

Editors= TSUJIMURA Miyoko + OSAWA Mari.
*Gender Equality in Multicultural Societies:
gender, diversity, and conviviality in the age of globalization.*
Tohoku University Press (Sendai, Japan)
pp. 215–234 (2010)

ISBN= 978-4-86163-135-1
NCID= BB01803690 (<http://webcat.nii.ac.jp>)

Chapter 11

The Family and Women's Economic Disadvantage

— a micro-macro problem for distributive justice —

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It is therefore **not identical** with the chapter of the published book.

Online PDF version: 2010-08-01

1. Introduction

1-1. Micro and macro levels in distributive justice

Distributive justice addresses the issue of how to distribute scarce resources among people. We introduce the distinction between micro-level justice and macro-level justice.

“Micro-level justice” refers to justice that functions as a criterion for evaluating the actions of each actor in a society. It also functions as a norm that controls the behavior of the actors, since it serves as an indication of the actions that such actors should take.

In contrast, “macro-level justice” is used to evaluate the results of distribution in the total society. It involves only aspects that serve as principles for the evaluation of conditions. It does not serve as a norm that controls the behavior of actors.

Such a distinction is important because our society is not a single organization as a whole, rather it is made up of the complex interactions among multiple subsystems. If it were a single organization, identifying a problem in the organization would be the same as pointing out what problems the organization is responsible for solving. However, this is not the case for the total society.

This issue is analogous to what social scientists call a “micro-macro problem,” which addresses the issue of rationality in a decentralized system. Under such a system, accumulation of rational choices at the subsystem level often results in an irrational outcome at the total system level. This occurs in phenomena such as “the fallacy of composition” and “the social dilemma.” Here “rationality” refers to making better choices through judgment according to some rationale. We derive our terminology from the “micro-macro problem,” substituting “justice” for “rationale.” We thus obtain a tool to analyze the difference between the subsystem (= micro) level and the total system (= macro) level in the theory of justice.

1-2. Institutionalization of equality

Social theorists often distinguish between just inequality and unjust inequality based on the cause of the inequality. For example, in the case of a sprint race, the term “inequality of opportunity” is often used to refer to the differences in the distance from start to finish or in the conditions of the track surface. In this example, since factors such as starting positions and track surface conditions should not determine the result of the race, it is implied that any differences due to such causes should be considered to be injustice. In contrast, other causes of differences (such as the athlete’s physique, physical strength, running techniques, and physical condition on the day of the race) should be considered as the responsibility of the athlete him or herself. It is therefore not unjust that these factors determine the result of the race.

The same principle is applied to problems in distribution at a macro level when considering the total society. It is a deeply ingrained idea for us that inequality due to causes that are not attributed to the individual’s responsibility is unjust.

In the application of the principle, we confront a problem. What causes can be categorized as those of unjust inequality? In theory, a wide variety of categories is conceivable, including an empty set for the causes of just or unjust inequality. In reality, the claims of liberal social theorists are narrower in range. In the most right-wing view, which applies this standard strictly, only inequality caused by discrimination in a public area is unjust. (Such viewpoints could also vary widely on what is considered “public,” and on what constitutes “discrimination”). In contrast, the most left-wing view, which broadens the scope of unjust inequality, considers all inequalities that are due to causes beyond the individual’s control to be unjust (Roemer, 1998). In between these two extremes, a wide range of principles are asserted.

A good example concerns inequality between social categories. To achieve equality, it is necessary to create an effective institution for eliminating inequality. We should form a social consensus that such inequality is not the individual’s own responsibility. In general, however, forming such a consensus is difficult.

Here, we take an example of economic inequality resulting from differences in family background. Many researchers have examined this type of inequality. In Japan today, the term “inequality of opportunity” usually refers to such inequality (Sato, 2000), and many social scientists consider such inequality to be unjust. Even so, we have not yet succeeded in forming a social consensus that such inequality should be eliminated, and for this reason there has not been a considerable movement toward institutionalization for this purpose. In fact, the system of inheritance of wealth, which clearly supports such inequality, is established firmly in the current law, and there is no movement to eliminate this system. Although researchers have continued for many years to observe the process of reproduction of economic inequality that result from a family background mediated by systems such as education and the labor market, the findings of such research have not been reflected in governmental policy.

In contemporary Japan, the systematic movement to eliminate macro-level inequality by social category is most active in the field of gender. The Basic Law for a Gender-equal Society, passed in 1999, declares that its goal is to form “a society where both women and men [.....] shall be able to enjoy political, economic, social, and cultural benefits equally as well as to share responsibilities” (Gender Equality Bureau n.d.: Art. 2). In other words, based on recognition that there is inequality in the benefits enjoyed by men and women, the law states that its goal is a society free of such inequality. This means that the Japanese society has officially adopted the principle that inequality caused by gender is considered unjust.

Under this law, the Cabinet Office of Japan has established the Gender Equality Bureau. A high-level organization within the administration, this bureau investigates various systems from a gender perspective and promotes policies toward equality. In contemporary Japan, gender equality is a policy goal of high priority that is backed by national consensus.

1-3. Micro-macro linkage

The national consensus about the goal of macro-level equality does not automatically establish equality within the society. This is because the total society is a decentralized system

made up of the interactions between subsystems. For this reason, even if a principle of justice is given at the macro level, it will not necessarily become a norm that should be complied within subsystems. Realization of justice on a macro level requires its implementation as norms that restrict actors at a micro level. Macro-level justice can be institutionalized through carrying out this implementation process properly.

In this chapter, we will use the term “micro-macro linkage” to refer to the process of realizing macro-level justice through deciding on the subsystem(s) that should be held responsible for the macro-level injustice and reforming the subsystem(s) to implement micro-level justice. This process includes the observation of unjust conditions at the macro level, identifying the causal process of the observed injustice, determining whether responsibility can be assigned for the subsystem(s), and then creating norms that control actors in the subsystem(s).

In the process of micro-macro linkage to realize equality at a macro level, it is essential to ascertain the reality through quantitative analysis. First, we must discover quantitatively what kinds of inequalities are occurring on a macro level. Then, we must analyze the mechanism generating such inequalities and specify the causal relationship. We can thereby identify the subsystem(s) that should be held responsible for removing the causes of inequality. In this chapter, we will provide a practical example of quantitative analysis on the issue of economic disadvantages of women in order to contribute to the micro-macro linkage process and to realize macro-level justice.

2. Measurement of the economic disadvantages of women

2-1. Data

The data used in our analysis is the National Family Research of Japan 2003 (NFRJ03) dataset from the Japan Society of Family Sociology. This dataset consists of survey data from a random sample of Japanese nationals residing in Japan. The survey was conducted using the self-administered questionnaire (home-delivery, leave-and-pick-up) method from January through February, 2004, with 10,000 subjects chosen through stratified two-stage random sampling. The valid response rate was 63.02%.

This survey, which focused on relations between family members and relatives, is characterized by its detailed questioning about marital history, including divorce, the attributes of individual children, and other family-related events. See Table 1 Synopsis of NFRJ03 for details.

2-2. Equivalent household income

It is difficult to measure “economic benefits” as used in the Basic Law for a Gender-equal Society. It is needed to evaluate the distribution of something (resources, goods, services, advantages, etc.) among people. Welfare economists would recommend focusing on individuals’ “utility,” but it is impossible to measure utility. The means of obtaining utility can be measured, but such an approach can be unsuitable to ascertaining inequality of distribution if there are a

variety of alternatives of such means, and if individuals have the freedom to choose among the alternatives.

A pragmatic solution is to investigate the state of distribution of items that cannot be easily substituted and also used by almost all people. In contemporary society, money is thought to satisfy these conditions. In a wide range of aspects of daily living, we require goods and services purchased with money. “Income” is used to determine the money an individual can use as a flow, while “assets” are used to determine this money as a stock. Of these, we focus on income, because measurement of assets involves some difficulties.

Income is ordinarily distributed within the household, and this determines the level of an individual’s standard of living. For this reason, in discussing differences in income, we first must consider the intra-household distribution. Equivalent household income is a gauge widely used for this purpose. This measure deflates household income (usually, disposable income) by household size, by dividing income by the square root of the number of people in the household. Assuming that there are economies of scale in the management of household finances and that all members of the household receive an equal distribution of income, equivalent household income traditionally has been used as an approximate measure of individual standards of living (OECD, 2001).

The NFRJ03 survey asked about annual household income (tax included) in the year previous to the survey. Respondents were required to choose from 18 categories for income level, mostly separated in intervals of 1 million yen.

We will employ this data by converting it as shown below. Equivalent household income can be expressed by the following equation, with l denoting the lower and h denoting the upper limit of the selected income level (each in units of 10,000 yen), and n denoting the number of members of the household.

$$\text{Equivalent household income} = \frac{h + l}{2\sqrt{n}}$$

The measure of equivalent household income derived in this equation has a skewed distribution. In the following analysis, we employ this measure converted using the natural logarithm to approximate a normal distribution.

2-3. Gender gap in equivalent household income

Gender gap is apparent in this equivalent household income. Table 2 shows the mean value of equivalent household income (after logarithmic transformation) and the standard deviation, by gender and marital history. As shown under “total” on the right-hand side, figures for men are slightly higher than for women. A look at the values of equivalent household income itself (exponent of the mean indicated at the bottom line of each cell in Table 2) shows that while the figure for women was 2.79 million yen, the figure for men was 3.06 million yen, with male figures 9.4% higher than female figures. However, when viewed from the perspective of the magnitude of gender to determine equivalent household income, the difference by gender is not great because the

difference in the mean is approximately 14% of the standard deviation and the coefficient of determination R^2 is approximately 0.005.

Table 2 also shows gender differences in equivalent household income according to marital experience. According to these results, the equivalent household income for men does not vary greatly by marital history. While the figure is slightly lower (2.79 million yen) for divorced men and slightly higher (3.1 million yen) for men still married to their first spouses, in general the figure is around 3 million yen. In contrast, the female equivalent household income is 2.01 million yen for divorced women and 1.98 million yen for widows. Each of these figures is much lower than the figures of 2.86 million yen for unmarried women and 2.99 million yen for women still married to their first spouses. The equivalent household income for divorced or widowed women is about 30% less than that of men in the same categories. Table 2 thus indicates that there is a significant gender gap between divorced/widowed men and women.

3. Failure of the family?

3-1. Perspectives for further analyses

From the above results, it is clear that economic disadvantages of women appear in the categories of divorced and widowed women. What causes these disadvantages? We analyze these results in detail below.

However, widowed women will not be addressed below. This is because such analysis would be difficult for two reasons. First, the sample size is small, as there were only 86 valid cases among men (see Table 2), it would be difficult to obtain significant results on a gender gap through multivariate analysis. Second, there is a bias in the survey subjects. In the case of widowed subjects, the spouses were deceased. Therefore, the spouse was not included in the population of the survey. This makes it impossible to trace differences in the risks borne by each spouse, with data available only for the surviving spouse.

In this chapter, we focus our analysis on the other primary cause of a gender gap — economic status in a post-divorce life. According to Table 2, the sample includes 206 men and 253 women who have been divorced. This sample offers a sufficient number of cases. Moreover, in principle the other divorced spouses should also be included in the survey population,¹ it should be possible to compare the risks borne by male and female spouses.

3-2. Literature on gender gap in post-divorce life

In Japanese society, we have little literature of quantitative research on the economic gender gap in post-divorce life.

Under the Japanese family system, law notices of marriage and divorce are submitted to local governments. The Government of Japan has filed a record of notified divorces as a section of Vital Statistics (Ministry of Health and Welfare, 2000). These statistics form a reliable and

¹ This does not hold perfectly true for the NFRJ03 data. There are limitations due to three reasons: (1) The survey subjects are limited to ages 28–77; (2) Non-Japanese nationals and residents abroad are excluded from the population; and (3) There were a large number of nonresponses and unanswered questions.

official source for the frequency of divorces and the basic demographic variables of divorced people. However, it is not useful for our purpose, because it contains little detail on social and economic aspects.

Another data source is the follow-up surveys of divorced people sampled from the notifications of divorce submitted to the local governments (Ministry of Health and Welfare, 1999). These data can be used to ascertain, to some degree, social and economic aspects at the time of the survey. However, since such surveys do not explore long-term change in economic status, the data cannot be used to trace the impact of social and economic positions prior to marriage or changes in economic status after divorce.

Under these circumstances, studies of fatherless households do provide some degree of data. Fatherless households have been one of the major targets of social policy (Iwata, 2005); therefore, numerous researchers have conducted empirical studies on this topic. Most of these studies focused on female subjects only, and thus they often lack a perspective on male-female comparison. However, some such research offers suggestions for exploring gender differences.

The Japan Institute of Labour (2003) conducted a project aiming at the secondary analysis of the official statistics to establish policies promoting the independence of mothers in fatherless households. As a result of this project, Nagase (2004) presented a hypothesis on the conditions that cause economic problems for women after divorce: (1) Many women quit regular employment and are not employed before the divorce; (2) Mothers tend to take custody of young children; (3) It is difficult to forge a balance between work and childcare. Hamamoto (2005), Kambara (2006), Shinotsuka (1992), and Tamiya et al. (2008) also pointed out similar factors related to the economic difficulties of fatherless households.

If Nagase's hypothesis is correct, the economic disadvantages of women are caused by faults in the family system. As Becker (1991) said, differences in human capital between spouses are due to the division of labor that is established to manage the household efficiently in marital life. Upon divorce, there is no legal framework provided to arrange a fair settlement of the human capital that has been jointly accumulated in this way. Under this structure, both spouses receive the benefits of the division of labor for as long as the marriage continues peacefully. However, if the relationship breaks down, the risks are assumed by one side. Although marriage always faces the risk of a breakup, it is possible for one of the spouses to get a free ride by enjoying the returns of a successful marriage without bearing such risks. We also mention the problem of who provides for the children. The duty of providing for the children, the product of a marriage, is not apportioned properly between spouses after divorce (Shimoebisu, 2008).

However, Nagase's hypothesis resulted from inferences made through the comparison of data on fatherless households with other official statistics. They were not proposed based on sufficient empirical grounds. A possible counterargument is that many fatherless households are impoverished due to the fact that disparities were already developed in human capital formation prior to marriage. In fact, a relatively large proportion of fatherless households are made up of those in which the mother has a low level of education (Fujiwara, 2005). The large number of women who are impoverished after divorce could be due to the fact that divorce is concentrated

among women suffering disadvantages in human capital formation prior to marriage. If so, this cannot be said to be a problem of unfair distribution between spouses.

Based on this point, Tanaka (2008) analyzed the equivalent household income of divorced men and women, controlling the two factors of education and pre-marriage employment. The results indicated that, even when controlling these factors, two variables had a major impact on the equivalent household income of divorced persons: (1) a continuous career as a full-time regular employee and (2) the presence of young children. These two factors could explain most of the gender gap in equivalent household income. These results support Nagase's hypothesis that the gender gap results from the division of labor in marital life and the presence of children.

However, there are some problems with the analysis of Tanaka (2008). The first is the fact that the data is limited to persons who had no spouses at the survey date, leaving out those who remarried following divorce. The result may be biased owing to the tendency that people with some specific properties had easily remarried and were thus excluded from the analysis. The second problem is the small number of cases (159 persons). The result is not sufficiently reliable in statistical terms.

The NFRJ03 consists of data to compensate for these defects. The NFRJ03 dataset has information about remarriage after divorce. In Table 2 this information has been used to treat respondents who had ever been divorced as "divorced" people, even if they had remarried. In addition, the data include more than 450 respondents who had been divorced. The sampling error is thereby smaller. In the next section, we will use this data to obtain reliable results about the factors determining economic status following divorce.

4. Factors determining economic status following divorce

4-1. Variables used

The subject of the following analysis is restricted to individuals who have been divorced. In addition to equivalent household income and gender, the following variables will be introduced: age (in 10-year intervals), education (converted to years of education in standard periods), whether the individual has remarried (i.e. whether or not he or she has a spouse), whether or not the individual lives alone, whether or not the individual lives with parents, whether or not the individual has a child younger than 13 years of age,² and whether or not the individual's employment status is that of an ordinary regular employee.

Table 3 shows male and female averages for the variables used in this analysis. Cases with missing values are deleted according to list-wise deletion criterion. For this reason, in comparison with the figures shown under "Divorced" in Table 2, these data include three fewer male cases and four fewer female cases.

² This category includes respondents who have children younger than 13 years of age in their households, excluding those who have remarried. Remarried respondents are excluded because the data contains no information to tell whether the children are from a previous marriage or from remarriage.

Equivalent household income is higher for men and lower for women. This is the same result as seen in Table 2.

Age distribution differs slightly between men and women. The women tend to be younger and the men tend to be older.³

Gender differences are apparent in education. The mean of years of education for divorced men is roughly 12.5 years (a little higher than the high-school graduate level), and for divorced women is roughly 11.9 years (just below the high-school graduate level).

Gender differences are apparent in family and household conditions as well. While the proportion of men who remarried (i.e. those with spouses) is 56.2%, for women the proportion is 32.5 %. The likelihood of a male remarrying after divorce is higher. While the proportion of men living alone is 23.2%, for women this proportion is 14.1 %. The percentage is thus higher among men. However, almost no difference is apparent in the proportions of subjects living with parents: 23.6% for men and 21.7% for women. On the other hand, while 2% of men live with children younger than 13 years of age, 15.3% of women do so. Thus, while very few men live together with young children, the cases of women doing so are not rare.

Gender differences are apparent in employment conditions as well. The proportions who were ordinary regular employees at the time of the survey were 43.8% of men and 25.7% of women.

4-2. Multiple linear regression analysis

We used these variables in multiple linear regression analysis to predict equivalent household income. Starting with a simple model, we will gradually increase the number of independent variables.

First, Model 1 checks for the effect of gender, controlling only age composition. The coefficient of the “female” variable is negative. This means that women’s equivalent household income tends to be lower in comparison with men’s. The value of this coefficient is -0.346 . This value largely corresponds to the difference (0.329) between the means for men (5.631) and women (5.302) under “Divorced” in Table 2.

Model 2 introduces the variable of education (years of education). The coefficient of the “education” variable is 0.102, indicating that equivalent household income tends to increase with educational status. As a result of introducing this variable, the effect of gender shrunk from -0.346 to -0.274 . This implies that roughly 20% of the difference in equivalent household income after divorce due to gender is attributable to the fact of male-female differences in education.

Model 3 adds variables concerning family and household. Of these, the variable with the greatest impact is the presence of children younger than 13 years of age. The coefficient is -0.373 . In comparison with the impact of education above, this corresponds to roughly 3.7 years

³ This figure may reflect the tendency toward marriage between an older husband and a younger wife. Alternatively, it may be the case that marriages between spouses with greater age differences are more likely to end in divorce. Whichever the case, the data contain a truncation effect in the age of the survey subjects because they are sampled from the population of people ages 28–77.

of education. Next, the effect of remarriage is also relatively large, with a coefficient of 0.246. This corresponds to 2.4 years of education. No significant results were apparent for living alone or living with parents.⁴ As a result of introducing these variables, the effect of gender shrunk from -0.274 to -0.183 . Approximately one-fourth of the gender gap in equivalent household income after divorce is attributable to these factors related to family and household. Most of this impact depends on whether the individual has a child younger than 13 years or age and whether the individual is remarried.

Finally, Model 4 adds a variable concerning employment. If the individual is an ordinary regular employee at the time of the survey, the impact on equivalent household income is 0.282. Introduction of this variable shrunk the gender effect from -0.183 to -0.121 . Thus, this factor creates nearly 20% of the gender gap in equivalent household income in post-divorce life. We should also note that the effect of gender is no longer significant in Model 4.

4-3. Summary of the results

The results of analysis make the following points clear. The economic disadvantages of women appear among divorced and widowed persons. For the most part, the causes of the worsening of economic conditions for divorced persons can be reduced to four factors: (1) having young children, (2) not being an ordinary regular employee, (3) not remarrying, and (4) having a low level of education. The above results largely support the results of the analysis in Tanaka (2008).

However, there are some differences between our results and those of Tanaka (2008). The greatest difference is the fact that the effect of the presence of children under 13 years of age on equivalent household income is much smaller in the results of our analysis: The effect in our analysis is less than one-half of Tanaka (2008). Also, the effect of gender in the initial model (Model 1 in Table 4) was slightly smaller in the results of our analysis. The analysis of Tanaka (2008) excluded those who had remarried. In addition, Tanaka (2008) used information about occupational history to make the variable of continuous employment as ordinary regular employees during the childrearing stage, and in our analysis we considered only employment status at the time of the survey. These differences, including differences in data and variables, should be subjected to scrutiny in future research.

5. Discussion

5-1. Restructuring the family system

The above results indicate that the family system should bear the primary responsibility for the economic disadvantages of women. As discussed in Section 3, the current family system offers no framework for the proper distribution of risks brought about by the division of labor between spouses. When a marriage breaks up, the relationship can be dissolved with one party

⁴ Murakami (2009) suggests that divorced women can receive the benefits of living with parents in their own home. Such an economic benefit related to house rent does not appear in our analysis using income as the dependent variable.

bearing no risks at all. The difference between men and women in terms of the likelihood of remarriage is also a problem with the family system, since this is a result of the mate-selection process, which is a part of the family system. The gender difference in education⁵ involves issues not related to the family. However, it is also created within the family, where the parents have a power to determine educational investment for their daughters and sons. Given the recognition that the current family system leads to malfunctioning, we must explore how to achieve macro-level gender equality.

It is difficult to regulate the educational investment that parents make in their children. This is because there are no norms in the family prohibiting discrimination by gender. Of course, the intentional abandonment of children will be treated as a crime and will be subjected to legal sanctions. However, anticipating a child's future life and attempting to give him or her suitable human capital is not recognized to be unjust, even if such anticipation of the child's future life is conducted through statistical discrimination using information based on gender.

The same can be said about the division of labor within the home. The division of labor under which the husband earns income while the wife is in charge of housework and caring for children is not itself considered unjust. While this division of labor results in substantial qualitative differences in human capital between husband and wife, it would be difficult to establish norms of direct regulation at a micro level.

A more hopeful strategy is to improve the system of financial provisions on divorce in order to adjust the imbalances resulting from marital life. If legal intervention is properly conducted to manage the divorce process to reach a fair settlement between the couple, it will make a great contribution for the elimination of women's economic disadvantage.

We take an example of the joint responsibility of parents for their children. Their responsibility for their children continues after divorce. However, in many cases, divorcing parents do not recognize this responsibility for raising children after divorce. While systemic reforms have been conducted to secure the payment of childcare costs, these have not developed as norms that regulate the behavior of parents (Shimoebisu, 2008).

Similar issues concern how to adjust for differences in human capital resulting from the division of labor during marriage as well. Since the establishment of the provisions on the distribution of marital property under an amendment to the Civil Code of Japan in 1947, the system of financial provision on divorce has undergone gradual improvement in case laws. However, this

⁵ In today's Japan, gender differences in the rates of advancement to secondary and higher education largely have been eliminated. However, a considerable difference is apparent in the rates of advancement to four-year universities or higher. Roughly 50% of males but less than 40% of females advance to that level of education. Differences persist in the rates of advancement to graduate school as well (Onai, 2005). Hirao (2008) found, based on the comparison of educational attainment among siblings using the NFRJ03 data, a persistent gender gap in the enrollment in four-year universities, though the gap had been narrowing. On the attitude of parents, Abe and Murayama (2009) detected higher educational aspiration for sons than for daughters, using data from a series of surveys of high-school students and their parents in Miyagi Prefecture from 1987 to 2007. This gap in parents' aspiration was great in the 1980s: the percentage of parents expecting their daughters to go to a four-year university was about one-half of the percentage of parents expecting their sons to go to a four-year university (Abe and Murayama, 2009, p. 52). Brinton (1993, pp. 213–217) argued, based on data from surveys of men and women in their 20s and 40s in Sapporo, Kodaira, and Toyohashi in 1984, parents' educational investment strategy was different between for sons and for daughters, because they determined the strategy based on gendered prospects of the child's work life and income in future. These findings indicate that the educational gender gap has been created through gender discrimination in the family in the past.

system is seen to cover material property only, and ordinarily human capital accumulated during the marital life has not been included. The text of the law does not stipulate that this system should be restricted to material property. Legal scholars have for many years asserted that financial provision on divorce should cover the husband's or wife's human capital and social status obtained through their cooperation (Round Table by Lawyers, 1955; Wagatsuma, 1953). However, up until today, no norms have been established that call for a full settlement of human capital and social status that a divorced couple have achieved through their marital life.

Under policies of gender equality, we should establish micro-level norms calling for an equal sharing of responsibility between husband and wife of all of the results of their marital life. Motozawa (1998, pp. 272–276.) described a practical standard for this purpose. This standard calls for treating any changes that have occurred during marriage (1) by restoring to their original state those for which such restoration is feasible and (2) by balancing others through monetary transfer. The subject of such treatment includes disadvantages in employment arising from the division of labor between husband and wife and various burdens related to the raising of their children.

Motozawa (1998) did not mention the difference between men and women in the event of remarriage. But we can think of the difference as a result of the division of labor between husband and wife. In the typical sexual division of labor, the husband accumulates general human capital that can be easily applied outside of the marital relationship, while the wife accumulates specific human capital that is effective in a particular human relationship (England et al., 1990). This difference in their human capital can be a source of inequality in the marriage market. If this is so, we argue that financial provision on divorce should include compensation for such inequality.⁶

After fully making these adjustments in the financial conditions of divorce, disadvantage of women in the post-divorce life would decrease. In Table 4, we confirm the factors that affect the gender gap in equivalent household income after divorce: remarriage, the presence of children younger than 13 years of age, and employment as an ordinary regular employee. Most of the change in the coefficient for the “female” variable from Model 2 to Model 4 (from -0.274 to -0.121) is due to these factors. The result thus predicts that the full compensation for the effects of the three factors above is able to cover roughly 40% of the -0.346 effect of gender shown in Model 1 of Table 4.

5-2. Plural policies and micro-macro linkage

As described above, the primary cause for the economic disadvantage of women is found in the family system. This problem should be solved through the reform of systems for financial provision on divorce. However, although progress is being made from a legal perspective, no widespread consensus has been reached on the necessity for such reform. It is likely to take many

⁶ On this point, another explanation is that the experience of divorce itself decreases a woman's competitiveness in the marriage market. If so, this does not result from changes during the couple's marital life. Although we can regard this factor as internal to the family system, it may not be suited to making a settlement on divorce, because it is not the responsibility of each couple.

years until a new principle of micro-level justice is established and norms are developed that effectively regulates people's behavior in circumstances of divorce.

At the same time, in addition to the family, private companies and government could be considered to be parties that have a secondary responsibility for this problem. For example, the principle of equal pay for equal work functions to decrease the impact of employment as an ordinary regular employee in Table 4, by reducing the wage differential between regular and non-regular employment. Government benefits for children and policies in the area of work-life balance are likely to reduce the impact of having young children. There are thus a variety of policies to reduce differences between the economic advantages enjoyed by men and women.

We should keep in mind that these policies —equal pay, child benefits, and work-life balance— have their original aim as something other than the elimination of gender inequalities created within the family. There are therefore logical limits to their power to help us realize gender equality. However, we have already achieved a broad consensus on the principles to justify these policies —i.e. equity of wages, child welfare, and worker choice and freedom. They already exist in the stage of policy implementation. These policies thus have the advantage of being highly feasible in the short term.

Concerning the extent to which these complex policies can realize macro-level economic equality between men and women, continued observation is required. The reform of a micro-level subsystem is restricted by micro-level justice required in the subsystem, so it cannot be optimized solely through consideration of equality at a macro level. Also, the scope of the impact of each policy is limited by factors such as the conditions of the labor market, public finance, demographic constraints, and the balance of political power. We have conducted a quantitative analysis in this chapter using the rough data from a multi-purpose survey for family research. It is not sufficient to take into consideration the effect of the complex policies. We need detailed data about how the family system determines men's and women's economic status, and we need systematic research to clarify the effects of policies and to develop the possibility of economic gender equality.

Acknowledgement

The data for this secondary analysis, National Family Research of Japan 2003 (NFRJ03) by the NFRJ Committee, Japan Society of Family Sociology, was provided by the Social Science Japan Data Archive, Information Center for Social Science Research on Japan, Institute of Social Science, the University of Tokyo.

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Tables

Table 1 Synopsis of NFRJ03

Survey name	National Family Research of Japan 2003
Survey organizer	Japan Society of Family Sociology, NFRJ Committee
Survey company	Central Research Service Inc.
Survey area	All over Japan
Subjects	Japanese nationals living in Japan and born between 1926 and 1975 (28 to 77 years old as of the end of 2003)
Sampling method	Stratified two-stage random sampling
Sample size	10,000 (response 6,302, response rate 63.02%)
Survey period	January to February 2004
Survey method	Self-administered questionnaire, home delivery, leave and pick-up
Published reports	The first report in 2005 and the second report (2 volumes) in 2006
Data availability	Deposited at the SSJ Data Archive by the University of Tokyo (Survey Number 0517)
Website	http://www.wdc-jp.com/jsfs/english/nfrj.html

Table 2 Log equivalent household income by sex and marital experience

	Unmarried	Divorced*	Widowed**	Married	Total
Male	5.697	5.631	5.688	5.736	5.722
	0.681	0.694	0.726	0.611	0.629
	(278)	(206)	(86)	(2,139)	(2,709)
	298	279	295	310	306
Female	5.655	5.302	5.287	5.702	5.632
	0.682	0.760	0.765	0.617	0.664
	(192)	(253)	(244)	(2,329)	(3,019)
	286	201	198	299	279
Total	5.680	5.450	5.392	5.718	5.675
	0.681	0.749	0.774	0.614	0.649
	(470)	(459)	(330)	(4,468)	(5,727)
	293	233	220	304	291

Mean, standard deviation, (*N*), and exponent of the mean in each cell.

* : Including those who have remarried.

** : Including those who have remarried and excluding those who have experienced divorce.

Results of ANOVA: $p < 0.01$ for all of the main and interaction effects (by Type III SS).

$R^2=0.034$ ($p < 0.01$).

Table 3 Descriptive statistics for regression analysis (for those who experienced divorce)

	Male		Female	
	Mean	SD	Mean	SD
Log equivalent household income	5.633	0.698	5.309	0.760
Age*:				
28–37	0.118		0.193	
38–47	0.246		0.301	
48–57	0.281		0.261	
58–67	0.241		0.181	
68–77	0.113		0.064	
Education**	12.493	2.355	11.936	1.898
Remarried+	0.562	0.497	0.325	0.469
One-person household	0.232	0.423	0.141	0.348
Living with parent	0.236	0.426	0.217	0.413
Child under 13++	0.020	0.139	0.153	0.360
Ordinary regular employee	0.438	0.497	0.257	0.438
(N)	(203)		(249)	

SD: Standard deviation.

* : Age as of 31 December 2003.

** : Years of standard requirements.

+ : Those who had a spouse at the time of the survey.

++ : Excluding those who had a spouse at the time of the survey.

Table 4 Regression analysis of log equivalent household income (for those who experienced divorce)

	Model 1	Model 2	Model 3	Model 4
Constant	5.840** (0.075)	4.526** (0.222)	4.435** (0.229)	4.350** (0.226)
Age (reference: 48–57):				
28–37	–0.156 (0.107)	–0.131 (0.103)	–0.042 (0.105)	–0.045 (0.103)
38–47	–0.208* (0.092)	–0.233** (0.088)	–0.165 (0.088)	–0.176* (0.086)
58–67	–0.327** (0.099)	–0.210* (0.097)	–0.222* (0.095)	–0.147 (0.096)
68–77	–0.512** (0.133)	–0.329* (0.131)	–0.379** (0.129)	–0.261* (0.131)
Female	–0.346** (0.069)	–0.274** (0.067)	–0.183** (0.070)	–0.121 (0.071)
Education		0.102** (0.016)	0.098** (0.016)	0.092** (0.016)
Remarried			0.246** (0.088)	0.266** (0.087)
One-person household			0.009 (0.108)	0.025 (0.106)
Living with parent			–0.098 (0.090)	–0.082 (0.089)
Child under 13			–0.373** (0.128)	–0.352** (0.127)
Ordinary regular employee				0.282** (0.072)
R ²	0.087**	0.161**	0.221**	0.247**

Coefficient (standard error). **: $p < 0.01$. *: $p < 0.05$. $N=452$.