
Equal Employment Opportunity Act and Work-Life Balance: Do Work-Family Balance Policies Contribute to Achieving Gender Equality?

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This paper has two objectives. One is to clarify the aims of the government's formulation of policies concerning work-life balance after the Equality Act entered into force and the intentions of companies in introducing systems relating to work-life balance; the other is to consider whether or not policies concerning work-life balance have had any effect on women's participation in the labor market, using both macro- and micro-level data to examine this question. As a result, the following has become clear. Firstly, the government's main measures to promote a better work-life balance were implemented as measures to counter the declining birthrate. The vast majority of companies provide support for achieving compatibility between work and child rearing as part of their efforts to make a contribution to society. However, around two-thirds of companies have implemented measures to support achieving compatibility between work and family with the expectation that this will improve the motivation of female workers and increase their retention within the company. Secondly, over the last 20 years, the female attrition rate due to marriage has declined considerably and the level of female retention, as seen in terms of the proportion of women among long-standing staff members, has increased. At the same time, women's relative wage has also risen. Moreover, since 2000, the employment rate among women with preschool-age children has risen, as has the proportion of female managers. However, the rise in the relative wage of women is very sluggish. Thirdly, comparing individual companies, the more assiduous the senior management at a company is about measures to promote a better work-life balance, the higher the level of female retention, and the higher the level of female retention, the more successful women are in a company.

I. Introduction

This year it will be 27 years since the Equal Employment Opportunity Act entered into force, but the gender gap in economic activities in Japan is still one of the biggest among all developed countries. One of the root causes of this is the division of labor by gender. The fact that women bear the majority of the burden of housework and child rearing hinders their active participation in the labor market in the same way as men. Many women quit their jobs because of marriage, childbirth or child rearing, and even women who continue in employment find it hard to work in the same way as men, because of the burden of housework and childcare.

The Equality Act alone is insufficient in order to break through this situation. The objective of the Equality Act is, as the name suggests, to achieve equality of opportunity, or, to

put it another way, to remove discriminatory treatment; it does not require employers to implement any initiatives beyond this. Consequently, it has no provisions to encourage employers to support efforts to achieve compatibility between work and family life. However, if it is difficult to achieve compatibility between work and family life, it will be impossible for most women to work in the same way as men, so a gender gap will remain.

Nevertheless, it is not possible for the government forcibly to change the division of labor within individual households. One thing that can be done in terms of policy is to develop systems that enable women to work while doing housework and bringing up children, and another is to develop systems that enable men to participate more in housework and childcare. Shortening working hours and making them more flexible (that is to say, more flexible in a way that reflects the requests of workers rather than their companies) is a policy that achieves both of these things, while the enhancement of childcare services and the child care leave system are policies that reflect the former rather than the latter goal.

Creating a society that makes it possible to achieve compatibility between work and family life in this way is one of the objectives of work-life balance (hereinafter abbreviated to WLB) policy. The term WLB spread across the globe after the WLB campaign initiated in 2000 by British Prime Minister Tony Blair. In Japan, the Work-Life Balance Charter was formulated in 2007 and it would be fair to say that, today, the government, companies and labor unions are all aware of its importance.

The L (life) in WLB includes not only family life, but also all parts of people's lives outside work, such as personal development, volunteer activities, hobbies and activities undertaken for the sake of one's health. However, in relation to more active participation by women, it is important to achieve compatibility between work and family life, particularly housework and child rearing, so this paper focuses on the achievement of compatibility between work and family life. It does not discuss matters relating to achieving compatibility with activities other than family life, such as personal development, volunteer activities, hobbies and activities undertaken for the sake of one's health.

This paper has two objectives. One is to clarify the aims of the government's formulation of policies concerning WLB after the Equality Act entered into force and the intentions of companies in introducing systems relating to WLB; the other is to consider whether or not policies concerning WLB have had any effect on women's participation in the labor market, using both macro- and micro-level data to examine this question.¹

The structure of this paper is as follows. Section II discusses the process of introducing

¹ Studies that have analyzed the impact of the child care leave system on continuing female employment include Higuchi (1994), Tomita (1994), Morita and Kaneko (1998), Waldfogel, Higuchi and Abe (1999), and Suruga and Zhang (2003); these studies conclude that the child care leave system has a tendency to increase the probability of women continuing in employment. Moreover, Matsushige and Takeuchi (2008) asserts that measures to support achieving compatibility between work and family will extend the number of years of continuous service by women and that the proportion of female managers and women's wages will increase as a result.

Table 1. WLB-Related Policies since the Equal Employment Opportunity Act Entered into Force

1987	Labor Standards Act revised (40-hour working week introduced)
1991	Childcare Leave Act enacted
1994	Angel Plan formulated
1995	Childcare Leave Act revised, becomes the Child Care and Family Care Leave Act
1999	New Angel Plan formulated Family-Friendly Companies Awards begin
2000	Nursing care insurance system enters into force
2003	Act on Advancement of Measures to Support Raising Next-Generation Children enacted Basic Act for Measures to Cope with Society with Declining Birthrate enacted
2007	Work-Life Balance Charter issued

WLB-related policies after the entry into force of the Equality Act, with a particular focus on the objectives of those policies. Section III uses statistics to discuss the degree to which the level of female retention in the labor market and gender equality have improved between the time the Equality Act entered into force and today. Section IV uses individual data from surveys of companies to analyze the relationship between companies' systems to support achieving compatibility between work and family and women's success within those companies. Finally, Section V summarizes the discussion.

II. WLB-Related Policies since the Equality Act Entered into Force

Table 1 summarizes the main WLB-related policies since the Equal Employment Opportunity Act entered into force. The first WLB-related policy on which we should focus is the 1987 revision of the Labor Standards Act. As a result of this, statutory working hours were reduced from 48 to 40 hours a week. However, the 40-hour working week was not applied to all companies immediately; rather, a transitional grace period was established for certain industries and scales of company. The 40-hour working week began to be applied to all companies in 1997. Following the end of the period of high economic growth, total actual working hours had stabilized at around 2,100 hours, but 1987, when the law was revised, marked the point after which they began to decline.

It cannot be denied that one of the factors contributing to this revision of the Labor Standards Act was the advance of women into the workplace as a result of the increasingly upgraded industrial structure, but a more direct cause was trade friction. At that time, Japan's trade surplus was expanding and there was intensifying criticism from the West that "Japanese people work too much." In order to deal with such criticism from overseas, the Nakasone Cabinet established the Advisory Group on Economic Structural Adjustment for International Harmony, which published its report (the Maekawa Report) in 1986. The

Maekawa Report highlighted the necessity of reforming the industrial structure, shifting from being dependent upon external demand to being led by domestic demand; one of the measures that it advocated to this end was the shortening of working hours in order to expand domestic demand (i.e. expand consumption). This was the motive force driving the introduction of the 40-hour working week.²

At the same time, most policies to support achieving compatibility between work and child rearing have been implemented as measures to counter the declining birthrate. The Childcare Leave Act was enacted in 1991, but the background to this was the long-term decline in the birthrate from the mid-1970s. In particular, in 1990, it emerged that the previous year's total fertility rate had reached the postwar record low of 1.57, so concern about the declining birthrate suddenly increased (the "1.57 Shock"). This provided a major impetus for the enactment of the Childcare Leave Act.

Subsequently, successive measures to counter the declining birthrate were launched, in the form of the Angel Plan (1994) and the New Angel Plan (1999). Moreover, laws such as the Act on Advancement of Measures to Support Raising Next-Generation Children (2003) and the Basic Act for Measures to Cope with Society with Declining Birthrate (2003) were enacted. The fundamental component of these measures to counter the declining birthrate is support for achieving compatibility between work and child rearing. In addition, at the heart of policies that support achieving compatibility between work and child rearing are the enhancement of public childcare services and the requirement for employers to implement measures to support achieving compatibility between work and family life.

As well as granting workers the right to leave until their child reaches the age of one year (or 18 months, under certain circumstances), the Child Care and Family Care Leave Act stipulates that while on leave, workers will receive half their wage as a Childcare Leave Benefit under the employment insurance system. Furthermore, it guarantees a short-time work system and an exemption from overtime work for workers with a child aged under three years, as well as guaranteeing workers with children who have not yet started elementary school the right to take sick/injured child care leave, in order to enable such workers to take care of their children if unwell.

Moreover, the Act on Advancement of Measures to Support Raising Next-Generation Children obliges employers with 101 or more employees to formulate measures to support achieving compatibility between work and child rearing (a general business owner action plan or an action plan for employers regarding countermeasures to support the development of the next generation), to notify the Equal Employment Office of the Labor Bureau of these measures, to make the details publicly available, and to ensure widespread awareness of these measures among employees. In addition, in the Guidelines for Formulating Action Plans, the Ministry of Health, Labour and Welfare requires that, as well as promoting im-

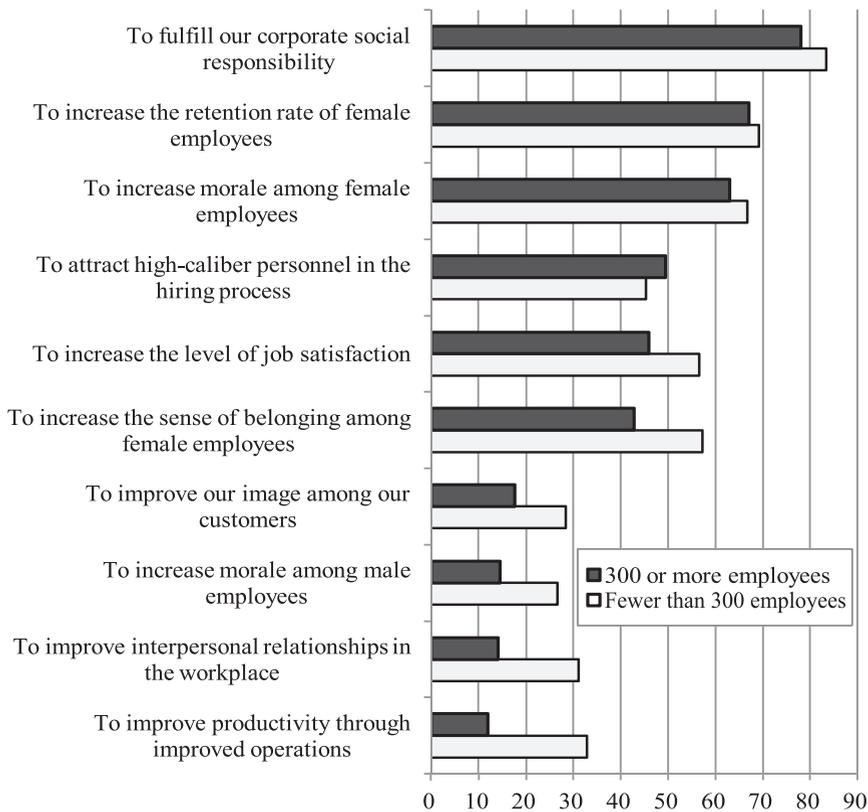
² The author referred to Hamamura (2000) for the social background to the introduction of the 40-hour week.

improvements in workplace awareness and the workplace culture, employers implement initiatives aimed at achieving improvements in numerical indicators, such as the proportion of those working long hours (60 or more hours a week), the annual paid leave take-up rate, and the child care leave take-up rate among both men and women (Ministry of Health, Labour and Welfare 2009).

As described above, the motive force driving the policy of the 40-hour working week prescribed under the revised Labor Standards Act was pressure from overseas resulting from trade friction, while that providing the impetus for policies to support achieving compatibility between work and child rearing was the sense of crisis about the declining birthrate; thus, achieving gender equality was not necessarily the main objective of these policies. Amid this situation, rather than being a measure to counter the declining birthrate, the Family-friendly Companies Awards that were initiated in 1999 are worthy of attention as a measure that had gender equality as its main goal. By giving awards to companies that are assiduously providing support for achieving compatibility between work and family, this system offers an opportunity to provide society with good examples of companies that are leaders in this field, as well as improving the image of the companies that receive awards. It is evident that the reasons why this system was introduced as part of gender equality policies rather than as a measure to counter the declining birthrate include the fact that the system was formulated by the Ministry of Labour, which was in charge of promoting gender equality at that time, rather than the Ministry of Welfare, which was in charge of measures to counter the declining birthrate, as well as the fact that the Corporation Awards for the Promotion of Gender Equality were introduced at the same time as the Family-friendly Companies Awards. Furthermore, in 2007, the two systems were integrated to create the Corporation Awards for the Promotion of Gender Equality and Work-Life Balance. However, the limitations of the awards system are such that only some particularly advanced companies have benefited from the system. Compared with the measures that targeted the majority of companies, such as the reduction in statutory working hours, the introduction of the child care leave system, and measures to support achieving compatibility between work and child rearing based on the Act on Advancement of Measures to Support Raising Next-Generation Children, the influence of the awards system is small.

Up to this point, this paper has focused primarily on policies by the government, but what are the reasons why companies promote WLB measures? Figure 1 shows the reasons given when companies were asked why they implemented measures to support achieving compatibility between work and child rearing. The dark-shaded bars indicate the figures for companies with 300 or more regular employees, while the light-shaded bars indicate those for companies with fewer than 300 regular employees. The figures for the former are taken from a nationwide survey conducted in 2006, while those for the latter are from a survey conducted in 2009, which focused on companies in Osaka Prefecture.

According to this chart, irrespective of the scale of the company, the reason cited by the largest number of companies was “To fulfill our corporate social responsibility,”



Sources: Figures for companies with 300 or more employees taken from Japan Institute for Labour Policy and Training, *Survey concerning Support for Achieving Compatibility between Work and Family* (conducted in 2006); figures for companies with fewer than 300 employees taken from Research Group on Support for Child Rearing and Corporate Management (Representative: Akira Kawaguchi), *Survey concerning Support for Child Rearing and Corporate Management*.

Notes: 1. “300 or more employees” denotes companies with at least 300 regular employees; these figures are taken from a nationwide survey conducted in 2006. “Fewer than 300 employees” denotes companies with fewer than 300 regular employees; these figures are from a survey conducted in 2009, which focused on companies in Osaka Prefecture.

2. As there were many responses, only the top ten are shown here.

Figure 1. Reasons for Implementing Support for Achieving Compatibility between Work and Family (Multiple responses permitted, %)

accounting for around 80% in both cases. The companies were not asked what they meant by “social responsibility.” Nevertheless, judging from the history of the government’s requirement that companies provide support for achieving compatibility between work and family as a measure to counter the declining birthrate, there can be no doubt that the term

“social responsibility” here refers to contributing to measures to counter the declining birthrate. This means that the policies that require companies to implement measures to support achieving compatibility between work and family as part of measures to counter the declining birthrate were effective, to some extent. In Japan’s culture, it is perhaps easier for companies to accept WLB measures as measures to counter the declining birthrate, rather than measures to promote gender equality.

However, looking at the reasons listed in second place and below, one can see that there are still quite a few companies that expect measures to support achieving compatibility between work and family to promote more active participation by women, thereby increasing the competitiveness of the company. Irrespective of the scale of the company, around two-thirds of companies cited “To increase the retention rate of female employees” and “To increase morale among female employees.” Moreover, among small and medium-sized enterprises, almost 60% of companies cited “To increase the sense of belonging among female employees.”

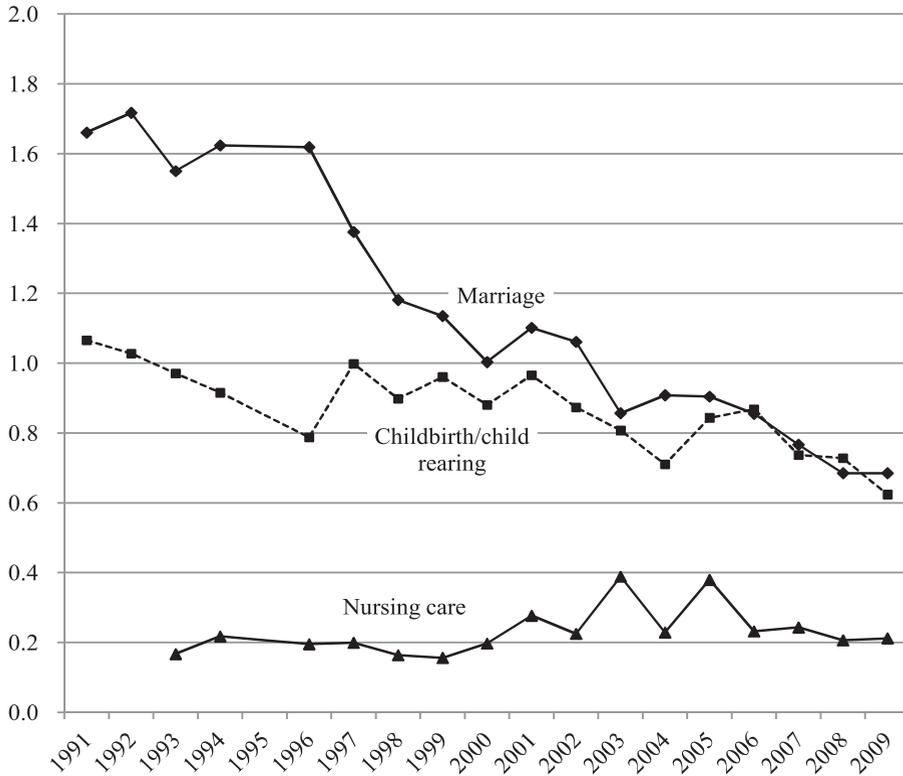
III. The Actual Status of Female Employment since the Equality Act Entered into Force

If WLB policies contribute to achieving gender equality, this is probably because such policies reduce the attrition rate among women, increase the female employment rate, and extend the number of years of continuous service on the part of women, thereby contributing to rises in the proportion of female managers and in women’s wages. Accordingly, let us look at the degree to which the attrition rate among women due to marriage and childbirth has actually declined.

Figure 2 shows changes in the attrition rate due to marriage, childbirth and child rearing, and long-term nursing care, as calculated from the Survey on Employment Trends. The attrition rate due to marriage is the figure obtained by dividing the number of female regular employees who have left their jobs due to marriage by the total number of female regular employees. The attrition rates due to childbirth and child rearing, and due to nursing care are calculated in the same way. It should be noted that the figures do not represent the proportion of all those leaving their jobs accounted for by those leaving due to marriage, etc.

The attrition rates due to marriage and childbirth and child rearing are clearly demonstrating a downward trend. In contrast, the attrition rate due to nursing care has remained stable, in general. There is a pronounced decline in the attrition rate due to marriage, which has fallen to more than half the previous level, from 1.66% in 1991 to 0.69% in 2009. The attrition rate due to childbirth and child rearing has also fallen to around 60% of the previous level, from 1.07% in 1991 to 0.62% in 2009.

One of the root causes of the decline in the attrition rate due to marriage is the fall in the number of marriages, which has resulted from the increased tendency to marry later in life or not to marry at all. However, the decline in the number of marriages between 1991



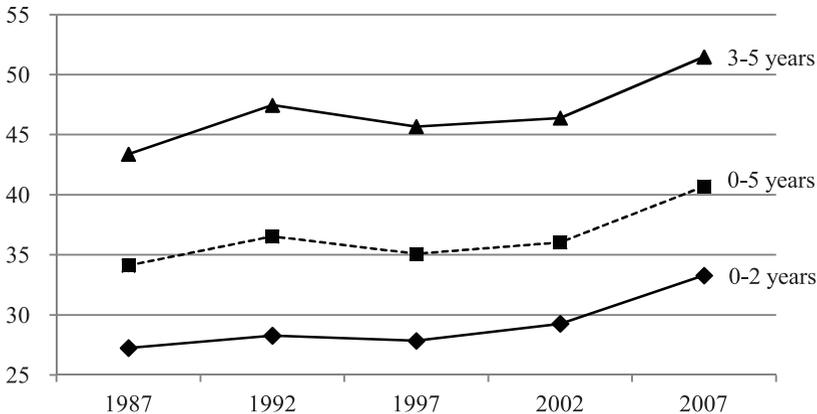
Source: Ministry of Health, Labour and Welfare, *Survey on Employment Trends*, editions for each year.

Note: The attrition rate due to marriage was obtained by dividing the number of female regular employees who quit their jobs within a particular year due to marriage by the number of female regular employees on January 1 that year. The attrition rate due to childbirth/child rearing and the attrition rate due to nursing care were obtained in the same way.

Figure 2. Female Attrition Rate by Reason for Quitting (%)

and 2009 was only 5% (National Institute of Population and Social Security Research 2011). Even taking this into consideration, there has undoubtedly been a considerable decline in the proportion of women resigning upon marriage. However, the decline in the attrition rate due to marriage probably results from the effects of a rise in women’s desire to work and changes in customs, rather than the effects of WLB policies. Housework other than child rearing and providing long-term nursing care is not so difficult as to hinder employment. Moreover, although WLB policies alleviate the burden of child rearing and long-term nursing care, their impact on housework other than this is small, so it is thought that they do not greatly influence decisions to resign upon marriage.

In contrast to this, it is only natural to think that WLB policies, which are centered on measures to counter the declining birthrate, are one factor contributing to the decline in the



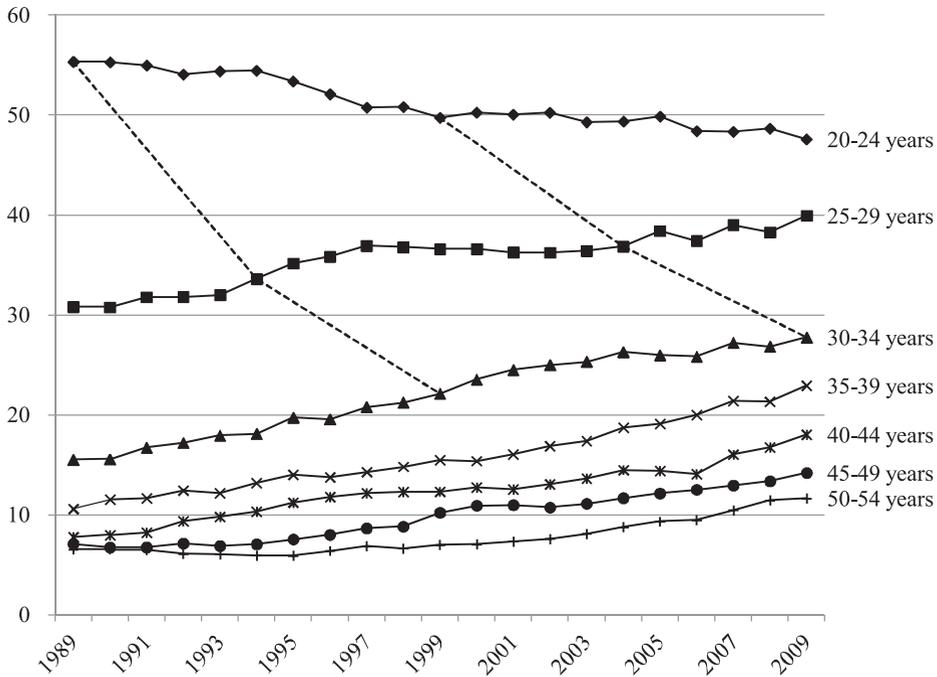
Source: Ministry of Health, Labour and Welfare, *Employment Status Survey*, editions for each year.
 Note: This chart shows the employment rate among wives in “households of a couple and child(ren)” and “households of a couple, child(ren) and parent(s).”

Figure 3. Employment Rate among Married Women by Age of Youngest Child (%)

attrition rate due to childbirth and child rearing. If there is a constant proportion of women who continue to work even after giving birth, the figure for those resigning due to childbirth should increase due to the fall in the number of those resigning due to marriage. The fact that the attrition rate due to childbirth and child rearing is declining despite this means that the number of women continuing in employment after giving birth is increasing.

Figure 3 supports this inference. This depicts the employment rate among married women by age of their youngest child, based on figures from the Employment Status Survey. In the case of married women with a child aged between zero and two years old, no upward trend was seen in the employment rate between 1987 and 1997, but a clear upward trend can be seen from 1997 to 2007. In particular, the figure rose by 4.0 percentage points between 2002 and 2007. A similar tendency can be seen among married women with a child aged between three and five years old. The figure rose by 5.1 percentage points between 2002 and 2007. Although the employment rate among mothers with children of preschool age is low, this has been rising gradually since the beginning of the 2000s.

However, there are also statistics that run contrary to the inference that the proportion of women resigning due to childbirth is declining. According to the 14th National Fertility Survey, in the latter half of the 1980s, 37.4% of women who gave birth to their first child gave up work due to childbirth, but this figure increased to 43.9% in the latter half of the 2000s. Moreover, the proportion of women continuing in employment even after the birth of their first child has only increased very slightly, from 24.0% in the latter half of the 1980s to 26.8% in the latter half of the 2000s (National Institute of Population and Social Security Research 2010). Thus, the results differ according to the statistics, so it is not possible to state categorically that the proportion of women resigning due to childbirth has been decreasing in recent years.



Source: Ministry of Health, Labour and Welfare, *Basic Survey on Wage Structure*, editions for each year.

Note: Long-standing workers are those workers whose age when they joined the company where they currently work was 16 or under, in the case of those who joined the company after graduating from junior high school, 19 or under, in the case of those who joined after graduating from high school, 21 or under, for those who joined after graduating from junior college or technical college, and 24 or under, for those who joined after graduating from university.

Figure 4. Proportion of Women among Long-Standing Staff Members by Age Bracket (%)

So is the retention level of women in companies rising? In order to see changes in the retention level, let us look at the proportion of women among long-standing staff members. Figure 4 shows changes in the proportion of women among long-standing staff members by age bracket. The Basic Survey on Wage Structure has been used to obtain these figures. Here, the term “long-standing staff member” refers to workers who have continued working at the company where they were first employed, ever since they graduated from school. However, one cannot tell precisely whether or not a person has experience of changing job, so here, the term “long-standing workers” is defined as referring to those workers for whom the difference between the age they were when they completed their highest level of schooling (15 in the case of junior high school graduates, 18 in the case of high school graduates, 20 in the case of junior college or technical college graduates, and 22 in the case of university graduates) and the age at which they joined the company is less than one year

(less than two in the case of university graduates³).⁴

At most companies, being a long-standing staff member places a worker at an advantage when being considered for a managerial post. For example, the proportion of long-standing staff members among those at departmental director level in 2009 was 52%, while such staff members accounted for 58% of those at divisional director level. Consequently, the proportion of women among those in managerial posts also shows the degree of ease with which women achieve promotion.

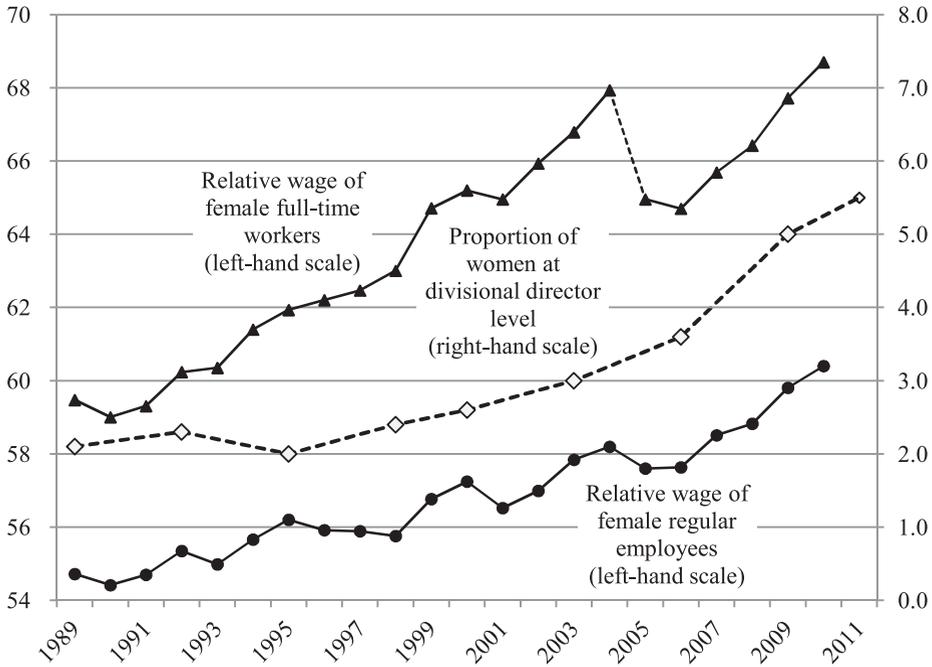
According to Figure 4, in the 20–24 age bracket, the proportion of women among long-standing staff members is declining. This is thought to be because the proportion of women among new graduates hired is falling. In all other age brackets, the proportion of women among long-standing staff members is rising. As a result, the distance between the lines for the first half of the 20s and the latter half of the 20s is decreasing. Moreover, the distance between the lines for the latter half of the 20s and the first half of the 30s is decreasing somewhat. This means that the retention rate of women in their 20s and early 30s is rising relative to that of men.

One can clearly see that the level of female retention in companies is rising in relative terms if one looks at the figures in cohort terms. The broken lines in Figure 4 depict changes in the proportion of women among long-standing staff members among two cohorts. The proportion of women among long-standing staff members in the cohort that was aged between 20 and 24 in 1989 (those born between 1965 and 1969) declined by 21.7 percentage points over the five years that followed, falling by a further 11.5 percentage points over the next five years after that. Of the two broken lines on this chart, the left-hand one depicts this. In contrast, the proportion of women among long-standing staff members in the cohort born ten years later (those born between 1975 and 1979, aged between 20 and 24 in 1999, right-hand broken line) only declined by 12.9 percentage points in the five years from 1999 and then by just 9.1 percentage points in the five years from 2004. This means that the level of female retention in companies between their mid-20s and their mid-30s—the period when they are most likely to marry and have children—has risen in relative terms.

So, has this relative rise in the level of female retention in companies increased women's economic status? Figure 5 depicts changes in the relative wage of women and the

³ The Basic Survey on Wage Structure does not distinguish between university graduates and graduate school graduates, so all are treated as university graduates and the age at the time of joining the company is calculated accordingly.

⁴ When looking at the level of retention within a company, the average number of years of continuous service by age bracket is often used, but this entails the problem that it is affected more by fluctuations in mid-career employment than by fluctuations in the number of those resigning due to marriage or childbirth. The proportion of women among long-standing staff members does not entail this kind of problem, but it does present the difficulty that it is affected by changes in the proportion of women among those hired as new graduates. However, this problem can be resolved to some extent by looking at changes in the proportion of women among long-standing staff members by age in each cohort.



Sources: Ministry of Health, Labour and Welfare, *Basic Survey of Gender Equality in Employment Management*, editions for each year; and Ministry of Health, Labour and Welfare, *Basic Survey on Wage Structure*, editions for each year.

Note: Figures for the relative wage of women are based on data from companies with five or more regular employees, while figures for the proportion of women at divisional director level are based on data from companies with 30 or more regular employees.

Figure 5. Relative Wage of Women and Proportion of Female Managers (%)

proportion of female managers. With regard to the relative wage for women, this chart shows data for both regular employees and full-time workers. Regular employees consist of both full-time and part-time workers. Part-time workers are defined as “workers whose daily prescribed working hours are shorter than those of general workers, or, if their daily prescribed working hours are the same as those of general workers, have fewer days in their prescribed working week than do general workers.” Relative wage is the mean hourly wage for women divided by the mean hourly wage for men, multiplied by 100.⁵

Over the 20 years from 1990 to 2010, the relative wage for female full-time workers

⁵ The relative wage of women among full-time workers declined considerably from 2004 to 2005 because the term for part-time workers, which had been “*paato*” until 2004, was changed to “*tanjikan roudousha*” (the latter literally means “short-hour workers,” but both are translated as “part-time worker” in English). Despite the fact that there was no change in the definition itself, it can be inferred that this occurred because the change in appellation led to some workers, who had hitherto been classified as “*paato*,” being classified as full-time workers.

has risen by 9.7 percentage points, from 59.0 to 68.7.⁶ However, during the same period, the relative wage for female regular employees—a figure that includes part-time workers—has only risen by 6.0 percentage points, from 54.4 to 60.4. The main reason for this disparity is the fact that the number of female part-time workers has increased. The relative wage among regular employees has been rising at a pace of no more than 0.3 percentage points per year.

On the other hand, the proportion of women at divisional director level has risen by 3.4 percentage points, from 2.1% in 1989 to 5.5% in 2011. The figure rose by only 0.5 percentage points between 1989 and 2000, but it has risen by 2.9 percentage points between 2000 and 2011. There is a possibility that the rate of increase in the number of women at divisional director level has accelerated somewhat in the 2000s.

Accordingly, it is evident that, over the past 20 years, the level of female retention in companies has been demonstrating an upward tendency compared with that of men, due to the impact of such factors as the decline in the number of women resigning due to marriage, the tendency to marry later in life, and the declining birthrate. However, it is unclear whether or not the proportion of women quitting their jobs due to childbirth is decreasing. Women's relative wage and the proportion of women at divisional director level are rising, with the rise in women's relative wage being very gradual and that in the proportion of women at divisional director level having accelerated somewhat since 2000. However, it is unclear from macro-level data whether or not WLB policies have increased the retention rate of women in companies and promoted more active participation by women. Accordingly, the following section uses data for individual companies to discuss what kind of effects WLB measures by companies have had on the retention rate of women in companies and their promotion to managerial posts.

IV. An Empirical Analysis of Measures to Promote a Better Work-Life Balance, Continued Female Employment and Gender Equality

1. Hypotheses

This section firstly verifies the hypothesis “the more assiduously a company implements WLB measures, the higher the level of female retention within the company,” and then verifies the hypothesis “the higher the level of female retention, the greater the proportion of female managers.”

2. Database

The database used for this empirical analysis is the Survey Concerning Support for Achieving Compatibility between Work and Family. This survey was conducted between

⁶ Due to the reasons given in Note 5, it can be inferred that the relative wage of female full-time workers compared to male workers actually rose by more than 9.7 percentage points.

June 28 and July 21, 2006 by the Japan Institute for Labour Policy and Training. The survey subjects were 6,000 companies with 300 or more regular employees nationwide; they underwent stratified random sampling by category of business and by scale. The study consists of three surveys—a survey of companies, a survey of those in managerial posts, and a survey of ordinary staff members—but this paper uses only the data from the survey of companies. Valid responses to the survey of companies were received from 863 companies (valid response rate of 14.4%).⁷

3. Variables

The following provides an explanation of the variables used in the estimates. The descriptive statistics for the variables are shown in Table 2. “Number of years of continuous service by women” and “Timing of women quitting their jobs” are used as variables in order to ascertain the level of female retention in companies. The former variable is easy to understand, but at companies that are increasing the number of staff they hire because their business performance is improving, there is the problem that the average length of continuous service becomes shorter. In order to adjust for this, “Number of years of continuous service by men” is used as an explanatory variable.

The variable “Timing of women quitting their jobs” has been calculated from questions about the life stage at which most female workers resign, such as upon marriage or childbirth. In this variable, the response “Resign at their own convenience before marriage” scores 1 point, “Resignation triggered by marriage” scores 2 points, “Resign after marriage, before pregnancy or childbirth” scores 3 points, “Resignation triggered by pregnancy or childbirth” scores 4 points, “Use child care leave after birth, but resign within a year or two afterwards” scores 5 points, and “Use child care leave after birth and continue working thereafter” or “Continue working after birth, without using child care leave” both score 6 points.

The “Existence of female managers dummy” and the “Proportion of female managers” are used as variables to ascertain how actively women are participating in companies. The former is a dummy variable set at 1 in the event that there are female departmental or divisional directors, while the latter is the proportion of female departmental or divisional directors.

“WLB orientation of senior management” and “Number of measures to support child rearing actually used” are used as variables to ascertain how assiduously companies are implementing WLB measures. “WLB orientation of senior management” involves using a five-rank scale (agree, somewhat agree, neither agree nor disagree, somewhat disagree, disagree) to evaluate the management policies of senior management concerning personnel

⁷ For a detailed explanation of the survey and the cross tables, please refer to The Japan Institute for Labour Policy and Training (2007). Kawaguchi (2008) used this survey to study WLB measures and the active participation of women. However, this study did not analyze the impact of WLB measures and the level of female retention in companies on the proportion of female managers.

Table 2. Descriptive Statistics

	Overall			Companies with female managers		
	Observations	Mean value	Standard deviation	Observations	Mean value	Standard deviation
Existence of female managers dummy	624	0.638	0.481	398	1.000	0.000
Proportion of female managers	532	0.084	0.165	321	0.139	0.193
Timing of women quitting their jobs	612	3.974	2.094	388	4.155	2.102
Number of years of continuous service by women	549	11.31	6.045	357	11.22	6.102
Number of years of continuous service by men	553	14.96	6.112	357	14.44	6.416
WLB orientation of senior management	618	0.667	0.187	393	0.691	0.189
Equality orientation of senior management	613	0.767	0.189	389	0.812	0.172
Number of measures to support child rearing actually used	624	2.962	2.225	398	3.415	2.309
Number of PA measures being implemented	624	1.604	2.227	398	1.915	2.422
Number of PA measures not required to be implemented	624	0.894	2.209	398	1.211	2.509
Logarithmic value of the number of regular employees	624	6.566	0.876	398	6.681	0.995
Logarithmic value of the number of those in managerial posts	532	4.501	1.233	321	4.751	1.350

Note: “Managerial posts” refers to posts equivalent to divisional director and departmental director level.

management in relation to each of the following five statements: “There is widespread knowledge among employees of our company’s support for achieving compatibility between work and family, such as child rearing support systems”; “We are striving to enable employees to continue working even after marriage/childbirth”; “We also encourage men to actively take child care leave”; “We are seeking the understanding of employees’ family responsibilities in the workplace (among bosses and colleagues)”; and “We are seeking the cooperation of those in the workplace (bosses and colleagues) concerning leave and short-time work related to child care.” Each response on the five-rank scale was awarded 4, 3, 2, 1, or 0 points, respectively, and the total score for all five statements was then divided

by 20. In other words, it has been adjusted so that the highest score is 1 point and the lowest is 0 points.

“Number of measures to support child rearing actually used” is the number of systems that were actually used in the past three years from among the following: short-time work; flexi-time; bringing forward or pushing back work start/finish times; not making staff members work overtime; operating an in-house day-care center; measures to subsidize the cost of child care services, etc.; support for returning to the workplace; granting men leave when their spouse gives birth; sick/injured child care leave; exemption from intra-company transfers (region-specific staff member system, etc.); priority re-employment system for those who have resigned due to child rearing, etc.; and home-working while bringing up children.

“Equality orientation of senior management” and “Number of positive action (hereafter abbreviated to PA) measures being implemented” are used as variables to ascertain how assiduously companies are striving to achieve gender equality. “Equality orientation of senior management” involves using a five-rank scale (agree, somewhat agree, neither agree nor disagree, somewhat disagree, disagree) to evaluate the management policies of senior management concerning personnel management in relation to each of the following four statements: “We actively utilize and appoint women”; “We engage in human resource development, irrespective of gender”; “We assign to women not only routine work, but also work that is highly creative”; and “We have ensured widespread knowledge of the measures that will be taken in the event that an employee has suffered harm, such as sexual harassment or bullying.” Each response on the five-rank scale was awarded 4, 3, 2, 1, or 0 points, respectively, and the total score for all four statements was then divided by 16. In other words, it has been adjusted so that the highest score is 1 point and the lowest is 0 points.

“Number of PA measures being implemented” is the number of systems that are being implemented from among the following: establishing a dedicated department or staff member to deal with PA; conducting surveys and analyzing problems; formulating plans to enable women to demonstrate their abilities; actively appointing women to posts; active education and training in order to enable women to work in workplaces where there are few women at present; establishing a dedicated consultation service for women; formulating regulations to prevent sexual harassment; developing support for achieving compatibility between work and family above and beyond what is required in law; improving awareness and attitudes among male staff members; and improving the workplace environment and culture.

There are also companies that are not implementing PA because they believe that women participate sufficiently actively within the company. In order to distinguish such companies from companies that are not interested in active participation by women, “Number of PA measures not required to be implemented” is used as an explanatory variable. This variable is the number of measures from among the aforementioned PA measures, in relation to which a company believes “There is no need to implement this measure as women

already participate sufficiently actively.”

“Logarithmic value of the number of regular employees,” “Labor union dummy” and “Industry dummy” are used as the other control variables. Moreover, in estimates of the “Existence of female managers dummy,” “Logarithmic value of the number of those in managerial posts” is used as the explanatory variable. This is because the probability of female managers existing is higher in companies with more managerial posts.

4. Results of Estimates

Table 3 shows the results of estimates of the level of female retention. Models (1) to (4) take “Number of years of continuous service by women” as the explained variable, while Models (5) to (8) take “Timing of women quitting their jobs” as the explained variable. The former is estimated using OLS, while the latter is estimated using ordered probit. As is evident from Models (1), (2), (5) and (6), the coefficient of “WLB orientation of senior management” is significantly positive at the 5% level at least. The coefficient of “Number of measures to support child rearing actually used” is not significant in Models (3) and (4), but in Models (7) and (8) it is significantly positive at the 5% level at least. From these outcomes, one can say that the hypothesis that “the more assiduously a company implements WLB measures, the higher the level of female retention within the company” is supported.

In contrast, the coefficient of “Equality orientation of senior management” is significantly positive at the 10% level in Model (6), but it is not significant in any other model. “Number of PA measures being implemented” is not significant in any of the models. From this, one can say that initiatives focused on measures to promote gender equality do not have much of an effect on rises in the level of female retention.

Table 4 shows the results of the estimate of the proportion of female managers. At quite a large proportion of companies (36.2%), there were no female managers at all, so a two-stage estimation method was used for the estimate. This is because it is anticipated that the hurdles that the first female manager has to overcome in order to achieve promotion are higher than those that have to be overcome by the second and subsequent female managers. At the first stage, probit is used to estimate whether or not there are any female managers, while at the second stage, the proportion of female managers at companies that have female managers is estimated using OLS. The logarithmic value of the number of those in managerial posts is added as an explanatory variable to the first stage estimate, while the inverse Mills ratio is added as an explanatory variable to the second stage estimate.

Looking at the results of the estimates, the coefficient of “Number of years of continuous service by women” is significantly positive at the 5% level at least in both the first and second stage estimates. The coefficient of “Timing of women quitting their jobs” is not significant in the first stage estimate in Model (4), but it is significant at the 5% level at least in all other models. From this, one can say that the hypothesis that “the higher the level of female retention, the greater the proportion of female managers” is supported. This is

Table 3. Impact of WLB Measures on Women's Continuation in Employment

	OLS: Explained variable = number of years of continuous service by women				Ordered probit: Explained variable = Timing of women quitting their jobs			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
WLB orientation of senior management	3.284 (1.007)	3.855 *** (1.325)	-	-	1.170 *** (0.290)	0.735 ** (0.376)	-	-
Equality orientation of senior management	-	1.003 (1.575)	-	-	-	0.756 * (0.397)	-	-
Number of measures to support child rearing actually used	-	-	0.107 (0.077)	0.090 (0.081)	-	-	0.082 *** (0.027)	0.061 ** (0.028)
Number of PA measures being implemented	-	-	-	-0.041 (0.077)	-	-	-	0.028 (0.026)
Number of PA measures not required to be implemented	-	-	-	0.157 ** (0.070)	-	-	-	0.088 ** (0.025)
Number of years of continuous service by men	0.696 *** (0.039)	0.692 *** (0.040)	0.697 *** (0.040)	0.700 *** (0.040)	0.034 *** (0.010)	0.037 *** (0.010)	0.036 *** (0.010)	0.038 *** (0.010)
R2	0.5683	0.5674	0.5614	0.5647	0.0535	0.0554	0.0490	0.0579
Observations	540	540	545	545	538	533	540	540

Notes: 1. All models have the industry dummy, the logarithmic value of the number of regular employees, and the labor union dummy as explanatory variables.

2. Figures in brackets show the standard error.

3. * denotes significance at the 10% level, ** at the 5% level, and *** at the 1% level.

Table 4. Impact of WLB Measures on the Proportion of Female Managers

Stage 1 Probit: Explained variable = Existence of female managers dummy					
	(1)	(2)	(3)	(4)	
Number of years of continuous service by women	0.040 ** (0.018)	-	0.041 ** (0.017)	-	
Timing of women quitting their jobs	-	0.064 ** (0.033)	-	0.052 (0.033)	
Number of years of continuous service by men	-0.045 ** (0.019)	-0.020 (0.013)	-0.050 *** (0.018)	-0.025 * (0.013)	
WLB orientation of senior management	-0.429 (0.492)	-0.408 (0.483)	-	-	
Equality orientation of senior management	2.179 *** (0.518)	2.090 *** (0.506)	-	-	
Systems to support child rearing actually used	-	-	0.121 *** (0.036)	0.120 ** (0.035)	
Number of PA measures being implemented	-	-	0.070 ** (0.032)	0.063 * (0.032)	
Number of PA measures not required to be implemented	-	-	0.137 *** (0.043)	0.134 *** (0.043)	
Logarithmic value of the number of those in managerial posts	0.428 *** (0.106)	0.363 *** (0.104)	0.491 *** (0.109)	0.421 *** (0.107)	
Pseudo R2	0.2139	0.2077	0.2341	2286	
Observations	471	469	480	475	
Stage 2 OLS: Explained variable = Proportion of female managers					
	(1)	(2)	(3)	(4)	
Number of years of continuous service by women	0.011 *** (0.002)	-	0.008 *** (0.002)	-	
Timing of women quitting their jobs	-	0.025 *** (0.005)	-	0.015 *** (0.004)	
Number of years of continuous service by men	-0.015 *** (0.002)	-0.009 *** (0.002)	-0.012 *** (0.002)	-0.008 *** (0.002)	
WLB orientation of senior management	-0.010 (0.061)	-0.008 (0.062)	-	-	
Equality orientation of senior management	0.445 *** (0.094)	0.481 *** (0.098)	-	-	
Systems to support child rearing actually used	-	-	0.015 *** (0.006)	0.017 *** (0.006)	
Number of PA measures being implemented	-	-	0.009 ** (0.004)	0.009 *** (0.004)	
Number of PA measures not required to be implemented	-	-	0.030 *** (0.005)	0.031 *** (0.005)	
Inverse Mills ratio	0.243 ** (0.051)	0.301 *** (0.054)	0.140 *** (0.045)	0.179 *** (0.049)	
Pseudo R2	0.4503	0.4633	0.5212	0.523	
Observations	291	284	299	290	

Notes: 1. “Managerial posts” refers to posts equivalent to divisional director and departmental director level.

2. All models have the industry dummy, the logarithmic value of the number of regular employees, and the labor union dummy as explanatory variables.

3. Figures in brackets show the standard error.

4. * denotes significance at the 10% level, ** at the 5% level, and *** at the 1% level.

consistent with the results obtained by Matsushige and Takeuchi (2008).

Looking at the other coefficients, the coefficients of “Equality orientation of senior management” and “Number of PA measures being implemented” are significantly positive at the 5% level at least, apart from in the first stage of Model (4). It can be surmised that the outcomes of efforts by companies that are assiduously striving to achieve gender equality become apparent in the form of an increase in the number of female managers. Furthermore, the coefficient of “Number of measures to support child rearing actually used” is significant at the 5% level at least in both the first and second stage estimates in Models (3) and (4). This might be because there is a reverse causal relationship, in that the existence of female managers makes it easier to use child rearing support measures.

V. Conclusion

This paper has analyzed the objectives of the government’s introduction of WLB policies and companies’ introduction of WLB measures since the Equal Employment Opportunity Act entered into force, and the effects that these have had on the level of female retention and their active participation in companies. As a result, the following has become clear. Firstly, the government’s main WLB measures over the last quarter of a century have been implemented as measures to counter the declining birthrate. The vast majority of companies provide support for achieving compatibility between work and child rearing as part of their efforts to make a contribution to society. However, around two-thirds of companies have implemented measures to support achieving compatibility between work and family, with the expectation that this will improve the motivation of female workers and increase their retention within the company.

Secondly, over the last 20 years, the number of women leaving their jobs due to marriage has declined considerably and the level of female retention, as seen in terms of the proportion of women among long-standing staff members, has steadily increased. At the same time, women’s relative wage has also risen. However, it is unclear whether or not the proportion of women quitting their jobs due to childbirth has decreased. Moreover, since 2000, the employment rate among women with preschool-age children has risen, as has the proportion of female managers. However, the rate of increase in the relative wage of women is very low.

Thirdly, comparing individual companies, the more assiduous the senior management at a company is about WLB measures and the greater the number of child rearing support measures that are actually used, the higher the level of female retention; and the higher the level of female retention at a company, the greater the proportion of female managers. Consequently, looking at the situation at the company level, one can say that WLB measures contribute to female retention in companies, and also contribute to their participating more actively in those companies.

References

- Hamamura, Akira. 2000. Rodo jikan kisei no mokuteki to shudan [Objectives and means of restricting working hours]. In *Chingin to rodo jikan* [Wages and working hours], ed. Japan Labor Law Association, 164–182. Tokyo: Yuhikaku.
- Higuchi, Yoshio. 1994. Ikuji kyugyo seido no jisho bunseki [Empirical analysis on child-care leave]. In *Gendai kazoku to shakai hoshō* [Modern families and social welfare], ed. Social Welfare Research Center, 181–204. Tokyo: University of Tokyo Press.
- Japan Institute for Labour Policy and Training. 2007. *Shigoto to katei no ryōritsu shien ni kakawaru chōsha* [Survey concerning support for achieving compatibility between work and family]. JILPT Survey Series, no. 37. Tokyo: The Japan Institute for Labour Policy and Training.
- Kawaguchi, Akira. 2008. Jenda keizai kakusa [Gender inequality in economic status]. Tokyo: Keiso Shobo.
- Matsushige, Hisakazu, and Mamiko Takeuchi. 2008. Kigyōnai shisaku ga josei jugyōin no shugyo ni ataeru kōka [The effect of in-house measures on the employment of female employees]. *International Public Policy Studies* 13, no.1:257–71.
- Ministry of Health, Labour and Welfare. 2009. Jisedai ikusei shien taisaku suishinō ni motozuku ippan jigyonushi kōdo keikaku ni tsuite [Concerning the general employer action plan based on the Act on Advancement of Measures to Support Raising Next-Generation Children]. <http://www.mhlw.go.jp/general/seido/koyou/jisedai/index.html>.
- Morita, Yoko, and Yoshihiro Kaneko. 1998. Ikuji kyugyo seido no fūkyū to josei kōyō no kinzoku nensu [The popularization of the child care leave system and the number of years of continuous service of female employees]. *Japanese Journal of Labour Studies* 40, no. 9:50–60.
- National Institute of Population and Social Security Research. 2010. Dai 14-kai Shūshō Dōkō Kihon Chōsha (Kekkon to Shūssan ni Kansuru Zenkoku Chōsha) [14th Japanese National Fertility Survey (National Survey Concerning Marriage and Childbirth)]. <http://www.ipss.go.jp/ps-doukou/j/doukou14/fuhyou.html>.
- . 2011. Jinko Tokei Shiryōshū [Population statistics of Japan]. <http://www.ipss.go.jp/syoushika/tohkei/Popular/Popular2011.asp?chap=0>.
- Suruga, Terukazu, and Zhang Jianhua. 2003. Ikuji kyugyo seido ga josei no shūssan to keizoku shugyo ni ataeru eikyo ni tsuite: Paneru deta ni yoru keiryō bunseki [Concerning the impact of the child care leave system on childbirth and continuation in employment by women: A quantitative analysis using panel data]. *Japanese Journal of Research on Household Economics*, no. 59:56–63.
- Tomita, Yasunobu. 1994. Josei ga hataraki tsuzukeru koto ga dekiru shōkba kankyō: Ikuji kyugyo seido to rodo jikan seido no yakuwari [Effect of parental leave and work schedule on women's retention after pregnancy]. *The Journal of Economic Studies* 39,

no. 2:43–56.

Waldfoegel, Jane, Yoshio Higuchi, and Masahiro Abe. 1999. Family leave policies and women's return after childbirth: Evidence from the United States, Britain, and Japan. *Journal of Population Economics* 12 (4):523–45.