

**Single Mothers and Poverty in Japan:
The Role of Intergenerational Coresidence**

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Abstract: We examine the role of intergenerational coresidence in shaping the economic well-being of single mothers in Japan. Using data from a large national survey, we begin by demonstrating that the “official” poverty rate for single mothers (which is based on those living alone) overstates the poverty rate of all single mothers by about 50%. We then show that the poverty rate of mothers would have declined if the prevalence and poverty rates of single-mother families had not increased in recent years. Finally, we demonstrate that 90% of single-mothers coresiding with parents would fall below the poverty line without the shared income of parents and show that public income support plays a very small role in limiting poverty among single-mothers. These results have important implications for understanding poverty and inequality in Japan and other countries like the U.S. where public support for families is limited and intergenerational coresidence is relatively common.

High rates of poverty among single-mother families are well documented and it is clear that the increasing concentration of single parenthood among the least advantaged women is contributing to rising aggregate income inequality and the intergenerational transmission of disadvantage (Ellwood and Jencks 2004; McLanahan and Percheski 2008). In the context of growth in the number of single-mother families, reductions in public income support, increased labor force participation of single mothers following welfare reform, and a poor job market for those with limited human capital, social scientists are increasingly interested in the role of coresidence with parents (and other adults) as a buffer against poverty among single-parent families. Related research has demonstrated that intergenerational coresidence contributes to the economic well-being of single mothers (Haider and McGarry 2005; Magnuson and Smeeding 2005), the well-being of their children (DeLeire and Kalil 2002), and shapes inequality and stratification processes more generally.

Similar research in other countries is very limited. The lack of attention to the role of intergenerational coresidence and family support in other countries, especially those characterized by low levels of public support and few job opportunities for single mothers, is limiting in several ways. First, it complicates efforts to compare the economic circumstances of single mothers across countries. Because most official statistics on poverty and other measures of economic well-being are calculated at the household level (OECD 2011), standard poverty measures presumably overstate the economic disadvantage of single mothers in countries like the U.S. where coresidence with other family members is common. Second, it limits our understanding of relationships between changes in family structure (i.e., the growing prevalence of single mother families) and aggregate-level trends in poverty. Substantial cross-national variation in both the nature of family change and trends in poverty highlight the potential value of comparative insights. Third, it limits our understanding of the extent to which intergenerational coresidence shapes the economic well-being of single mothers (and their children) – especially the extent to which coresidence with parents keeps single mothers out of poverty.

In this paper, we focus on Japan – a country that resembles the U.S. in several key respects but differs markedly in the normativity of intergenerational coresidence. Although nonmarital childbearing is

far less common than in most other low-fertility countries, significant increases in divorce (Raymo, Iwasawa, and Bumpass 2004) have resulted in a rapid increase in single-parent families. Public income support for single mothers in Japan is quite limited and, as in the U.S., the primary policy emphasis is on the promotion of self-sufficiency through employment. In this context, it is not surprising that Japan has one of the highest levels of poverty among single mothers. Indeed, recent data indicate that the proportion of Japanese single mothers in poverty (.54) is higher than in any other OECD country (OECD 2011:216). At the same time, the most recent government survey of single-parent families indicates that 39% of single mothers are coresiding with another adult and that 29% coreside with parents (Ministry of Health, Labour, and Welfare 2012). This high prevalence of intergenerational coresidence suggests that official poverty figures overstate the actual level of economic deprivation among single mothers. It is also possible that poverty rates could be even higher in the absence of intergenerational coresidence if those single mothers who are most susceptible to poverty are also the most likely to coreside.

Research questions:

Question 1: To what extent does failure to account for intergenerational coresidence with parents overstate the level of poverty among single mothers in Japan?

Question 2: To what extent do recent trends in poverty among mothers reflect change in family structure (marital status and living arrangements) and to what extent do they reflect changes in mothers' poverty rates?

Question 3: What is the relative importance of intergenerational coresidence in limiting poverty among single mothers?

Data and Methods:

Using data from the Basic Survey of People's Living Conditions (*Kokumin Seikatsu Kiso Chōsa*), we begin by identifying single mothers and calculating an indicator of household poverty based on detailed information about the income of each household member. Mothers are defined as women coresiding with at least one child under the age of 18 and single mothers are those without a spouse (never married, divorced, or widowed). Poverty is defined as equivalent household income that is less than one-half of the

median value and near poverty is defined as equivalent household income that is less than or equal to 125% of the poverty line. The use of equivalent household income (i.e., total disposable household income from all sources divided by the square root of household size) assumes income sharing among family members living in the same household. With data from multiple rounds of the survey, we are able to address our second question about trends in poverty among single mothers over the past 20 years (1986-2007). The most recent survey in our analyses (2007) includes information on 4,344,338 mothers (weighted N) with a response rate of 65%. The large sample size is critical for our purposes given that the proportion of single-mother families in the population is relatively small.

To address our first question, we calculate the counterfactual level of poverty (and near poverty) among single mothers that would be observed in the absence of any intergenerational coresidence. We generate this figure by recalculating the proportion of mothers in poverty and near poverty after eliminating all income contributed by parents and household members other than the mother. To the extent that coresidence with parents is associated with a reduction in mothers' hours of employment and market earnings, this simple counterfactual will likely overstate the benefits of coresidence. We therefore adjust the earnings of coresident single mothers by assuming that their work hours are equivalent to the mean value observed among single mothers living alone (i.e., we multiply their observed wage rate by the mean value of work hours for single mothers not coresiding with parents).¹ Comparing counterfactual and observed poverty rates allows for a straightforward assessment of the extent to which official measures of poverty based on household income overstate the economic deprivation of single mothers in Japan. Because the earlier surveys do not provide detailed information of income, tax, and social insurance payments for individual household members, these analyses are based on data from the surveys conducted since 1995.

To answer our second question about trends in poverty among mothers, we conduct similar counterfactual analyses. Because the proportion of mothers in poverty in a given year (t) can be expressed

¹ In the preliminary results presented below, we have not yet made this adjustment.

as: $\frac{P_t}{N_t} = \sum \frac{M_{it}}{N_t} * \frac{C_{jt}}{M_{it}} * \frac{P_{ijt}}{C_{jt}}$, where N is the total number of mothers, P is the number of mothers in poverty, M is mothers' marital status (*i*:married vs. unmarried), and C is mothers' living arrangements (*j*:living with parents vs. not living with parents) summed across marital status and living arrangements (*i, j*). It is thus straightforward to calculate values for $\frac{P_t}{N_t}$ that would have been observed if the prevalence of single mothers $\frac{M_{it}}{N_t}$ remained at its initial (1986) values, if the marital status-specific proportions of mothers coresiding with parents $\frac{C_{jt}}{M_{it}}$ had remained constant since 1986, and if the marital status-living arrangement-specific proportions of mothers in poverty $\frac{P_{ijt}}{C_{jt}}$ had not changed. These counterfactual values allow us to calculate the proportion of the observed change in mothers' poverty rates attributable to each component.

A similar counterfactual logic underlies analyses relevant to our third question. With detailed information on the sources of income for all members of each household in the survey (since 1995), it is straightforward to recalculate measures of mother's poverty after counterfactually removing one or more sources of income. We begin with a replication of analyses addressing our first question – how would single mothers' poverty rate change if all income from coresiding parents were eliminated? We then focus on market earnings, comparing observed poverty rates of single mothers in 2007 to counterfactual rates calculated under the assumption of no employment earnings for women. We then focus on public income support, calculating counterfactual levels of poverty based on the assumption that mothers receive no public income support (and pay no taxes). The results of previous research suggest that public support should be much less important than coresidence with parents in reducing poverty among single mothers (Abe 2008). Again, the results of earlier studies lead us to expect that the role of employment earnings in reducing poverty will be lower than that for coresidence with parents (Shirahase 2009). Ours is the first study to provide comparable measures of the contributions of each of these three components of income in reducing economic deprivation among the rapidly growing population of single mothers in Japan.

Preliminary Results

Figure 1 presents results relevant to question 1. The solid black line shows the “official” poverty rates of single mothers calculated based on those who are living alone. Ranging from 52% in 1989 to 64% in 1998 and 2004, these figures are similar to those presented in OECD cross-country comparisons.² The dashed line shows the poverty rate for all single mothers, including those living with parents. Not surprisingly, these figures are substantially lower than the widely-cited figures based on single mothers living alone. Indeed, the standard measure is 26-98% higher than the measure calculated based on all single mothers. Clearly coresidence with parents plays a major role in limiting economic deprivation among single mothers in Japan.

Figure 2 presents results relevant to question 2. The solid line presents observed values of the poverty rate of all mothers which increased somewhat from 10% in 1986 to 12% in 2007. The three dashed lines depict the counterfactual poverty rates that would have been observed if no change had occurred in the prevalence of single mothers (triangle markers), the proportion of mothers living with parents (diamond markers), and the poverty rates of mothers in each marital status-living arrangement configuration (circle markers). Through 2001, it is clear that changes in the prevalence of single mothers and living arrangements contributed little to changes in mothers’ poverty rate. The level of poverty among mothers would have declined if the poverty rate of single mothers (regardless of living arrangements) had not increased. Since 2001, however, the rise in single-mother families has contributed to part of the rise in mothers’ poverty rate (the proportion of mothers who are not married increased from .05 in 1986 to .11 in 2007). If the prevalence of single mothers had remained at its 1986 value, the percent of mothers in poverty in 2007 would have been 11% rather than 12%. However, the magnitude of these changes is relatively small, reflecting the fact that the vast majority of mothers are married and have experienced relatively little change in poverty.

² One difference between this measure and the official measure released by the Ministry of Health, Labour, and Welfare is that we define single mothers as unmarried women living with a child age 18 or younger rather than age 20 or younger.

Figure 3 presents results relevant to question 3. The black bars represent the observed poverty rates of single mothers living on their own (left) and with parents (right) in 2007.³ Moving from left to right, the gray bars represent the proportion of single mothers who would be in poverty if we counterfactually eliminate (a) the income of coresident parents, (b) women's own market earnings, and (c) public income support. The story from these figures is clear. For single mothers living on their own, earned income is far more important than public income support in preventing poverty from being even more prevalent. This is not surprising given that the primary policy emphasis is on promoting independence through employment. For single mothers living with parents, shared income is critical. In the absence of parents' income, 90% of these women would fall below the poverty line.

Next steps

In subsequent extensions of the preliminary analyses presented here, we will construct, describe, and incorporate more detailed measures of living arrangements, paying particular attention to single mothers who are living with adults other than their parents. We will also incorporate additional variables such as age of mother, age and number of children, age and marital status of parents, and pathway to single-parenthood (non-marital childbearing, divorce, widowhood). Finally, we will make efforts to account for the endogeneity of living arrangements and economic well-being and non-random selection into different living arrangements more generally (e.g., as in Raymo and Zhou 2012).

³ For the sake of simplicity, we present results only from the 2007 data here. Patterns in other years are similar and will be included in subsequent extensions.

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Figure 1: Proportion of single mothers in poverty, "official" and modified measures

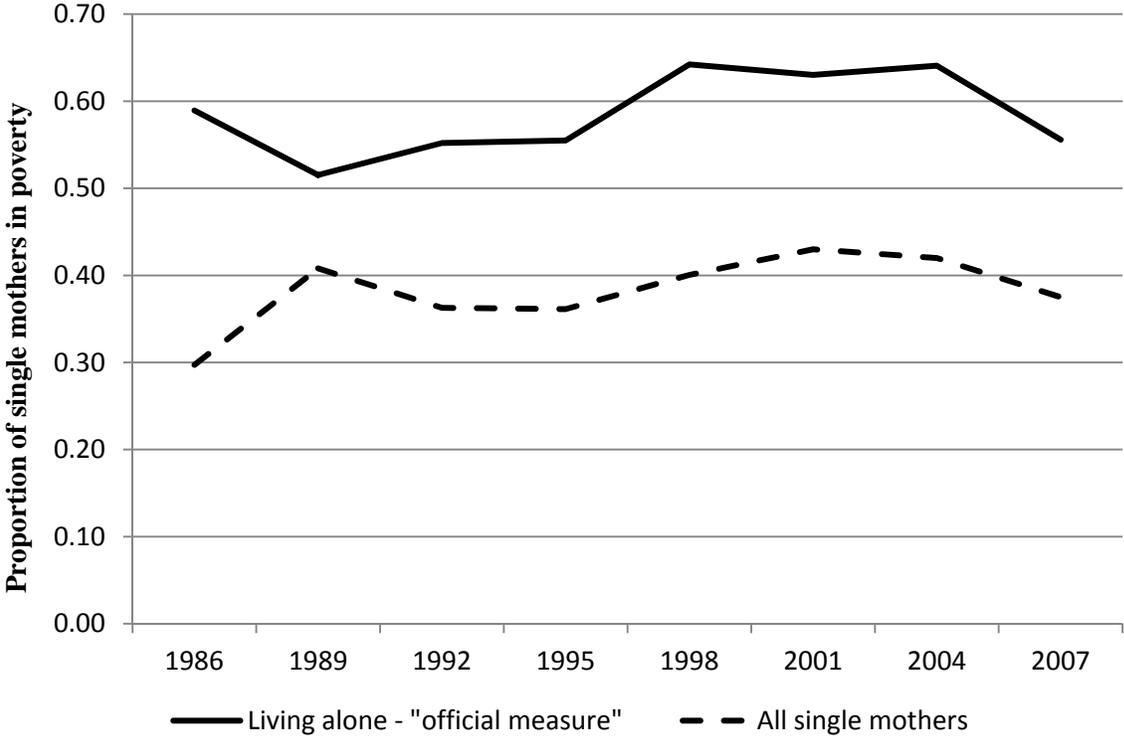


Figure 2: Observed and counterfactual trends in the proportion of Japanese mothers living in poverty, 1986-2007

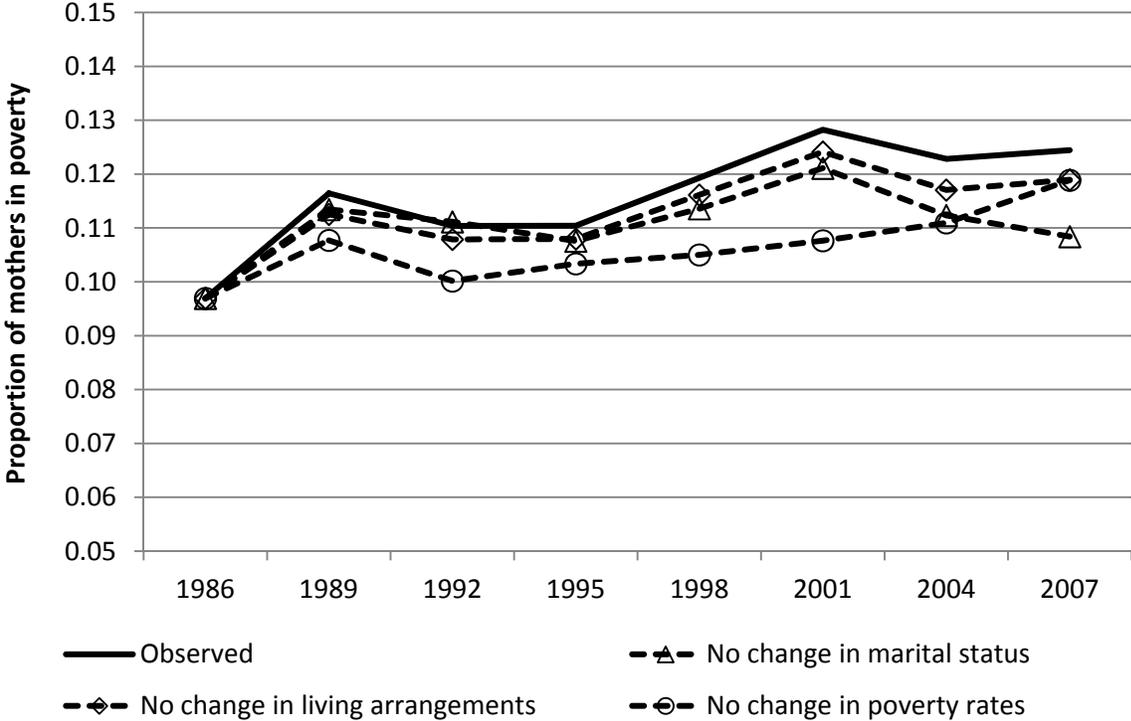


Figure 3: Observed and counterfactual proportions of single mothers living in poverty, by living arrangements, 2007

