earnings and wealth. In some dimensions, positive correlation is clearly observed, though the direction is less obvious in others. For example, income tends to rise with earnings deciles within each wealth decile, or with wealth deciles within each earnings decile. Within each earnings decile, however, the average wealth does not show a clear trend along the dimension of wealth deciles. Also, households with high wealth (those in the right-end columns) are not always earning more than those with lower wealth since many of them are elderly households who have already exited the labor market.

To isolate the effects of retirees and focus on joint distribution among working-age households, Tables 17 to 20 display the same joint distributions, but the samples are

restricted to those aged 35 to 55. This is the group of households that have the highest earnings but less wealth compared to households of higher ages. As shown in Tables 18 and 20, fewer households are in the upper right corner than in the tables of the whole population and a larger mass is in the bottom right bin. More households are in the bins on and close to the main diagonal and earning-wealth correlation is higher within the age group.

4.4 Dimensions of Inequality: By Age, Employment and Marital Status and Household Structure

We now examine distribution of earnings, income and wealth by the dimensions that are critical in understanding the dynamics of household inequality over the last three decades. Tables 21 to 24 show the levels and concentration of earnings, income and wealth conditional upon various household characteristics including age, employment status, marital status, and household structure.

By Age: Levels

Levels of earnings, income and wealth as well as Gini coefficients are shown in the upper section of Tables 21 to 24. To make the trend more visible, age-profiles of levels and concentration are also displayed in Figure 22. Earnings and income of households increase in age until about their early 50s and decline sharply thereafter. The profile of wealth levels shows an increase until around age 60 and becomes flatter, declining slightly in their 60s and 70s though much less sharply than earnings and income. The net wealth level is lower than gross wealth among young and middle-aged households but the profile is similar to that of gross wealth.

As shown in Figure 22a, earnings of working-age households increased across age groups from 1984 to 1994 during the bubble period, but they declined monotonically since then. Earning levels of those aged 20s to 50s in 2014 are close to those in 1984. Income profiles exhibits a similar trend as shown in Figure 22c. The average wealth held by households significantly increased from 1984 to 1994 during the bubble period across all age groups and the level has not changed significantly since then, though it fell at ages between 20 and 50 and fluctuated up and down among older households.

While average earnings and income of households aged 20s to 60s fell rather sharply from the 1990s to 2010s, their wealth does not exhibit a decline of the same magnitude, as shown in Figure 22e. There could be different explanations for such outcomes. First,

if consumption fell more than proportionately to the decline in income, that is, if saving rates increased, wealth can stay high while income falls. As discussed in section 3, there is limitation with the consumption data of the NSFIE to verify the hypothesis, because expenditure data are collected only in three particular months of a year rather than the entire year. Unayama and Ohno (2017) combined the consumption data of the NSFIE with data of another survey and estimated annual consumption of households. They argue and show that the saving rates in fact fell across age groups since the 1990s.

Second, households may have other sources of income that are not reported in the NSFIE, but added to their accumulated wealth. In particular, there is no survey question that explicitly asks about bequests from parents or other relatives, which may in particular explain the small change or a moderate increase in the wealth level of households above their 50s since 1994. Third, disposable income could increase even if income falls, for example, if income tax rates decline or other expenditures fall. Income tax rates, however, changed in both directions over the last few decades and increased moderately during the last decade.²⁰

Lastly, different wealth levels may be due to cohort effects. Households aged 50s and 60s in the 1980s spent most of their career when the Japanese economy was still growing from a highly underdeveloped level, and may have been unable to accumulate enough savings. Later cohorts enjoyed higher and faster-growing earnings during their prime working years. Such cohort effects can partly be seen in the wealth profiles by cohort in Figure 34, that we discuss in section 4.10.

By Age: Inequality

Right panels of Figure 22 show the trend of inequality within age groups in the three variables. As shown in Figure 22b, Gini coefficients of earnings increase over the life-cycle, rising from around 0.25 in their early 20s to around 0.4 in their mid-50s. Thereafter, the Gini increases more sharply but the rise in later years of a life-cycle is due to waves of households exiting the labor force or changing work hours and employment types starting in their late 50s and 60s, and making a discrete change in their earnings level. As shown in the last column of Table 24, the average number of workers falls, for example, from 1.80 at age 55-59 to 1.50 at 60-64 and 0.98 at 65-69 in 2014.

²⁰The highest marginal income tax rate fell from 50% to 40% in 1999 and to 37% in 2007 and then increased to 45% in 2015. The marginal tax rate at the income level of 10 million yen, the rate fell from 35% to 30% in 1988 and increased to 33% in 2007. At 5 million yen, the rate fell from 25% to 20% in 1987 and hasn't changed since then.

Gini coefficients of income increase as well until their 60s in all years, but the pattern of inequality above 65 has changed since 1984. Income Gini of households continued to rise until their 80s in 1984, but the profile became flatter after 2000, implying that income is more equally distributed among old-aged households. Gini coefficients even show a decline after age 65 in 2014.

The change in the trend decline in inequality of wealth among the old is mostly due to availability of a more comprehensive coverage of public pension benefits. The national pension system started in 1961 but the coverage was not mandatory until the reform in 1985 made it compulsory for all individuals to be enrolled in the pension system. To isolate effects of the national pension system, Figure 23 shows Gini coefficients of income when we exclude public pension benefits from income. Unlike in Figure 22d, there is no major decline in income Gini coefficients among the old. Gini coefficients continue to rise even after their 70s and the level of the peaks is at around 0.80 in their 80s except for 1984.

Figure 22f shows that Gini coefficients of wealth among households in their 20s to 60s increased from the 1980s and 1990s to the 2000s and 2010s. As we saw in Table 4, aggregate wealth Gini increased over time from 0.58 to 0.64 in 2014, but the Gini coefficients by age increased by more, for example, from 0.50 to 0.59 in their 30s. The rise of Gini coefficients among young and middle-aged households appears to be driven by an increase in the fraction of households reporting zero wealth, rather than by an rise in the wealth concentration in the upper end of the distribution. Table 25 shows the fraction of households who report possession of zero wealth by age between 1984 and 2014. The fraction of households with zero wealth increased across all age groups since 1980s. The increase is particularly significant among young households, for example from 4.8% in 1984 to 11.4% in 2009 and coming down to 8.5% in 2014 among households aged 25-29 and from 4.7% in 1984 to 9.8% in 2014 among 30-34. The increase in the relative size of the very poor will push the Lorenz curve down in the left and increases the value of Gini coefficients. Sections 4.7 and 4.8 discuss more on the characteristics of households with low wealth and the trend of the relative poverty.

Greater concentration of wealth in the upper tail of the distribution would also contribute to a rise in Gini coefficients. Table 26 and 27 show the fraction of households that own wealth greater than 50 million yen and 100 million yen, respectively.²¹ There was

²¹Note that the sample size of the wealthiest households, especially those with more than 100 million yen, is very small and some caution is needed in the interpretation of the results because the fractions above the high cutoffs and other statistics about these households are based on a limited number of households.

a major increase in the fraction of the very wealthy from 1984 to 1989 and the fraction rose steadily since the 1990s. For example, households with more than 50 million yen increased from 0.9% of all households in 1984 to 2.5% in 1989 and to 5.5% in 2014. Those with more than 100 million yen rose from 0.1% in 1984 to 1.0% in 2014. Conditional on age, the fraction has decreased among middle-aged groups of households but it rose among older households.

Gini coefficients of net wealth is higher than those of gross wealth since households in the lower end of the distribution own negative wealth and the distribution is more unequal. Tables 21 to 24 also show the distribution of the sample size of each age group. The largest age group in 1984 was that aged 35-39, with 14.2% of samples, and the age of the largest group increased over time. The largest age group of households in 2014 was in their late 60s (aged 65-69) with 12.9% of samples. The group aged 35-39 takes up only 6.1% in 2014, less than one half of their relative size in 1984. Therefore, in computing the aggregate statistics such as average earnings and wealth or Gini coefficients, they tend to be driven by the characteristics of older generations when we look at more recent data.

By Age: Gini decomposition

In order to decompose changes in inequality into factors associated with demographic aging, across-age difference and within-age difference, we compute Gini coefficients under some counterfactual assumptions.²² More precisely, in addition to original Gini coefficients in the aggregate level reported in Tables 2 to 4, we also compute Gini coefficients assuming that the age distribution remains unchanged since 1984. The transition of Gini coefficients computed this way will exclude effects associated with demographic aging. Moreover, we also compute Gini coefficients assuming that the average level of earnings by age does not change over time, in addition to the age distribution. The dynamics of this third series of Gini coefficients represent changes in within-age inequality by removing effects associated with both demographic aging and different growth experience of average levels across age groups.

Figure 24 shows the change in the path of the three Gini coefficients for earnings, income and wealth, respectively. Figure 24a shows a sharp difference when effects of changes in the age distribution are removed, indicating that most of the rise in Gini coefficients of earnings in the aggregate level is driven by demographic aging in the last three decades. This does not, however, imply that the rise in earnings inequality among

²²We thank Satoshi Tanaka for suggesting that we analyze the transition of inequality by decomposing Gini coefficients.

younger households is trivial. In fact, as shown in Figure 25a, which plots earnings Gini coefficients of working-age households aged 25-55, inequality in earnings among working-age households has also increased over the last three decades.

A rise in inequality among the young is mostly explained by a further decline of earnings among those in the lower tail of the distribution, rather than a further rise among the rich. For example, a fraction of households aged 25-55 who report zero earnings increased from 4.2% in 1984 to 7.2% in 2014, though the change during 30 years was not monotonic. The average earnings in the lower quintiles among the young declined while those in the upper quintiles rose mildly over the same period.

Figure 24b shows the paths of Gini coefficients for income. As with earnings, removing effects of demographic aging will reduce the rise in aggregate inequality because age-dependent Gini coefficients are higher among older households. The gap, however, has not increased monotonically as in earnings and has somewhat stabilized since the late 1990s. As shown in Figure 25b, earnings Gini coefficients declined sharply among the old while those of the young mildly increased but remained in a narrow range, which together affect and determine net changes in the level of Gini coefficients in the aggregate level.

Lastly, Figure 24c shows wealth Gini coefficients under alternative assumptions. Interestingly, without effects of age distribution, inequality would rise more sharply. This is because age-dependent Gini coefficients increased among the young more sharply, as we saw in Figure 22 and as shown in Figure 25c, which displays the movement of the Gini coefficients in two age groups. Without aging effects, Gini coefficients would weigh a sharp rise in inequality among the young by more relative to the path of original Gini coefficients. When we also exclude effects of across-age inequality, Gini coefficients would be lower since inequality of average wealth across age groups was less severe in 1980s.

By Employment Status

The middle section of Tables 21 to 24 show the average level and concentration of earnings, income and wealth by employment status.

As we discussed in section 3.3, there has been a rapid decrease in the number of self-employed households. The fraction of self-employed workers in the population fell from 27.3% in 1984 to 19.3% in 1994, 16.8% in 2004, and 14.2% in 2014. As shown in Figure 11, a sizeable decrease occurred at young to middle ages during the last three decades, while the self-employment rate among the old has not changed much or even increased slightly as the cohort with a large number of self-employed households aged.

Self-employed households tend to hold more wealth than employed households. In

1984, for example, the average wealth of self-employed households is 9.2 million yen while the wealth of employees is 5.7 million yen and that of non-working households is 8.0 million yen. The wealth of the last group increased over time, reflecting a rise in the fraction of the elderly who are out of the labor force and tend to have higher wealth. Figure 26 shows the wealth profiles by employment type in 2014 and indicates that wealth increases over the life-cycle and until the early 60s, irrespective of their employment status.

By Marital Status and Number of Workers in Households

The third section of Tables 21 to 24 shows how earnings, income and wealth differ by marital status of household heads and a number of workers in each household. The fraction of households with a married head declined from 78% in 1984 to 68% in 2014. At the same time, the average number of workers in a household also decreased from 1.72 for the married 0.94 for the non-married (1.55 on average) in 1984 to 1.44 and 0.72 (1.21 on average) in 2014. Married households earn more than non-married households and this is the case even when controlling for the number of workers in the households. In 2014, for example, the average earnings of married households are 4.6 million yen and that of non-married households are 2.0 million yen.

By Household Structure

In terms of the household structure, as shown in the bottom section of the tables, about one fifth of households have just one member and the fraction of one-person households increased from 17.6% in 1984 to 23.2% in 2014. Among households with multiple members, the percentage of households with children aged 16 and below decreased dramatically, from 50.8% in 1984 to 24.5% in 2014. This change is explained by a decline in fertility rates that continued since the early 1970s and a rise in the population ratio of the elderly. The number of households with a member aged 65 or above increased from 20.7% of the population in 1984 to 35.5% in 2014. One-person households report lower earnings, income and wealth than households with two or more members, which of course is not surprising given a larger number of workers. One-person households, however, also have higher Gini index in all three variables than multiple-person households, implying that there is a greater degree of heterogeneity and among them. Among two-or-more person households, those with heads aged 65 and above own the largest amount of wealth.

4.5 Adult Equivalent Profiles

Tables 21 to 24 above showed a declining trend in household size, not only in the population average, but also conditional on age and especially among households in their 30s to 50s. The average household size of those aged 40-44, for example, fell from 4.2 in 1984 to 3.4 in 2014. The number of workers in the household declined over the same period, though the change is much more moderate compared to the size of the household. The average number of workers aged 40-44 was 1.6 in 1984 and 1.5 in 2014. Since the number of household members varies across survey years, in order to study changes in household variables without the effects of time-varying household size, we compute equivalized values of the three statistics using the OECD equivalence scale. More precisely, we assign a value of 1.0 to the first adult household member, 0.7 to each additional adult aged 20 or above, and 0.5 to each child below age 20 and compute per adult equivalent values of each variable for each household.

Table 28 shows the trend in average and median levels of equivalized per adult values of earnings, income and wealth and Gini coefficients. The decline in the level of earnings and income since the peak in the 1990s is milder in per adult levels than in household levels because of the decline in household size over the last few decades. The rise in the average wealth since 1984 is also milder with equivalized values. Gini coefficients for both household and per adult variables changed in a similar fashion.

Figure 27 shows life-cycle profiles of equalized per adult variables using the OECD equivalent scales. Given the decline in the average size of households, there is not much decline in earnings and income levels since 1990s, which was observed in the profiles of household variables. The rise in wealth is milder in per adult levels. Profiles of Gini coefficients are similar in household and per adult statistics.

4.6 Individual Profiles (with Limitations)

As discussed in section 3, the NSFIE is suitable for studying inequality across households, but it is not an ideal data source for analysis of individuals' earnings and income inequality. This is because the survey collects individual earnings and income data only for a household head and his or her spouse but not for the rest of the household members are lumped together and reported only collectively. For example, we are not able to identify earnings of an adult, who is a member of a household headed by his parent. Despite this limitation, we report earnings and income of individuals who are either heads or head's spouses in our sample and summarize them in Figures 28 and 29 for males and females,

respectively.²³ As before, we include all samples in the analysis, including ones who report zero earnings or income except for the samples with missing data as explained in section 3.

Earnings and income profiles of males are similar to those of household heads in Figure 22, since the majority of households are headed by male individuals. The level is lower without contributions of a spouse and other household members. The time trend is also similar to that of households, showing a rise in earnings and income from the 1980s to the bubble period and falling thereafter, although the decline after 1990s is milder in the male individual data.

Female profiles are very different from those of males or households. Their level is significantly lower in both earnings and income. Over the life-cycle, female earnings decline from the youngest group aged 24 and below to those in their early to mid-30s, reflecting a large number of female workers leaving the labor force as they marry and give birth. Earnings start to rise as females begin to return to work. Since 1980s to 2010s, the timing of the reversal in labor force participation has shifted to later ages in the life-cycle, and the drop in earnings is less prominent in recent years compared to the 1980s and 1990s. Also distinct from the male and household profiles is the trend of earnings and income levels of females. They continued to rise in most age groups or stayed at similar levels even after the bubble period. In fact, earnings monotonically rise from the 1980s to the mid-2010s among female individuals in their 20s to 40s. The Gini coefficient declined almost monotonically over time since fewer female individuals report zero earnings or income in more recent survey years.

4.7 Households with Zero Wealth

As discussed in section 4.2, there has been a steady increase in a fraction of households who own little financial wealth. We study in this section characteristics of such households in various dimensions. Table 29 summarizes distribution of households with zero wealth in dimensions of gender, marital status, employment status and family structure. There are more households with zero wealth headed by male than those headed by female, but the fraction of the latter is higher than the fraction of households headed by female in the entire population. The fraction of non-working households is also larger among zero-wealth households than in the entire population.

²³Using individual earning data of married couples, we also analyzed joint distribution of earnings of a husband and a wife. Although we did not find a clear evidence of assortative marriage, further analysis with more comprehensive individual data is needed to make any conclusion.

In terms of family structure, the fraction of households headed by single males or females is smaller than those headed by married heads as shown in the bottom section of Table 29. However, likelihood of reporting zero wealth is much higher among households headed by singles. Figure 30 shows the fraction of households with zero wealth conditional on family structure, comparing those headed by married couples and single females, with and without dependent children.²⁴ Likelihood has increased across all groups but it is the highest and increased by the most among single females with children.

Figure 31 shows earnings and income of households with zero vs non-zero wealth in each age group, indicating that those with zero wealth tend to have significantly lower earnings and income.

4.8 Relative Poverty

In order to assess inequality at the lower end of distribution and quantify the magnitude of poorness, a measure of relative poverty is often used. It is measured as percentage of the population below a poverty line. Following the definition of the OECD, the poverty line is set to one half of median of each variable.

Table 30 shows the poverty line and relative poverty for earnings, income and wealth, based on household data as well as per adult equivalent data. For earnings, we compute the poverty line based on the samples aged below 65. Poverty lines follow the trend of median levels as discussed above, with earnings and income rising until the end of the bubble period and falling thereafter. Wealth trend is different from those of earnings and income, and exhibits no major decline since early 1990s. Relative poverty rates, defined as a fraction of households below poverty lines, increased for household earnings, except for 2014, and that of wealth also increased nearly monotonically since 1984.

Relative poverty of equivalized earnings, income and wealth shows a similar trend, though the level is lower than with household-level data. As before, we use the OECD scale to compute equivalized levels.²⁵ Relative poverty of income increased mildly from 8.9% in 1984 to 10.0% in 2014, and the observation is in line with the findings of Moriguchi (2017), who studies the trend of after-tax income inequality from various sources.

Figures 32 and 33 show age distribution of households under the poverty lines, based

²⁴Statistics of households headed by single males are omitted from the figure, but the fraction for single males is between those of married couples and single females with children, except for a few data points.

²⁵As an alternative to compute equivalized values, we also compute relative poverty lines and relative poverty rates by dividing household-level data by a square root of a number of household members and main results remain the same.

on household level data and equivalized data, respectively. For earnings, there are more households at the lower and upper end of the distribution since these age groups include households who do not participate or work less intensively. Demographic aging implies a shift of the age distribution towards the older generations that have a greater fraction under the poverty line. However, what is driving a rise in relative poverty of earnings over the last decades is not just demographic aging, but also a rise in relative poverty among those aged 30-50, as shown in Figure 32a. Figure 32b shows that a number of households with low income significantly decreased among retirees. Figure 32c shows a rise in the size of the poor among younger generations, which is consistent with an increase in the fraction of households with zero wealth, as discussed above.

4.9 Decomposition of Household Wealth

Tables 31 and 32 show decomposition of household wealth by wealth quintiles and top percentiles as well as by age groups. The Japanese households allocate a much larger fraction of their wealth to deposits including regular/cash-like deposits and time deposits, than to bonds and stocks. Wealthier households allocate more of their wealth to stocks. For example, in 2014, less than 1% of wealth held by households in the lowest quintile was in bonds and stocks (sum of stock and investment trust, and bond and bond trust) while the share was as large as 14% among households in the top quintile and 28% in the highest percentile. Overall, the wealth in the form of stock increased during the bubble period and declined thereafter.

Tables 33 and 34 show the level of household debt and its breakdown into mortgage and non-mortgage. Our definition of wealth is financial wealth not including real assets. Consistently with the definition of wealth, non-mortgage debt is subtracted from gross wealth held by households in our computation of net wealth. A large part of households' debt is mortgage. On average, total debt accounts for 38% of wealth (32% for mortgage) in 1984 and 30% (25% for mortgage) in 2014. The relative size of debt as a ratio to wealth falls in wealth levels. In the dimension of age groups, households in their 30s own the highest level of debt relative to wealth since this is the time for many households to purchase housing on mortgage.

4.10 Cohort Profiles

Figure 34 shows profiles of earnings, income and wealth by cohort, indexed by birth (age-0) year of each cohort. For earnings, there is not much difference in levels for households in

their 20s, although we only observe data for more recent cohorts born in 1960s and later. Cohorts making the largest earnings at each group corresponds to those in a particular age group during the bubble period of the late 1980s to 1990s. For example, the peak of earnings at age 50-54 is marked by the 1940-44 cohort in the 1990s.

Figure 34b shows the profiles of earnings for cohorts born after 1960, where each profile is normalized by the initial earnings level at age below 25 of each cohort. It shows that the growth of earnings during early to middle phases of life-cycle declined during the last decades and the profile became flatter. The wealth levels of recent cohorts aged in their 20s and 30s did not change much though wealth at older ages appears to have increased among more recent cohort as shown in Figure 34d.

5 Conclusion

We have taken seriously the results of the NSFIE survey and examined trends of inequality in earnings, income and wealth across Japanese households between 1984 and 2014. What we uncovered by slicing data in different dimensions cross-sectionally and over time is that it is critical to take into consideration changes at the micro level and within households as well as changes at the macro level in terms of the demographic transition and business cycles that occurred during the last few decades. The 1980s and early 1990s were a time when the Japanese economy experienced a major boom driven by a rise in real estate prices and stock investment and also when fertility rates plummeted, which lead to unprecedented demographic aging that Japan is experiencing now. The population started to decline in 2008, shifting the direction for the first time since the 19th century. At the same time, marriage rates fell sharply, female labor force participation increased, and the share of irregular workers rose relative to regular workers, all of which affect the dynamics of inequality across households.

We find that inequality of earnings, income and wealth increased between 1984 and 2014. The rise in earnings and income inequality is mostly driven by the ongoing demographic aging since older households tend to have higher inequality. Income inequality across old-age households fell during the last three decades thanks to a more comprehensive coverage of the public pension system. Wealth inequality shows a different trend than earnings and income. There was a major increase in the fraction of households with very low assets, which raised inequality among young to middle-aged households.

Average earnings and income rose and peaked during the bubble period of late 1980s and early 1990s and declined thereafter due to a decades-long economic slow-down and a

shift of population to the elderly and retirees. Since mid-1990s, the wealth level increased for households above the median but decreased below the median.

Demographic aging and a rise in old-age dependency ratios will continue for decades to come. To cover the shortage of workers and raise tax revenues to pay for rising expenditures for the social security system, the government aims to raise employment, especially among females and the elderly. In the long-run, whether and when fertility rates will recover to a normal level will be critical in the projections of the population and the growth of the aggregate economy. Much is expected on more proactive and effective actions of the government, not only to encourage growth but also to remove impediments that prevents growth. Distribution of income and wealth across households will rely on the effectiveness of such policies. Importance of examining data across various different dimensions will remain critical in understanding trends in inequality and evaluating effects of policies that redistribute among households of different characteristics.

References

- Ahn, S., G. Kaplan, B. Moll, T. Winberry, and C. Wolf (2017). When inequality matters for macro and macro matters for inequality. NBER Working Paper No. 23494.
- Balestra, C. and R. Tonkin (2018). Inequalities in household wealth across OECD countries: Evidence from the OECD wealth distribution database. OECD Statistics Working Papers, 2018/01, OECD Publishing, Paris.
- Braun, A. R. and D. H. Joines (2015). The implications of a graying Japan for government policy. *Journal of Economic Dynamics and Control* 57, 1–23.
- Budría Rodríguez, S., J. Díaz-Giménez, V. Quadrini, and J.-V. Ríos-Rull (2002). Updated facts on the U.S. distributions of earnings, income, and wealth. *Federal Reserve Bank of Minneapolis, Quarterly Review* 26(3), 2–35.
- Cagetti, M. and M. De Nardi (2008). Wealth inequality: Data and models. *Macroeconomic Dynamics* 12(S2), 285–313.
- De Nardi, M. and G. Fella (2017). Saving and wealth inequality. *Review of Economic Dynamics* 26, 280–300.
- De Nardi, M., G. Fella, and F. Yang (2017). Macro models of wealth inequality. In H. Boushey, B. DeLong, and M. Steinbaum (Eds.), *After Piketty: The Agenda for Economics and Inequality*. Harvard University Press.
- Díaz-Giménez, J., A. Glover, and J.-V. Ríos-Rull (2011). Facts on the distributions of earnings, income, and wealth in the United States: 2007 update. *Federal Reserve Bank of Minneapolis, Quarterly Review* 34(1), 2–31.
- Díaz-Giménez, J., V. Quadrini, and J.-V. Ríos-Rull (1997). Dimensions of inequality: Facts on the U.S. distribution of earnings, income, and wealth. *Federal Reserve Bank of Minneapolis, Quarterly Review* 21(2), 3–21.
- Guvenen, F., G. Kaplan, J. Song, and J. Weidner (2018). Lifetime incomes in the United States over six decades. Working Paper, University of Minnesota.
- Guvenen, F., F. Karahan, S. Ozkan, and J. Song (2019). What do data on millions of U.S. workers reveal about life-cycle earnings? Working Paper, University of Minnesota.
- Heathcote, J., F. Perri, and G. L. Violante (2010). Unequal we stand: An empirical analysis of economic inequality in the United States, 1967–2006. *Review of Economic Dynamics* 13(1), 15–51.

- Heathcote, J., K. Storesletten, and G. L. Violante (2009). Quantitative macroeconomics with heterogeneous households. *Annual Review of Economics* 1(1), 319–354.
- İmrohoroğlu, S., S. Kitao, and T. Yamada (2016). Achieving fiscal balance in Japan. *International Economic Review* 57(1), 117–154.
- Kitao, S. (2015). Fiscal cost of demographic transition in Japan. *Journal of Economic Dynamics and Control* 54, 37–58.
- Kuhn, M. and J.-V. Ríos-Rull (2016). 2013 update on the U.S. earnings, income, and wealth distributional facts: A view from macroeconomics. *Federal Reserve Bank of Minneapolis, Quarterly Review* 37, 2–73.
- Lise, J., N. Sudo, M. Suzuki, K. Yamada, and T. Yamada (2014). Wage, income and consumption inequality in Japan, 1981 - 2008: From boom to lost decades. *Review of Economic Dynamics* 17(4), 582–612.
- Moriguchi, C. (2010). Top wage incomes in Japan, 1951—2005. *Journal of The Japanese and International Economies* 24, 301–333.
- Moriguchi, C. (2017). Has Japan become an “unequal society?”. Institute of Economic Research, Hitotsubashi University, Discussion Paper Series A. No.666. (in Japanese).
- Moriguchi, C. and E. Saez (2008). The evolution of income concentration in Japan, 1886—2005: evidence from income tax statistics. *Review of Economics and Statistics* 90(4), 713–734.
- Ohtake, F. (2005). *Inequality in Japan*. Tokyo: Nihon Keizai Shinbunsha. (in Japanese).
- Ohtake, F. and M. Saito (1998). Population aging and consumption inequality in Japan. *Review of Income and Wealth* 44(3), 361–381.
- Oshio, T. (2006). Income inequality and redistribution policies in Japan during the 1980s and 1990s. *Journal of Income Distribution* 15, 119–146.
- Oshio, T. (2010). *Welfare Analysis of Redistribution*. Tokyo: Nihon Hyoronsha. (in Japanese).
- Piketty, T. (2014). *Capital in the Twenty-First Century*. Cambridge: The Belknap Press of Harvard University Press.
- Quadrini, V. and J.-V. Ríos-Rull (2014). Inequality in macroeconomics. In A. Atkeson and F. Bourguignon (Eds.), *Handbook of Income Distribution*, Volume 2B, Chapter 15, pp. 1229–1302. Elsevier.

- Sudo, N., M. Suzuki, and T. Yamada (2012). Inequalities in Japanese economy during the lost decades. CIRJE Discussion Paper Series, CIRJE-F-856.
- Tachibanaki, T. (2005). *Confronting Income Inequality in Japan*. Cambridge: MIT Press.
- Teruyama, H. (2010). Japan's labor market and the rise in unemployment since 1990. *The Monthly Journal of the Japan Institute of Labour* 597, 2-5. (in Japanese).
- Unayama, T. and T. Ohno (2017). Household savings rate in national accounts and household surveys in Japan. RIETI Discussion Paper Series 17-J-035 (in Japanese).

Table 1: Summary Statistics

Year	1984	1989	1994	1999	2004	2009	2014
Sample size							
Total	54,780	59,768	60,339	60,189	60,059	57,059	56,422
≥2 HH members	50,721	55,668	55,630	55,180	55,056	52,716	51,768
One-person HH	4,059	4,100	4,709	5,009	5,003	4,343	4,654
% of one-person HH (weighted)	17.6 %	19.0 %	20.4 %	23.0 %	20.3 %	21.9 %	23.2 %
Demography							
Average HH size	3.353	3.244	3.059	2.847	2.735	2.642	2.556
Age of HH head	45.4	47.7	49.7	52.0	53.8	55.5	57.6
% of HH head aged ≥ 65	9.9 %	13.4 %	18.0 %	23.5 %	27.7 %	32.5 %	38.9 %
Marital status of HH head							
Married	77.7 %	76.6 %	74.3 %	70.9 %	72.4 %	70.0 %	67.9 %
Single	22.3 %	23.4 %	25.7 %	29.1 %	27.6 %	30.0 %	32.1 %
Female HH head							
% of female HH head	12.6 %	16.1 %	18.3 %	20.9 %	17.0 %	18.9 %	20.1 %
aged ≤ 64	9.8 %	11.3 %	11.8 %	12.5 %	10.5 %	10.6 %	10.1 %
aged ≥ 65	2.8 %	4.8 %	6.5 %	8.4 %	6.5 %	8.3 %	10.1 %
Workers in HH							
Average # of workers	1.545	1.485	1.451	1.322	1.283	1.242	1.207
Whether spouse works	46.8 %	48.9 %	53.1 %	54.9 %	53.5 %	56.2 %	59.3 %
# of workers ≥ 3	12.9 %	12.6 %	12.8 %	10.6 %	9.6 %	8.8 %	8.3 %
Employment status of HH head							
Employee	64.1 %	63.7 %	64.0 %	59.6 %	56.5 %	54.6 %	52.9 %
Self-employed	27.3 %	23.4 %	19.3 %	16.8 %	16.8 %	15.8 %	14.2 %
Not working	8.6 %	12.9 %	16.7 %	23.6 %	26.7 %	29.6 %	32.8 %
Not working (aged ≤ 64)	3.3 %	4.7 %	4.4 %	6.0 %	6.3 %	5.8 %	4.3 %

Table 2: Summary of Earnings Inequality

	(Earnings in JPY1,000)						
Year	1984	1989	1994	1999	2004	2009	2014
Mean	4,983.8	5,449.7	5,696.4	5,047.5	4,518.3	4,062.5	3,765.1
Median	4,653.9	5,061.9	5,204.1	4,540.9	3,950.9	3,278.9	2,914.6
Concentration							
Gini index	0.385	0.428	0.452	0.494	0.526	0.553	0.577
Coefficient of variation	0.754	0.851	0.896	0.953	1.038	1.081	1.156
Ratio of top 1% to median	3.462	3.747	3.922	4.141	4.585	5.246	5.824
Ratio of top 10% to median	1.985	2.104	2.196	2.374	2.554	2.897	3.103
Skewness							
Skewness	3.080	3.377	4.415	2.833	2.951	2.814	2.986
Ratio of mean to median	1.071	1.077	1.095	1.112	1.144	1.239	1.292
Percentiles							
10%	0	0	0	0	0	0	0
20%	2,148	1,485	816	0	0	0	0
40%	3,914	4,072	4,143	3,353	2,610	1,920	1,367
60%	5,370	5,962	6,286	5,689	5,118	4,515	4,070
80%	7,339	8,436	9,071	8,483	7,779	7,293	6,965
90%	9,236	10,652	11,429	10,778	10,092	9,499	9,045
95%	11,146	12,823	13,776	13,194	12,283	11,757	11,156
99%	16,110	18,965	20,408	18,802	18,117	17,201	16,975
Age Group							
≤ 34	3,920	4,197	4,532	4,378	4,317	4,127	4,149
35-49	5,888	6,597	7,146	6,907	6,332	6,083	5,865
50-64	5,620	6,348	7,015	6,342	5,891	5,532	5,492
≥ 65	2,132	1,947	1,719	1,410	1,269	1,061	1,138
Correlation							
Earnings and income	0.880	0.874	0.863	0.856	0.833	0.804	0.832
Earnings and wealth	0.334	0.218	0.212	0.163	0.155	0.115	0.126
Earnings and income (aged 25-59)	0.885	0.883	0.888	0.871	0.851	0.855	0.878
Earnings and wealth (aged 25-59)	0.386	0.338	0.339	0.363	0.343	0.348	0.347

Table 3: Summary of Income Inequality

	(Income in JPY1,000)						
Year	1984	1989	1994	1999	2004	2009	2014
Mean	5,882.1	6,636.8	7,048.6	6,572.2	6,288.1	5,903.1	5,620.2
Median	5,214.8	5,736.8	6,122.4	5,608.8	5,322.4	4,974.5	4,723.6
Concentration							
Gini index	0.318	0.336	0.345	0.351	0.341	0.347	0.351
Coefficient of variation	0.657	0.716	0.736	0.722	0.731	0.729	0.747
Ratio of top 1% to median	3.538	3.845	3.818	3.783	3.935	4.000	4.015
Ratio of top 10% to median	1.952	2.024	2.050	2.135	2.106	2.136	2.149
Skewness							
Skewness	4.082	5.198	5.753	3.993	4.862	4.754	4.549
Ratio of mean to median	1.128	1.157	1.151	1.172	1.181	1.187	1.190
Percentiles							
1%	764	675	653	599	778	644	683
5%	1,492	1,541	1,531	1,387	1,546	1,410	1,367
10%	2,148	2,250	2,245	1,996	2,201	1,971	1,869
20%	3,055	3,318	3,347	3,034	3,101	2,860	2,663
40%	4,535	4,949	5,143	4,731	4,545	4,198	3,970
60%	5,967	6,749	7,143	6,667	6,213	5,873	5,548
80%	8,115	9,224	9,949	9,431	8,782	8,345	8,030
90%	10,179	11,609	12,551	11,976	11,208	10,623	10,151
95%	12,184	14,061	15,276	14,601	13,726	13,075	12,533
99%	18,449	22,058	23,378	21,218	20,942	19,898	18,965
Age group							
≤ 34	4,224	4,576	4,861	4,678	4,603	4,515	4,533
35-49	6,526	7,372	7,951	7,694	7,140	6,855	6,670
50-64	6,915	7,909	8,530	7,956	7,569	7,119	6,902
≥ 65	4,373	4,589	4,785	4,502	4,751	4,466	4,289
Correlation							
Income and wealth	0.482	0.348	0.340	0.333	0.327	0.301	0.307
Income and wealth (aged 25-59)	0.486	0.434	0.381	0.421	0.397	0.404	0.403

Table 4: Summary of Wealth Inequality

	(Wealth in JPY1,000)						
Year	1984	1989	1994	1999	2004	2009	2014
Mean	6,873.4	10,437.6	12,075.5	12,871.7	13,916.2	13,450.6	14,117.5
Median	3,961.8	5,489.3	6,836.7	7,085.8	7,318.3	6,874.4	6,834.2
Concentration							
Gini index	0.579	0.616	0.587	0.595	0.609	0.623	0.635
Coefficient of variation	1.448	2.008	1.493	1.428	1.430	1.469	1.544
Ratio of top 1% to median	12.066	14.000	11.791	11.911	12.488	13.223	14.382
Ratio of top 10% to median	3.961	4.314	4.197	4.411	4.811	5.022	5.294
Skewness							
Skewness	5.164	14.783	8.539	4.787	4.311	5.120	5.306
Ratio of mean to median	1.735	1.901	1.766	1.817	1.902	1.957	2.066
Percentiles							
5%	0	0	0	0	0	0	0
10%	358	281	429	299	102	0	0
20%	1,169	1,406	1,847	1,667	1,433	1,021	975
40%	2,876	3,982	5,000	5,030	5,118	4,576	4,523
60%	5,358	7,334	9,133	9,681	10,348	9,980	10,050
80%	9,905	14,353	17,592	19,691	21,443	21,144	22,060
90%	15,692	23,678	28,694	31,257	35,210	34,525	36,181
95%	23,150	35,433	41,327	44,930	50,154	49,183	52,362
99%	47,804	76,850	80,612	84,401	91,392	90,899	98,291
Age group							
≤ 34	2,946	3,580	3,944	3,710	3,666	3,685	3,801
35-49	6,453	8,816	9,834	9,616	9,247	8,721	8,089
50-64	10,009	14,411	15,761	16,237	17,031	16,096	16,672
≥ 65	9,135	15,698	17,521	18,078	19,388	17,871	18,214

Table 5: Summary of Net Wealth Inequality

	(Net wealth in JPY1,000)						
	1984	1989	1994	1999	2004	2009	2014
Mean	6,499.9	9,831.5	11,538.3	12,304.7	13,271.5	12,789.9	13,516.6
Median	3,699.3	5,061.9	6,428.6	6,716.6	6,949.8	6,455.6	6,532.7
Concentration							
Gini index	0.623	0.663	0.624	0.637	0.656	0.678	0.680
Coefficient of variation	1.541	2.111	1.573	1.520	1.537	1.614	1.656
Ratio of top 1% to median	12.832	15.007	12.381	12.467	13.116	14.019	14.923
Ratio of top 10% to median	4.155	4.580	4.400	4.606	5.007	5.302	5.492
Skewness							
Skewness	4.899	13.776	8.208	4.222	3.582	3.431	4.173
Ratio of mean to median	1.757	1.942	1.795	1.832	1.910	1.981	2.069
Percentiles							
1%	-2,136	-3,375	-2,755	-3,493	-4,094	-4,086	-3,779
5%	0	0	0	0	-174	-266	-201
10%	60	0	0	0	0	0	0
20%	835	979	1,378	1,198	860	511	503
40%	2,613	3,588	4,592	4,621	4,667	4,086	4,080
60%	5,072	6,997	8,735	9,311	10,051	9,551	9,829
80%	9,582	13,881	17,214	19,321	21,095	20,787	21,709
90%	15,370	23,183	28,286	30,938	34,800	34,229	35,879
95%	22,792	34,758	40,918	44,511	49,734	48,979	51,859
99%	47,470	75,962	79,592	83,733	91,157	90,501	97,487
Age group							
≤ 34	2,704	3,197	3,544	3,315	3,273	3,319	3,428
35-49	6,024	8,146	9,205	8,947	8,535	8,139	7,558
50-64	9,564	13,643	15,081	15,511	16,197	15,138	15,755
≥ 65	8,873	15,324	17,280	17,744	18,915	17,336	17,753

Table 6: Growth Rates of Earnings, Income and Wealth at Main Percentiles

From 1984 to 2014											
	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	95 %	99 %
Earnings	-	-	-	-65.1 %	-37.4 %	-24.2 %	-13.7 %	-5.1 %	-2.1 %	0.1 %	5.4 %
Income	-13.0 %	-12.8 %	-13.4 %	-12.5 %	-9.4 %	-7.0 %	-3.8 %	-1.0 %	-0.3 %	2.9 %	2.8 %
Wealth	-	-16.6 %	27.6 %	57.3 %	72.5 %	87.6 %	104.8 %	122.7 %	130.6 %	126.2 %	105.6 %

From 1994 to 2014											
	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	95 %	99 %
Earnings	-	-	-	-67.0 %	-44.0 %	-35.2 %	-29.1 %	-23.2 %	-20.9 %	-19.0 %	-16.8 %
Income	-16.7 %	-20.4 %	-22.5 %	-22.8 %	-22.8 %	-22.3 %	-20.9 %	-19.3 %	-19.1 %	-18.0 %	-18.9 %
Wealth	-	-47.2 %	-25.4 %	-9.5 %	0.0 %	10.0 %	18.7 %	25.4 %	26.1 %	26.7 %	21.9 %

Table 7: Households Ranked by Earnings in 1984

	Households in Earnings Quintiles					The Earnings-Top Rich			Total Sample
	1st	2nd	3rd	4th	5th	10-5%	5-1%	1%	
Mean (JPY1,000)	651	3,117	4,665	6,298	10,311	10,067	12,809	22,452	4,984
Ratio to all avg	0.131	0.625	0.936	1.264	2.069	2.020	2.570	4.505	1.000
Share of Total Sample (%)									
Earnings	2.7	12.2	19.2	24.7	41.2	10.1	10.3	4.5	100.0
Income	10.4	11.9	17.7	22.6	37.4	9.1	9.3	4.2	100.0
Wealth	16.3	11.2	16.0	20.3	36.2	8.6	9.7	4.3	100.0
Sources of Income (% , Share of Each Group's Income)									
Labor	27.0	71.1	76.2	78.9	78.7	78.6	77.3	58.9	67.3
Capital	10.1	20.1	17.8	15.6	15.8	16.2	17.3	34.2	16.0
Business	7.9	1.8	1.8	2.0	2.6	2.6	3.2	4.7	3.1
Transfers	47.1	5.3	3.0	2.4	2.0	1.7	1.5	1.4	11.2
Others	7.8	1.8	1.2	1.0	0.8	0.8	0.7	0.7	2.4
Age of Household Head (% , Share of Each Group's Sample)									
≤ 34	17.8	47.2	31.6	14.2	6.2	3.8	3.0	3.1	23.3
35-49	16.4	27.7	47.2	57.9	48.4	49.9	40.2	33.7	39.4
50-64	32.8	19.8	17.8	24.8	41.5	42.6	51.9	54.9	27.4
≥ 65	32.9	5.4	3.4	3.0	4.0	3.6	4.9	8.2	9.9
Average age	54.1	39.2	41.0	44.3	48.4	48.6	50.6	52.4	45.4
Household Structure (% , Share of Each Group's Sample)									
Married Head	50.8	62.2	86.1	93.5	96.3	95.8	97.6	97.6	77.7
One-person HH	40.2	32.0	10.3	3.6	1.7	2.4	0.9	0.6	17.6
Average HH Size	2.16	2.80	3.68	3.98	4.17	4.20	4.25	4.30	3.35

Table 8: Households Ranked by Earnings in 2014

	Households in Earnings Quintiles					The Earnings-Top Rich			Total Sample
	1st	2nd	3rd	4th	5th	10-5%	5-1%	1%	
Mean (JPY1,000)	0	718	2,818	5,428	10,286	9,951	13,187	23,942	3,765
Ratio to all avg	0.000	0.191	0.748	1.442	2.732	2.643	3.502	6.359	1.000
Share of Total Sample (%)									
Earnings	0.0	1.7	15.0	28.8	54.6	14.0	14.0	6.4	100.0
Income	19.7	5.1	14.4	21.7	39.1	10.0	9.9	4.6	100.0
Wealth	34.5	9.1	14.7	15.1	26.7	6.5	6.5	3.6	100.0
Sources of Income (% , Share of Each Group's Income)									
Labor	0.0	27.8	71.8	87.7	90.0	90.8	91.3	63.7	56.2
Capital	0.0	4.6	6.2	3.8	5.0	4.2	4.5	31.3	3.6
Business	5.8	4.9	1.9	1.1	1.3	1.5	1.2	3.0	2.9
Transfers	90.9	58.8	17.9	5.6	2.9	2.7	2.4	1.5	35.0
Others	3.2	3.9	2.3	1.8	0.9	0.7	0.4	0.4	2.3
Age of Household Head (% , Share of Each Group's Sample)									
≤ 34	1.3	4.7	19.8	16.0	4.7	3.9	1.6	0.1	8.9
35-49	5.7	8.0	21.9	43.2	39.6	40.6	32.6	19.5	23.4
50-64	13.8	23.9	32.3	30.9	48.8	49.2	58.1	64.0	28.8
≥ 65	79.2	63.4	25.9	9.9	7.0	6.3	7.8	16.3	38.9
Average age	70.2	64.3	51.9	47.4	50.7	50.7	52.6	56.4	57.6
Household Structure (% , Share of Each Group's Sample)									
Married Head	56.8	52.9	57.3	79.0	91.4	94.8	97.2	97.2	67.9
One-person HH	34.7	31.6	28.4	14.0	5.5	3.1	1.1	1.9	23.2
Average HH Size	1.92	2.00	2.39	3.10	3.41	3.50	3.60	3.36	2.56

Table 9: Households Ranked by Income in 1984

	The Income Poor			Households in Income Quintiles					The Income Rich			Total Sample
	1%	1-5%	5-10%	1st	2nd	3rd	4th	5th	10-5%	5-1%	1%	
Mean (JPY1,000)	562	1,170	1,848	2,037	3,831	5,267	6,947	11,450	11,067	14,232	25,975	5,882
Ratio to all avg	0.096	0.199	0.314	0.346	0.651	0.895	1.181	1.947	1.882	2.420	4.416	1.000
Share of Total Sample (%)												
Earnings	0.0	0.4	1.2	5.5	13.2	18.3	23.7	39.2	9.6	9.7	4.2	100.0
Income	0.1	0.8	1.6	6.9	13.4	17.9	23.1	38.7	9.4	9.7	4.4	100.0
Wealth	0.3	1.4	2.0	8.6	12.8	16.7	21.4	40.6	9.7	11.2	5.1	100.0
Sources of Income (% Share of Each Group's Income)												
Labor	11.1	28.9	49.1	47.9	68.2	72.8	75.5	72.3	72.5	69.4	48.9	67.3
Capital	10.2	9.5	14.3	14.4	17.5	17.4	14.7	16.1	15.5	17.1	32.8	16.0
Business	4.4	3.7	3.5	3.2	2.3	2.2	2.8	5.0	4.7	7.5	13.2	3.1
Transfers	64.6	47.6	28.1	29.3	9.9	5.9	5.4	5.1	5.8	4.5	2.9	11.2
Others	9.7	10.3	5.0	5.2	2.1	1.7	1.6	1.5	1.5	1.5	2.3	2.4
Age of Household Head (% Share of Each Group's Sample)												
≤ 34	6.2	16.9	38.5	34.4	41.0	23.2	12.0	5.2	3.9	3.0	2.1	23.3
35-49	8.3	10.6	14.3	15.7	32.0	50.7	54.8	44.4	44.2	35.5	32.1	39.4
50-64	26.8	32.8	24.1	25.6	18.9	20.7	28.1	43.9	45.4	53.9	52.9	27.4
≥ 65	58.6	39.8	23.1	24.3	8.2	5.3	5.0	6.5	6.4	7.6	12.9	9.9
Average age	63.4	56.1	45.8	47.4	41.4	43.2	45.8	49.6	49.9	51.9	53.5	45.4
Household Structure (% Share of Each Group's Sample)												
Married Head	12.8	18.6	31.8	37.5	73.2	89.5	93.2	95.6	96.8	96.2	97.3	77.7
One-person HH	82.9	73.5	58.8	54.7	21.6	6.5	3.2	1.7	0.6	1.3	0.6	17.6
Average HH Size	1.31	1.42	1.77	1.90	3.01	3.71	3.96	4.22	4.27	4.30	4.38	3.35

Table 10: Households Ranked by Income in 2014

	The Income Poor			Households in Income Quintiles					The Income Rich			Total Sample
	1%	1-5%	5-10%	1st	2nd	3rd	4th	5th	10-5%	5-1%	1%	
Mean (JPY1,000)	380	1,083	1,631	1,781	3,313	4,720	6,677	11,636	11,207	14,771	27,908	5,620
Ratio to all avg	0.068	0.193	0.290	0.317	0.589	0.840	1.188	2.070	1.994	2.628	4.966	1.000
Share of Total Sample (%)												
Earnings	0.0	0.3	0.5	2.7	6.9	15.0	25.6	49.8	12.2	12.9	5.6	100.0
Income	0.1	0.8	1.5	6.4	11.8	16.8	23.7	41.3	10.0	10.5	5.0	100.0
Wealth	0.6	1.8	2.6	12.1	16.8	18.2	20.4	32.5	7.5	8.5	4.1	100.0
Sources of Income (% , Share of Each Group's Income)												
Labor	13.6	20.0	24.8	25.3	39.1	61.6	76.0	79.1	80.9	79.0	45.1	56.2
Capital	6.8	3.0	2.4	3.2	3.3	3.2	3.1	5.3	4.1	5.3	31.5	3.6
Business	11.0	2.0	2.1	2.5	1.9	2.6	2.6	4.9	4.1	7.0	18.1	2.9
Transfers	61.3	66.8	65.0	64.5	53.8	30.7	16.4	9.5	9.8	7.8	4.6	35.0
Others	7.2	8.3	5.6	4.5	1.9	2.0	1.9	1.2	1.1	0.9	0.7	2.3
Age of Household Head (% , Share of Each Group's Sample)												
≤ 34	1.7	5.4	7.0	7.4	11.9	14.1	7.9	3.2	2.6	0.9	0.0	8.9
35-49	8.2	6.7	8.9	8.4	13.4	25.6	37.9	31.8	32.3	25.2	16.7	23.4
50-64	42.6	23.1	22.6	21.6	18.2	24.8	31.9	47.5	48.0	56.3	52.1	28.8
≥ 65	47.6	64.9	61.5	62.6	56.6	35.5	22.3	17.5	17.1	17.7	31.1	38.9
Average age	64.6	66.0	65.2	64.9	61.4	55.1	52.7	54.0	54.0	55.5	59.5	57.6
Household Structure (% , Share of Each Group's Sample)												
Married Head	14.9	12.8	20.5	26.5	64.3	75.7	83.4	89.8	91.5	94.2	93.7	67.9
One-person HH	74.3	74.8	66.3	61.0	25.9	16.0	8.4	4.4	1.9	0.8	3.4	23.2
Average HH Size	1.39	1.35	1.45	1.54	2.14	2.64	3.08	3.39	3.49	3.58	3.30	2.56

Table 11: Households Ranked by Wealth in 1984

	Households in Wealth Quintiles					The Wealth-Top Rich			Total Sample
	1st	2nd	3rd	4th	5th	10-5%	5-1%	1%	
Mean (JPY1,000)	421	1,993	4,017	7,284	20,682	18,855	31,231	70,706	6,873
Ratio to all avg	0.061	0.290	0.584	1.060	3.009	2.743	4.544	10.287	1.000
Share of Total Sample (%)									
Earnings	11.1	17.3	20.4	23.3	28.0	6.8	6.0	2.2	100.0
Income	12.8	16.0	19.1	22.4	29.8	7.3	6.9	2.7	100.0
Wealth	1.2	5.8	11.7	21.2	60.1	13.7	18.2	10.3	100.0
Sources of Income (% , Share of Each Group's Income)									
Labor	71.1	72.9	70.4	66.0	56.3	55.8	48.6	42.1	67.3
Capital	12.2	15.2	16.6	17.7	17.9	17.0	17.4	21.5	16.0
Business	0.9	1.1	1.8	3.0	8.5	7.6	13.4	22.0	3.1
Transfers	11.6	8.9	9.1	11.3	15.1	17.1	18.3	11.5	11.2
Others	4.2	1.9	2.1	2.0	2.2	2.5	2.3	2.9	2.4
Age of Household Head (% , Share of Each Group's Sample)									
≤ 34	43.5	33.6	20.8	13.1	5.6	4.4	2.2	1.2	23.3
35-49	28.8	39.6	47.1	46.1	35.5	34.0	25.2	25.4	39.4
50-64	17.6	19.4	24.3	30.8	44.8	46.5	55.0	52.9	27.4
≥ 65	10.1	7.4	7.8	10.0	14.2	15.1	17.6	20.5	9.9
Average age	40.4	42.1	44.8	47.7	52.2	53.0	55.3	56.6	45.4
Household Structure (% , Share of Each Group's Sample)									
Married Head	53.1	74.7	84.1	87.0	89.6	91.2	89.9	88.8	77.7
One-person HH	40.5	21.1	11.6	9.2	5.7	4.3	5.0	6.3	17.6
Average HH Size	2.61	3.24	3.59	3.68	3.65	3.68	3.52	3.54	3.35

Table 12: Households Ranked by Wealth in 2014

	Households in Wealth Quintiles					The Wealth-Top Rich			Total Sample
	1st	2nd	3rd	4th	5th	10-5%	5-1%	1%	
Mean (JPY1,000)	181	2,612	7,012	15,076	45,785	43,241	68,297	143,540	14,118
Ratio to all avg	0.013	0.185	0.497	1.068	3.243	3.063	4.838	10.168	1.000
Share of Total Sample (%)									
Earnings	11.6	20.6	22.6	22.6	22.6	5.4	4.7	1.9	100.0
Income	14.7	17.4	20.0	21.7	26.3	6.3	5.9	2.4	100.0
Wealth	0.3	3.7	9.8	21.3	64.9	15.4	19.4	10.2	100.0
Sources of Income (%), Share of Each Group's Income)									
Labor	61.3	67.3	61.3	52.7	39.4	38.7	35.7	27.6	56.2
Capital	3.8	3.6	3.6	3.3	3.9	3.4	4.1	11.0	3.6
Business	0.9	0.9	1.7	3.0	7.6	6.7	10.5	17.9	2.9
Transfers	28.9	25.9	31.6	39.5	47.6	49.7	48.5	41.8	35.0
Others	5.2	2.2	1.8	1.5	1.5	1.5	1.2	1.7	2.3
Age of Household Head (%), Share of Each Group's Sample)									
≤ 34	15.9	16.5	7.8	3.5	0.7	0.5	0.4	0.3	8.9
35-49	24.7	31.6	30.5	20.9	9.3	7.0	5.9	2.2	23.4
50-64	24.4	22.6	28.0	33.1	35.8	38.8	35.0	35.1	28.8
≥ 65	35.0	29.2	33.7	42.5	54.2	53.7	58.6	62.4	38.9
Average age	54.7	52.3	56.1	60.2	64.8	65.1	66.0	67.6	57.6
Household Structure (%), Share of Each Group's Sample)									
Married Head	54.7	66.2	71.4	72.4	74.9	73.8	75.7	71.6	67.9
One-person HH	33.4	24.7	20.6	19.7	17.6	19.2	15.8	18.3	23.2
Average HH Size	2.41	2.67	2.69	2.57	2.44	2.40	2.38	2.35	2.56

Table 13: Joint Distribution of Earnings for Each Wealth Decile in 1984: Average Values of Earnings, Income and Wealth in Each Bin (heads of all ages, in JPY1,000)

Earnings		Wealth deciles									
deciles		1	2	3	4	5	6	7	8	9	10
1-2	E	482	954	761	679	630	589	540	484	450	395
	I	3,362	1,821	2,012	2,254	2,485	2,695	2,891	3,403	3,550	4,895
	W	60	691	1,509	2,406	3,399	4,604	6,138	8,322	12,333	28,471
3	E	2,545	2,624	2,623	2,696	2,672	2,649	2,647	2,648	2,617	2,608
	I	2,642	2,738	2,839	3,020	3,205	3,431	3,432	3,994	4,590	5,995
	W	125	703	1,522	2,390	3,371	4,590	6,193	8,327	12,381	27,302
4	E	3,449	3,478	3,497	3,505	3,533	3,537	3,549	3,540	3,522	3,528
	I	3,566	3,596	3,625	3,755	3,878	3,904	4,130	4,528	5,016	6,245
	W	120	760	1,565	2,413	3,364	4,612	6,124	8,316	12,237	28,826
5	E	4,235	4,231	4,265	4,260	4,266	4,278	4,285	4,293	4,265	4,284
	I	4,357	4,365	4,388	4,438	4,511	4,616	4,666	4,876	5,299	6,673
	W	103	787	1,526	2,410	3,409	4,601	6,148	8,296	12,119	25,208
6	E	4,956	4,953	4,935	4,954	4,982	4,971	4,973	4,988	4,968	5,007
	I	5,155	5,092	5,130	5,138	5,223	5,302	5,334	5,577	5,814	7,403
	W	86	776	1,564	2,426	3,394	4,608	6,192	8,337	12,294	26,818
7	E	5,752	5,745	5,699	5,732	5,744	5,742	5,748	5,740	5,773	5,761
	I	5,990	6,000	5,880	5,946	5,975	6,054	6,095	6,223	6,503	7,653
	W	59	748	1,546	2,416	3,398	4,627	6,171	8,319	12,131	27,754
8	E	6,772	6,739	6,685	6,724	6,721	6,752	6,758	6,760	6,775	6,781
	I	7,067	6,939	6,839	6,972	6,956	7,055	7,152	7,209	7,460	8,742
	W	57	807	1,556	2,441	3,415	4,632	6,203	8,364	12,246	26,554
9	E	8,226	8,107	8,114	8,112	8,152	8,158	8,174	8,197	8,239	8,249
	I	8,456	8,274	8,389	8,307	8,442	8,497	8,521	8,678	8,962	9,761
	W	59	766	1,602	2,455	3,422	4,627	6,236	8,413	12,340	26,155
10	E	12,950	12,159	11,264	11,040	11,366	11,314	11,525	11,688	11,981	13,966
	I	13,949	12,401	11,559	11,341	11,816	11,577	11,920	12,168	12,708	15,632
	W	26	755	1,595	2,446	3,446	4,685	6,228	8,426	12,501	32,739

Table 14: Joint Distribution of Earnings for Each Wealth Decile in 1984: Percentage of Population in Each Bin (heads of all ages, %)

Earnings deciles	Wealth deciles										total
	1	2	3	4	5	6	7	8	9	10	
1-2	5.41	2.81	1.68	1.44	1.25	1.21	1.28	1.34	1.49	1.90	19.82
3	1.60	2.48	1.38	1.07	0.75	0.71	0.56	0.46	0.42	0.38	9.80
4	0.78	1.82	1.83	1.40	1.33	0.94	0.75	0.61	0.42	0.43	10.32
5	0.43	1.11	1.38	1.56	1.29	1.25	0.92	0.83	0.57	0.44	9.77
6	0.34	0.74	1.09	1.25	1.23	1.27	1.17	1.00	0.75	0.54	9.38
7	0.39	0.60	1.05	1.27	1.46	1.39	1.43	1.30	1.14	0.69	10.74
8	0.27	0.41	0.73	1.02	1.23	1.33	1.35	1.46	1.41	0.97	10.16
9	0.20	0.24	0.51	0.75	0.90	1.17	1.42	1.54	1.83	1.47	10.01
10	0.22	0.13	0.25	0.37	0.54	0.73	1.13	1.41	2.05	3.19	10.01
Total	9.63	10.34	9.90	10.13	9.96	10.01	10.01	9.94	10.08	10.00	100.00

Table 15: Joint Distribution of Earnings and Wealth in 2014: Average Values in Thousands of Yen of Earnings, Income and Wealth in Each Bin (heads of all ages, in JPY1,000)

Earnings		Wealth deciles								
deciles		1-2	3	4	5	6	7	8	9	10
1-4	E	141	207	175	169	167	169	156	141	120
	I	3,489	2,593	2,635	2,994	3,117	3,149	3,485	3,938	4,827
	W	100	1,662	3,433	5,588	8,328	12,108	18,166	28,300	62,047
5	E	2,138	2,160	2,180	2,135	2,185	2,082	2,129	2,117	2,132
	I	2,644	3,033	3,317	3,565	3,908	4,045	4,466	5,071	5,916
	W	247	1,623	3,469	5,698	8,172	12,177	18,088	28,558	60,742
6	E	3,415	3,463	3,518	3,483	3,494	3,452	3,479	3,455	3,451
	I	3,707	3,796	4,112	4,332	4,730	4,657	5,447	5,871	6,807
	W	307	1,636	3,427	5,405	8,168	11,872	18,064	28,017	64,167
7	E	4,681	4,704	4,707	4,754	4,748	4,734	4,779	4,682	4,730
	I	4,981	5,017	5,039	5,198	5,376	5,718	5,803	6,883	7,759
	W	292	1,650	3,401	5,555	8,276	11,976	17,037	27,926	64,893
8	E	6,078	6,059	6,093	6,113	6,156	6,186	6,148	6,090	6,189
	I	6,440	6,317	6,362	6,488	6,621	6,787	7,204	7,351	9,062
	W	294	1,676	3,475	5,538	8,303	11,998	17,686	28,312	59,522
9	E	7,796	7,838	7,749	7,858	7,840	7,870	7,935	7,872	7,900
	I	8,060	8,113	8,021	8,203	8,162	8,326	8,744	8,916	9,787
	W	254	1,686	3,474	5,570	8,262	11,967	17,987	27,510	58,948
10	E	12,524	11,166	11,109	11,331	11,644	11,952	12,089	12,863	15,481
	I	12,964	11,515	11,393	11,738	12,062	12,360	12,631	13,676	17,736
	W	146	1,685	3,481	5,624	8,309	12,153	18,072	28,195	70,163

Table 16: Joint Distribution of Earnings and Wealth in 2014: Percentage of Population in Each Bin (heads of all ages, %)

Earnings deciles	Wealth deciles									total
	1-2	3	4	5	6	7	8	9	10	
1-4	10.49	2.69	2.93	3.05	3.20	4.02	4.10	4.65	4.85	39.99
5	2.98	1.18	1.00	0.74	0.80	0.83	0.77	0.79	0.78	9.88
6	2.42	1.90	1.31	1.32	0.71	0.69	0.55	0.61	0.61	10.12
7	1.61	1.56	1.74	1.18	1.04	0.90	0.82	0.59	0.54	9.99
8	1.19	1.08	1.47	1.54	1.34	1.17	0.89	0.73	0.59	10.00
9	0.71	0.85	1.08	1.19	1.39	1.25	1.34	1.00	0.90	9.71
10	0.58	0.36	0.80	0.93	1.22	1.53	1.51	1.60	1.78	10.31
Total	20.00	9.62	10.33	9.95	9.71	10.39	9.99	9.97	10.04	100.00

Table 17: Joint Distribution of Earnings and Wealth in 1984: Average Values of Earnings, Income and Wealth in Each Bin (heads aged 35-55, in JPY1,000)

Earnings		Wealth deciles									
deciles		1	2	3	4	5	6	7	8	9	10
1	E	497	1,244	1,274	990	1,156	1,141	829	872	715	671
	I	4,369	2,392	2,880	2,734	3,183	3,619	5,416	4,290	4,017	6,456
	W	101	1,125	2,107	2,973	4,045	5,282	6,633	8,804	12,108	30,425
2	E	2,830	2,938	2,962	2,982	2,983	3,007	2,901	2,969	2,926	2,867
	I	2,925	3,165	3,198	3,396	3,428	3,563	3,497	3,703	4,395	5,393
	W	232	1,153	2,114	3,053	4,048	5,208	6,661	8,581	12,027	25,395
3	E	3,947	4,001	3,985	3,999	4,010	4,001	3,990	4,061	4,027	3,999
	I	4,104	4,106	4,241	4,221	4,293	4,305	4,464	4,691	4,864	5,926
	W	271	1,193	2,115	3,030	4,016	5,211	6,663	8,653	11,987	26,699
4	E	4,778	4,751	4,784	4,788	4,794	4,787	4,797	4,781	4,812	4,801
	I	4,941	4,849	4,969	4,979	5,037	5,173	5,215	5,203	5,554	6,351
	W	285	1,226	2,161	3,040	4,082	5,214	6,696	8,670	12,207	24,199
5	E	5,379	5,378	5,407	5,399	5,387	5,412	5,394	5,396	5,419	5,384
	I	5,609	5,501	5,573	5,606	5,568	5,724	5,692	5,859	6,053	6,825
	W	217	1,259	2,163	3,061	4,047	5,217	6,630	8,628	11,979	25,454
6	E	5,982	6,013	6,015	5,997	6,007	5,984	6,011	6,010	6,012	6,035
	I	6,195	6,124	6,233	6,177	6,228	6,305	6,293	6,408	6,561	7,308
	W	202	1,214	2,155	3,065	4,005	5,201	6,635	8,679	12,072	23,105
7	E	6,724	6,720	6,718	6,707	6,728	6,724	6,718	6,725	6,732	6,730
	I	6,948	6,874	6,893	6,862	6,963	7,025	7,013	7,162	7,363	7,752
	W	234	1,221	2,182	3,042	4,033	5,202	6,710	8,650	12,093	22,436
8	E	7,573	7,576	7,613	7,612	7,571	7,615	7,623	7,625	7,656	7,654
	I	7,681	7,727	7,800	7,800	7,783	7,946	7,964	8,068	8,326	8,830
	W	204	1,244	2,187	3,078	4,088	5,206	6,624	8,730	12,159	25,379
9	E	9,010	8,989	8,972	9,007	8,938	9,053	9,054	9,075	9,046	9,117
	I	9,231	9,238	9,190	9,211	9,316	9,309	9,371	9,448	9,554	10,292
	W	219	1,254	2,139	3,068	4,058	5,227	6,669	8,644	12,090	24,716
10	E	13,591	12,988	11,552	11,979	12,279	11,821	12,357	12,521	12,814	14,007
	I	14,460	13,220	11,788	12,407	12,545	12,089	12,790	12,936	13,396	15,354
	W	90	1,185	2,136	3,038	4,046	5,215	6,649	8,737	12,182	30,070

Table 18: Joint Distribution of Earnings and Wealth in 1984: Percentage of Population in Each Bin (heads aged 35-55, %)

Earnings deciles	Wealth deciles										total
	1	2	3	4	5	6	7	8	9	10	
1	4.51	1.21	0.88	0.64	0.58	0.51	0.36	0.34	0.42	0.51	9.95
2	1.52	1.70	1.32	1.02	0.82	0.73	0.65	0.44	0.36	0.24	8.79
3	1.03	1.88	1.54	1.55	1.43	1.11	0.96	0.72	0.57	0.46	11.25
4	0.62	1.40	1.37	1.27	1.16	1.16	1.04	0.91	0.56	0.46	9.96
5	0.52	0.96	1.07	1.24	1.19	1.19	1.11	1.00	0.70	0.50	9.49
6	0.55	1.03	1.20	1.23	1.25	1.18	1.19	1.15	1.06	0.68	10.52
7	0.35	0.64	0.86	1.04	1.06	1.08	1.09	1.18	1.12	0.73	9.16
8	0.30	0.63	0.83	0.97	1.09	1.15	1.33	1.54	1.63	1.38	10.84
9	0.28	0.34	0.61	0.71	0.83	1.07	1.27	1.47	1.70	1.73	10.02
10	0.25	0.22	0.32	0.37	0.60	0.73	1.08	1.24	1.77	3.45	10.01
Total	9.92	10.00	10.01	10.04	10.02	9.91	10.08	10.00	9.89	10.13	100.00

Table 19: Joint Distribution of Earnings and Wealth in 2014: Average Values of Earnings, Income and Wealth in Each Bin (heads aged 35-55, in JPY1,000)

Earnings		Wealth deciles								
deciles		1-2	3	4	5	6	7	8	9	10
1	E	81	173	256	199	239	190	294	257	106
	I	5,113	3,902	3,471	4,425	4,728	5,102	4,195	5,692	5,106
	W	58	1,479	3,006	4,606	6,507	8,787	11,999	18,870	42,414
2	E	2,027	2,038	2,230	2,361	2,159	2,081	1,965	2,018	2,094
	I	2,430	2,607	2,705	3,020	2,812	3,406	3,386	4,845	5,744
	W	249	1,489	3,086	4,643	6,578	8,515	12,226	18,018	49,948
3	E	3,544	3,576	3,610	3,691	3,571	3,646	3,608	3,546	3,643
	I	3,763	3,853	3,991	4,033	3,972	4,107	4,171	4,576	5,679
	W	253	1,579	2,970	4,486	6,328	8,578	12,391	18,375	42,068
4	E	4,582	4,595	4,569	4,580	4,597	4,571	4,591	4,565	4,578
	I	4,816	4,852	4,889	4,919	4,998	4,842	5,042	5,291	6,075
	W	273	1,556	3,008	4,550	6,319	8,767	12,290	18,211	39,768
5	E	5,389	5,404	5,416	5,404	5,434	5,396	5,423	5,327	5,420
	I	5,567	5,628	5,671	5,606	5,779	5,646	6,045	5,799	6,293
	W	299	1,597	3,028	4,558	6,432	8,831	12,352	17,294	36,381
6	E	6,253	6,292	6,276	6,271	6,290	6,316	6,341	6,302	6,306
	I	6,475	6,534	6,417	6,533	6,549	6,518	6,663	6,662	7,538
	W	282	1,563	3,025	4,575	6,350	8,608	12,224	18,232	44,347
7	E	7,168	7,140	7,157	7,132	7,180	7,161	7,154	7,247	7,196
	I	7,336	7,322	7,389	7,311	7,423	7,435	7,367	7,744	8,215
	W	240	1,589	3,047	4,589	6,432	8,764	12,071	18,965	36,852
8	E	8,176	8,152	8,160	8,131	8,201	8,212	8,195	8,258	8,189
	I	8,424	8,344	8,365	8,346	8,494	8,431	8,442	8,765	8,828
	W	248	1,601	2,996	4,608	6,530	8,796	12,194	18,227	43,033
9	E	9,649	9,681	9,624	9,713	9,719	9,693	9,741	9,751	9,838
	I	9,867	9,889	9,984	9,987	10,025	9,974	10,004	10,166	10,699
	W	203	1,627	3,049	4,585	6,376	8,819	12,296	18,480	42,304
10	E	13,017	13,678	12,917	13,395	13,292	13,366	13,651	13,876	15,435
	I	13,350	13,962	13,082	13,719	13,640	13,534	13,929	14,288	16,147
	W	95	1,565	3,209	4,667	6,483	8,931	12,436	18,551	46,149

Table 20: Joint Distribution of Earnings and Wealth in 2014: Percentage of Population in Each Bin (heads aged 35-55, %)

Earnings deciles	Wealth deciles									total
	1-2	3	4	5	6	7	8	9	10	
1	5.82	0.61	0.38	0.49	0.28	0.39	0.63	0.42	0.82	9.84
2	3.63	1.10	0.83	0.96	0.78	0.41	0.55	0.38	0.51	9.16
3	3.16	2.09	1.55	1.03	1.07	0.73	0.62	0.40	0.31	10.98
4	1.70	1.46	1.41	1.05	0.90	0.82	0.76	0.51	0.31	8.93
5	1.63	1.36	1.57	1.37	1.35	1.25	1.02	0.85	0.64	11.03
6	1.21	0.92	1.13	1.34	1.23	1.38	1.11	0.95	0.71	9.98
7	0.98	0.84	1.04	1.15	1.15	1.21	1.15	1.28	1.06	9.87
8	0.73	0.75	0.92	1.06	1.31	1.26	1.30	1.67	1.19	10.19
9	0.58	0.49	0.86	1.02	1.07	1.25	1.47	1.57	1.61	9.92
10	0.52	0.23	0.48	0.49	0.89	1.19	1.46	2.02	2.83	10.10
Total	19.97	9.84	10.17	9.98	10.03	9.89	10.07	10.05	10.01	100.00

Table 21: Other Dimensions of Inequality (by age, employment status and marital status of HH head) in 1984

	Average Level				Concentration (Gini Index)				Sample size(%)	Avg. hhld size	Avg. worker size
	Earnings	Income	Wealth	Net wealth	Earnings	Income	Wealth	Net wealth			
Age											
≤24	2,450.5	2,574.8	949.6	747.0	0.228	0.213	0.589	0.883	4.6	1.228	1.043
25-29	3,723.3	3,984.4	2,349.4	2,110.6	0.233	0.211	0.525	0.611	7.2	2.141	1.197
30-34	4,634.8	5,038.4	4,122.1	3,862.5	0.244	0.218	0.497	0.547	11.5	3.456	1.346
35-39	5,361.9	5,882.7	5,331.5	4,995.8	0.251	0.226	0.496	0.548	14.2	4.097	1.478
40-44	5,970.1	6,614.0	6,485.3	6,068.2	0.275	0.240	0.505	0.555	13.4	4.197	1.565
45-49	6,428.6	7,198.8	7,767.1	7,210.1	0.298	0.260	0.535	0.590	11.8	3.955	1.806
50-54	6,622.0	7,477.3	8,569.1	8,077.1	0.329	0.290	0.539	0.585	10.7	3.486	2.044
55-59	5,783.6	7,091.0	10,830.3	10,352.9	0.414	0.338	0.548	0.584	9.9	3.223	1.938
60-64	3,789.2	5,764.3	11,082.9	10,759.8	0.593	0.406	0.552	0.578	6.7	2.859	1.535
65-69	2,502.9	4,806.8	9,791.1	9,453.4	0.687	0.432	0.572	0.589	4.8	2.630	1.233
70-74	2,029.2	4,216.0	8,674.4	8,438.5	0.744	0.445	0.603	0.623	3.1	2.523	1.090
75-79	1,469.4	3,656.4	7,778.8	7,635.2	0.826	0.474	0.632	0.650	1.5	2.189	0.781
80-84	1,230.6	3,355.6	9,901.1	9,862.6	0.851	0.508	0.709	0.709	0.4	2.099	0.727
≥85	870.7	2,978.3	8,504.6	8,463.0	0.832	0.429	0.659	0.662	0.1	2.300	0.620
Employment Status											
Employee	5,464.8	5,954.3	5,732.1	5,507.4	0.291	0.272	0.553	0.585	64.1	3.307	1.498
Self-employed	5,281.3	6,697.2	9,209.1	8,388.4	0.432	0.350	0.585	0.663	27.3	3.934	2.074
Not working	461.3	2,760.6	7,957.9	7,896.3	0.890	0.388	0.617	0.623	8.6	1.858	0.210
Marital Status and Workers											
Married	5,674.9	6,628.7	7,734.3	7,310.4	0.336	0.276	0.547	0.593	77.7	3.915	1.719
Married (# worker=0)	116.9	3,116.1	10,750.1	10,675.6	0.945	0.249	0.528	0.533	3.0	2.191	0.000
Married (# worker=1)	5,272.8	6,071.8	7,089.8	6,803.4	0.312	0.257	0.554	0.587	32.5	3.659	1.000
Married (# worker=2)	6,019.4	6,844.0	7,585.8	7,113.8	0.298	0.263	0.544	0.595	29.9	3.912	2.000
Married (# worker≥3)	7,283.3	8,454.9	9,058.1	8,299.2	0.296	0.260	0.527	0.599	12.3	5.026	3.372
Not married	2,580.4	3,285.9	3,879.4	3,681.6	0.464	0.345	0.666	0.704	22.3	1.402	0.937
Not married (# worker=0)	73.6	1,668.3	4,754.0	4,719.5	0.942	0.352	0.678	0.685	4.2	1.158	0.000
Not married (# worker=1)	2,951.1	3,344.9	3,235.3	3,031.7	0.331	0.284	0.658	0.707	16.1	1.216	1.000
Not married (# worker≥2)	4,804.4	6,162.7	7,221.6	6,733.0	0.350	0.287	0.576	0.626	2.0	3.396	2.377
Family Structure											
One-person household	2,375.4	2,891.4	3,133.6	2,963.3	0.454	0.322	0.656	0.698	17.6	1.000	0.790
Two-or-more person household	5,542.4	6,522.7	7,674.3	7,257.4	0.346	0.281	0.552	0.597	82.4	3.857	1.706
without child aged ≤ 16	5,132.1	6,588.4	9,754.1	9,363.3	0.440	0.321	0.557	0.590	31.5	2.850	1.737
with child(ren) aged ≤ 16	5,796.8	6,481.9	6,384.9	5,951.7	0.284	0.254	0.530	0.584	50.8	4.482	1.688
without old aged ≥ 65	5,703.7	6,425.0	6,954.7	6,555.4	0.317	0.269	0.549	0.597	61.7	3.677	1.647
with old aged ≥ 65	5,060.8	6,814.3	9,823.1	9,353.2	0.431	0.314	0.542	0.580	20.7	4.396	1.883
Total Sample	4,983.8	5,882.1	6,873.4	6,499.9	0.385	0.318	0.579	0.623	100.0	3.353	1.545

Table 22: Other Dimensions of Inequality (by age, employment status and marital status of HH head) in 1994

	Average Level				Concentration (Gini Index)				Sample size(%)	Avg. hhld size	Avg. worker size
	Earnings	Income	Wealth	Net wealth	Earnings	Income	Wealth	Net wealth			
Age											
≤24	2,738.8	2,993.4	1,199.3	980.7	0.252	0.217	0.629	0.841	3.1	1.310	1.043
25-29	4,316.9	4,570.9	3,271.6	2,912.8	0.234	0.218	0.559	0.664	5.3	2.064	1.209
30-34	5,367.2	5,772.4	5,446.4	4,948.8	0.246	0.218	0.512	0.597	8.1	3.119	1.309
35-39	6,324.9	6,946.7	7,703.7	7,148.1	0.259	0.230	0.498	0.561	9.9	3.936	1.440
40-44	7,076.1	7,851.5	9,538.5	8,994.4	0.279	0.242	0.507	0.551	12.1	4.095	1.579
45-49	7,868.8	8,847.3	11,817.1	11,048.3	0.305	0.264	0.530	0.584	12.4	3.853	1.782
50-54	8,571.2	9,638.5	13,355.9	12,527.5	0.326	0.284	0.540	0.591	11.5	3.383	2.064
55-59	7,793.0	9,021.1	15,802.0	15,086.9	0.395	0.337	0.542	0.577	10.0	2.965	1.977
60-64	4,325.1	6,680.3	18,616.8	18,150.2	0.594	0.393	0.545	0.564	9.5	2.544	1.372
65-69	2,312.0	5,478.2	18,706.1	18,419.1	0.757	0.416	0.543	0.552	8.7	2.188	0.878
70-74	1,269.5	4,275.3	17,317.4	17,175.0	0.857	0.434	0.596	0.602	5.3	1.891	0.589
75-79	1,050.1	4,017.9	15,416.3	15,197.9	0.884	0.429	0.573	0.583	2.5	1.887	0.522
80-84	1,006.1	3,849.8	15,519.2	15,067.7	0.926	0.506	0.655	0.655	1.2	1.750	0.430
≥85	920.5	3,820.4	12,586.2	12,540.6	0.908	0.515	0.661	0.661	0.3	1.684	0.385
Employment Status											
Employee	6,680.2	7,420.6	9,715.1	9,309.6	0.319	0.284	0.566	0.602	64.0	3.239	1.587
Self-employed	6,686.7	8,754.5	16,392.0	15,043.4	0.488	0.389	0.601	0.673	19.3	3.543	2.073
Not working	796.6	3,662.7	16,125.7	16,019.5	0.885	0.378	0.566	0.569	16.7	1.812	0.215
Marital Status and workers											
Married	6,752.3	8,115.7	13,192.9	12,546.4	0.383	0.294	0.563	0.604	74.3	3.643	1.679
Married (# worker=0)	284.7	3,952.5	20,343.9	20,208.4	0.937	0.238	0.519	0.521	5.9	2.129	0.000
Married (# worker=1)	6,063.2	7,150.0	11,719.9	11,277.5	0.335	0.261	0.571	0.603	28.4	3.469	1.000
Married (# worker=2)	7,557.3	8,634.0	12,197.7	11,445.8	0.311	0.264	0.558	0.613	27.8	3.707	2.000
Married (# worker≥3)	9,646.7	11,194.1	15,434.3	14,305.7	0.309	0.266	0.542	0.599	12.2	4.632	3.338
Not married	2,643.8	3,963.4	8,845.0	8,623.7	0.585	0.389	0.651	0.673	25.7	1.372	0.792
Not married (# worker=0)	296.6	2,440.3	11,848.2	11,797.7	0.958	0.384	0.595	0.599	8.0	1.135	0.000
Not married (# worker=1)	3,444.0	4,272.4	6,730.2	6,491.4	0.406	0.334	0.670	0.700	15.7	1.261	1.000
Not married (# worker≥2)	5,683.6	7,558.2	13,375.2	12,618.3	0.389	0.323	0.608	0.659	2.0	3.156	2.300
Family Structure											
One-person household	2,223.3	3,373.9	7,837.1	7,681.6	0.598	0.364	0.656	0.675	20.4	1.000	0.642
Two-or-more person household	6,584.2	7,987.8	13,158.8	12,524.1	0.393	0.299	0.567	0.607	79.6	3.585	1.658
without child aged ≤ 16	6,194.4	8,132.4	16,504.3	15,924.6	0.481	0.331	0.556	0.584	41.6	2.817	1.667
with child(ren) aged ≤ 16	7,009.9	7,829.8	9,504.0	8,809.1	0.288	0.258	0.542	0.604	38.1	4.424	1.648
without old aged ≥ 65	7,114.7	7,975.0	10,985.5	10,372.6	0.332	0.277	0.560	0.608	55.7	3.494	1.679
with old aged ≥ 65	5,352.7	8,017.5	18,204.0	17,518.5	0.532	0.345	0.544	0.574	24.0	3.798	1.607
Total Sample	5,696.4	7,048.6	12,075.5	11,538.3	0.452	0.345	0.587	0.624	100.0	3.059	1.451

Table 23: Other Dimensions of Inequality (by age, employment status and marital status of HH head) in 2004

	Average Level				Concentration (Gini Index)				Sample size(%)	Avg. hhld size	Avg. worker size
	Earnings	Income	Wealth	Net wealth	Earnings	Income	Wealth	Net wealth			
Age											
≤24	2,719.8	2,943.8	1,081.2	750.3	0.29	0.24	0.65	1.13	1.60	1.422	1.070
25-29	4,005.0	4,231.3	2,693.9	2,272.4	0.25	0.22	0.59	0.78	4.59	1.961	1.202
30-34	4,892.2	5,233.0	4,906.2	4,517.9	0.26	0.22	0.54	0.62	6.93	2.749	1.279
35-39	5,675.2	6,227.1	6,994.6	6,382.2	0.28	0.23	0.53	0.62	8.14	3.277	1.351
40-44	6,235.1	7,083.5	8,914.8	8,242.5	0.32	0.25	0.55	0.63	8.62	3.603	1.475
45-49	7,010.9	8,011.2	11,576.6	10,736.9	0.32	0.26	0.55	0.62	9.10	3.552	1.648
50-54	7,196.6	8,379.9	13,115.7	12,153.1	0.35	0.29	0.56	0.64	10.30	3.313	1.883
55-59	6,891.4	8,162.6	17,246.5	16,357.9	0.41	0.33	0.57	0.62	11.61	2.823	1.845
60-64	3,695.2	6,231.9	20,344.6	19,683.1	0.61	0.37	0.54	0.57	11.41	2.512	1.333
65-69	1,703.1	5,125.9	19,532.4	18,959.0	0.77	0.36	0.56	0.60	10.48	2.265	0.853
70-74	1,212.7	4,798.0	19,140.7	18,535.2	0.86	0.37	0.57	0.60	8.54	2.053	0.590
75-79	876.9	4,468.6	20,526.4	20,279.6	0.91	0.37	0.58	0.59	5.75	1.894	0.433
80-84	645.4	3,821.8	17,443.6	17,296.7	0.94	0.40	0.61	0.62	2.23	1.797	0.348
≥85	671.1	3,829.6	17,069.0	16,800.2	0.92	0.41	0.58	0.59	0.69	1.922	0.375
Employment Status											
Employee	6,100.5	6,939.6	10,609.0	10,126.8	0.34	0.28	0.60	0.64	56.46	2.986	1.563
Self-employed	5,505.8	8,114.4	17,984.4	15,998.9	0.54	0.38	0.63	0.75	16.81	3.091	1.976
Not working	555.0	3,763.2	18,343.9	18,199.4	0.89	0.32	0.57	0.57	26.73	1.979	0.256
Marital Status and workers											
Married	5,310.7	7,178.6	15,308.7	14,539.2	0.48	0.30	0.58	0.63	72.38	3.236	1.479
Married (# worker=0)	158.6	3,982.6	21,052.9	20,948.9	0.95	0.21	0.52	0.53	11.95	2.124	0.000
Married (# worker=1)	5,103.8	6,634.5	13,829.0	13,239.1	0.40	0.26	0.60	0.64	25.72	3.175	1.000
Married (# worker=2)	6,814.0	8,109.9	13,618.8	12,620.4	0.35	0.27	0.58	0.66	25.58	3.418	2.000
Married (# worker≥3)	8,422.6	10,282.7	16,693.5	15,189.3	0.35	0.28	0.57	0.66	9.13	4.351	3.306
Not married	2,441.6	3,954.3	10,266.6	9,948.9	0.60	0.36	0.67	0.71	27.62	1.421	0.769
Not married (# worker=0)	105.5	2,338.9	13,557.5	13,464.4	0.96	0.31	0.63	0.64	9.21	1.166	0.000
Not married (# worker=1)	3,460.6	4,464.2	8,018.7	7,635.6	0.40	0.30	0.69	0.75	16.13	1.359	1.000
Not married (# worker≥2)	4,683.0	6,887.9	12,884.2	12,119.8	0.44	0.35	0.64	0.69	2.27	2.896	2.250
Family Structure											
One-person household	2,252.3	3,447.4	9,532.9	9,283.3	0.62	0.34	0.68	0.71	20.34	1.000	0.601
Two-or-more person household	5,097.0	7,013.6	15,035.5	14,290.0	0.49	0.31	0.59	0.64	79.66	3.177	1.457
without child aged ≤ 16	4,450.4	6,935.4	18,265.0	17,522.3	0.58	0.33	0.57	0.61	51.58	2.644	1.388
with child(ren) aged ≤ 16	6,285.0	7,157.2	9,102.7	8,351.9	0.32	0.26	0.58	0.66	28.08	4.158	1.585
without old aged ≥ 65	6,239.8	7,248.1	11,961.5	11,225.5	0.37	0.29	0.59	0.65	48.88	3.250	1.622
with old aged ≥ 65	3,282.2	6,641.1	19,917.4	19,156.8	0.68	0.35	0.56	0.60	30.78	3.062	1.196
Total Sample	4,518.3	6,288.1	13,916.2	13,271.5	0.53	0.34	0.61	0.66	100.00	2.735	1.283

Table 24: Other Dimensions of Inequality (by age, employment status and marital status of HH head) in 2014

	Average Level				Concentration (Gini Index)				Sample size(%)	Avg. hhld size	Avg. worker size
	Earnings	Income	Wealth	Net wealth	Earnings	Income	Wealth	Net wealth			
Age											
≤24	2,557.4	2,780.8	996.7	644.3	0.251	0.214	0.647	1.316	1.1	1.328	1.072
25-29	3,868.4	4,221.5	2,873.6	2,498.3	0.263	0.222	0.614	0.769	2.9	1.966	1.234
30-34	4,680.8	5,120.5	5,001.8	4,625.2	0.275	0.232	0.591	0.669	4.8	2.662	1.378
35-39	5,352.6	6,050.1	6,169.5	5,702.7	0.297	0.239	0.592	0.674	6.1	3.513	1.514
40-44	5,808.8	6,621.6	7,657.0	7,160.8	0.330	0.259	0.586	0.654	8.9	3.371	1.494
45-49	6,302.9	7,180.6	9,971.2	9,353.1	0.346	0.275	0.582	0.648	8.3	3.286	1.612
50-54	6,881.5	7,764.2	13,204.8	12,382.6	0.357	0.299	0.594	0.662	8.4	2.971	1.763
55-59	6,339.5	7,500.8	16,621.4	15,686.4	0.420	0.340	0.613	0.663	9.4	2.664	1.799
60-64	3,702.7	5,730.3	19,370.2	18,395.2	0.555	0.371	0.583	0.638	11.0	2.502	1.503
65-69	1,949.4	5,005.2	19,339.4	18,714.4	0.734	0.377	0.596	0.627	12.9	2.201	0.978
70-74	1,032.5	4,296.2	17,878.2	17,522.0	0.838	0.349	0.594	0.616	11.6	2.047	0.624
75-79	568.4	3,745.1	16,570.3	16,153.8	0.904	0.331	0.622	0.648	8.0	1.919	0.419
80-84	441.0	3,587.2	18,700.1	18,312.5	0.936	0.342	0.649	0.669	4.4	1.776	0.277
≥85	365.0	3,394.6	18,440.5	18,091.2	0.941	0.354	0.627	0.654	2.1	1.785	0.276
Employment Status											
Employee	5,503.5	6,446.6	10,731.4	10,285.8	0.359	0.283	0.627	0.670	52.9	2.861	1.608
Self-employed	4,988.1	7,714.4	18,099.9	15,882.1	0.567	0.390	0.662	0.802	14.2	2.882	1.945
Not working	434.9	3,381.1	17,844.2	17,694.2	0.904	0.318	0.601	0.611	32.8	1.923	0.243
Marital Status and workers											
Married	4,610.0	6,597.3	15,322.6	14,607.3	0.523	0.308	0.612	0.660	67.9	3.090	1.438
Married (# worker=0)	99.8	3,657.1	20,623.8	20,478.6	0.959	0.217	0.558	0.565	14.0	2.126	0.000
Married (# worker=1)	4,438.4	6,256.1	14,906.1	14,325.2	0.459	0.275	0.625	0.669	20.3	3.050	1.000
Married (# worker=2)	6,332.9	7,634.6	12,867.1	12,008.2	0.358	0.271	0.618	0.683	26.0	3.317	2.000
Married (# worker≥3)	7,442.4	9,338.0	15,074.1	13,453.7	0.363	0.276	0.615	0.729	7.7	4.187	3.310
Not married	1,978.2	3,553.5	11,568.7	11,209.7	0.647	0.364	0.683	0.719	32.1	1.426	0.719
Not married (# worker=0)	67.8	2,208.6	14,205.7	14,090.1	0.965	0.317	0.656	0.666	12.5	1.170	0.000
Not married (# worker=1)	3,070.4	4,124.3	9,477.1	9,120.6	0.432	0.309	0.692	0.736	16.8	1.379	1.000
Not married (# worker≥2)	3,922.4	6,121.1	12,418.8	10,954.8	0.432	0.317	0.697	0.837	2.8	2.857	2.240
Family Structure											
One-person household	1,808.0	3,092.8	11,074.4	10,829.0	0.673	0.347	0.681	0.708	23.2	1.000	0.534
Two-or-more person household	4,356.8	6,384.3	15,037.5	14,329.1	0.536	0.316	0.620	0.669	76.8	3.026	1.411
without child aged ≤ 16	3,557.6	6,108.0	18,146.4	17,415.8	0.631	0.339	0.598	0.638	52.3	2.550	1.295
with child(ren) aged ≤ 16	6,066.1	6,975.0	8,388.6	7,727.8	0.326	0.258	0.610	0.698	24.5	4.046	1.658
without old aged ≥ 65	6,140.2	7,064.4	11,262.6	10,538.2	0.361	0.283	0.625	0.689	41.3	3.300	1.728
with old aged ≥ 65	2,280.8	5,592.6	19,431.7	18,741.9	0.730	0.338	0.592	0.629	35.5	2.708	1.042
Total Sample	3,765.1	5,620.2	14,117.5	13,516.6	0.577	0.351	0.635	0.680	100.0	2.556	1.207

Table 25: Households with Zero Wealth (%)

	1984	1989	1994	1999	2004	2009	2014
Age							
≤24	7.18	11.50	11.42	9.54	10.04	13.53	10.48
25-29	4.80	6.94	5.53	7.50	8.81	11.41	8.45
30-34	4.73	6.58	5.82	5.59	7.25	9.96	9.78
35-39	4.93	7.09	5.85	5.83	8.22	9.43	10.56
40-44	5.72	7.50	6.35	6.33	9.65	10.25	10.87
45-49	5.66	7.81	7.42	7.13	7.48	9.70	11.16
50-54	5.04	8.24	7.71	7.67	9.81	10.58	9.26
55-59	5.35	8.01	6.74	7.94	9.35	9.74	10.72
60-64	4.38	6.11	7.13	8.56	8.80	10.59	9.92
65-69	6.39	7.38	5.54	7.26	9.21	9.68	10.60
70-74	7.85	8.50	8.53	7.42	9.00	11.78	11.68
75-79	11.37	8.66	7.36	8.60	9.31	11.07	12.99
80-84	15.26	5.68	10.21	10.03	12.71	11.10	14.37
≥85	23.25	18.84	9.43	4.67	11.27	19.87	15.49
Total Sample	5.53	7.59	6.90	7.33	8.98	10.50	10.97

Table 26: Households with Wealth above 50 Million Yen (%)

	1984	1989	1994	1999	2004	2009	2014
Age							
≤24	0.00	0.01	0.06	0.13	0.00	0.00	0.00
25-29	0.02	0.22	0.22	0.15	0.09	0.03	0.28
30-34	0.08	0.26	0.30	0.39	0.35	0.48	0.32
35-39	0.15	0.61	0.67	0.67	0.47	0.60	0.76
40-44	0.43	1.17	1.25	1.33	1.41	1.45	0.87
45-49	1.22	2.13	2.65	1.89	2.52	2.06	2.02
50-54	1.19	2.89	3.50	3.21	3.68	2.63	3.80
55-59	2.08	4.93	4.55	5.40	6.29	5.94	7.04
60-64	2.28	6.05	7.00	7.96	9.35	8.56	8.97
65-69	1.86	5.83	7.53	7.59	8.66	8.57	9.06
70-74	1.52	4.88	7.19	7.73	8.61	7.41	7.95
75-79	1.58	3.63	5.62	6.88	10.30	7.22	7.49
80-84	5.14	5.25	6.49	6.00	6.33	7.87	8.03
≥85	3.02	7.95	5.89	6.13	7.73	8.65	9.97
Total Sample	0.91	2.59	3.38	3.94	5.02	4.82	5.53

Table 27: Households with Wealth above 100 Million Yen (%)

	1984	1989	1994	1999	2004	2009	2014
Age							
≤24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25-29	0.00	0.00	0.09	0.00	0.00	0.00	0.06
30-34	0.00	0.05	0.05	0.01	0.01	0.13	0.02
35-39	0.04	0.11	0.10	0.25	0.07	0.07	0.05
40-44	0.08	0.25	0.16	0.12	0.07	0.24	0.05
45-49	0.19	0.51	0.38	0.19	0.41	0.16	0.14
50-54	0.12	0.67	0.59	0.33	0.48	0.58	0.64
55-59	0.31	0.96	0.75	0.59	1.00	0.62	1.40
60-64	0.19	0.91	1.30	1.15	1.06	1.21	1.39
65-69	0.32	1.13	1.08	1.67	1.30	1.19	1.55
70-74	0.05	1.49	1.55	1.18	1.65	1.43	1.37
75-79	0.22	0.95	0.60	1.22	1.52	1.38	1.38
80-84	2.31	3.73	2.35	0.94	1.47	1.40	2.40
≥85	0.00	4.49	1.11	0.94	0.50	0.93	1.24
Total Sample	0.12	0.56	0.57	0.60	0.74	0.74	0.96

Table 28: Per Adult Equivalent Mean, Median and Gini Coefficients

Year	1984	1989	1994	1999	2004	2009	2014
Earnings							
Mean	2,109.6	2,295.5	2,466.4	2,275.0	2,124.7	1,949.2	1,827.6
Median	1,909.3	2,083.1	2,238.3	2,033.0	1,816.8	1,562.2	1,418.9
Gini index	0.380	0.420	0.445	0.489	0.528	0.556	0.576
Income							
Mean	2,529.6	2,885.6	3,192.3	3,129.6	3,099.8	2,992.5	2,893.7
Median	2,188.7	2,474.7	2,721.1	2,674.6	2,620.3	2,512.0	2,428.8
Gini index	0.294	0.300	0.309	0.311	0.310	0.318	0.315
Wealth							
Mean	3,045.3	4,967.0	6,050.5	6,869.3	7,520.6	7,529.7	8,173.4
Median	1,646.8	2,308.9	3,013.4	3,293.4	3,540.2	3,360.0	3,517.6
Gini index	0.591	0.641	0.616	0.626	0.634	0.649	0.660

Mean and median are in JPY1,000.

Table 29: Characteristics of Households with Zero Wealth

	1984	1989	1994	1999	2004	2009	2014
Total (% of all HHs)	5.53	7.59	6.90	7.33	8.98	10.50	10.97
By gender of HH head (total 100%)							
Head: male	81.0	79.7	76.2	69.6	78.9	76.9	74.6
Head: Female	19.0	20.3	23.8	30.4	21.1	23.1	25.4
By marital status (total 100%)							
Not married	32.1	29.1	34.7	41.2	35.9	38.6	39.5
Married	67.9	70.9	65.3	58.8	64.1	61.4	60.5
By employment status of HH head (total 100%)							
Employee	52.1	58.1	58.5	51.2	50.4	48.4	46.4
Self-employed	31.9	27.7	23.2	18.9	19.3	17.2	16.5
Not working	15.9	14.2	18.3	29.9	30.3	34.4	37.1
By family structure (total 100%)							
Married							
no child	25.2	31.6	34.1	33.8	40.7	39.7	38.7
with child(ren)	42.7	39.2	31.2	25.0	23.4	21.6	21.7
Single male							
no child	13.1	9.7	11.1	11.7	15.7	16.6	15.3
with child(ren)	0.7	0.3	0.4	0.2	0.2	0.3	0.2
Single female							
no child	15.2	17.3	21.2	26.8	17.0	18.6	21.1
with child(ren)	3.2	1.9	2.1	2.6	3.0	3.2	2.9

Table 30: Relative Poverty in Earnings, Income and Wealth

Households	1984	1989	1994	1999	2004	2009	2014
Poverty line (JPY1,000)							
Earnings	243.4	275.6	304.1	283.4	264.1	252.8	251.3
Income	260.7	286.8	306.1	280.4	262.5	245.1	231.7
Wealth	198.1	274.5	341.8	354.3	365.9	343.7	341.7
% below poverty line							
Earnings	17.8	19.5	19.4	21.6	22.9	23.9	23.2
Income	14.5	15.6	16.5	17.3	15.1	15.6	16.5
Wealth	30.1	30.7	30.3	31.7	32.7	34.6	34.7
Per Adult Equivalent	1984	1989	1994	1999	2004	2009	2014
Poverty line (JPY1,000)							
Earnings	100.5	112.9	127.3	123.9	119.9	115.3	115.6
Income	109.4	123.7	136.1	133.7	131.0	125.6	121.4
Wealth	82.3	115.4	150.7	164.7	177.0	168.0	175.9
% below poverty line							
Earnings	15.1	17.0	16.9	19.5	21.2	21.9	21.3
Income	8.9	8.9	9.7	10.3	9.5	10.2	10.0
Wealth	28.9	29.9	30.1	31.3	32.8	34.5	35.3

Table 31: Wealth Decomposition by Wealth Levels and by Age in 1984

	Households in Wealth Quintiles					The Wealth Rich								
	1st	2nd	3rd	4th	5th	10-5%	5-1%	1%	All					
Average wealth (JPY1,000)	421	1,993	4,017	7,284	20,682	18,855	31,231	70,706	6,873					
Decomposition (%)														
All deposit	69.2	60.9	60.3	61.2	56.4	56.3	52.7	47.8	61.1					
Ordinary deposit	34.7	16.7	11.9	9.2	6.4	6.1	5.1	4.9	14.7					
Time deposit	34.5	44.2	48.4	51.9	50.0	50.2	47.6	42.9	46.5					
Insurance	22.7	29.8	27.3	22.4	15.8	15.8	11.7	9.7	23.6					
Lending trust and money in trust	0.6	1.7	3.6	5.5	9.9	11.3	12.1	7.9	4.5					
Stock and investment trust	0.4	1.0	1.9	3.3	7.7	7.2	10.6	21.2	3.0					
Bond and bond trust	0.4	0.8	1.5	2.4	6.2	6.2	9.9	11.3	2.4					
Others	6.8	5.8	5.5	5.2	4.0	3.2	3.0	2.2	5.4					
Age	≤ 24	24-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	≥ 85
Average wealth (JPY1,000)	950	2,349	4,122	5,331	6,485	7,767	8,569	10,830	11,083	9,791	8,674	7,779	9,901	8,505
Decomposition (%)														
All deposit	70.9	65.3	60.3	56.8	55.6	57.8	59.2	61.2	63.3	69.8	74.2	80.3	78.6	80.3
Ordinary deposit	29.9	20.7	13.4	12.0	11.5	12.7	13.0	12.9	15.0	17.5	19.4	22.0	23.6	22.1
Time deposit	41.0	44.6	46.8	44.9	44.1	45.2	46.2	48.3	48.3	52.3	54.8	58.3	54.9	58.2
Insurance	11.8	18.9	24.4	27.8	28.2	27.3	26.2	22.9	20.8	17.3	14.3	8.9	6.7	6.4
Lending trust and money in trust	1.1	2.4	4.0	4.3	4.8	4.1	4.5	6.2	6.8	5.5	4.5	3.7	3.7	8.0
Stock and investment trust	0.6	1.3	2.1	2.9	3.7	3.7	3.6	3.7	3.4	3.2	2.8	3.4	4.9	3.7
Bond and bond trust	0.6	1.6	2.2	1.9	2.0	2.0	2.4	3.5	4.0	3.3	3.4	3.1	5.7	1.5
Others	14.9	10.5	7.1	6.2	5.7	5.0	4.0	2.5	1.6	0.9	0.7	0.6	0.5	0.0

Table 32: Wealth Decomposition by Wealth Levels and by Age in 2014

	Households in Wealth Quintiles					The Wealth Rich			All
	1st	2nd	3rd	4th	5th	10-5%	5-1%	1%	
Average wealth (JPY1,000)	181	2,612	7,012	15,076	45,785	43,241	68,297	143,540	14,118
Decomposition (%)									
All deposit	83.0	72.2	67.2	64.0	63.0	63.8	60.7	54.0	68.3
Ordinary deposit	66.4	41.9	30.8	24.3	19.6	19.3	18.6	17.4	33.0
Time deposit	16.6	30.3	36.4	39.7	43.4	44.5	42.1	36.6	35.3
Insurance	14.7	24.1	26.3	25.4	20.0	18.9	17.8	15.9	23.0
Lending trust and money in trust	0.0	0.2	0.3	0.5	1.1	1.3	1.4	1.1	0.5
Stock and investment trust	0.1	0.2	0.6	1.6	3.6	3.5	5.0	7.5	1.4
Bond and bond trust	0.7	1.4	3.3	6.3	10.4	10.9	13.7	20.7	4.9
Others	1.4	1.9	2.4	2.1	1.8	1.6	1.5	0.9	2.0

Age	≤ 24	24-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	≥ 85
Average wealth (JPY1,000)	997	2,874	5,002	6,170	7,657	9,971	13,205	16,621	19,370	19,339	17,878	16,570	18,700	18,440
Decomposition (%)														
All deposit	88.6	83.7	73.0	69.1	65.5	60.2	58.5	61.1	67.0	70.0	71.6	73.4	76.2	80.7
Ordinary deposit	73.3	60.9	53.9	44.9	37.9	30.5	27.2	27.9	27.6	28.0	28.3	27.6	28.5	36.4
Time deposit	15.3	22.8	19.1	24.2	27.7	29.7	31.4	33.2	39.4	42.1	43.3	45.8	47.7	44.3
Insurance	9.7	11.2	19.9	24.0	27.0	30.5	31.6	28.9	24.9	20.3	18.6	17.2	14.4	12.2
Lending trust and money in trust	0.0	0.9	0.1	0.2	0.2	0.2	0.3	0.5	0.6	0.7	0.7	0.9	0.4	1.1
Stock and investment trust	0.0	0.1	0.7	0.6	0.7	0.7	1.0	1.2	1.5	2.1	2.1	2.1	2.4	1.6
Bond and bond trust	0.6	1.4	1.8	2.9	3.0	4.3	5.1	5.3	5.0	6.3	6.7	6.3	6.5	4.1
Others	1.0	2.7	4.5	3.1	3.6	4.1	3.5	3.1	1.0	0.5	0.3	0.2	0.1	0.3

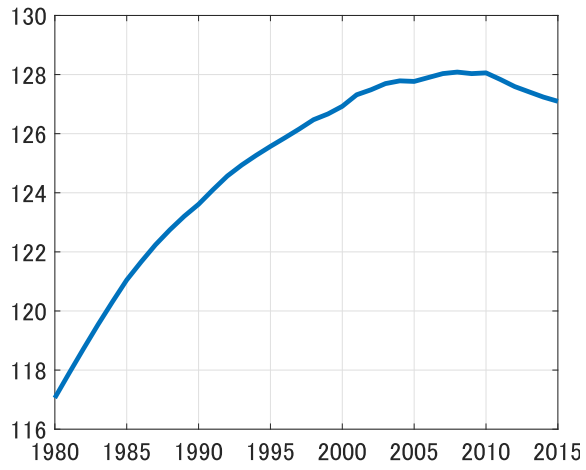
Table 33: Debt by Wealth Levels and by Age in 1984

	Households in Wealth Quintiles					The Wealth Rich			All
	1st	2nd	3rd	4th	5th	10-5%	5-1%	1%	
Debt level (JPY1,000)									
Total	1,290	2,814	3,111	2,885	2,883	2,786	2,909	4,981	2,595
Mortgage	1,015	2,464	2,731	2,539	2,366	2,327	2,248	3,442	2,222
Non-mortgage	275	351	379	346	517	459	661	1,540	373
% of wealth									
Total	306.6	141.2	77.4	39.6	13.9	14.8	9.3	7.0	37.8
Mortgage	241.2	123.6	68.0	34.9	11.4	12.3	7.2	4.9	32.3
Non-mortgage	65.4	17.6	9.4	4.7	2.5	2.4	2.1	2.2	5.4

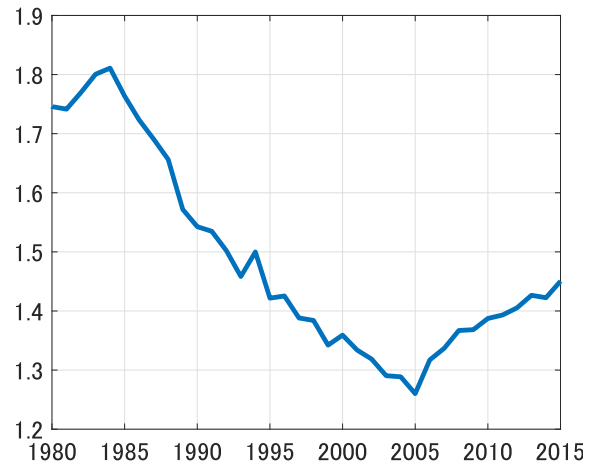
Age	≤ 24	24-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	≥ 85
Debt level (JPY1,000)														
Total	290	921	2,470	3,779	4,179	3,874	2,855	2,199	1,242	846	719	362	341	165
Mortgage	87	682	2,210	3,443	3,762	3,317	2,363	1,721	919	508	484	218	303	123
Non-mortgage	203	239	260	336	417	557	492	477	323	338	236	144	39	42
% of wealth														
Total	30.5	39.2	59.9	70.9	64.4	49.9	33.3	20.3	11.2	8.6	8.3	4.7	3.4	1.9
Mortgage	9.2	29.0	53.6	64.6	58.0	42.7	27.6	15.9	8.3	5.2	5.6	2.8	3.1	1.4
Non-mortgage	21.3	10.2	6.3	6.3	6.4	7.2	5.7	4.4	2.9	3.4	2.7	1.8	0.4	0.5

Table 34: Debt by Wealth Levels and by Age in 2014

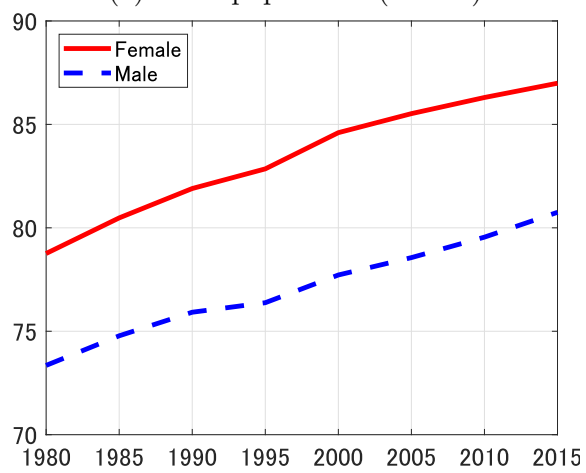
	Households in Wealth Quintiles					The Wealth Rich								
	1st	2nd	3rd	4th	5th	10-5%	5-1%	1%	All					
Debt level (JPY1,000)														
Total	2,552	6,051	5,364	4,106	2,831	2,453	2,652	8,139	4,183					
Mortgage	2,091	5,445	4,855	3,700	1,810	1,624	1,139	4,025	3,582					
Non-mortgage	461	606	508	406	1,021	829	1,513	4,113	601					
% of wealth														
Total	1,408.0	231.7	76.5	27.2	6.2	5.7	3.9	5.7	29.6					
Mortgage	1,153.4	208.5	69.2	24.5	4.0	3.8	1.7	2.8	25.4					
Non-mortgage	254.6	23.2	7.2	2.7	2.2	1.9	2.2	2.9	4.3					
<hr/>														
Age	≤ 24	24-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	≥ 85
Debt level (JPY1,000)														
Total	836	3,730	7,275	10,096	9,006	7,871	5,849	4,257	2,728	1,648	986	817	710	762
Mortgage	484	3,355	6,899	9,629	8,510	7,253	5,027	3,322	1,753	1,023	630	400	323	413
Non-mortgage	352	375	377	467	496	618	822	935	975	625	356	417	388	349
% of wealth														
Total	83.9	129.8	145.5	163.6	117.6	78.9	44.3	25.6	14.1	8.5	5.5	4.9	3.8	4.1
Mortgage	48.5	116.8	137.9	156.1	111.1	72.7	38.1	20.0	9.1	5.3	3.5	2.4	1.7	2.2
Non-mortgage	35.4	13.1	7.5	7.6	6.5	6.2	6.2	5.6	5.0	3.2	2.0	2.5	2.1	1.9



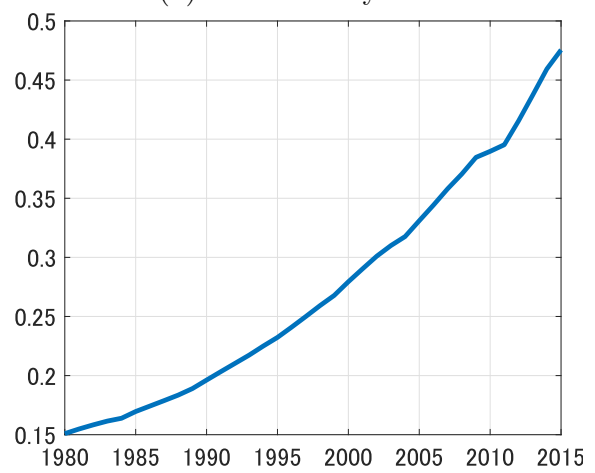
(a) Total population (in mm)



(b) Total fertility rate

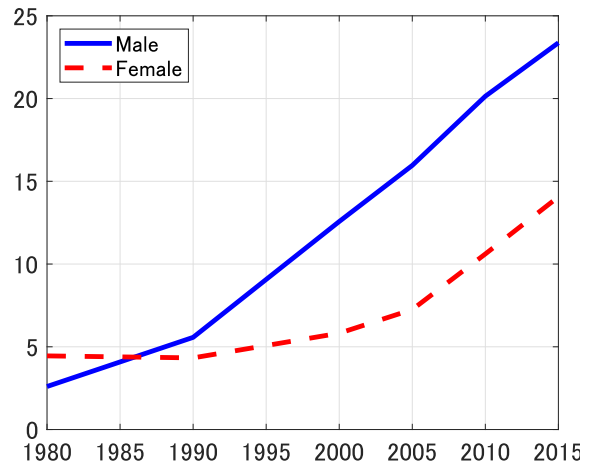
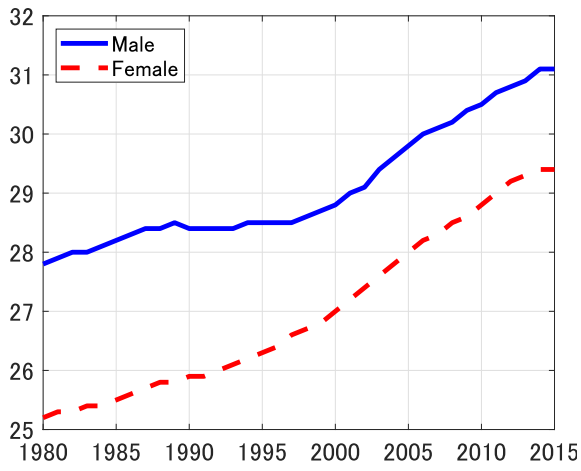


(c) Life expectancy at birth



(d) Old-age dependency ratio

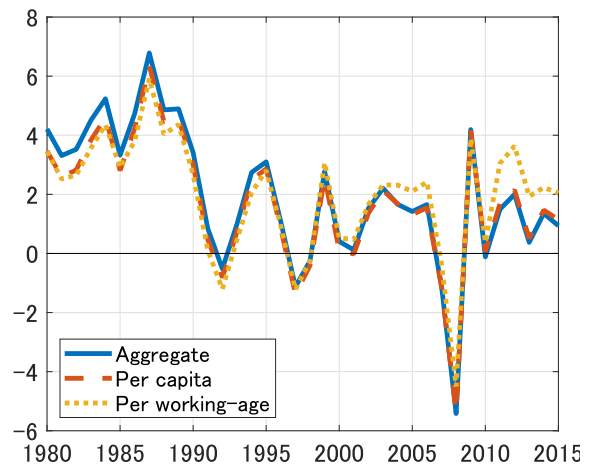
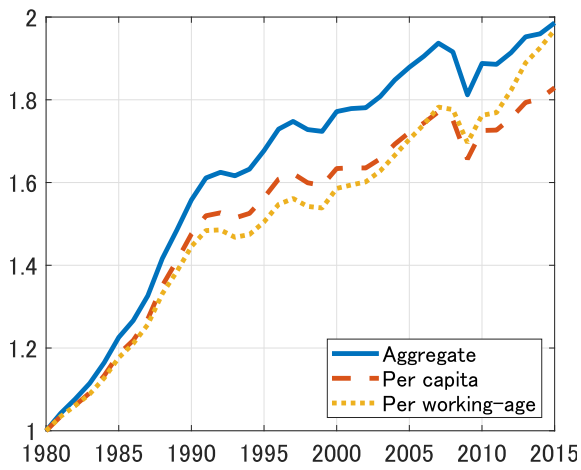
Figure 1: Demographics in Japan



(a) Average age of first marriage

(b) Never-married rate at age 50 (%)

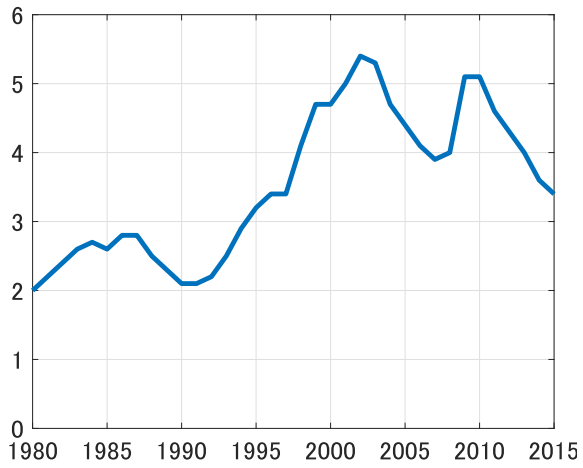
Figure 2: Trend in marriage



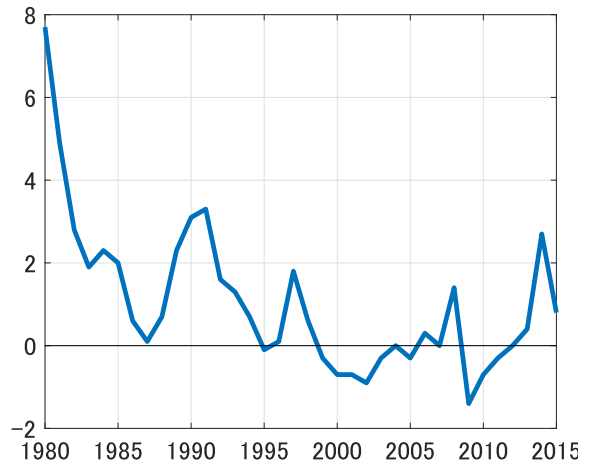
(a) Level (1980=1.0)

(b) Growth rate (%)

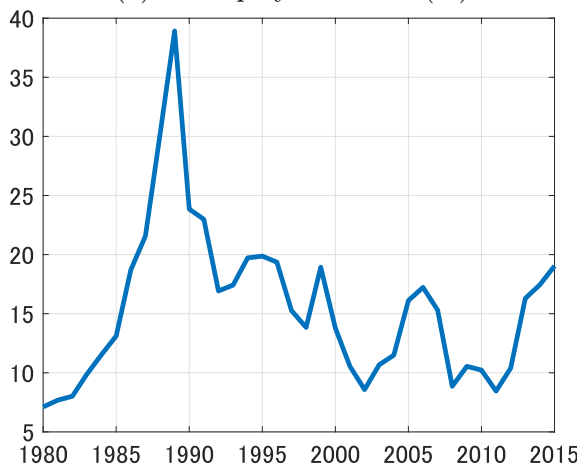
Figure 3: GDP (aggregate, per capita and per working-age population)



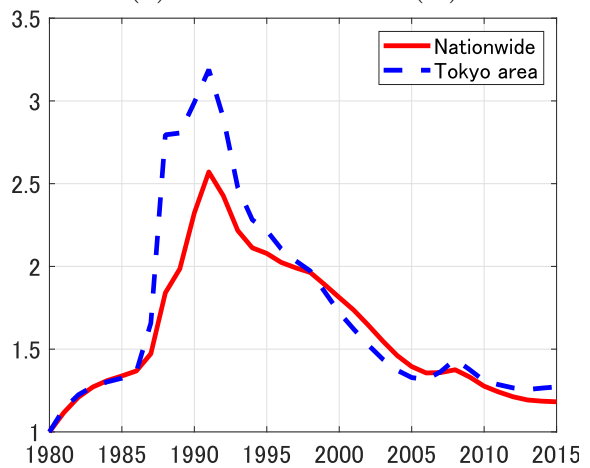
(a) Unemployment rate (%)



(b) CPI inflation rate (%)



(c) Stock price (Nikkei index, JPY1,000)



(d) Land price (1980=1.0)

Figure 4: Unemployment, Inflation, Stock Price and Land Price

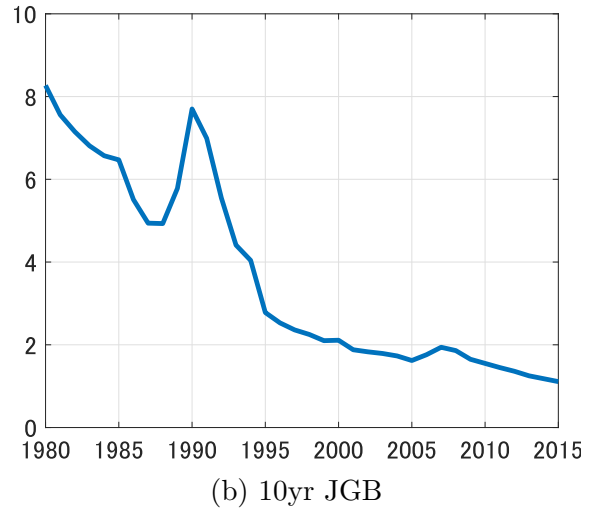
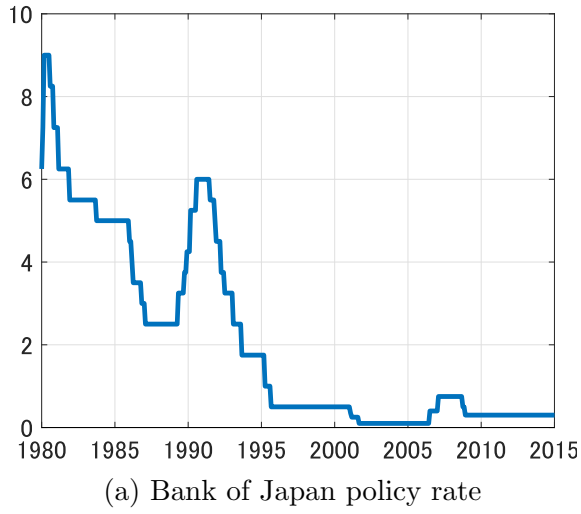


Figure 5: Interest Rate (%)

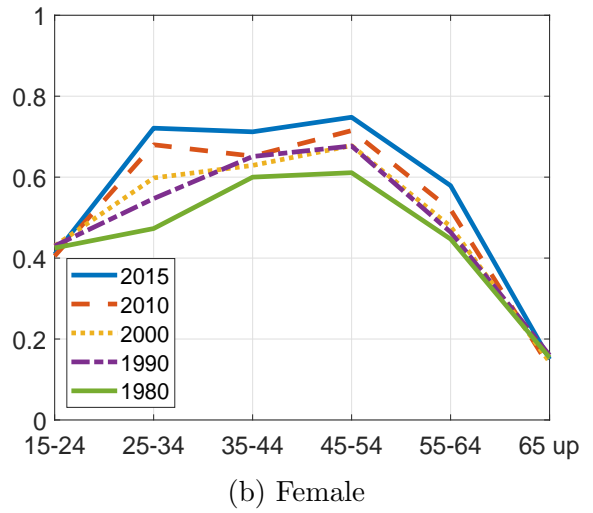
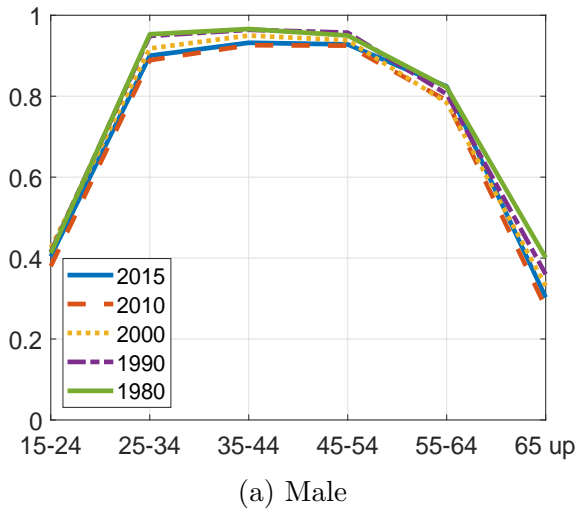


Figure 6: Employment Rate by Age

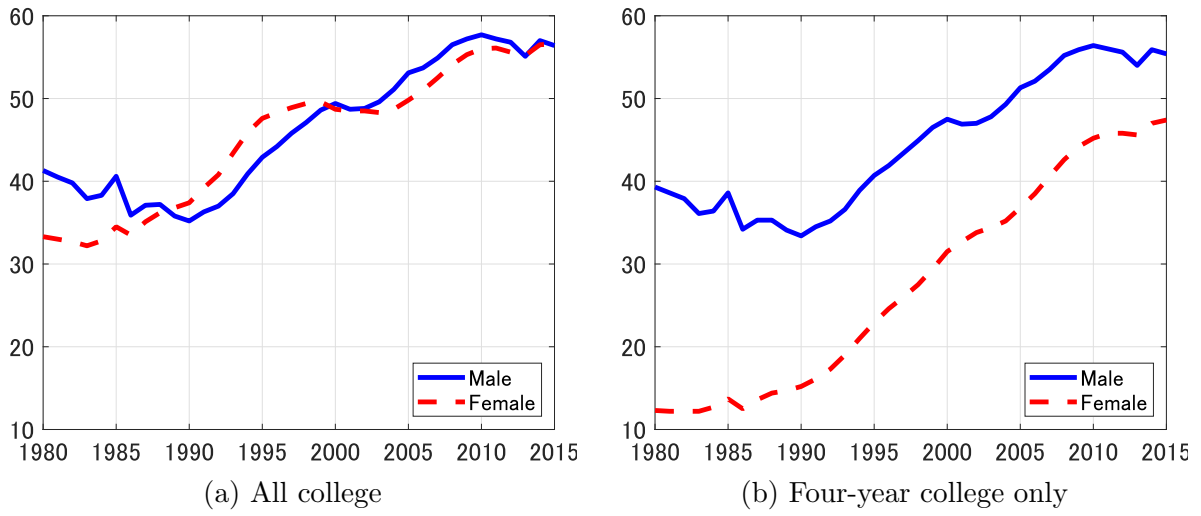


Figure 7: College Entrance Rate (%)

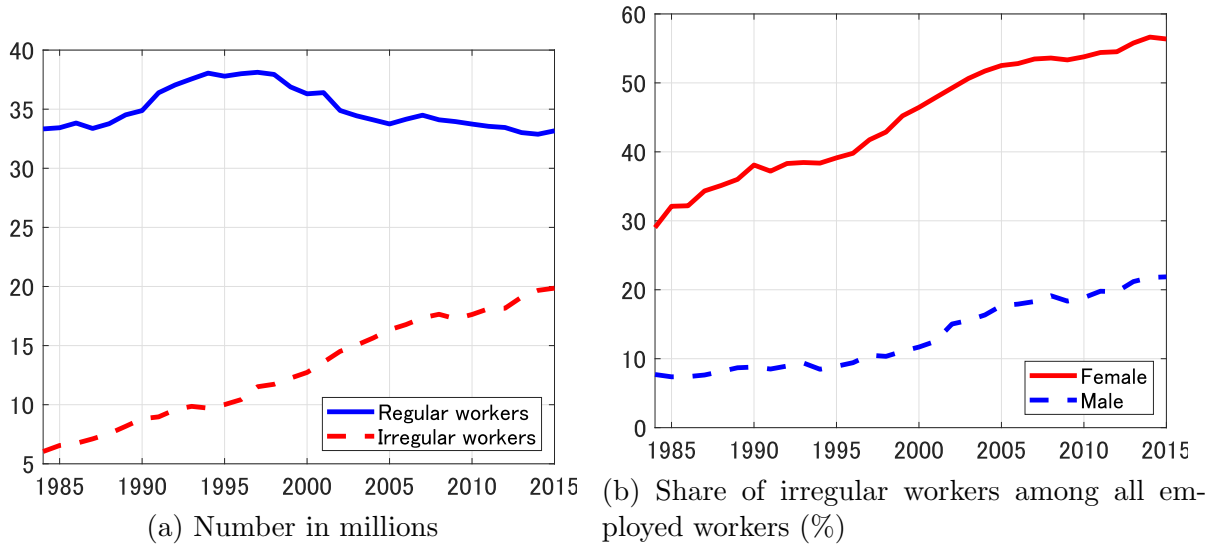


Figure 8: Regular and Irregular Workers

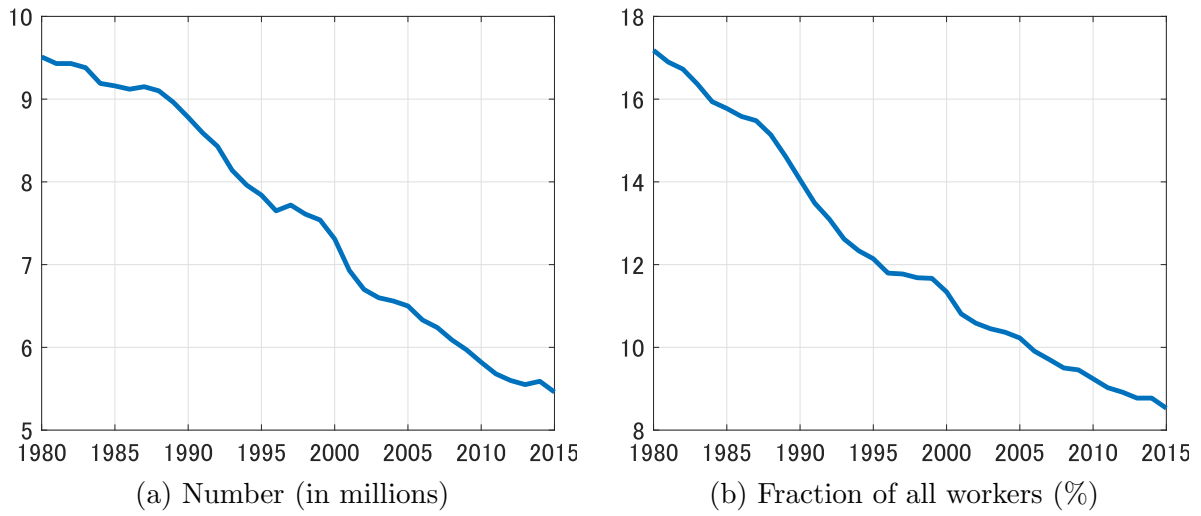


Figure 9: Self-employment

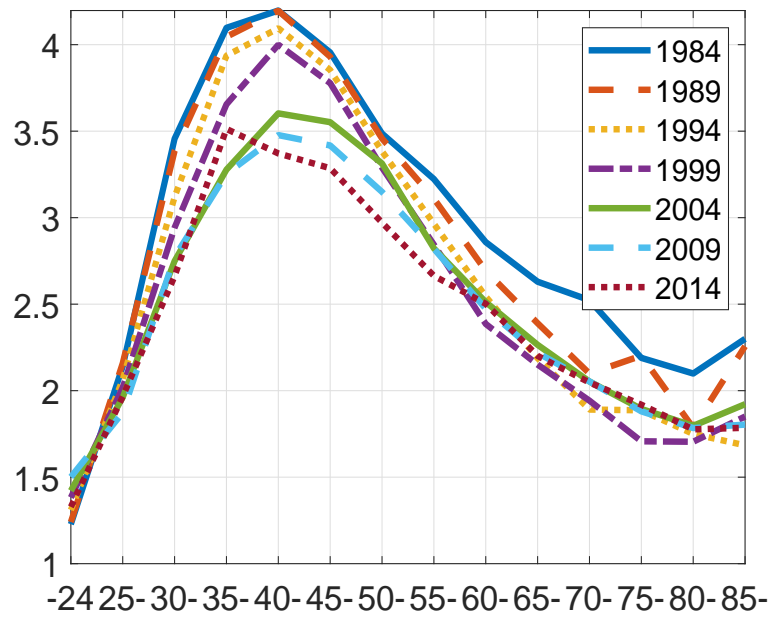


Figure 10: Average Household Size by Age (Number of Individuals)

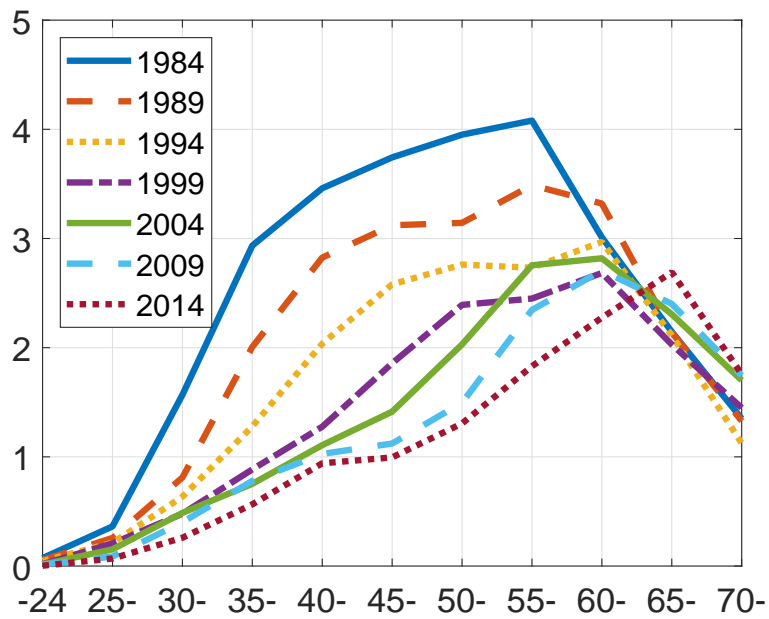


Figure 11: Self-employed Household Heads by Age and Year (% of entire population)

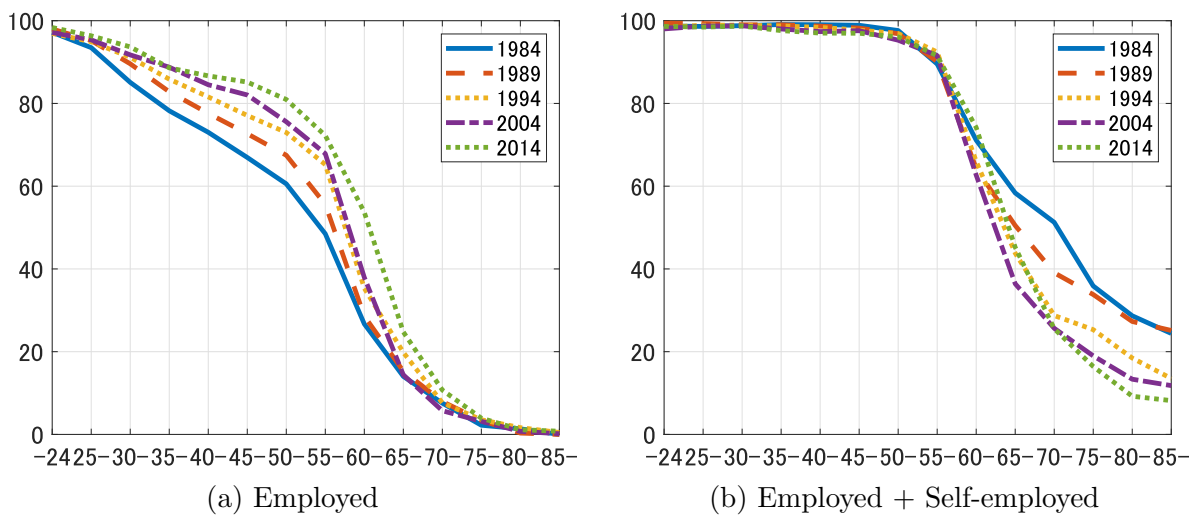
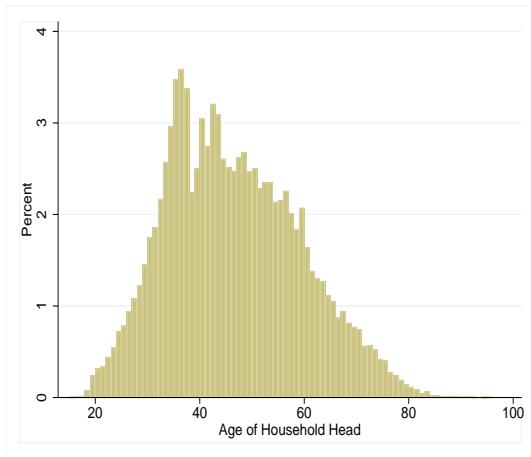
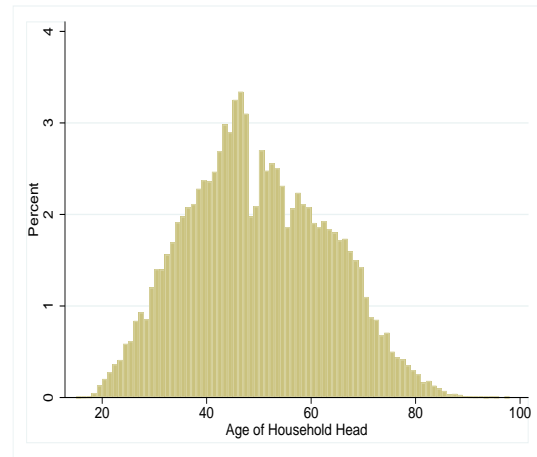


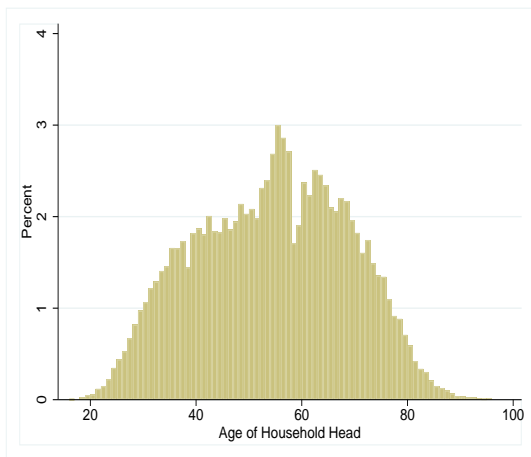
Figure 12: Trends of Employment by Age (% of population in each age group)



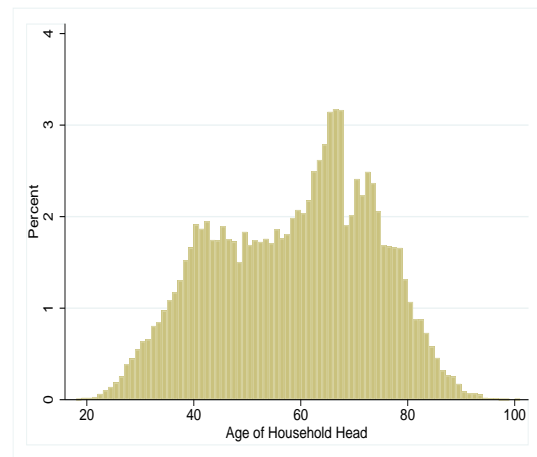
(a) 1984



(b) 1994

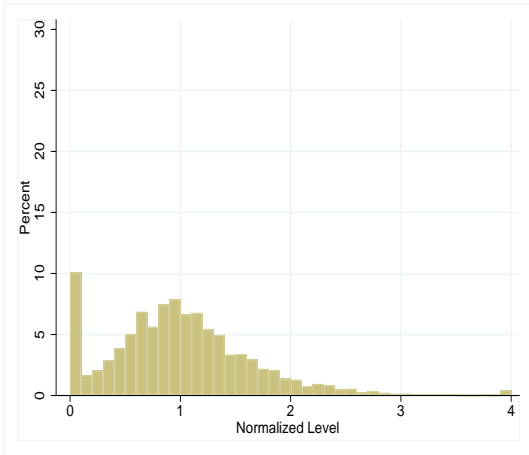


(c) 2004

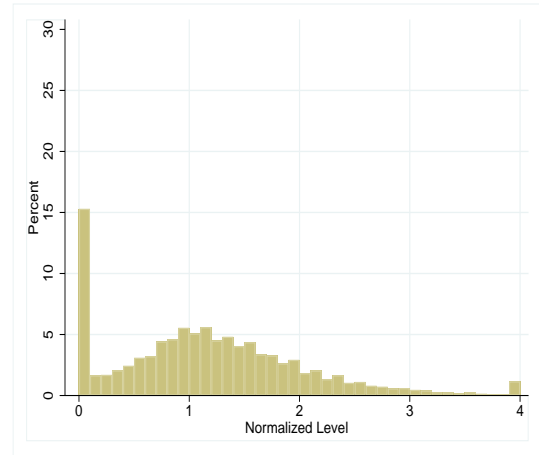


(d) 2014

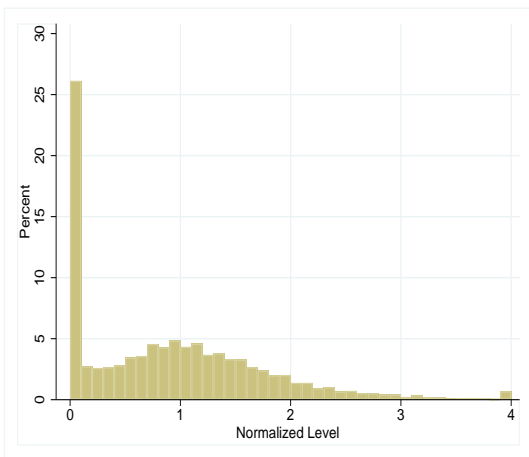
Figure 13: Age Distribution of Household Heads in the NSFIE



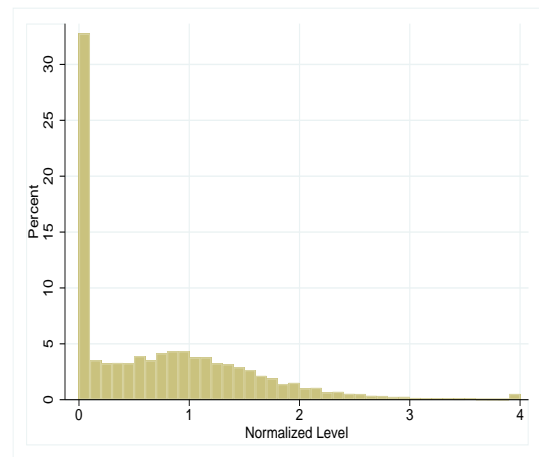
(a) 1984



(b) 1994

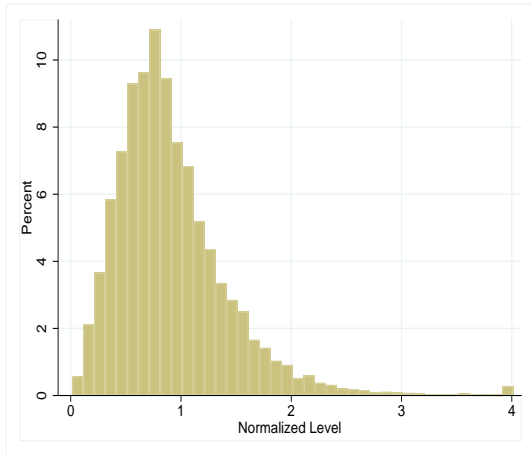


(c) 2004

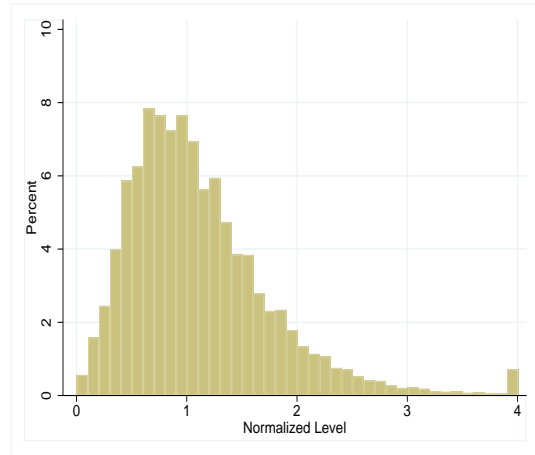


(d) 2014

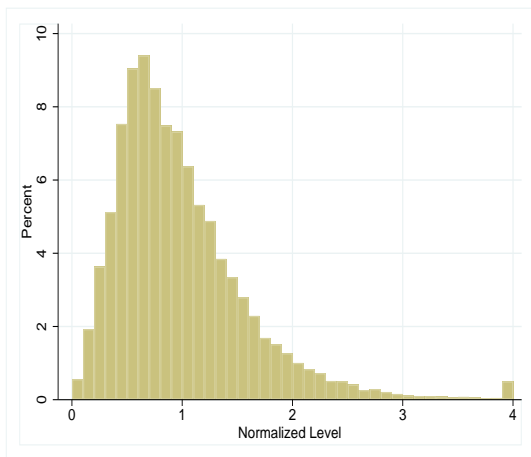
Figure 14: Earnings Distribution: Levels are Normalized so That the Mean is 1.



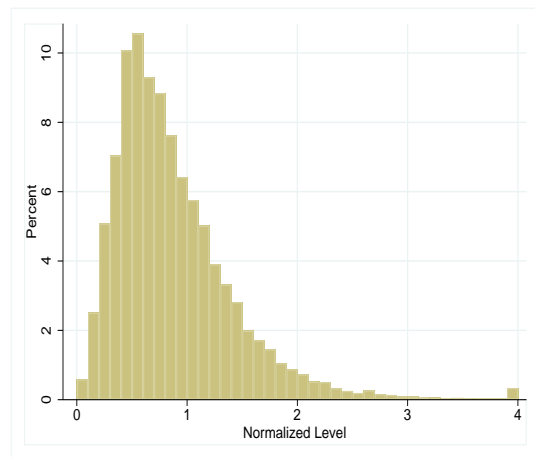
(a) 1984



(b) 1994

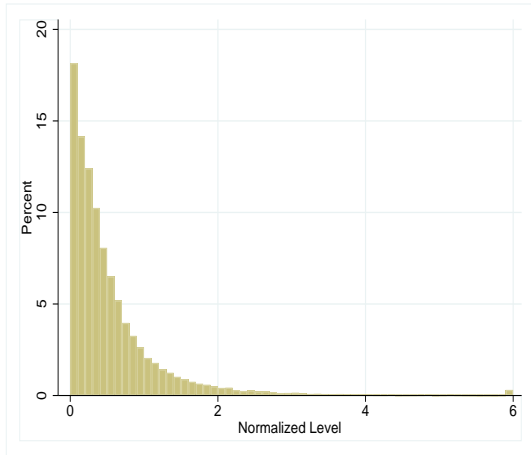


(c) 2004

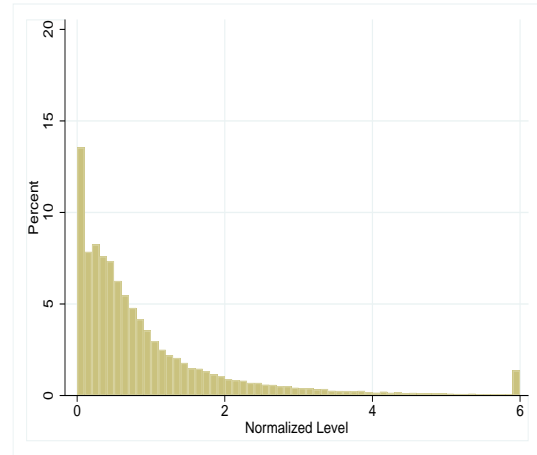


(d) 2014

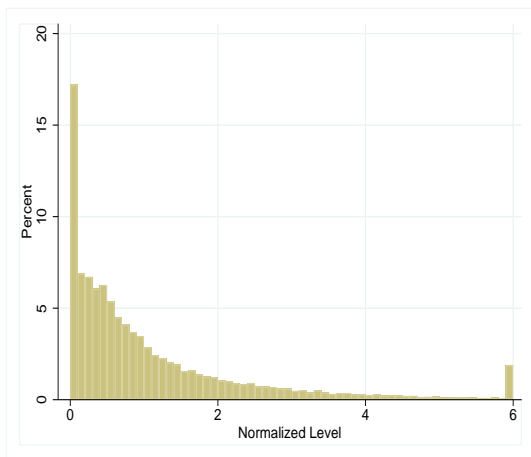
Figure 15: Income Distribution: Levels are Normalized so That the Mean is 1.



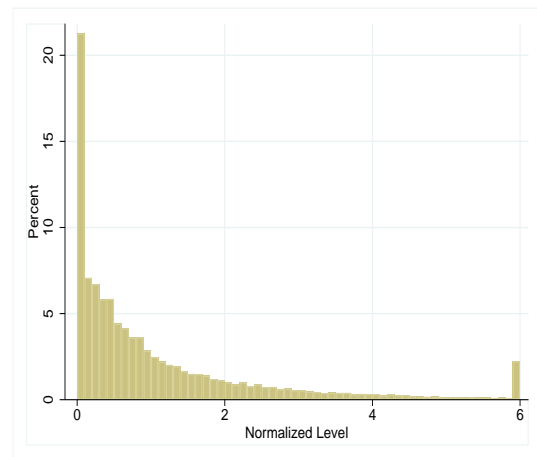
(a) 1984



(b) 1994

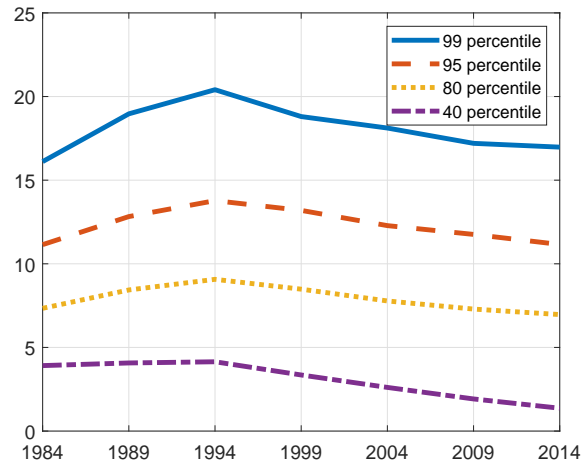


(c) 2004

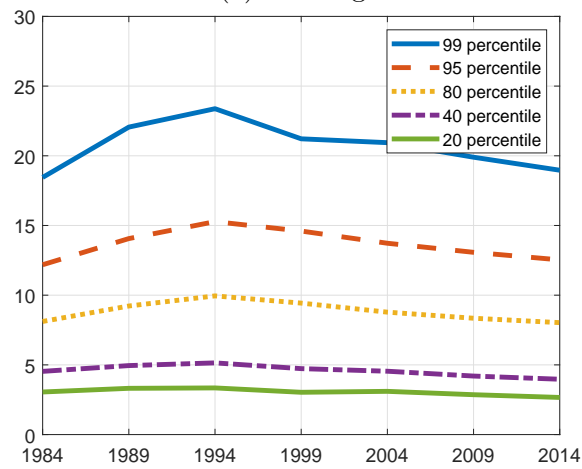


(d) 2014

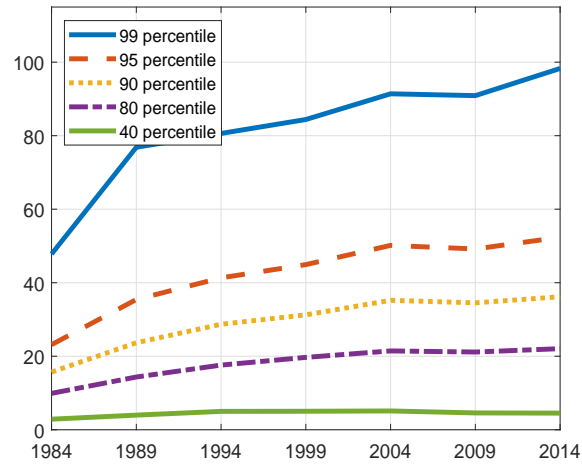
Figure 16: Wealth Distribution: Levels are Normalized so That the Mean is 1.



(a) Earnings



(b) Income



(c) Wealth

Figure 17: Earnings, Income and Wealth at Different Percentiles (JPY mm)

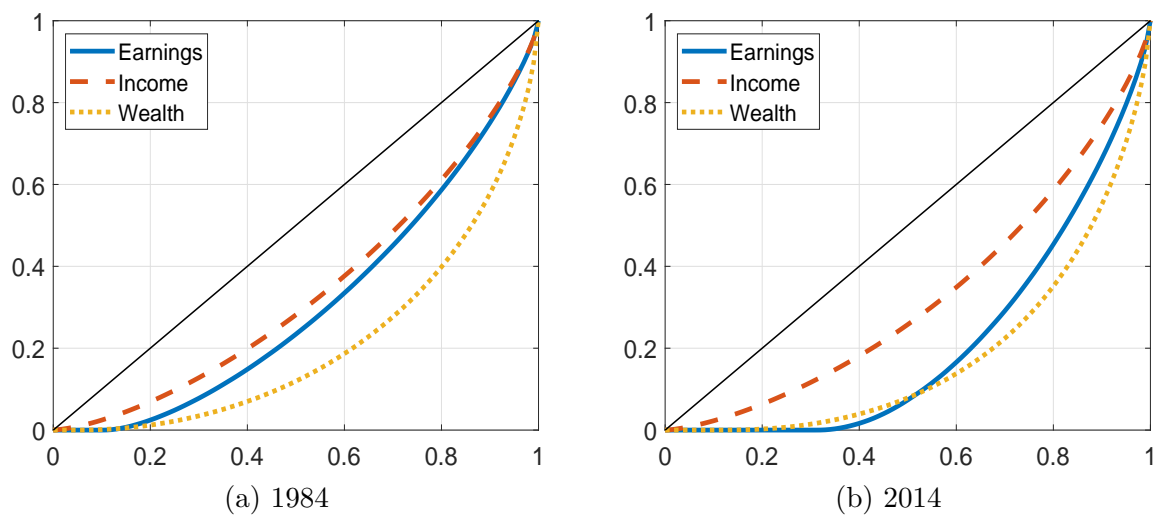
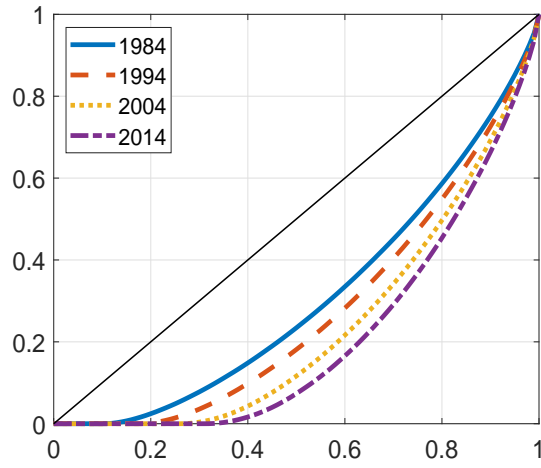
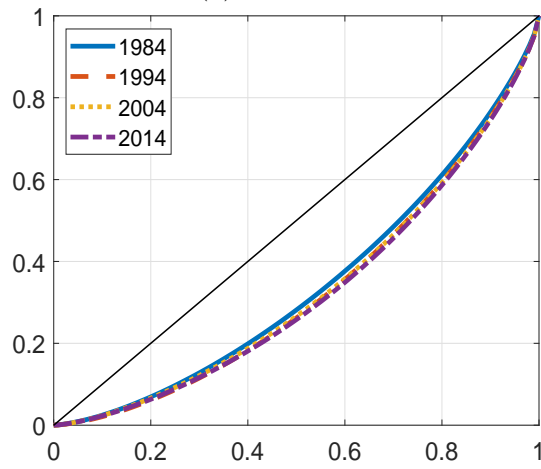


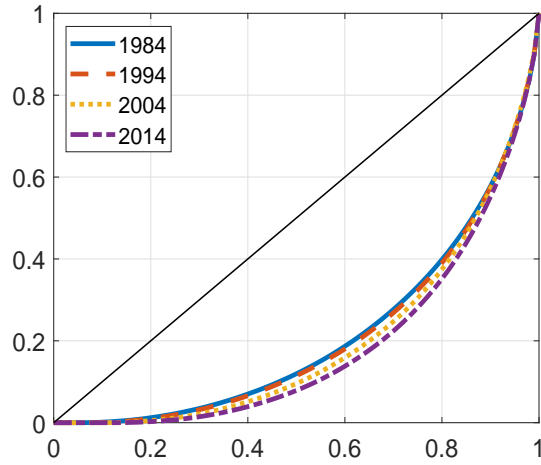
Figure 18: The Lorenz Curves for the Distributions of Earnings, Income, and Wealth in 1984 and 2014



(a) Earnings

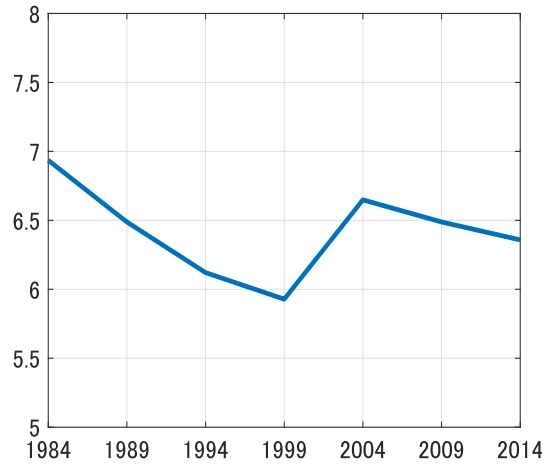


(b) Income

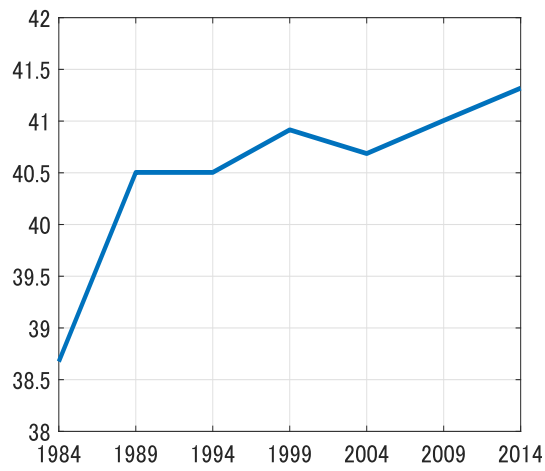


(c) Wealth

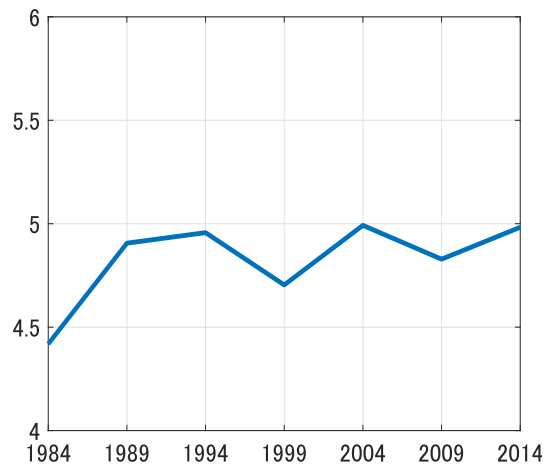
Figure 19: Trends in Lorenz Curves



(a) Bottom 20%

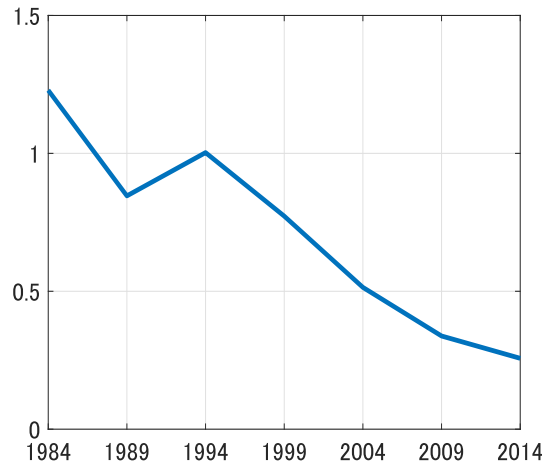


(b) Top 20%

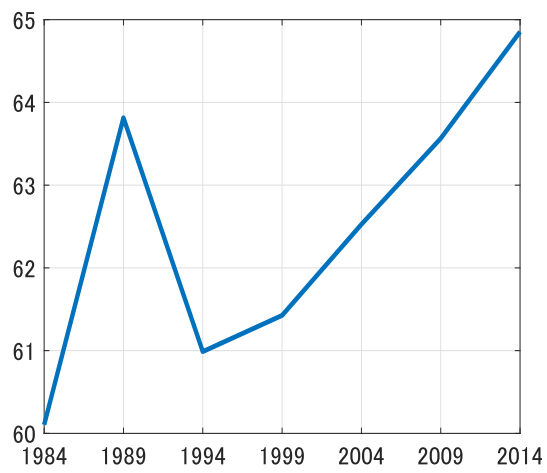


(c) Top 1%

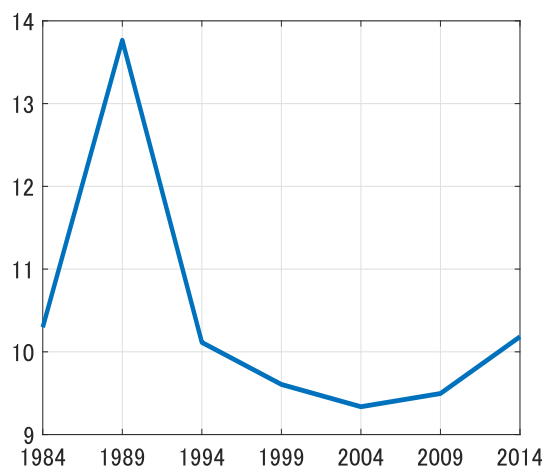
Figure 20: Share of Income Earned by Households in Bottom and Top Percentiles (%)



(a) Bottom 20%

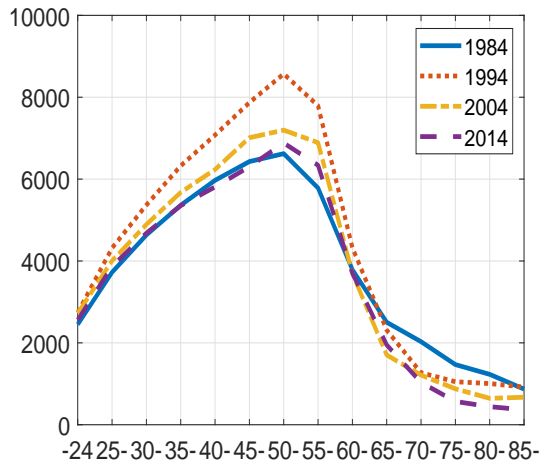


(b) Top 20%

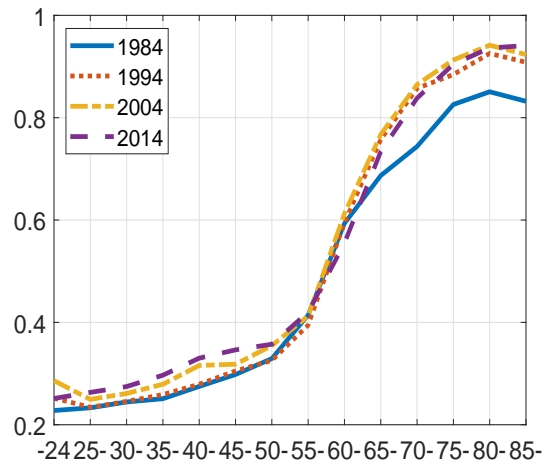


(c) Top 1%

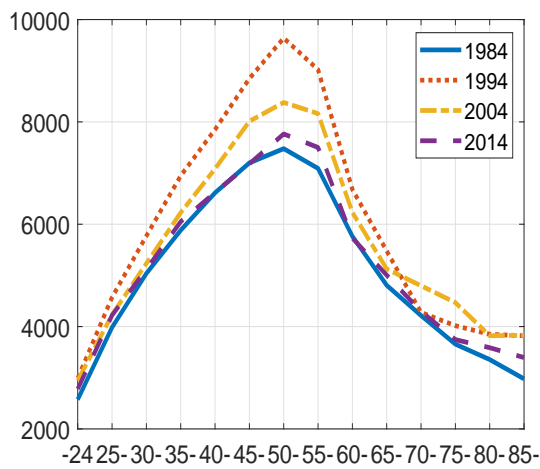
Figure 21: Share of Wealth Held by Households in Bottom and Top Percentiles (%)



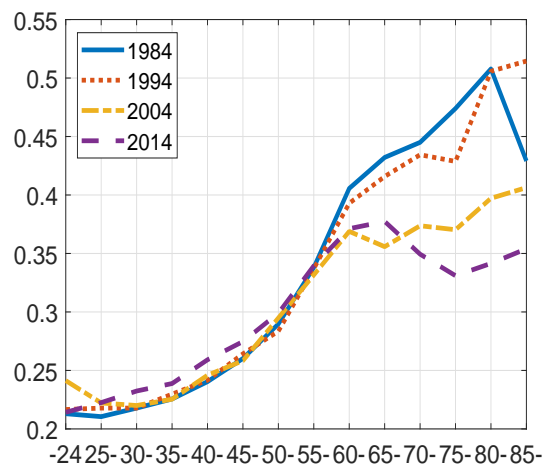
(a) Earnings (JPY1,000)



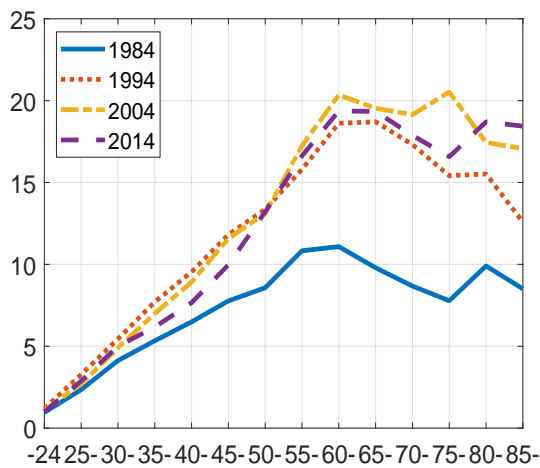
(b) Earnings Gini



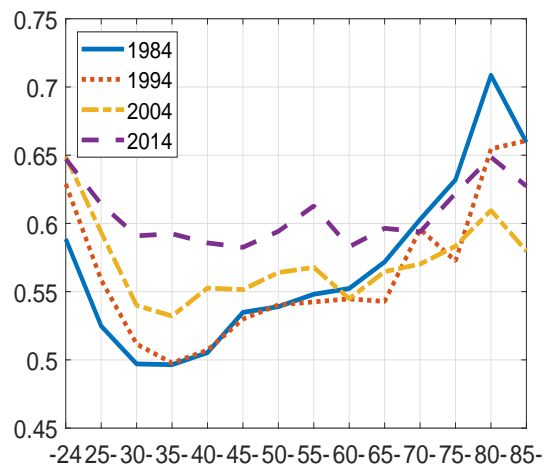
(c) Income (JPY1,000)



(d) Income Gini



(e) Wealth (JPY mm)



(f) Wealth Gini

Figure 22: Life-cycle Profiles: Household

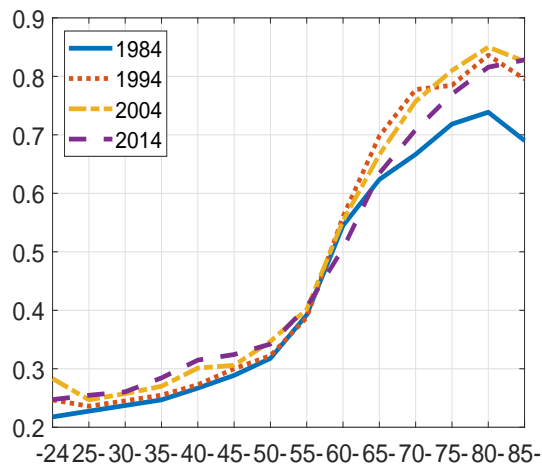
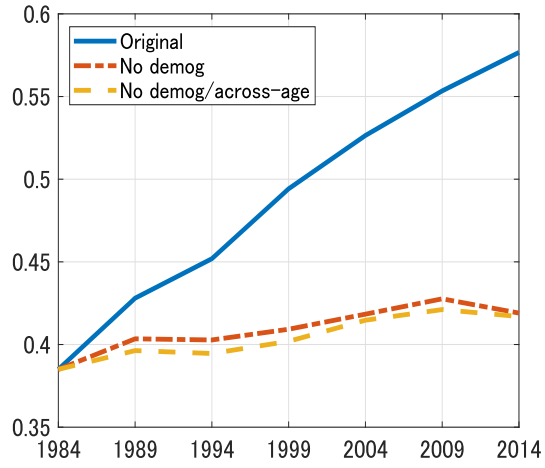
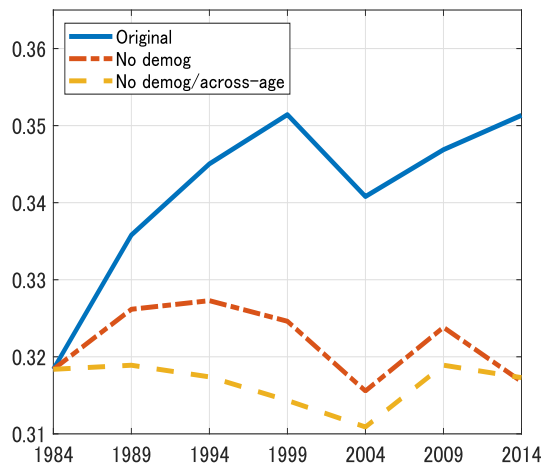


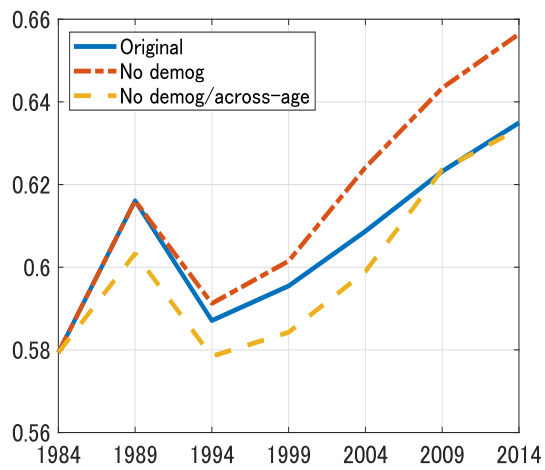
Figure 23: Life-cycle Profile: Income Gini Excluding Public Pensions



(a) Earnings

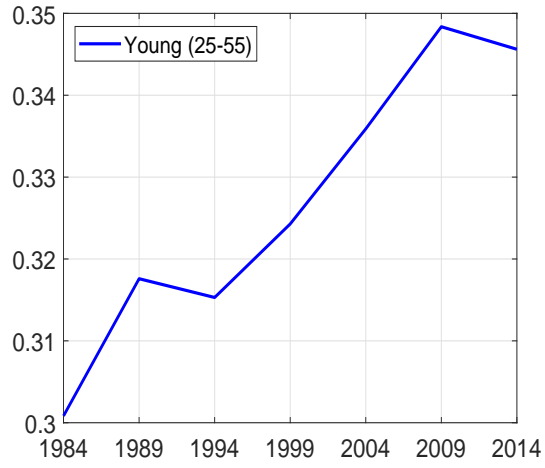


(b) Income

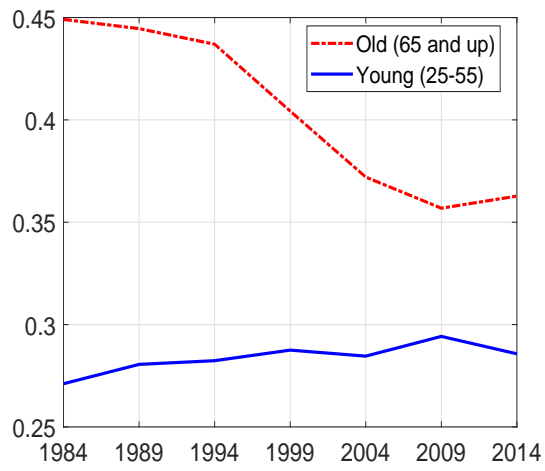


(c) Wealth

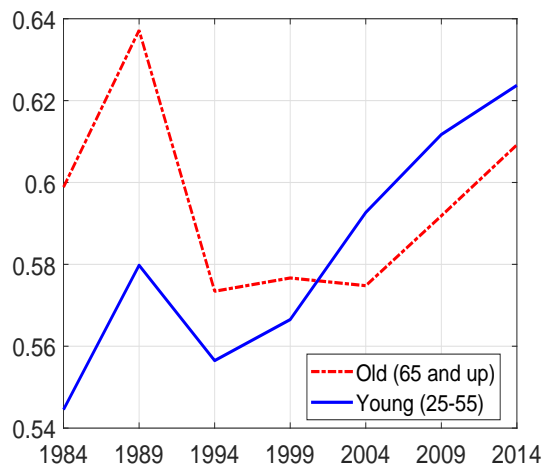
Figure 24: Gini Coefficient and Contributing Factors



(a) Earnings



(b) Income

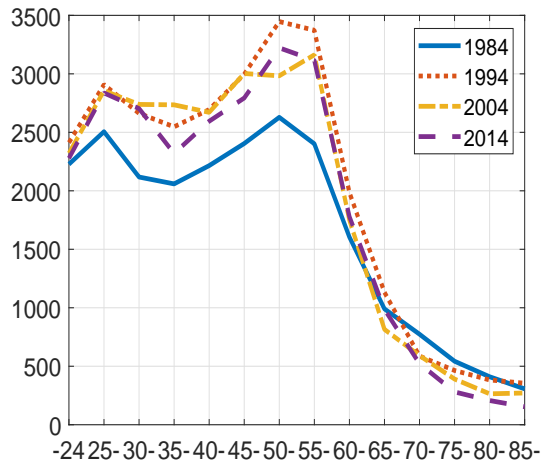


(c) Wealth

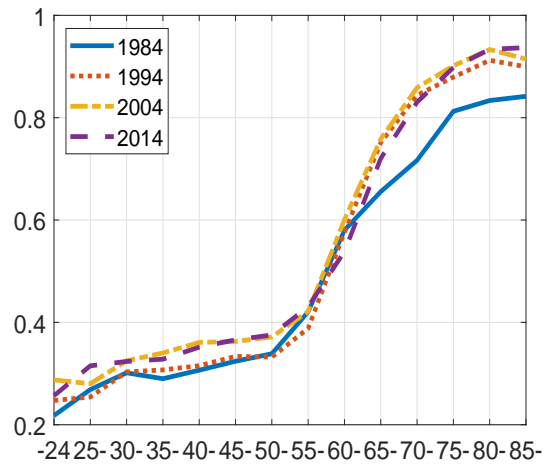
Figure 25: Gini coefficient by age groups



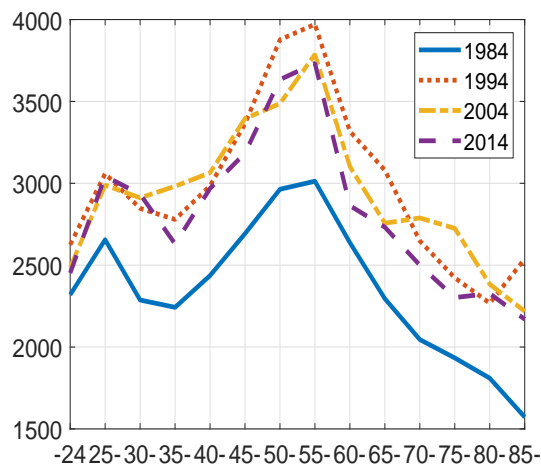
Figure 26: Wealth by Employment Type in 2014 (in JPY mm)



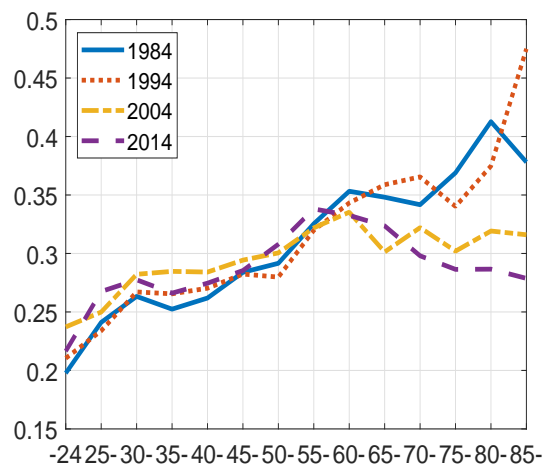
(a) Earnings (JPY1,000)



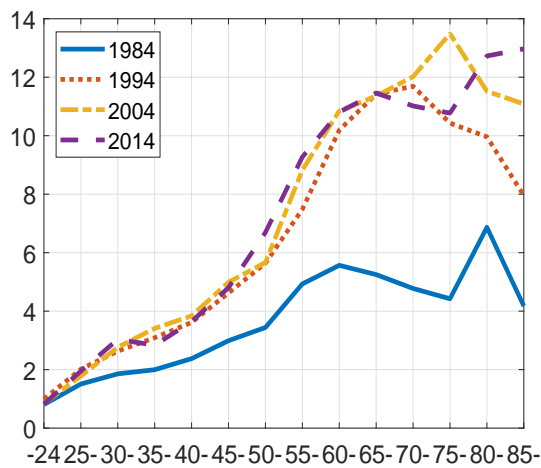
(b) Earnings Gini



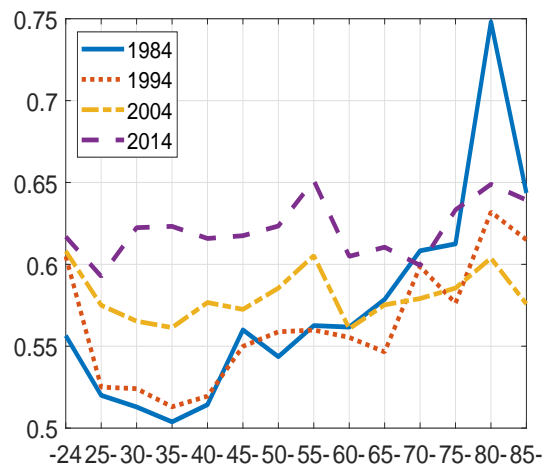
(c) Income (JPY1,000)



(d) Income Gini

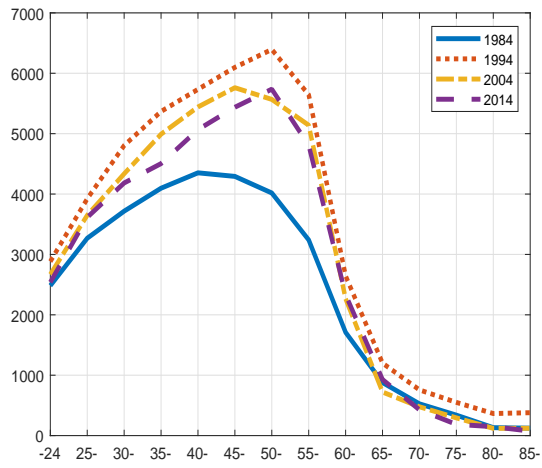


(e) Wealth (JPY mm)

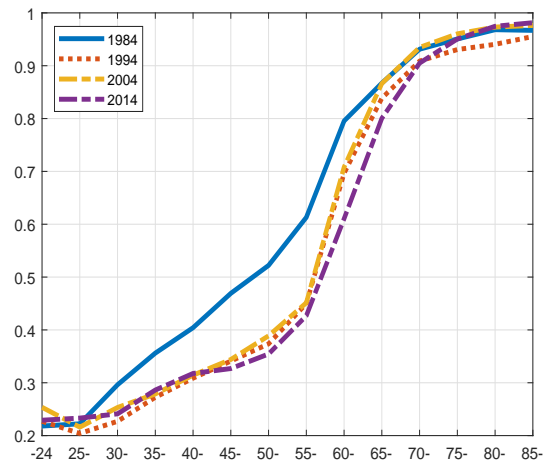


(f) Wealth Gini

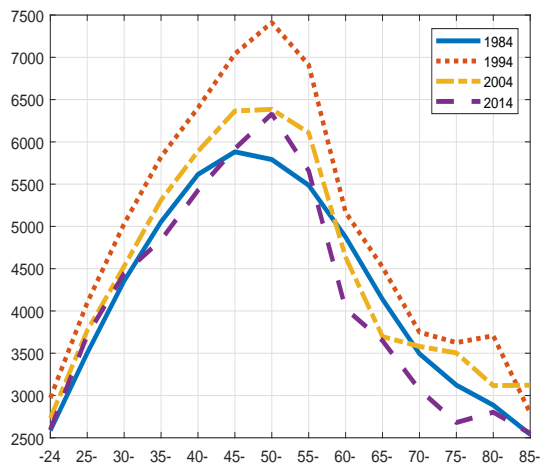
Figure 27: Life-cycle Profiles: Adult Equivalent



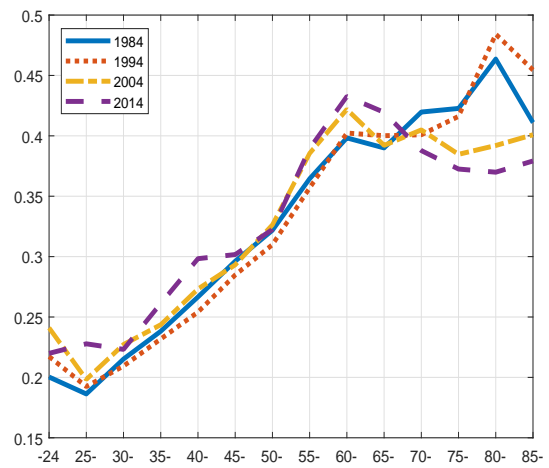
(a) Earnings (JPY1,000)



(b) Earnings Gini

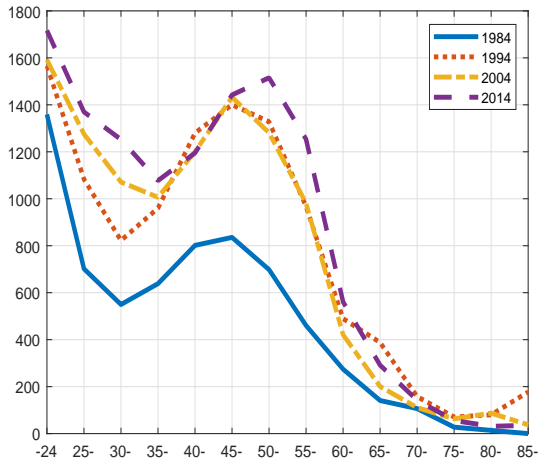


(c) Income (JPY1,000)

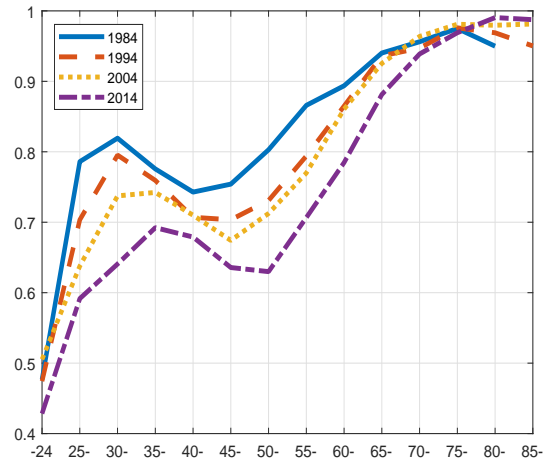


(d) Income Gini

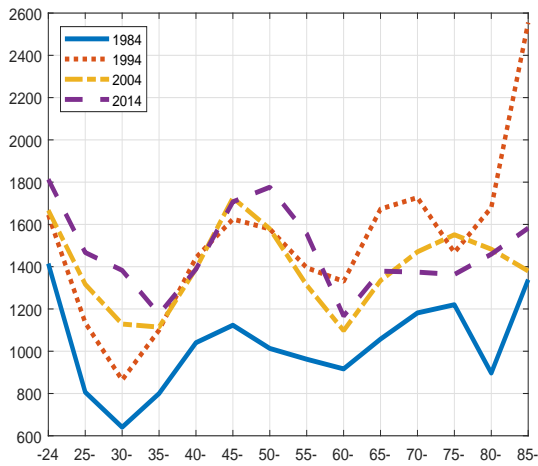
Figure 28: Life-cycle Profiles: Male Individuals



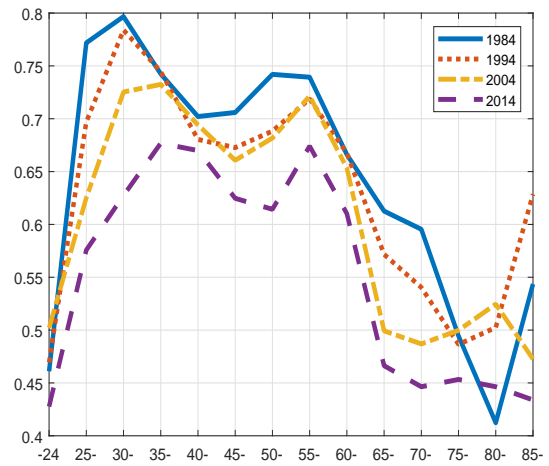
(a) Earnings (JPY1,000)



(b) Earnings Gini



(c) Income (JPY1,000)



(d) Income Gini

Figure 29: Life-cycle Profiles: Female Individuals

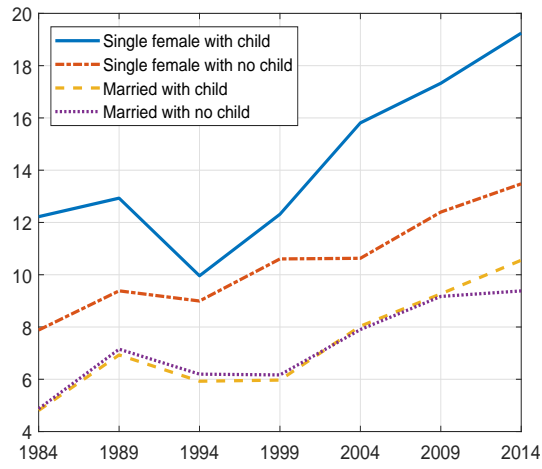
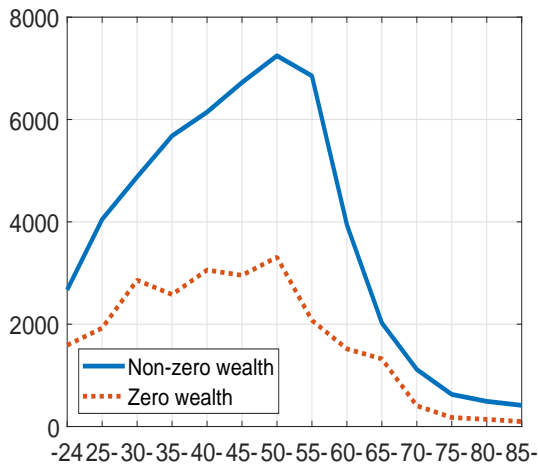
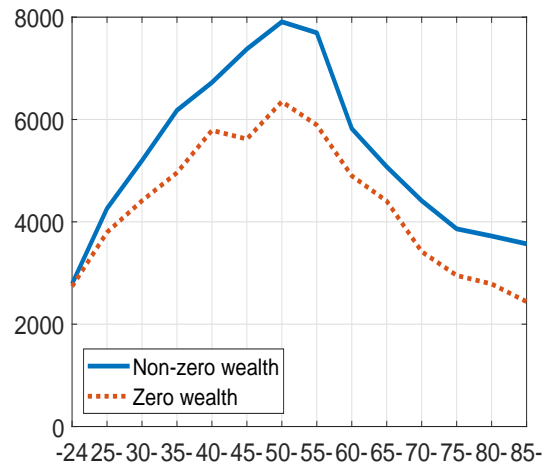


Figure 30: Households with Zero Wealth by Family Type (%)

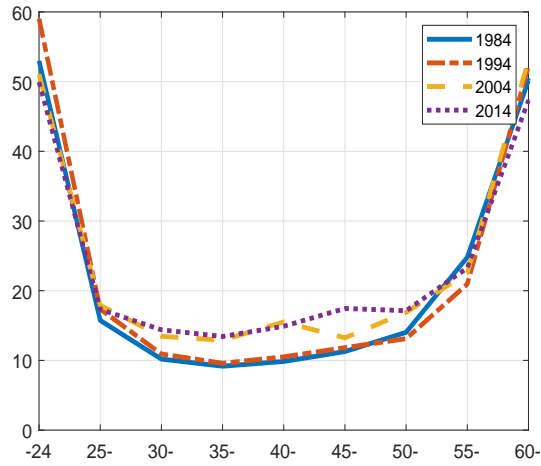


(a) Earnings

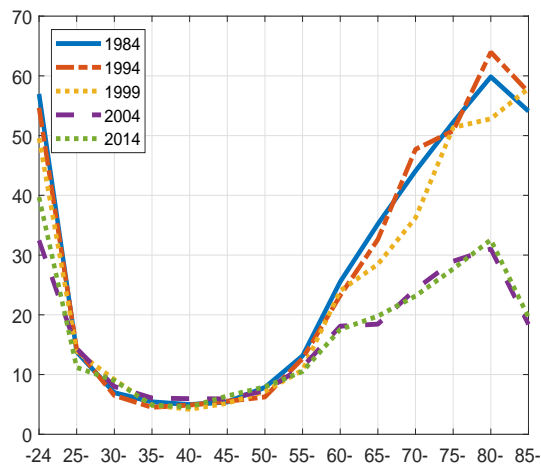


(b) Income

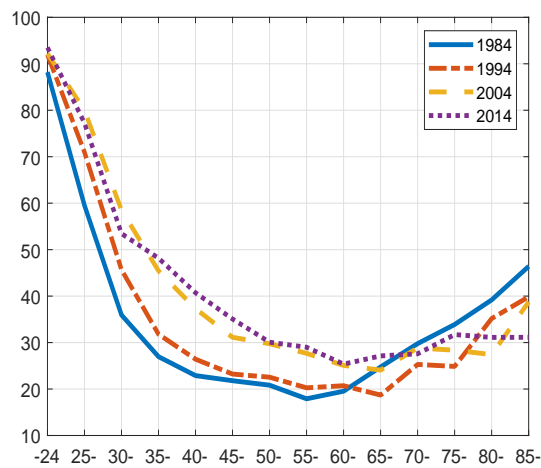
Figure 31: Earnings and Income of Households with zero vs non-zero Wealth (JPY 1,000)



(a) Earnings

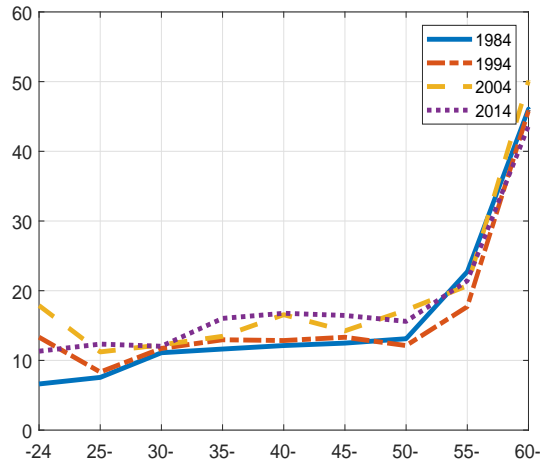


(b) Income

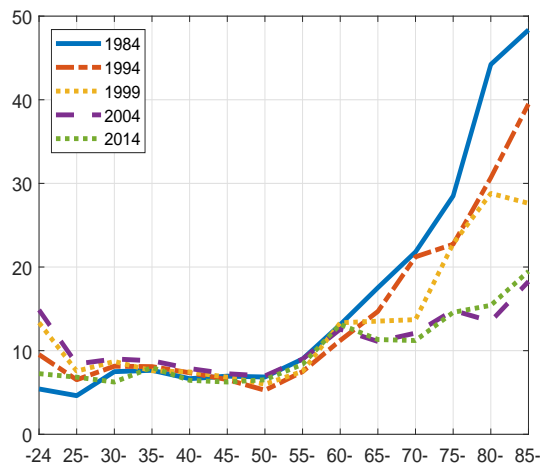


(c) Wealth

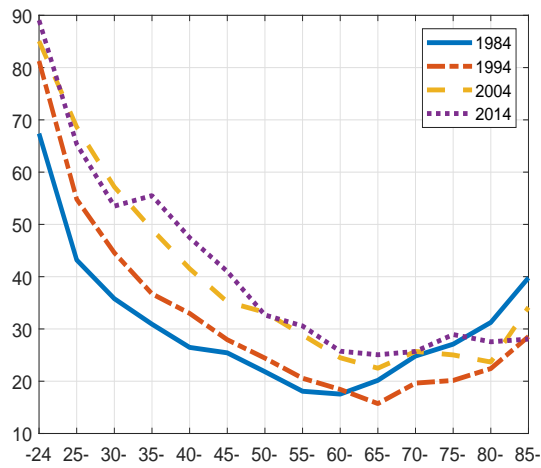
Figure 32: Relative Poverty by Age (% of Households below Poverty Lines of the Entire Population)



(a) Earnings

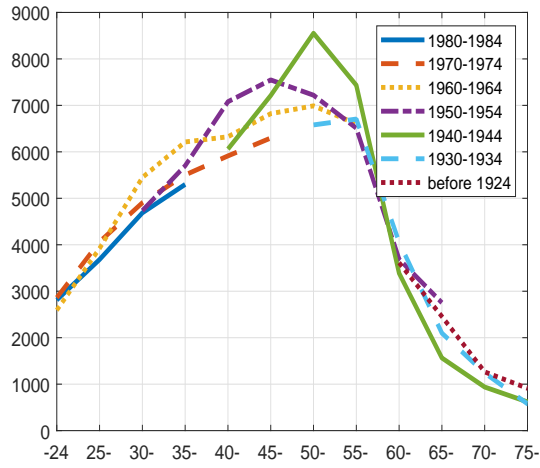


(b) Income

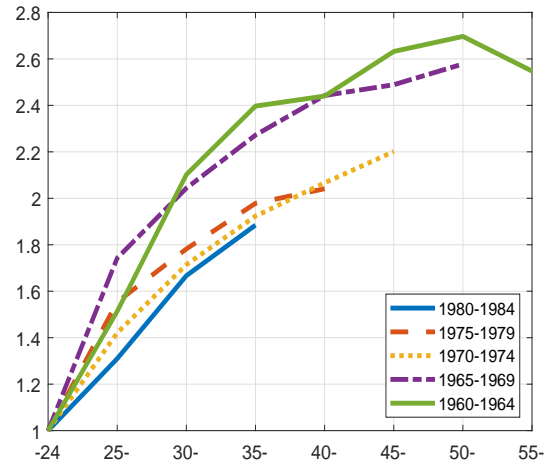


(c) Wealth

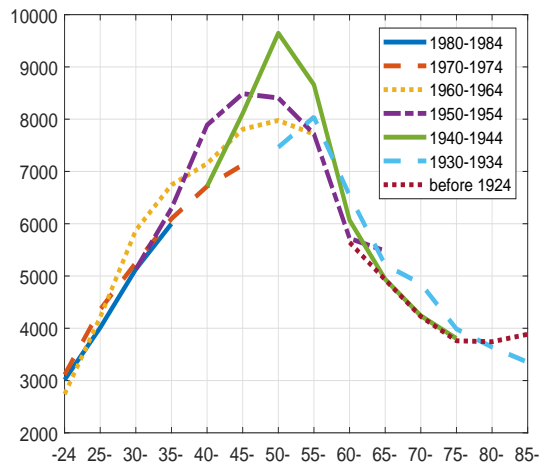
Figure 33: Relative Poverty by Age: Adult Equivalent (% of Households below Poverty Lines of the Entire Population)



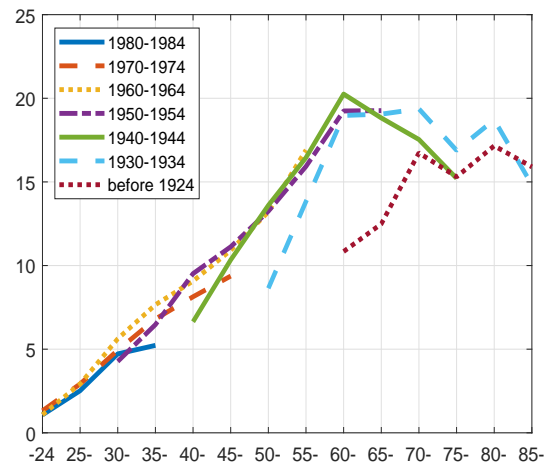
(a) Earnings by cohort birth year (JPY1,000)



(b) Earnings: normalized by age ≤ 24 earnings



(c) Income by cohort birth year (JPY1,000)



(d) Wealth by cohort birth year (JPY mm)

Figure 34: Cohort Life-cycle Profiles