

Why did Japanese Dual-earner Couples Increase since the Late 1980s?



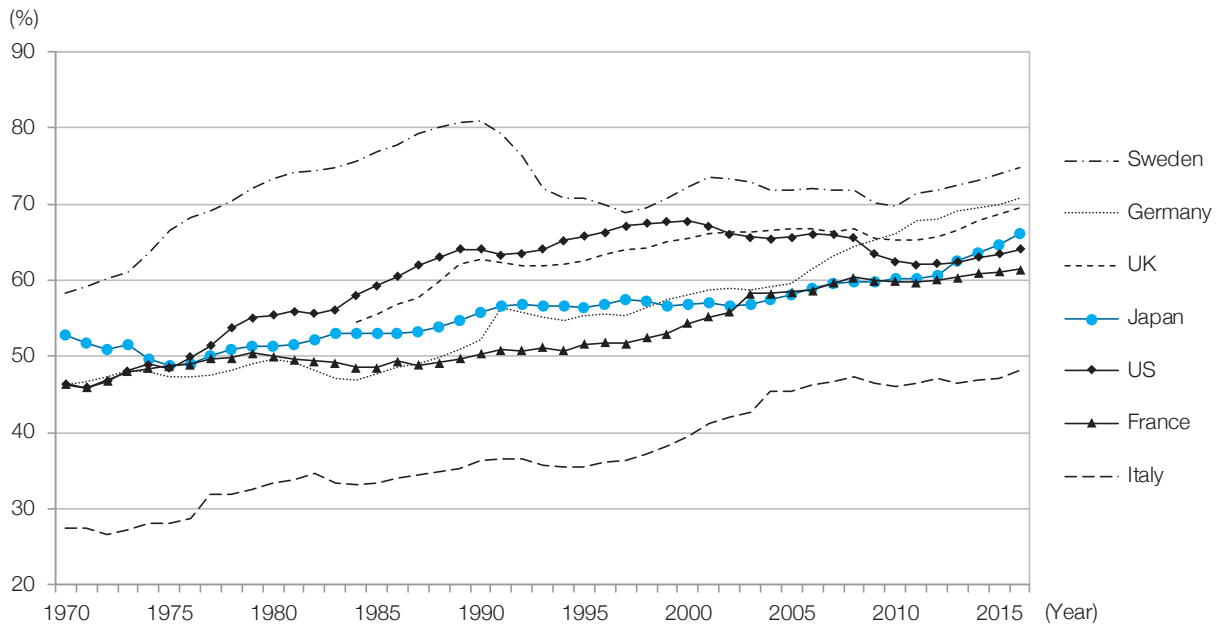
Akiko Sato Oishi

Past decades have seen a steady increase in the number of dual-earner couples in Japan. Although an increase in the employment rate of married women is a commonly observed phenomenon among industrialized countries, it was not until the late 1990s that the number of employed husbands with working wives exceeded their counterparts with full-time homemakers in Japan. This study examines economic and institutional factors that have affected the increase in the number of dual-earner couples, especially paying attention to differences in trends between female part-time and full-time workers. A historical perspective shows that the prevalence of part-time employment among married women has accounted for much of the increase in dual-earner couples since the late 1980s. Tax and social insurance schemes that favor part-time employment of salaried workers' wives also contributed to this trend. An analysis using official statistics suggests a growing income disparity among households with wives between ages 25–34, mainly due to the higher employment rate of wives whose husbands have higher-than-average earnings.

- I. Introduction
- II. Shift from self-employed two-worker couples to dual-earner couples
- III. Background of the increase in dual-earner couples
- IV. Shift to dual-earner couples and income disparity among households
- V. Concluding remarks

I. Introduction

The increase in female employment rates has been one of the most dramatic socioeconomic changes in industrialized countries since the end of World War II. Although the speed at which the rates have increased differs, they have more or less continued to rise in most industrialized countries since the 1970s (Figure 1).¹ The trend in the female employment rate in Japan, however, has taken a slightly different course. In 1970, the female employment rate in Japan stood at 52.8%, which was higher than the other industrialized countries, but it kept falling until 1975, and then started to rise again. What's more, the pace of this increase was more gradual than in other countries. For example, it took Japan about 30 years between the time its female employment rate surpassed 50% and reached 60%, which is noticeably longer than in the United States (10 years) and France (18 years). That being said, the female employment rate in Japan has been increasing at a faster pace over the past five years and now exceeds the rate in the United States. The main reason for this is the increase in the employment rate of married women (Ministry of Health, Labour and Welfare: MHLW



Source: The author, based on OECD Statistics (<https://stats.oecd.org/>).

Figure 1. Female employment rates in advanced countries (ages 15–64)

2016). Due to the increased workforce participation of married women, the number of dual-earner households is now higher than that of households with full-time homemakers among those households where the husband is employed in non-agricultural industries.

This paper elucidates the characteristics of the increase in the employment rate for married women from various aspects and examine the socioeconomic factors that brought about this change. The primary period subject to analysis is the roughly 30 years between 1985 and 2016. In Section II, the author reflects on the transformations in women’s work since the end of World War II and explains how two-worker couples have evolved into dual-earner couples. In Section III, the author explores the increase in dual-earner couples in terms of three underlying factors: supply-side, demand-side and institutional factors. In Section IV, the author looks at previous studies and various statistics to examine the impact that a wife’s employment has on household income disparity. Finally, in Section V, the author makes some observations on the meaning that the increase in dual-earner couples has in terms of childhood poverty and presents an outlook for future research.

II. Shift from self-employed two-worker couples to dual-earner couples

1. Transformations in Japanese women’s work since the end of World War II

In many industrialized countries, the labor force participation of women is generally U-shaped along with the countries’ course of economic development (as measured by gross domestic product [GDP] per capita) (Goldin 1995; Olivetti 2014). The main reason for the declining portion of the U-shape can be explained by the decreases in the number of family workers concurrent with changes in production technologies in the agricultural sector from labor-intensive one to capital-intensive one. As economies deindustrialize and become service-oriented, more emphasis is given to workers’ intellectual ability and interpersonal skills than their physical strength, and this leads to an increase in the female employment rate in line with rising relative wages (Olivetti 2014). These rates are said to have reached the bottom of the U in the early 20th century in the United States and in the 1950s and 1960s for most of the countries in continental Europe (Olivetti 2014).

As opposed to the United States and European countries, Japan had a comparatively higher percentage of self-employed workers after World War II as well as a higher rate of female employment. For instance, the rate of female employment in Japan was 50.0% in 1955,² much higher than the rate in the United States (36.4%) in October of the same year, but 70% of these female workers were self-employed, including farm and family workers.³ In other words, the typical pattern for two-worker couples in the period before the war until the preinitiation of the postwar economic boom was that of self-employed two-worker couples, including farmers.

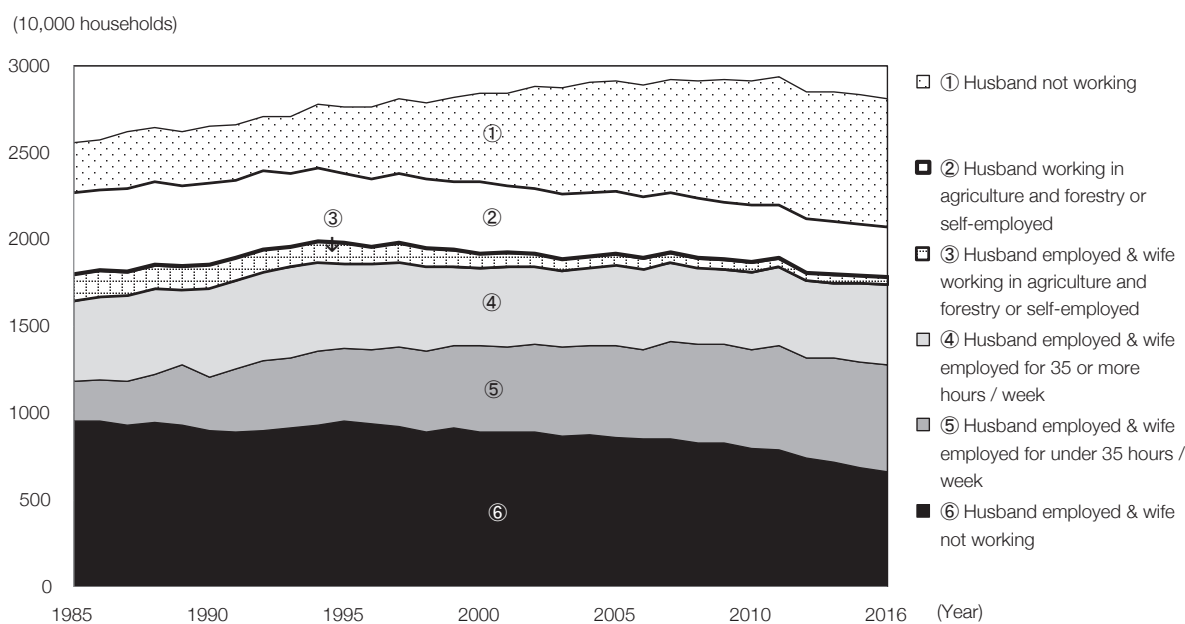
Upon entering the postwar economic boom, a major population shift occurred in which mostly young people migrated from rural areas to big cities, and the primary employment pattern for workers shifted from self-employment to paid employment. This shift created a divide between the home and the workplace. Additionally, young people who went to the cities to work got married and formed nuclear families, which made it difficult for workers (especially women) to balance work and family responsibilities. A dramatic uptick in the wages of household heads during the postwar economic boom was another factor that contributed to the decline in the employment rate among married women.

The female employment rate bottomed out in 1975, after the first oil crisis in the fall of 1973, but before then, the percentage of dual-earner couples among households with employed husbands had been gradually increasing. According to Yashiro (1983), the percentage of dual-earner couples in households headed by employed husbands was estimated at 31% in 1979, which is much lower than the rate of today. One thing to keep in mind is that although part-time employment was on an upward trend, it was still not very common in the 1970s.⁴ In fact, most of the dual-earner couples in this era consisted of husbands and wives who were both employed full-time. As seen in the next section, the rate of married women employed part-time began to increase notably in the latter half of the 1980s. Also, regarding two-worker couples, even in cases where husbands were employed, wives often worked in agriculture or as homeworkers (which are classified as self-employment for in the *Labour Force Survey*). For example, the uptick in the rate of employed married women after the first oil crisis was not the result of increased wives securing jobs as employees, but rather, it was due to the increase in the number of wives working as homeworkers sewing garments, producing textiles, or producing miscellaneous goods. The eventual decline in homeworking was brought about by the recession caused by the strong yen in the late 1980s. A steep decline in the homeworking jobs was caused by the relocation of manufacturing plants for industrial products overseas and the shift to a service-based economy around this time. This, in turn, led to an increase in part-time work. The next section explores the shift to dual-earner couples that started in the latter half of the 1980s.

2. The shift to dual-earner couples

In this paper, the author chooses to use the term “two-worker couple” when both the husband and wife are workers (including self-employed workers), and as a subset thereof, the term “dual-earner couple” when both the husband and wife are employed. Note that a Japanese word *tomo-bataraki* means “two-worker couple,” which indicates a couple where both the husband and wife are workers, regardless of whether they are self-employed or employed by someone else.

Figure 2 shows how the employment status of husbands and wives has changed since 1985 by using Statistics Bureau’s *Labour Force Survey* (Detailed Tabulation) (known as *Special Survey of the Labour Force Survey* before 2002). Specifically, it classifies all married couples into the following six categories of households: (1) husbands not working (regardless of wives’ work status); (2) husbands working in agriculture and forestry or self-employed (regardless of wives’ work status); (3) employed husbands in non-agricultural industries and wives working in agriculture and forestry or self-employed; (4) employed husbands and employed wives (35 or more working hours per week) in non-agricultural industries (i.e., full-time employed couples); (5) employed husbands and employed wives (less than 35 working hours per week) in non-agricultural industries (i.e., couples with wives working part-time); and (6) employed husbands in non-agricultural industries and non-working wives. “The two-worker households” that are often cited in



Sources: The author, based on Statistics Bureau's *Special Survey of the Labour Force Survey* (1985–2001) and *Labour Force Survey (Detailed Tabulation)* (2002–).
 Note: Data for 2011 are excluded.

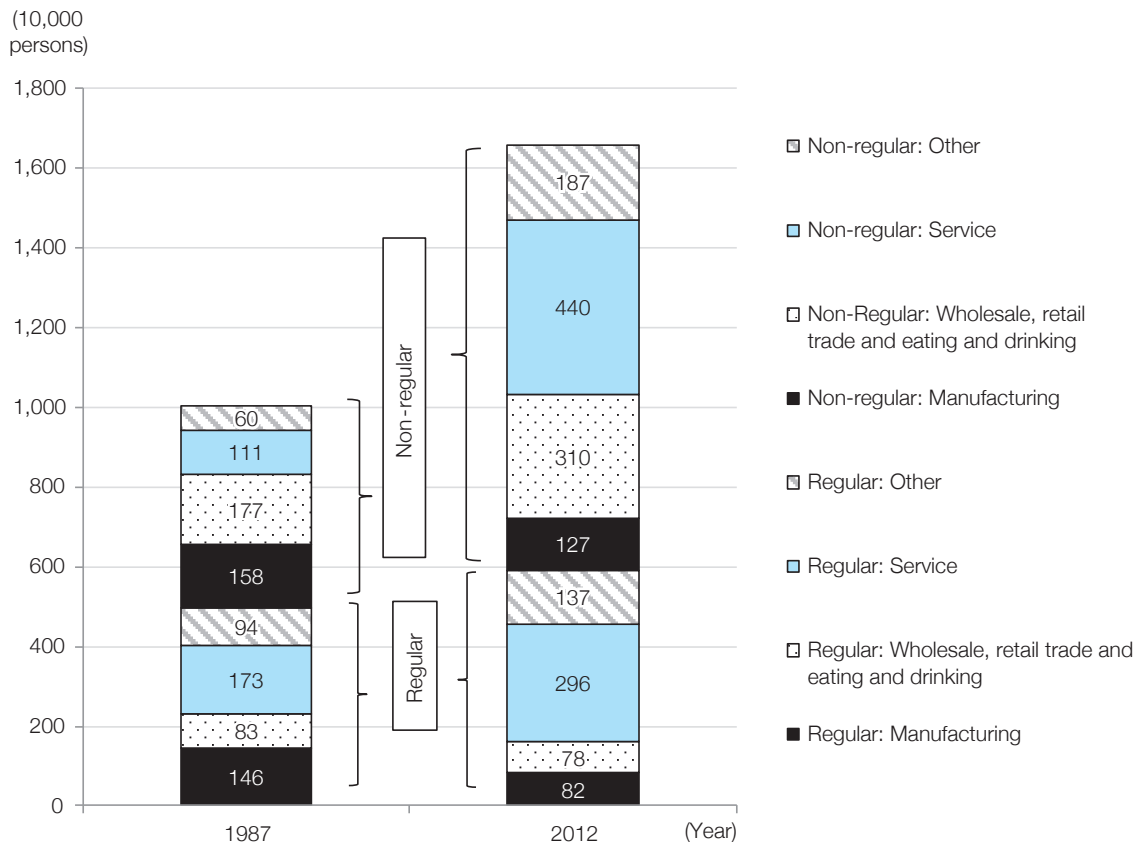
Figure 2. Changes in married couples' employment patterns

government white papers and other publications refer to what the author calls “dual-earner households” in this paper and corresponds to the total of categories (4) and (5). On the other hand, “households with full-time homemakers” correspond to category (6)

The first thing that this figure shows is that the total number of couples peaked relatively recently, around the year 2010. The number of households with husbands employed in non-agricultural industries (categories (3)–(6)) has remained somewhat steady, while the number of households with self-employed husbands (category (2)) is falling, and the number of households with non-working husbands (category (1)) is rapidly increasing. In 2016, households with non-working husbands (7,350,000 households) accounted for 26% of all couples, topping the number of households with full-time homemakers. When discussing couples' work styles, it is common to focus on the increase in dual-earner couples in households where the husbands are employed in non-agricultural industries and the decrease in the number of households with full-time homemakers; however, it must be noted that the number of households with non-working husbands, mostly retired, is increasing dramatically due to the aging of the population.

The second thing of note is that the number of households with full-time homemakers (category (6)), has been on a downward trend since 2000 and now exceeded by that of households with employed dual-earner couples. More than half of the households with dual-earner couples have wives aged 45 or older, and the increase in households with wives aged 55–64 since the 1990s has been particularly remarkable. The participation in the labor market of middle-aged and senior wives, who account for a large proportion of the population, has contributed greatly to this increase in the number of dual-earner couples.

Thirdly, when looking at households where husbands are employed in non-agricultural industries, the majority of these households in the 1980s were those in which wives worked for 35 or more hours per week (i.e., full-time employed couples; category (4)). However since the 1990s, the increase in wives working less than 35 hours per week (i.e., couples with wives working part-time; category (5)) has spurred the shift to dual-earner couples.⁵ Keeping in mind that most individuals who work less than 35 hours per week are non-regular



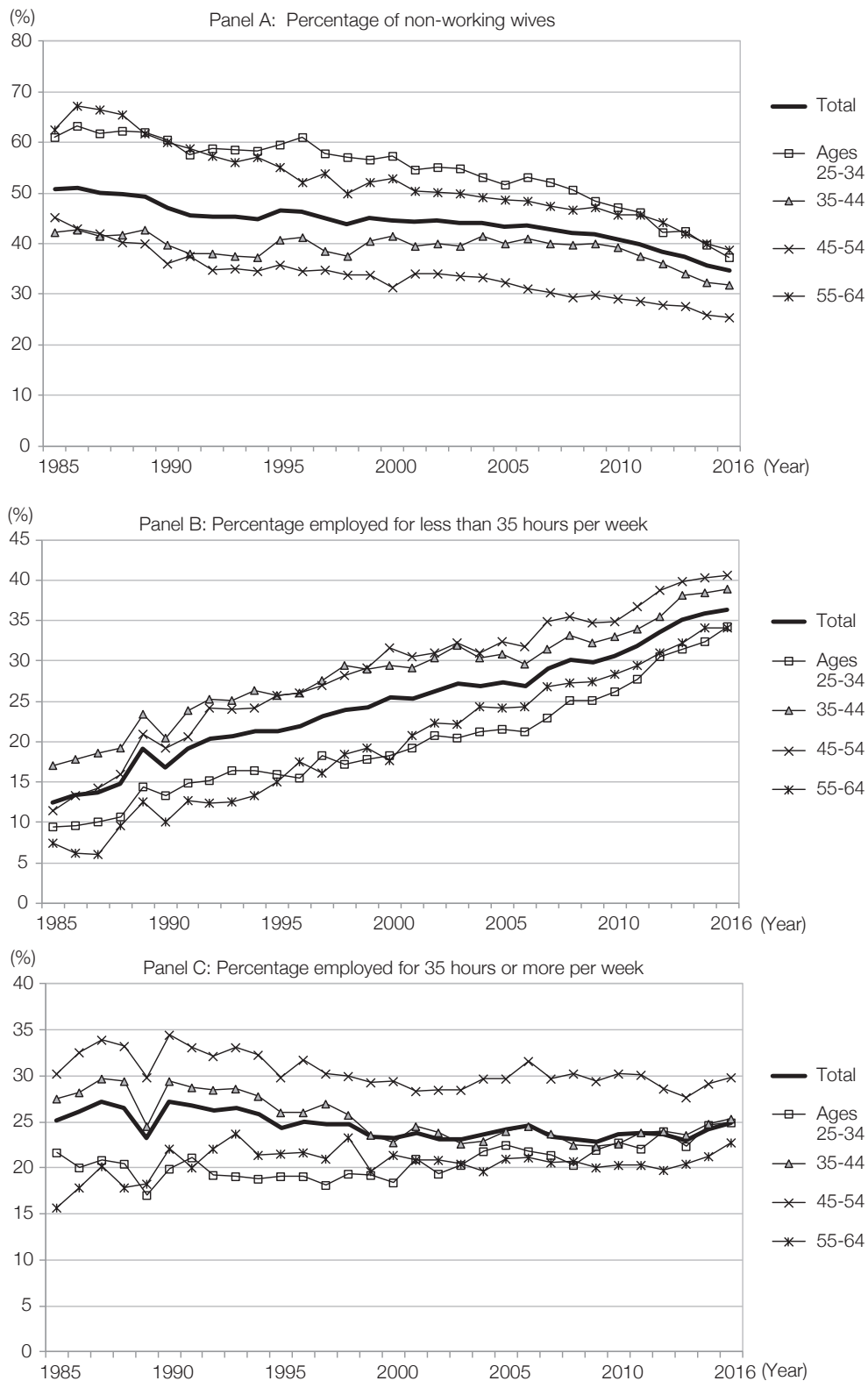
Sources: The author, based on Statistics Bureau's *Employment Status Survey*.

Figure 3. Sectors in which employed married women work (regular/non-regular)

employees, the increase in dual-earner couples could be considered a result of the uptick in married women working in non-regular positions.

Figure 3 compares employed married women by their employment status (regular vs. non-regular) and the sectors in which they are employed at two time points, 1987 and 2012.⁶ In 1987, when Japan struggled with a recession caused by the strong yen, the ratio of employed married women in regular and non-regular employment was about equal, and 30% of women in both types of employment worked in the manufacturing sector. By 2012, the number of employed married women had increased by more than 1.6 times, but for the most part, this was due to an increase in the number of non-regular employees in the service sector and the wholesale, retail trade and eating and drinking services. As a result, the percentage of regular employment among employed married women fell to 36%. Moreover, this decline was particularly sharp in the manufacturing sector.

Next, Figure 4 shows trends among wives whose husbands are employed in non-agricultural industries. Panel A shows the percentage of non-working wives by age, Panel B the percentage of wives employed for less than 35 hours per week, and Panel C the percentage of wives employed for 35 hours or more per week. Between 1985 and 2016, the percentage of non-working wives fell for all age groups, but the biggest declines were among the 25–34 and 55–64 age groups which showed relatively low employment rates in the late 1980s. The timing of these declines also differs by age group. The percentage of non-working wives aged 45 and older has been declining almost consistently since the 1980s, but the decline for the 25–34 age group did not begin until the mid-1990s, while the decline for the 35–44 age group began after 2010. Consequently,



Sources: The author, based on Statistics Bureau's *Special Survey of the Labor Force Survey* (2001-) and *Labour Force Survey (Detailed Tabulation)* (2002-). Data for less than age 25 are not indicated, but included in the total figure.

Note: For households where husband is employed in non-agricultural industries.

Figure 4. Employment status of married women by age group

these changes brought about the shallower dips in the M-shaped pattern of female labor force participation rates by age group.

The percentages of wives working less than 35 hours per week have risen considerably in every age group, especially notable in the 45–54 and 55–64 age groups. On the other hand, the percentages of wives working 35 or more hours per week have remained steady or declined gradually for most age groups since the 1990s. The trend in the 25–34 age group differs from the other age groups, however. The percentage began increasing gradually at the end of the 1990s and has grown sharply in recent years: the five-point increase over the past 10 years is particularly noticeable.

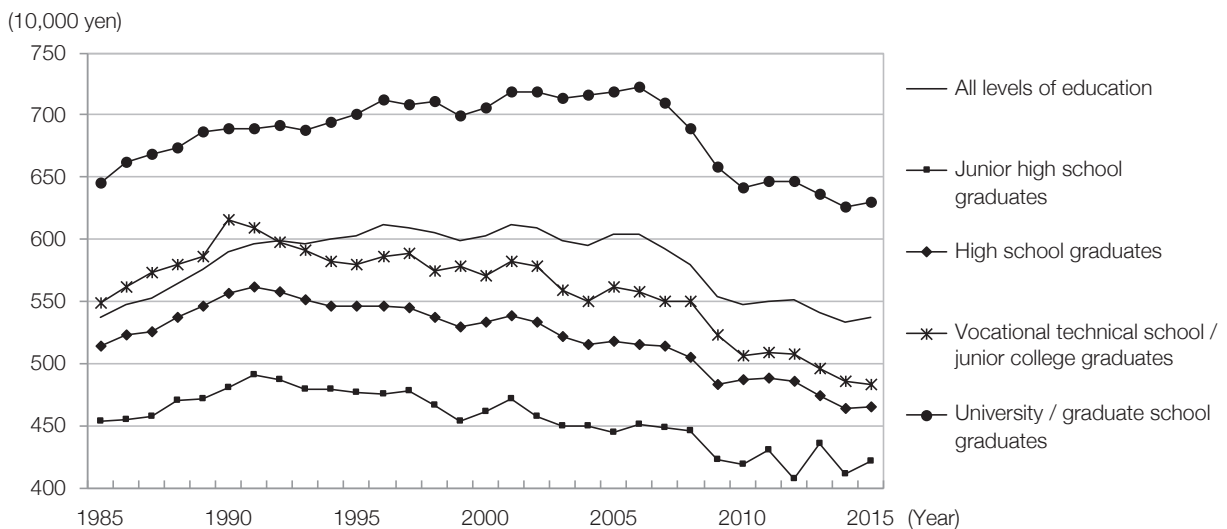
III. Background of the increase in dual-earner couples

1. Supply-side factor

There are at least three factors behind the remarkable increase in wives working part-time since the 1990s: (1) supply-side, (2) demand-side, and (3) institutional.

In terms of supply-side factor, stagnant incomes of household heads after the end of the bubble economy may have motivated wives to enter the labor market (the so-called “added worker effect”) (Higuchi 2001). Figure 5 presents the change in the real annual wages of male regular workers since the late 1980s by level of education (Figure 5). To avoid the impact of demographic change during the period analyzed here, this figure uses the wages of men aged 35–39 in full-time employment. One can see that men’s real wages have been declining consistently since the end of the bubble for all levels of education less than university graduates. Real annual wages for more than university degree also began declining in 2006 and have been trending under 1985 levels since 2010.

Studies in Japan have suggested the presence of added worker effect. For example, Kohara (2010) found that, between 1993 and 2004, households in which husbands experienced involuntary job loss saw wives working more hours. In particular, the tendency for non-working wives to start working increased significantly. Sato (2010) points to an added worker effect driven by job loss among husbands during the



Sources: The author, based on Ministry of Health, Labour and Welfare’s *Basic Survey on Wage Structure* and Statistics Bureau’s “Consumer Price Index.”

Note: Wages refer to the total of contractual cash earnings x 12 and annual special earnings such as bonuses, adjusted for inflation using the consumer price index (the general, excluding imputed rent) (Year 2015 = 100).

Figure 5. Real annual wages of men aged 35–39 employed as full-time workers

long-term recession after the Global Financial Crisis in 2008. Furthermore, Fukahori (2012) observed an added worker effect in which the decline in husbands' permanent income after the Global Financial Crisis encouraged wives to begin working. He also found that, when compared to the period before the Crisis, wives tended not to leave the workforce even after their husbands' permanent incomes increased.

2. Demand-side factors

Looking at demand-side factors, changes in the structure of demand concurrent with the rise of computers and other technological innovations, the aging of the population, and the shift to a service economy have profoundly expanded opportunities for women to work. With computers superseding relatively low-skill routine manual tasks and routine analytic tasks, the demand for those tasks has fallen, while the demand for labor that can perform high-skill nonroutine analytic and interactive tasks has increased; however, there has hardly been any impact on nonroutine manual tasks (Autor, Levy and Murnane 2003; Autor, Katz and Kearney 2006).

According to Ikenaga (2009), who analyzed the impact of IT adoption on employment in Japan, since 1980, the share of individuals employed as stenographers, typists, word processing clerks, and in other routine occupations has declined, while the share of individuals employed in nursing care, homemaking support services, custodial services, and other nonroutine manual occupations has increased remarkably. Since 2005, in particular, the share of individuals employed in nonroutine manual occupations such as institutional caregivers, nurses, nursery school teachers, and non-department store retail clerks has expanded noticeably. These are known as female dominated jobs, and the majority of women who took jobs in the medical and welfare industries during this time were employed as non-regular workers (Gordon 2017).

3. Institutional factors

In addition to the aforementioned supply-side and demand-side factors, institutional factors, such as taxation and social insurance systems, also appear to have driven the shift to dual-earner couples since the late 1980s. First, looking at the income tax system, the Special Allowance for Dependent Spouses was established in 1987, and the amount of this deduction was increased successively in 1988 and 1989, providing wives of salaried workers an incentive to set their earnings within a certain threshold (1.03 million yen since the 1995 reform) so that their husbands are eligible for the tax deduction.

Meanwhile, the base amount for authorizing dependents for social insurance was raised from 900,000 yen to one million yen in 1987, 1989, 1992 in succession, and it reached to 1.3 million yen in 1993. These frequent increases were occurred in accordance with the strong request from employers. During the economic boom in the late 1980s, wages for part-time workers were raised to counter labor shortages, and these part-time workers adjusted the working hours to ensure their annual income did not exceed the minimum threshold for taxation and the base amount for authorizing dependents. For this reason, employers often struggled to staff their operations during the busy year-end period. This led to increased calls from employers to raise the base amount.

From the standpoint of part-time workers, while the ceiling on their earnings was raised, the cap on working hours was successively lowered due to the shortening of statutory working hours. This was due in part to the so-called "three-fourths clause," that is, the standard for social insurance eligibility of "approximately three-fourths or more of the prescribed daily or weekly hours working and the number of days worked per month of regular employees." Because of this provision, the maximum hours that part-time workers could work without paying social insurance premiums were lowered from 36 hours per week (–1988) to 30 hours per week (1997–).⁷

This means employers can cut the cost of social insurance premiums by hiring part-time workers to replace full-time workers for those positions where replacement is possible. On the other hand, wives of salaried workers are motivated to work part-time, because, over the course of their lifetimes, the pension

benefit becomes greater when the wives keep their earning less than the base amount remaining in a position of dependent spouses who are exempt from paying social insurance premiums (Maruyama 1994; Nagase 2003). As this shows, actors on both the supply and demand sides of the labor market are provided with institutional incentives that make part-time work more advantageous.⁸

IV. Shift to dual-earner couples and income disparity among households

1. Wives' employment and income disparity among households

The impact of the increase in dual-earner couples on income disparity among households has gained the attention of many scholars both in Japan and overseas. In Japan, the Douglas-Arisawa Law—i.e., that the percentage of employed wives will be higher the lower the income of the household head—is well-known, and dual-earner couples were conventionally thought to equalize income disparity among households. Since the 2000s, however, an increasing number of studies have mentioned the possibility that the Douglas-Arisawa Law has weakened and the number of high-earning dual-earner households are on the rise (Ohtake 2001, 2005; Kohara 2007; Higuchi et al. 2003; Tachibanaki and Sakoda 2013).

Many empirical studies have also been conducted overseas about the relationship between wives' employment and income disparity among households. These include studies on how wives' income from employment equalizes income disparity among households (Cancian and Reed 1998; Del Boca and Pasqua 2003) and how it contributes to inequality (Karoly and Burtless 1995). The conclusions reached differ depending on the country and the time frame subject to research. Likewise, in Japan, there are studies that posit that wives' earnings expand income disparity among couples (Hamada 2007) as well as more recent studies like Higuchi et al. (2017), which argue that wives' earnings equalize income disparity among households.

There are three points to keep in mind regarding the issue of how the shift to dual-earner couples relates to income disparity among households in Japan. First, due to the institutional factors discussed in the previous section, the distribution of wives' earnings concentrated around 1.03 million yen. Abe and Oishi (2009) conducted a decomposition analysis of changes in the level of inequality based on the following four categories of married women's earnings for the period from 1993 to 2003: (1) zero income (not working), (2) less than 1.03 million yen, (3) exactly 1.03 million yen, and (4) more than 1.03 million yen. They found that a decline in the proportion of non-working wives and an increase in the number of wives earning less than 1.03 million yen have contributed to lowering the level of inequality over the 10-year span.

The second point is to discern changes in the level of inequality across age groups from the effects of aging. In general, wage income inequality begins to increase around the age of 40 as does household consumption and household income inequality. For this reason, even if there are no changes in the profile of the level of inequality by age, the level of household income inequality can rise due to the aging effect. When conducting such an analysis, it is necessary to control for age and birth cohort in order to ascertain changes in the level of inequality. For example, in a study focusing on the aging effect, Abe and Oishi (2007) analyzed income inequality among couples by using individual data from the "Survey on the Redistribution of Income" (MHLW) for the years 1987 to 2002. According to this study, the level of inequality in husbands' income from work increases as they age, but they also found that, because the level of inequality in wives' income from work declines in step with aging until around the age of 50, the effects of both parties cancels out, resulting in only a slight increase in the level of household income inequality by age.

Thirdly, a decision needs to be made on whether to look at income disparity among households at a particular point in time or throughout the life cycle. Let us assume that the lower a husband's income, the sooner a wife will re-enter the labor market after giving birth, and that wives will remain out of labor force in high-income households. If such is the case, the difference in labor supplied by wives over their life cycles will shrink lifelong income disparity among couples. With this in mind, Abe and Oishi (2007) calculated the present value of the cumulative income from work of couples over an eight-year period for each pattern of

wives' work. What they found was that the level of inequality in the cumulative income from work of couples was lower when looking at the eight years in total, instead of any given point in time.

It should also be noted that most studies of dual-earner couples and income disparity simply measure the level of inequality based only on income from jobs held by the couple. In other words, these studies i) do not include unearned income or income from other members of the household, ii) do not take into account tax and social insurance contributions and social insurance benefits, iii) do not adjust for household size, and iv) only target households with working age couples. Given this, one must pay attention to the possibility that the result of these studies might be different from the level of household income inequality based on equalized disposable income.

2. Have high-income couples increased?

As the transition to dual-earner couples has progressed, some researchers suggest the possibility of an increase in the number of high-income couples, or so-called “power couples.” In Japan, approximately 60% of women stop working before and after the birth of their first child, and once a woman leaves work, she is more likely to return as a non-regular employee. According to some estimates, the opportunity cost of childbirth stemming from work interruptions and the disparity in regular and non-regular wages upon re-entering the workforce can reach 200 million yen over a woman’s lifetime (Cabinet Office. “FY2005 White Paper on the National Lifestyle”). In other words, major lifelong income disparities among couples can occur depending on whether wives can continue working before and after giving birth. Given this, if policy measures to help parents balance work and family are expanded and more wives can continue working as regular employees after giving birth, then income disparity among couples could increase.

As previously mentioned, Abe and Oishi (2007) concluded that there was no evidence of an increase in the proportion of high-income couples. That being said, as Figure 4 shows, the recent increase in the percentage of wives aged 25–34 working 35 or more hours per week, suggests the possibility of an increase of “power couples” among the younger generation.

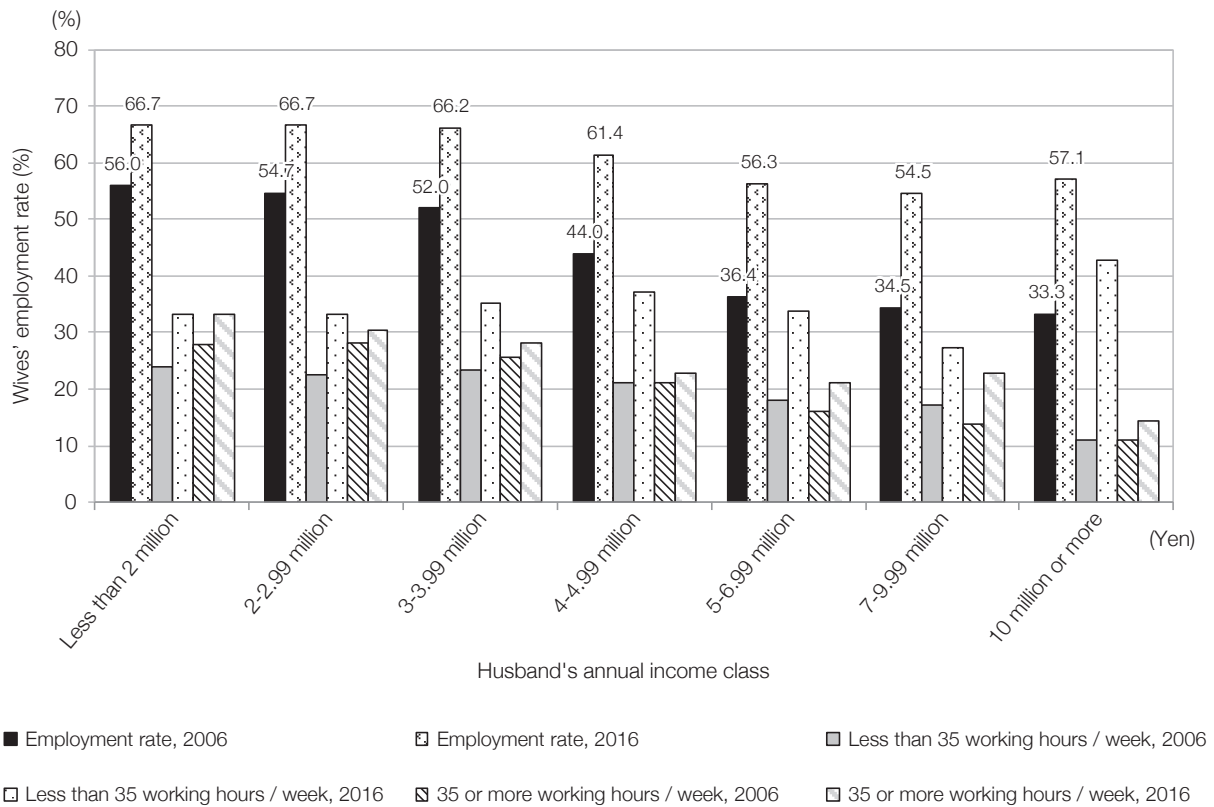
Table 1 compares the annual income distribution of wives in two different years for couples in which the husband’s annual income from work exceeds 7 million yen. The author used the years 2013 and 2016 for the comparison because the annual income distributions for couples listed in the statistical tables in the *Labour Force Survey* only date back to 2013. According to this data, the share of non-working wives decreased while the share of wives earning medium to high incomes increased slightly over the three years from 2013 to 2016. Almost no changes are evident in the less than 1.5 million yen category, which corresponds to the thresholds of 1.03 million yen and 1.3 million yen set by tax and social insurance systems, respectively. In other words,

Table 1. Distribution of wives’ income from work in households where husbands earn 7 million yen or more (%)

Wives’ income from work	2013	2016	Difference
Not working	44.3	40.2	–4.2
Less than 1 million yen	22.0	21.8	–0.2
1–1.49 million yen	9.3	9.4	0.1
1.5–2.99 million yen	8.0	9.0	1.0
3–4.99 million yen	6.9	8.5	1.7
5–6.99 million yen	4.7	5.3	0.7
7 million yen or more	4.7	5.3	0.7

Sources: The author, based on the statistical tables in Statistics Bureau’s *Labour Force Survey*.

Note: Includes cases in which either the husband or wife is self-employed or employed in the agriculture and forestry sectors.



Source: The author, based on the statistical tables in Statistics Bureau's *Labour Force Survey*.

Figure 6. Employment rate of wives by husbands' annual income class (for wives aged 25-34)

in couples where husbands have relatively high incomes, the percentage of wives with high incomes is slightly going up. Because this data does not adjust the difference by age, however, it is possible that this is an example of the aging effect.

For this reason, in Figure 6, the author compared the employment rate of wives aged 25-34 by husband's annual income class for the years 2006 and 2016. First, in 2006, one can observe the Douglas-Arisawa Law—that is, lower percentages of employed wives when husbands' income classes are higher. 10 years later, however, percentages of employed wives increased for all income classes and were particularly noticeable for couples in which the husbands earn 5 million yen or more per year. Even when a husband's annual income class exceeds 10 million yen, the percentage of employed wives increases remarkably and the difference in the percentage of employed wives across the husbands' annual income classes shrinks.

Furthermore, the same figure shows employment rates for wives who work less than 35 hours per week versus wives who work 35 or more hours per week. Looking at changes over the 10-year period, the bulk of the increase in percentages of employed wives derives from an increase in the number of wives who work less than 35 hours per week. The figure also shows a noteworthy increase in wives who work 35 or more hours per week for the husband's annual income class of 7-9.99 million yen. In other words, as observed from Figure 4, the increase in full-time dual earner couples in the 25-34 age bracket appears to occur in households where the husband's annual income is comparatively high. For the sake of space, the other age groups have been removed from the figure, but this trend does not appear to exist in couples with wives aged 35 or older. For those couples, the increase in the percentage of employed wives is due primarily to the expansion in wives working less than 35 hours per week, regardless of husbands' annual income.

3. Why full-time dual-earner couples have increased in the younger generation

Some may argue that the increase in full-time dual-earner couples among people in their late 20s and 30s may be a reflection of the increase in couples who remain dual earners after they marry until they have their first child (also known as double income no kids, “DINKS”). However, the percentage of mothers of pre-school age children in regular employment has been increasing apparently over the last 10 years, jumping from 13.4% in 2006 to 22.0% in 2016 for mothers of children under 3, for example (MHLW’s *Comprehensive Survey of Living Conditions*). It means the percentage of wives who continue working in regular positions even after giving birth is on the rise.

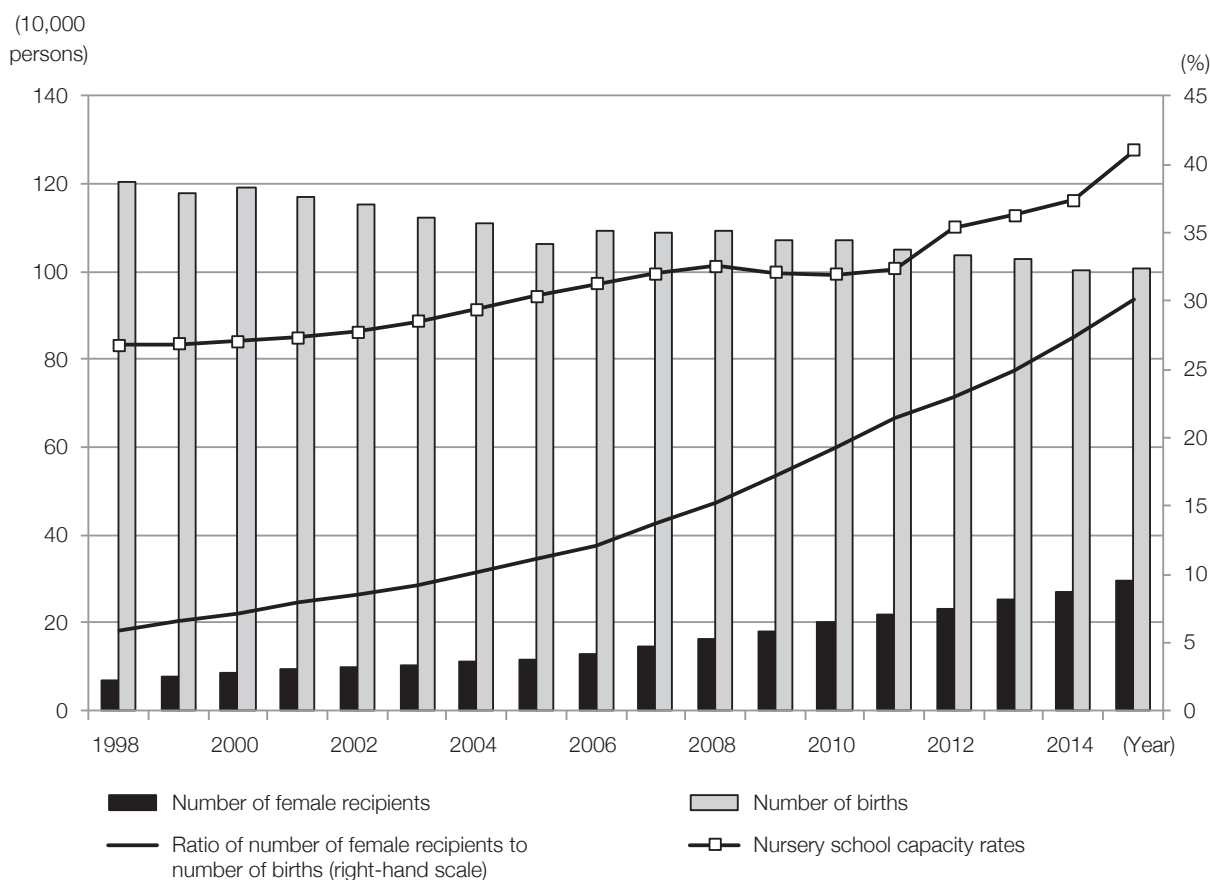
What seems to underlie this trend is the expansion of parental leave schemes and childcare services. Parental leave systems in Japan were first offered in 1992, and after numerous revisions and the establishment of parental leave benefits under the Employment Insurance system, the number of people taking parental leave increased despite fewer births. According to the “Annual Report on Employment Insurance” (MHLW), the number of women who received parental leave benefits for the first time in fiscal 2015 (i.e., the number of Employment Insurance subscribers who also received first-time parental leave benefits) reached 295,000, which equates to 30% of all births in that year (Figure 7). What’s more, access to childcare services has improved over the past 10 years. Looking at the ratio of the capacity of the accredited childcare to the population of children under six years of age, which is an indicator of childcare availability, the ratio has been increasing obviously since 2010.⁹

Despite major changes that now enable a balance between working and childrearing, many studies in recent years have drawn negative conclusions about the impact of such support measures on the percentages of mothers who continue working or enter the workforce (for a comprehensive survey, see Yamaguchi 2017). For example, Asai (2015) analyzed the effect of a rise in parental leave benefit rate in 2007 and found that there is little or no impact on boosting the percentage of mothers who continue working. Furthermore, Asai et al. (2015), who analyzed the impact of expanded childcare services, concluded that because these childcare services now take the place of support previously provided by grandparents, the overall impact of the expansion of these services on mothers’ employment rates has been minimal. It should be noted, however, that their analysis only extends until 2010. In yet another study, Nishitateno and Shikata (2017) used municipal level panel data to observe that expanded childcare services have had a small but significant effect on boosting the percentage of working mothers.

V. Concluding remarks

The purpose of this paper has been to reflect on how dual-earner couples has transformed over the long term also to examine the remarkable shift to dual-earner couples since the 1990s and its underlying factors. Additionally, it looked at the impact that the increase in dual-earner couples has had on income inequality among married couples.

With the enactment of the Act Concerning the Promotion of Women’s Career Activities and the government’s promotion of the Plan for the Dynamic Engagement of All Citizens, the percentage of employed mothers with pre-school age children has increased remarkably in the past 10 years. If financial conditions would improve in childrearing households due to both parents working, then it could eventually reduce childhood poverty. In fact, it appears that an increase in employed family members in childrearing households helped to substantially improve the child poverty rate between 2012 and 2015 (Oishi 2017a). On the other hand, it also attracts attention whether parents spending more time outside the home for work leads to a decline in the number of hours spent on childrearing at home. Interestingly, in the United States, even when both parents work outside the home, they reduce the time spent on other activities so they can spend more time caring for children (Fox et al. 2013), and the same trend has been observed in Japan (Oishi 2017b). The



Sources: The author, based on MHLW's "Annual Report on Employment Insurance Programs" and "Survey of Social Welfare Institutions," and Statistics Bureau's *Population Estimates and National Census*.

Notes: 1. Capacity figures for 2015 also include certified centers for early childhood education and care.

2. The nursery school capacity rate for 2015 is calculated based on the population determined by the national census.

Figure 7. Changes in number of first-time female parental leave benefit recipients, number of births, and nursery school capacity rates

more serious issue is single-parent households, where dual-earner status is impossible. Most single-parent households suffer from both income and time poverty (Ishii and Urakawa 2014). Although the author was unable to touch on this issue in this paper, examining the impact of the shift to dual-earner couples on the wellbeing of children can be considered an important topic for future research.

* This paper is based on an article commissioned by the editorial committee of *The Japanese Journal of Labour Studies* for inclusion in the special feature "Increase of Dual-Earner Couples and Society" in its December 2017 issue (vol.59, No.689) with additions and amendments in line with the gist of this journal.

Notes

1. Sweden experienced an economic bubble bursting in the 1990s, after which the female employment rate fell.
2. Based on Statistics Bureau's *National Census 2010*.
3. The percentage of employed women first exceeded 50% in 1966.
4. In the mid-1970s, part-time employees working less than 35 hours per week only accounted for about 10% of all working women.
5. The figure shows a temporary increase in households with wives working less than 35 hours per week in 1989. This was due to the fact that the Friday of the week subject to the *Special Survey of the Labour Force Survey* (i.e., February 24) was declared a holiday for the funeral of Emperor Showa.

6. It should be noted that this is not limited to households with employed husbands.
7. Since October 2016, companies with 501 or more employees have been obligated to provide social insurance coverages to employees who work 20 or more hours per week.
8. Using the structural estimation method, Takahashi (2010) estimates the effects of taxation and social insurance systems on wives' labor supply. Bessho and Hayashi (2014) and Yokoyama and Kodama (2016) analyze the effect of Special Allowance for Dependent Spouses on wives' labor supply using newer data.
9. Unayama (2011) argues that, in light of the endogenous nature of childbirth, "potential capacity ratio" as defined by the capacity of childcare facilities divided by the female population aged 20–39 should be used. Potential capacity ratio, omitted in Figure 7, remained more or less steady between 1990 and 2010 and has been trending upward thereafter.

References

- Abe, Yukiko and Akiko S. Oishi. 2007. "The Role of Married Women's Labor Supply on Family Earnings Distribution in Japan." *Journal of Income Distribution* 16, no.3–4: 110–127.
- . 2009. "The 1.03 Million Yen Ceiling and Earnings Inequality among Married Women in Japan." *Economics Bulletin* 29, no.2: 1521–1530.
- Asai, Yukiko 2015. "Parental Leave Reforms and the Employment of New Mothers: Quasi-Experimental Evidence from Japan." *Labour Economics* 36: 72–83.
- Asai, Yukiko, Ryo Kambayashi and Shintaro Yamaguchi. 2015. "Childcare Availability, Household Structure, and Maternal Employment." *Journal of the Japanese and International Economies* 38: 172–192.
- Autor, H. David, Frank Levy and Richard J. Murnane. 2003. "The Skill Content of Recent Technological Change: An Empirical Exploration." *Quarterly Journal of Economics* 118, no.4: 1279–1333.
- Autor, H. David, Lawrence F. Katz and Melissa S. Kearney. 2006. "The Polarization of the US Labor Market." *American Economic Review* 96, no.2: 189–194.
- Bessho, Shun-ichiro and Masayoshi Hayashi. 2014. "Intensive Margins, Extensive Margins, and Spousal Allowances in the Japanese System of Personal Income Taxes: A Discrete Choice Analysis." *Journal of the Japanese and International Economies* 34: 162–178.
- Cancian, Maria and Deborah Reed. 1998. "Assessing the Effects of Wives' Earnings on Family Income Inequality." *Review of Economics and Statistics* 80, no.1: 73–79.
- Del Boca, Daniela and Silvia Pasqua. 2003. "Employment Patterns of Husbands and Wives and Family Income Distribution in Italy 1977–98." *Review of Income and Wealth* 49, no.2: 221–245.
- Fox, Liana E., Wen-Jui Han, Christopher Ruhm and Jane Waldfogel. 2013. "Time for Children: Trends in the Employment Patterns of Parents, 1967–2009." *Demography* 50, no.1: 25–49.
- Fukahori, Ryotaro. 2012. "Kinnen no keiki kotai to yuhaigu josei no rodoryokuka/hi rodoryokuka" [Mobilization and demobilization of married women in the work force in the most recent economic recession]. Chap. 9 in *Oyako kankei to kakei kodo no dainamizumu: Zaisei kikika no kyoiku/kenko/shugyo* [Parent-child relationships and household behavior dynamics: Education, health and employment in a financial crisis], edited by Higuchi Yoshio, Tamaki Miyauchi, C.R. McKenzie and Panel Data Center at Keio University. Tokyo: Keio University Press.
- Goldin, Claudia. 1990. *Understanding the Gender Gap: An Economic History of American Women*. Chicago: University of Chicago Press.
- . 1995. "The U-Shaped Female Labor Force Function in Economic Development and Economic History." Chap. 3 in *Investment in Women's Human Capital and Economic Development*, edited by T.P. Schultz. Chicago: University of Chicago Press.
- Gordon, Andrew. 2017. "New and Enduring Dual Structures of Employment in Japan: The Rise of Non-Regular Labor, 1980s-2010s." *Social Science Japan Journal* 20, no.1: 9–36.
- Hamada, Koji. 2007. "Shotoku kakusa no koteisei no keisoku" [Measurement of the solidity of the income gap]. *Japanese Journal of Research on Household Economics* 73: 86–94.
- Higuchi, Yoshio. 2001. *Koyo to shitsugyo no keizaigaku* [The economics of employment and unemployment]. Tokyo: Nikkei Publishing.
- Higuchi, Yoshio, Kayoko Ishii and Kazuma Sato. 2017. "Keiei hendo to setai no shotoku kakusa: Riman shokku ka no otto no shotoku to tsuma no shugyo" [Economic fluctuations and household income inequality: Husbands' incomes and wives' employment after the collapse of Lehman Brothers]. *Keizaikenkyu* 68, no2: 132–149.
- Higuchi, Yoshio, Mitsuo Hosen, Morio Suzuki, Ryusuke Iijima, Masumi Kawade and Kazuyasu Sakamoto. 2003. "Paneru deta ni miru shotoku kaisokan no ryudosei to ishiki henka" [Fluidity and changing awareness across income classes as seen in panel data]. Chap. 3 in *Nihon no shotoku kakusa to shanai kaiso* [Income disparities and social classes in Japan], edited by Higuchi Yoshio and Policy Research Institute. Tokyo: Nihon Hyoron sha.
- Hisamoto, Norio. 2003. *Seishain Runesansu: Tayo na koyo kara tayo na seishain e* [Permanent employment renaissance: The shift from various types of employment to various types of permanent employee]. Tokyo: Chuko Koron Sha.
- Ikenaga, Toshie. 2009. "Rodo shijo no nikyoku ka: IT no donyu to gyomu naiyo no henka ni tsuite" [Polarization of the Japanese labor market: Adoption of ICT and changes in tasks required]. *The Japanese Journal of Labour Studies* 51, no.2–3: 73–90.

- Ishii, Kayoko and Kunio Urakawa. 2014. "Seikatsu jikan o koryo shita hinkon bunseki" [Time poverty and adjusted income poverty rates by homework time in Japan]. *Mita Business Review* 57, no.4: 97–121.
- Karoly, Lynn A. and Gary Burtless. 1995. "Demographic Change, Rising Earnings Inequality, and the Distribution of Personal Well-being, 1959–1989." *Demography* 32, no.3: 379–405.
- Kohara, Miki. 2007. "Is the Full-time Housewife a Symbol of a Wealthy Family?" *Japanese Economy* 34, no.4: 25–56.
- . 2010. "The Response of Japanese Wives' Labor Supply to Husbands' Job Loss." *Journal of Population Economics* 23, no.4: 1133–1149.
- Maruyama, Katsura. 1994. "Josei no shogai shotoku kara mita zeisei/nenkin seido" [Taxation and social insurance systems viewed in terms of female lifetime income]. *Kikan Shakai Hosho Kenkyu* 30, no.3: 274–292.
- Ministry of Health, Labour and Welfare (MHLW). 2016. *White Paper on the Labour Economy* 2016. Tokyo: MHLW.
- Nagase, Nobuko. 2003. "Josei to nenkinen no mondai" [Women and the pension rights issue]. *Kikan Shakai Hosho Kenkyu* 39, no.1: 83–96.
- Nishitatenno, Shuhei and Masato Shikata. 2017. "Has Improved Daycare Accessibility Increased Japan's Maternal Employment Rate? Municipal Evidence from 2000–2010." *Journal of the Japanese and International Economies* 44: 67–77.
- Oishi, Akiko S. 2017a. "Shoshika taisaku no kadai to shorai" [Current issues and the future of measures to combat the dwindling birthrate]. *Shukan Shakai Hosho (Social Security Reader 2017)* no.2936: 144–147.
- . 2017b. "24 jikan shu 7 nichi keizai ni okeru waku raifu baransu" [Work-life balance in a 24/7 economy in Japan]. *The Journal of Ohara Institute for Social Research* 701: 24–39.
- Olivetti, Claudia. 2014. "The Female Labor Force and Long-Run Development: The American Experience in Comparative Perspective." in *Human Capital in History: The American Record*, edited by P. L. Boustan, C. Frydman and R. A. Margo. 161–197. Chicago: University of Chicago Press.
- Otake, Fumio. 2001. *Koyo mondai o kangaeru: Kakusa kakudai to nihonteki koyoseido* [Thinking about employment issues: Expanding disparity and Japanese-style employment systems]. Osaka: Osaka University Press.
- . 2005. *Nihon no fubyodo: Kakusa shakai no genso to mirai* [Inequality in Japan: The fantasy and the future of an unequal society]. Tokyo: Nikkei Publishing.
- Sato, Kazuma. 2010. "Keiki kotaiki no shugyo kodo no henka" [Changes in employment behavior during a recession]. Chap. 4 in *Nihon no kakei kodo no dainamizumu VI: Keizai kikika no kakei kodo no henyo* [Dynamism of Japanese household behavior VI: Changes in household behavior during economic crises], edited by Miki Seko, Hiroshi Teruyama, Isamu Yamamoto, Yoshio Higuchi and Keio/Kyoto Joint Global Center of Excellent Program. Tokyo: Keio University Press.
- Tachibanaki, Toshiaki and Sayaka Sakoda. 2013. *Fufu kakusa shakai* [A society of unequal married couples: The bipolarization of marriage]. Tokyo: Chuko Shinsho.
- Takahashi, Shingo. 2010. "Haigusha kojo oyobi shakai hosho seido ga nihon no kikon josei ni oyobosu rodo yokusei koka no sokutei" [An estimation of the work disincentive effects of the spousal deduction and the social security systems on the labor supply of Japanese married women]. *The Japanese Journal of Labour Studies* 52, no.12: 28–43.
- Unayama, Takashi. 2011. "Kekkon/shussan to shugyo no ryoritsu kanosei to hoikujo no seibi" [Marriage and female labor participation: Evidence from Japanese prefectural cross-section data]. *JCER Economic Journal* no.65: 1–22.
- Yamaguchi, Shintaro. 2017. "Family Policies and Female Employment in Japan." *Japanese Economic Review* 68, no.3: 305–322.
- Yashiro, Naohiro. 1983. *Josei rodo no keizai bunseki: Mo hitotsu no miezaru kakumei* [An economic analysis of female employment: Another hidden revolution]. Tokyo: Nikkei Publishing.
- Yokoyama, Izumi and Naomi Kodama. 2016. "Josei no rodo to zei: Deta o mochiita genjo bunseki" [Women's Labor Supply and Taxation: Analysis of the current situation using data]. *Public Policy Review* 127: 49–76.

AUTHOR

Akiko Sato Oishi Professor, Graduate School of Social Sciences, Chiba University.