# Do Women Really Fare Better When Working Part-time? : Examining the Korean Case 

Jayoung Yoon<br>Korea Labor Institute


#### Abstract

As married women enter the labor market and the traditional gender division of labor is being undermined, concerns with gender equality have been soaring in terms of the distribution of total work between men and women. In solving the difficulties of accommodating needs of employed married women, part-time employment is being promoted as a strategy enhancing labor force participation of married women with children. Part-time work may have positive effects of reducing the burden imposed on married women who manage both paid work and family responsibilities. This study purports to offer better understandings of whether female part-time employment helps women reduce their workload. This study takes advantage of a nationally representative time use survey collected in 2004. The analysis shows that had women not worked part-time, the gender gap in the total work would have been much greater, but that the gender gap still remains intact even if women's part-time employment reduces the gap in the total work. And women's part-time employment hardly affects women's share of the total work out of the household total work within households. That is, holding other things constant, women who work part-time perform almost the same share of total work within households as do women working who work full-time. But the fact that the sign of the coefficient is positive implies that women who work part-time could undertake a higher share than women who work full-time.


Key words
total work, unpaid work, gender gap, part-time employment

## Introduction

In the last four decades of the twentieth century, South Korean women dramatically increased their participation in paid employment. Their labor force participation rate increased from 37.0 percent in 1963 to
50.5 percent in 2008, narrowing the gender gap in the labor market participation. The increasing participation rates of the married women led many scholars to emphasize the weakening of the traditional male breadwinner model in Korea (Cho, 2000). As married women enter the labor market and the traditional gender division of labor is undermined, concerns with gender equality have been soaring in terms of the distribution of total work between men and women. Gender inequality in total work in South Korea is extreme by international standards: the ratio of Korean females' total work hours to those of Korean males is ranked the second highest among OECD countries at 116 percent, following Italy with 128 percent ${ }^{1}$ (UNDP, 2003). Although attitudinal changes towards sharing housework are clearly occurring, husbands of employed women do not devote commensurate time to non-market work, creating public concerns about distributional justice (Lee, 2002).

Coupled with the men's lagged adaptation or resistance to sharing unpaid work, the labor market regime in Korea characterized by long work day and inflexibility is said to be responsible for the severe gender inequity in the distribution of total work in the event of women's paid employment (ILO, 1999). The rate of women's part-time employment as a percentage of total female employment is the lowest at 7.8 percent compared to 36.1 percent for Japan and 19.5 percent for the United States (OECD, 1999). ${ }^{2}$ This may imply that once married women remain in the labor force, they tend to experience longer total work hours than their staying-at-home counterparts.

In solving the difficulties of accommodating needs of employed married women, part-time employment is being promoted as a strategy enhancing labor force participation of married women with children (Hwang, 2004). Part-time work may have potentially positive effects of reducing the burden imposed on married women who have to manage both paid work and family responsibilities. But experiences of developed countries demon-

[^0]strate its adverse or limited impacts on both its effectiveness of inducing female employment and improving gender relations; especially when the part-time employment is envisioned as the secondary-labor market model where it is characterized by job insecurity, poor wages, and poor working conditions (Tijdens, 2002). Successes of part-time work as coping strategies for women faced with the 'the second shift' could be moderated by institutional contexts such as gender relations regarding equal sharing of housework or social pressure about mothers' exclusive responsibilities for child outcomes. While a few studies have emphasized an unequal distribution of total work-paid work and unpaid work- associated with the employment of married women in general (Son, 2005; An, 2008), there have been no empirical studies conducted to assess whether part-time employment would narrow gender gaps in the total workload, when it is adopted as a family-friendly labor market regime.

This study purports to offer better understandings of the impact of married women's employment on the distribution of the total workloads in married couples, with a focus on the impact of women's part-time work. This study takes advantage of a nationally representative time use survey collected in 2004 that is believed to help produce precise measures of the amount of time devoted to unpaid work as well as paid work (Juster \& Stafford, 1991). The author examines whether female part-time employment might reduce gender inequality in the total work in married couples. This will allow us to obtain better understanding of assessing the impacts of what is called family-friendly part-time employment on women's economic welfare.

## Previous Studies

Married women participating in the labor market both win and lose. While their own earnings may be able to give them bargaining power against their partners or purchasing power of meeting their own tastes, they come at the expense of their own leisure time. Research on the impacts of employment of married women in Western countries finds that men are irresponsive to spouses' employment. Men's contributions to household work and child care show invariantly little changes no matter what circumstances the household may be under (Coverman \& Sheley, 1986; Greenstein, 1996; Hochschild, 1989; Nock \& Kingston, 1988;

Manke, Seery, Crouter, \& Mchale, 1994), or weak, indirect, or no significant associations between women's employment and men's housework time (Hartmann, 1981; Kamo, 1991; Shelton, 1990; Shelton \& John, 1996), or even less time in direct child care activities than fathers with nonemployed wives (Bryant \& Zick, 1996). As Hartmann (1981) precisely points out, variations in wives' household work time generally are not explained by variations in the contributions of other household members including husbands' contributions to household work. Time spent by the husbands is almost invariant regardless of the wives' employment status and hours of working. Husbands hardly contribute to household work when they are unemployed or employed part-time. She concludes that the transformation of the society into patriarchal capitalism drives women out of the domestic sphere, but women still take on no less household responsibilities than they used to. The apparent higher income of du-al-earner families than that of single-earner families is made possible at the cost of women's leisure time.

Under these circumstances, it is likely that the adjustments are made on the part of women in order to balance work and family responsibilities. Marital conflicts over time allocation among couples seem to be resolved through choices about women's employment by dropping out of labor market or reducing their hours of work (Sanchez \& Thomson, 1997). Employed wives' overload diminishes because they make adjustments in their paid work time. However, women employed part-time to accommodate childcare responsibilities may find that they have little free time despite their part-time employment. The part-time arrangement for mothers reinforces conventional definitions of the gender division of labor (Negrey, 1993). A study of the Australian Time Use Survey finds that mothers working part-time, the most prevalent regime in Australia, have the highest total workload among groups such as working full-time, working part-time, unemployed, and not in the labor force (Craig, 2002). The labor market structure that puts women in marginalized part-time sectors may not necessarily be advantageous to women simply because it is based on assumptions that women are still responsible for family responsibilities, of which men are absolved.

The expansion of part-time employment for women could potentially constrain reorganization of paid and unpaid work in favor of gender equality in South Korea. Qualitative and quantitative studies done by Korean
researchers suggest that employed mothers certainly spend less time on housework than staying-at-home mothers do, but induces minimal changes in men's participation in unpaid work (Cho, 1994). Women's involvement in paid work, together with attitudinal changes in gender roles and reduced family size, led men to devote more time to unpaid work, but the increase is very marginal (An, 2008). Employed women in dual-earner couples use a variety of individual strategies for balancing work and family on their part by adjusting their paid work. Employed women are less likely to work during weekends and nights, more likely to work fewer hours, and more likely to work at home (Son, 2005).

Under these conditions, part-time employment obviously reduces total workloads of married women, but might hardly change men's participation in unpaid work. As a consequence, women's gender role of taking primary responsibility for housework and childcare may be reinforced. The reinforcement in turn may lead to gendered specialization where men are completely exempt from family responsibilities. Therefore, part-time employment not only marginalizes women in the labor market but also intensifies gendered specialization in kinds of work, limiting positive impacts of reduced work hours in total workloads.

## Method

## The Data and Sample

The Korean Time Use Surveys (KTUS) are conducted to measure time spent on various activities including household production using time diary methods (Shon, 2000) ${ }^{3}$. The time diary method provides a better quality of estimates of unpaid and care activities than do surveys based on stylized questions about amounts of time. Studies using stylized questions typically produce higher estimates of household production than those using time diary methods (Juster \& Stafford, 1991).

The 2004 KTUS was fielded during 12 days from September 2 to September 13, 2004. It surveyed 32,000 individuals aged 10 years and over in 12,750 households about time use for two designated consecutive

[^1]days for which households were divided into five groups: Friday and Saturday; Sunday and Monday; Tuesday and Wednesday; Thursday and Friday; and Saturday and Sunday. Activities were coded into 125 categories. The respondents were asked about primary and secondary activities, structured in 10 minutes intervals; secondary activities simultaneously take place with primary activities. The clustering and stratification in sampling method contributed to a high response rate by monitoring the process of filling out diaries. The overall response rate was 98.3 percent, yielding 63,268 diaries. Time diaries were left with respondents to fill out; a trained interviewer visited individual households the day before the designated days to explain the purpose and contents of the survey and to administer the household questionnaire and individual questionnaire. The respondents were asked to describe their activities in the open survey in as much detail as possible.

The analysis of this study will be restricted to married couples aged 55 and under living without or with children and living in both urban and rural areas. Married couples co-residing with their elderly parents are excluded from the analysis in order to be able to focus on the gender relations within married couples. This study examined only households in which either husbands or wives are employed as wage-earners to focus on the impact of the labor market participation on the distribution of paid and unpaid work within the households.

## Dependent Variables: The Definition of Paid and Unpaid Work

The analysis of the distribution of total work between husbands and wives is based on the time diary measure of capturing the total amount of time devoted to productive activities. Activities represented as conventionally productive work were classified in a major group, "employment." The group includes four subcategories such as employment for establish-ments/self-employed work, second job, unpaid work in family business/farm/garden, and purchasing employment related goods. The unpaid work for the family business/farm/garden will not be considered for this study because those engaged in family business/farm/garden as the source of main occupation are irrelevant for this paper. In fact, very few people in the sample selected for this paper are engaged in such activities. "Paid work" includes these activities and also related travel time for paid work
such as commuting to and from work.
"Unpaid work" reflects productive and yet uncompensated activities. The time devoted to activities related to unpaid work is conceptualized as productive work under the assumption that it produces transferable benefits to the third party that one would otherwise have to purchase (Waring, 1989). Unpaid work is broken down into two categories: housework and childcare. Housework includes food preparation, house cleaning, doing laundry, household management, gardening, house maintenance and repairs, car care, and shopping. Child care includes activities such as physical care, reading to/playing with children, helping with homework, visiting school, and voluntary participation in school activities for children. Voluntary activities of parents, mostly mothers, include classroom cleaning, a school lunch program, a traffic safety guidance, library management, special education, etc. Although this last activity is classified under 'voluntary activities', not under child care, it was decided to include it as efforts made by married women to care for children. Other kinds of voluntary activities such as civic obligations and community service can be regarded as productive, but they are not included as part of unpaid work, because the paper focuses on husbands and wives dividing their time between paid and unpaid work to provide necessary resources to household members. Having defined paid work and unpaid work as described above, 'total work' refers to the sum of time devoted to both paid work and unpaid work where secondary activities are also included in the measures.

## Independent Variables: Full-time versus Part-time

ILO defines part-time workers as those who work less than what full-time regular workers work. Labor Standards Act of Korea also defines part-time workers as those who work shorter than full-time workers working at similar jobs at the same workplaces. But these definitions are merely by legal standards and prevent us from analyzing actual hours worked by part-time workers. In order to capture actual sizes and practices of part-time labor markets, operational definitions are needed (Hwang, 2004).

In this study, measures of full-time versus part-time are constructed by using the questionnaire that asked about 'did you work for a payment at least an hour in the previous week?' and 'how many hours did you work
last week?' Since the purpose of this study is to assess part-time female employment as a strategy of balancing work and family and thereby alleviating gender inequality in total workloads, three different cut-offs are employed for defining part-time employment (20, 30, and 35 hours per week) for sensitivity analyses. The results found no fundamental changes by them in findings shown from Table 1. Therefore, 30 hours per week were used as the cut-off of defining women's part-time employment.

## Empirical Strategies

The investigation of whether women's part-time employment would reduce the gender gap in the time spent on total work combining paid work and unpaid work poses two questions. First, would women's part-time employment narrow the gender gap in total work across individuals? To answer this, OLS regression analyses were conducted for estimating determinants on the total work. Three different sets of regressions were conducted separately for weekday, Saturday, and Sunday, since part-time employment is likely to occur mostly during the weekdays. The first regression estimates a gender gap in the total work controlling for variables other than individuals' part-time dummy variable; the second regression adds the part-time employment variable to the first model; and the final regression adds the interaction term between gender and part-time employment. The main finding of interest is whether the coefficient on gender changes upon the entrance of the part-time dummy when controlling for other related explanatory variables. The controlling variables include job and human capital variables: working in a manufacturing sector, lodging, restaurant, service sector and working for clerical, sale, manual jobs (female-dominant jobs); monthly income; college graduates; age; dummies for different age groups of children; and living in urban/rural.

The second question is whether women who work part-time perform a smaller share of total work out of men's and women's total work combined than women who work full-time. This would be a rather direct measure of whether female part-time employment help undertake an equal share of total work relative to her spouse given a household. Women's share is defined as the ratio of women's total work to household total work and conducted interval regressions that are often employed when a depend-
ent variable is bounded to a lower and upper limit. In this case, the share has values of 0 as the lower and 1 as the upper limit.

## Female Part-time Employment and Gender Equality in Total Work

This section presents a descriptive analysis of the sample used and the time allocation to paid and unpaid work and discusses regression results.

Table 1 shows an overview of characteristics of husbands and wives included in the sample by the three different household types: men one-earner households where only men are employed as wage earners while women are not participating in labor markets; women part-time households where women work less than 30 hours; and women full-time households where women work more than 30 hours. Of wives employed, only 18 percent were working part-time, indicating that the majority of dual-earner households contain women employed full-time. It confirms that the men one-earner model and the full-time dual-earner model are currently the two dominant competing regimes in Korea. This obviously raised concerns about women's economic activities caught between remaining as professional home-makers and participating in the labor market at the risk of their heightened total workloads.

Table 1.
The Sample Statistics

|  | Men One-earners Household |  | Women Part-time Household |  | Women Full-time Household |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{n}=7,104$ |  | $\mathrm{n}=876$ |  | $\mathrm{n}=4,176$ |  |
|  | Men | Women | Men | Women | Men | Women |
| Monthly Income (tens of thousands won) | 237 | 0 | 221 | 56 | 196 | 116 |
| College graduates | 43\% | 24\% | 40\% | 27\% | 29\% | 18\% |
| Working in Manufacturing sectors | 18\% |  | 14\% | 12\% | 13\% | 8\% |
| Working in Lodging, Restaurants, and Service sectors | 15\% |  | 16\% | 3\% | 22\% | 8\% |
| Clerical, Sales, and Manual jobs | 53\% |  | 54\% | 46\% | 56\% | 41\% |
| Age | 38.6 | 36.1 | 40.3 | 37.5 | 40.4 | 37.7 |
| \# of Children < 3 | 0.32 | 0.32 | 0.14 | 0.13 | 0.10 | 0.10 |
| \# of Children 3-6 | 0.20 | 0.20 | 0.26 | 0.26 | 0.17 | 0.18 |
| \# of Children 7-18 | 0.48 | 0.49 | 0.81 | 0.81 | 0.72 | 0.73 |
| \# of Children >18 | 0.15 | 0.15 | 0.13 | 0.14 | 0.22 | 0.22 |
| Farming Households | 0\% | 0\% | 1\% | 1\% | 1\% | 1\% |
| Total Work (minutes per day) | 496 | 427 | 482 | 522 | 494 | 580 |
| Total Unpaid Work (minutes per day) | 49 | 424 | 56 | 321 | 54 | 211 |
| Total Paid Work (minutes per day) | 447 | 3 | 425 | 201 | 439 | 369 |
| Weekly Working Hours | 51 | 0 | 50 | 18 | 52 | 49 |

[^2]Weekly working hours for men are almost similar across the households. Women working part-time reported their weekly working hours as, on average, 18 hours per week whereas women working full-time work 49 hours per week, which approximates that of men. Differences in characteristics among the group to note is that women working part-time have more children aged under 18 than those working full-time, implying that par-time employment is likely to be chosen as strategies for balancing paid work and family responsibilities in households with small children. Men and women in households with women working full-time are less likely to graduate from colleges than their counterparts in the households with women working part-time.

There is no doubt from the past studies that women's employment increases their total workloads by inevitably intensifying the gender gap through the total workload. The question then is whether women's part-time employment could reduce their total workload. Presented first is the descriptive pictures of whether men and women in married couples would experience the gender gap in the total work by calculating average daily amounts of time spent on three areas of productive activities: paid work, housework, and child care. On average, men and women spend approximately similar hours on total work, close to 500 minutes per day. Although women appear to spend slightly less minutes on total work, the difference was only statistically significant at margins, 10 percent. It is consistent with Western countries' experiences that men and women's total work are converging to each other (Burda, Hammermesh, \& Weil, 2007). Not surprisingly, however, the composition of 'work' differs by gender; with women spending almost half of their time on unpaid work demonstrating gendered specialization in kinds of work. The breakdown by the day of the week provides us with an interesting picture of another dimension of the unequal distribution of total work (See Figure 1). The distribution of total work varies substantially by the day of the week. Men, all employed, devote tremendous amounts of minutes on paid work (more than nine hours on an average day), reflecting masculine practices of long workdays in Korea. As a result, during the weekday, men's total work time outweighs women's. However, the gender gap in the total work time reverses on Saturday and even more drastically on Sunday, precisely because unpaid work undertaken by women vary little by the days of the week. Men's reduced minutes of paid work on weekends con-
tribute to even widening the gender gap despite their slight increase in housework and child care. The fact that the severe inequality takes place during the weekends, particularly on Sunday, calls into question a complex of gender dynamics within the households going beyond the structure of labor market.

Figure 1.
Time Allocation to Paid Work, Housework, Care Work by the Day of Week


Figure 2.
Distribution of Work and Women's Share of Total Work by Household Type


How then does women's employment status affect this gendered distribution of total work? Figure 2 presents the distribution of care work, housework, and paid work between men and women in different types of households depending on female employment status: not employed; part-time employment; and full-time employment. Total work includes all three, care work, housework, and paid work. All men in these household are employed as wage-earners. Part-time is defined as those who worked less than 30 hours per week. I repeated the following analyses by using the definition of part-time employment based on 20 and 35 hours, but findings remained largely intact. Therefore, the discussions and results are based on the cut-off of 30 hours.

The dual-earner model causes women to bear the unequal distribution of total work. Figure 2 shows that there are substantial variations in their total workload among women depending on their employment status and hours. The male one-earner model operates in favor of women in terms of the total workload in daily lives: women work only 86 percent of what their spouses do while women in dual-earner households work more than men do. On the other hand, women's employment in paid work leads them to increase their total workload, with full-time employment leading to a wider gender gap. Women's employment status has very little positive association with men's contribution to child care and housework while reducing women's time devoted to unpaid work, which confirms the findings from the past studies. Women working full-time perform only 35 percent of total work for unpaid activities while women working part-time perform about 60 percent. Since men are insensitive to women's employment, wives' own hours of paid work seem to mainly account for the extent of the gender gap in total work occurs.

This finding seems to suggest that the experience of Korean married couples with respect to the part-time employment is different from that of Australian couples where the part-time employment for married women is associated with the highest workload (Craig, 2002). It appears that the part-time employment serves as a time adjustment strategy for reducing their total work time and accommodating family responsibilities, although it falls short of achieving the equality of the total work as comparable to that of the men one-earner household. With respect to women's share of total work out of households, for men and women combined, the total work is also lower in the households with women working part-time than
in the households where women working full-time. Since the choice of part-time employment for women is clearly influenced by the presence of children, however, it seems necessary to net out the effects of children in examining the impact of part-time employment on the gender gap in total work. The sample used for this study also suggests that women's part-time employment was found in households with more small children relative to women's full-time employment.

Table 2.
OLS Regression Results for Minutes Spent on Total Work, Weekday

|  | ${ }_{\text {(1) }}$ | ${ }^{(2)}$ | ${ }^{(3)}$ |
| :---: | :---: | :---: | :---: |
|  | Total work | Total work | Total work |
| Women | $\begin{aligned} & \text { 41.24*** } \\ & (6.42) \end{aligned}$ | $\begin{aligned} & \text { 42.70*** } \\ & (6.35) \end{aligned}$ | $\begin{aligned} & 54.04 * * * \\ & (6.73) \end{aligned}$ |
| Part-time |  | $\begin{aligned} & -60.10 * * * \\ & (10.13) \end{aligned}$ | $\begin{gathered} 33.04 \\ (29.93) \end{gathered}$ |
| Women*Part-time |  |  | $\begin{aligned} & -63.08 * * * \\ & (17.59) \end{aligned}$ |
| Manufacturing | $\begin{aligned} & \text { 19.19** } \\ & \text { (8.79) } \end{aligned}$ | $\begin{gathered} 21.17 * * \\ (8.59) \end{gathered}$ | $\begin{aligned} & 22.48 * * * \\ & (8.56) \end{aligned}$ |
| Service et al. | $\begin{aligned} & 18.46 * \\ & (10.40) \end{aligned}$ | $\begin{gathered} 16.25 \\ (10.36) \end{gathered}$ | $\begin{aligned} & 16.85 \\ & (10.32) \end{aligned}$ |
| Clerical and Sales | $\begin{aligned} & -30.92 * * * \\ & (6.38) \end{aligned}$ | $\frac{-28.69 * * *}{(6.34)}$ | $\begin{gathered} -28.37 * * * \\ (6.34) \end{gathered}$ |
| Women's income | $\begin{aligned} & 0.19 * * * \\ & (0.04) \end{aligned}$ | $\begin{gathered} 0.06 \\ (0.04) \end{gathered}$ | $\begin{gathered} 0.06 \\ (0.04) \end{gathered}$ |
| Men's income | $\begin{aligned} & 0.07 * * \\ & (0.03) \end{aligned}$ | $\begin{aligned} & 0.10 * * * \\ & (0.03) \end{aligned}$ | $\begin{aligned} & 0.10^{* * * *} \\ & (0.03) \end{aligned}$ |
| College graduates | $\begin{gathered} -22.65 * * * \\ (8.40) \end{gathered}$ | $\begin{gathered} -10.32 \\ (8.17) \end{gathered}$ | $\begin{array}{r} -10.61 \\ (8.19) \end{array}$ |
| Men's age | $\begin{aligned} & -2.40 * * \\ & (1.13) \end{aligned}$ | $\begin{aligned} & -2.22 * * \\ & (1.13) \end{aligned}$ | $\begin{aligned} & -2.24 * * \\ & (1.13) \end{aligned}$ |
| Women's age | $\begin{aligned} & 1.04 \\ & (1.16) \end{aligned}$ | $\begin{gathered} 1.02 \\ (1.16) \end{gathered}$ | $\begin{gathered} 1.04 \\ (1.15) \end{gathered}$ |
| \# of children <3 | $\begin{aligned} & 51.26 * * * \\ & (9.22) \end{aligned}$ | $\begin{aligned} & 54.63 * * * \\ & (9.25) \end{aligned}$ | $\begin{aligned} & 54.60 * * * \\ & (9.24) \end{aligned}$ |
| \# of children 3-6 | $\begin{aligned} & 34.31 * * * \\ & (6.66) \end{aligned}$ | $\begin{aligned} & 38.41 * * * \\ & (6.62) \end{aligned}$ | $\begin{gathered} 38.34 * * * \\ (6.57) \end{gathered}$ |
| \# of children 7-18 | $\begin{aligned} & 20.34^{* * *} \\ & (4.85) \end{aligned}$ | $\begin{aligned} & 21.76 * * * \\ & (4.79) \end{aligned}$ | $\begin{aligned} & 21.72 * * * \\ & (4.78) \end{aligned}$ |
| \# of children >18 | $\begin{gathered} 7.13 \\ (7.69) \end{gathered}$ | $\begin{gathered} 5.04 \\ (7.69) \end{gathered}$ | $\begin{gathered} 5.02 \\ (7.66) \end{gathered}$ |
| Farm Hhold | $\begin{aligned} & 47.54 * * \\ & (23.62) \end{aligned}$ | $\begin{aligned} & 50.36 * * \\ & (23.88) \end{aligned}$ | $\begin{aligned} & 50.87 * * \\ & (23.47) \end{aligned}$ |
| Constant | $\begin{aligned} & 566.15 * * * \\ & (29.10) \end{aligned}$ | $\begin{aligned} & 570.22 * * * \\ & (28.52) \end{aligned}$ | $\begin{aligned} & 553.15 * * * \\ & (28.77) \end{aligned}$ |
| Observations | 2,986 | 2,986 | 2,986 |
| R-squared | 0.068 | 0.085 | 0.091 |

Note. From Korean Time Use Survey, 2004. *** $\mathrm{p}<0.01$, ** $\mathrm{p}<0.05$, * $\mathrm{p}<0.1$

Does part-time employment reduce the gender gap in total work after controlling for other control variables? To answer this, OLS regression results for the sample including only dual-earner couples is presented. Since part-time employment is likely to occur mostly during the weekdays, a different set of regressions was calculated based on weekday, Saturday, and Sunday. In Table 2, there are three different regressions: the first regression estimates a gender gap in the total work controlling for variables other than part-time dummy, the second regression adds part-time employment variable, and the final regression adds the interaction term between gender and part-time employment. The main finding of interest is whether and how the coefficient on gender changes upon the entrance of the part-time dummy when controlling for other related explanatory variables.
Table 2 presents regression results for WEEKDAY. The first regression shows the statistically significant gender gap in total work in dual-earner couples: women work 41.24 minutes more than men do. How much of this gender gap is reduced by women's part-time employment? It finds from the second regression result that part-time employment certainly reduces the total workload for both men and women, while it slightly increases the gender gap. That is, had men and women not worked part-time, the gender gap would have been slightly greater. As can be seen from the third regression, it is mainly women's part-time employment that helps reduce the gender gap in total work.

On the other hand, the women's part-time employment is not a statistically significant predictor of explaining the total workload for weekends (regression results not presented). This suggests that the reduction of workweek only partly accounts for changes in the gendered distribution of total work during the weekends. The fact that the gender gap in total work is significantly greater for weekends, where daily lives are less affected by labor market regime, than for weekdays suggests persistent gender roles strongly operate as behavioral guidance when it comes to performing housework and childcare.

Table 3.
Interval Regression Results for Women's Share of Total Work

|  | $(1)$ <br> Weekday Share | $(2)$ <br> Saturday Share | $(3)$ <br> Sunday Share |
| :--- | :---: | :---: | :---: |
| Women Part-time | 0.06 | -2.68 | 2.31 |
|  | $(1.17)$ | $(2.94)$ | $(4.05)$ |
| Manufacturing | $-1.74 * *$ | -1.16 | 3.74 |
|  | $(0.86)$ | $(5.81)$ | $(5147)$ |
| Service et al. | 0.02 | -2.84 | 4.11 |
|  | $(1.22)$ | $(2.87)$ | $(6.40)$ |
| Clerical and Sales | 0.43 | 2.02 | -0.36 |
|  | $(0.67)$ | $(2.09)$ | $(2.65)$ |
| Women's income | $0.01 * * *$ | -0.00 | 0.03 |
|  | $(0.00)$ | $(0.02)$ | $(0.02)$ |
| Men's income | $-0.02 * * *$ | 0.01 | -0.01 |
| College graduates | $(0.00)$ | $(0.01)$ | $(0.02)$ |
|  | $-1.35 *$ | $7.42 * *$ | -4.77 |
| Men's age | $(0.11)$ | $(3.42)$ | $(3.36)$ |
|  | 0.18 | $0.61 *$ | -0.08 |
| Women's age | $(0.11)$ | $(0.35)$ | $(0.50)$ |
|  | 0.01 | -0.38 | 0.35 |
| \# of children $<3$ | $(0.12)$ | $(0.41)$ | $(0.49)$ |
|  | 1.06 | -1.02 | $7.62 * *$ |
| \# of children $3-6$ | $(0.85)$ | $(3.10)$ | $(3.59)$ |
| \# of children $7-18$ | $1.59 * *$ | -3.10 | 1.87 |
|  | $(0.64)$ | $(2.16)$ | $(3.38)$ |
| \# of children $>18$ | 0.03 | 0.96 | $3.89 * *$ |
| Farm Hhold | $(0.53)$ | $(1.35)$ | $(1.97)$ |
|  | 0.31 | 0.56 | 5.84 |
| Constant | $(0.87)$ | $(2.25)$ | $(3.62)$ |
| Observations | -0.34 | -3.96 | -2.84 |
| R-squared | $(2.06)$ | $(5.00)$ | $(9.33)$ |

Note. From Korean Time Use Survey, 2004. *** $\mathrm{p}<0.01$, ** $\mathrm{p}<0.05$, * $\mathrm{p}<0.1$
Having confirmed that women's part-time employment reduces the gender gap in the total work across individuals, we wonder if it will substantially lower women's share of total work within a household. This would give us a rather direct dimension of whether women's part-time employment would relieve them of work burden and help them undertake an equal share of work relative to their spouses. As Figure 2 illustrated, women's share of total work appeared to be slightly lower, on average, in the households with women working part-time than in households with women working full-time. Interval regression analyses show that having controlled for other explanatory variables women's part-time
employment has no statistically significant effect on women's share of total work, although the effect is positive for weekday (See Table 3). This means that compared to households where women work full-time, women's part-time employment could potentially increase women's share of total work.

## Conclusion

There have been growing concerns that women's participation in the labor market makes few changes in women's domestic responsibilities while intensifying the gender gap in the total workload at the expense of their leisure time, which has been dubbed as "the second shift" by Hochschild (1989). Adjustments in women's paid work time and schedules are often put forward for both increasing female labor force participation and alleviating the dual burden caused by male-centered work norms and the men's resistance to undertaking housework and childcare.

Using the Korean Time Use Survey 2004, this author investigated whether women's part-time employment could reduce the gender gap in the total work combining paid and unpaid work in dual-earner couples. This study has concurred with previous studies that dual-earner arrangements expose women to a wider gender gap in the total work than the men one-earner arrangements. Men's participation in unpaid work is hardly affected by women's employment status and conditions. Given the irresponsiveness of the men, their participation in the full-time employment imposes tremendous workload on the married women, leaving women with choices of part-time employment in order to cut back on the workloads. The analysis shows that had women not worked part-time, the gender gap in the total work would have been much greater, but the gender gap still remains intact even if women's part-time employment reduces the gap in the total work. Although women's part-time employment reduces the gender gap across individuals, it hardly affects women's share of total work out of household total work within households. That is, holding other things constant, women working part-time perform almost the same share of total work within households as do women working full-time. This means that women's part-time employment operates as a strategy for reallocating their time from paid to unpaid. But the fact that the sign of the coefficient is pos-
itive for weekday and Sunday implies that women working part-time could undertake a higher share than women working full-time.

The long workweek may not be solely responsible for the observed gender gap. The variations in the gender gap in the total work across the days of the week exhibit a more complex gender dynamics play a crucial role in determining the distribution of paid and unpaid work within and across households. As long as men are reluctant to change their attitudes towards participation in unpaid work in a fundamental way, positive impacts of women's part-time employment in reducing workloads and narrowing the gender gap would be limited, reinforcing gendered specialization in kinds of work as a major responsibility.

## References

An, M.-Y. (2008). Time use and gender inequality in Korea: Differences in paid, unpaid and non-productive activities. Asian Women, 24(3), 1-23.
Bryant, W. K., \& Zick, C. D. (1996). Are we investing less in the next generation? Historical trends in time spent caring for children. Journal of Family and Economic Issues, 17(3), 365-392.
Burda, M. C., Hammermesh, D. S., \& Weil, P. (2007). Total Work, Gender and Social Norms. NBER Working Papers No. W 13000, Retrieved February 9, 2010, from SSRN: http://ssrn.com/abstract=977411
Cho, H. (1994). Household economy and gender division of labor. In H. Cho \& P.-W. Chang (Eds.), Gender division of labor in Korea (pp. 169-198). Seoul, Korea: Ewha Womans University Press.
Cho, S.-K. (2000). KyungJeUiKiWa KoYong PyungDengUi ChoGun [Economic crisis and conditions for equal employment]. In S.-K. Cho (Ed.), RoDongKwa Peminizem (Labor and Feminism) (pp. 297-325). Seoul: Ewha Womans University Press.
Coverman, S., \& Sheley. J. F. (1986). Change in men's housework and childcare time, 1966-1975. Journal of Marriage and the Family, 48, 413-422.
Craig, L. (2002). The time cost of parenthood: An analysis of daily workload. No. SPRC Discussion Paper No.117: Social Policy Research Centre.
Greenstein, T. N. (1996). Gender ideology and perceptions of the fairness of the division of household labor: Effects on marital quality. Social Forces, 74, 1029-1042.
Hartmann, H. (1981). The family as the locus of gender, class and political struggle: The example of housework. Signs: Journal of Women in Culture and Society, 6, 366-394.

Hochschild, A. (1989). The second shift: Working parents and the revolution at home. New York: Viking.
Hwang, S.-K. (2004). DanSiGan GunRoWa YeoSungInLyeok HwalYong [Part-time employment and female labor force participation]. Research Report, Korea Labor Institute.
ILO. (1999). Yearbook of labour statistics. Paris.
Juster, T., \& Stafford, F. (1991). The allocation of time: Empirical findings, behavioral models, and problems of measurement. Journal of Economic Literature, 29(2), 471-522.

Kamo, Y. (1991). A nonlinear effect of the number of children on the division of
household labor. Social Perspectives, 34, 205-218.
Lee, J.-K. (2002). KajokUi YeeRumUiRo-HanKuk KenDeaKajokkwa Peminizem fIn the name of family: Korean modern family and feminism\}. Seoul: Alternative Culture.
Manke, B., Seery, B. L., Crouter, A. C., \& McHale, S. M. (1994). The three corners of domestic labor: Mothers', fathers', and children's weekday and weekend housework. Journal of Marriage and the Family, 56(3), 657-668.
Negrey, C. (1993). Gender, time, and reduced work. Albany: State University of New York Press.
Nock, S., \& Kingston, P. W. (1988). Time with children: The impact of couples' work-time commitments. Social Forces, 67, 59-85.
OECD. (2002). Chapter 2 Women at work: Who are they and how are they faring? In Organisation for Economic Co-operation and Development Employemnt Outlook. Paris.
OECD. (1999). Chapter 1 Recent labour market developments and prospects: Special focus on the quality of part-time jobs. In Organisation for Economic Co-operation and Development Employemnt Outlook. Paris.
Sanchez, L., \& Thomson, E. (1997). Becoming mothers and fathers: Parenthood, gender, and the division of labor. Gender and Society, 11(6), 747-772.
Shelton, B. A. (1990). The distribution of household tasks: Does wife's employment status make a difference? Journal of Family Issues, 11, 115-135.
Shelton, B. A., \& John, D. (1996). The division of labor. American Review of Sociology, 22, 299-322.
Shon, A. (2000). Country report on time use survey in the Republic of Korea. Paper Presented at the Training Workshop on Statistical Aspects of Integrating Unpaid Work into National Policies. 11-15 September, 2000. Bangkok.
Son, M.-K. (2005). YeoSungUi LeeJungBuDamKwa YouKeubRoDongSiGanUi JuByunHwa-MajBulYeeBuBuRul ChungSimUiRo [Women's dual burden and marginalization of paid work: A focus on dual-earner couples]. Korea Demography, 28(1), 277-311.
Tijdens, K. G. (2002). Gender roles and labor use strategies: Women's part-time work in the European Union. Feminist Economics, 8(1), 71-99.
UNDP. (2003). Human Development Report. New York.
Waring, M. (1989). If women counted. A new feminist economics. London: Macmillan.

Biographical Note: Jayoung Yoon earned her Ph. D in economics at the University of Massachusetts, Amherst. She is currently affiliated as a research fellow with Korea Labor Institute in Seoul, Korea. Her major research focuses on non-market work and its implications for economic well-being. She is particularly interested in roles of non-market work in the formation of capabilities and economic values of care work. She published several articles on measurements and valuations of child care time using time use surveys. They include "By What Measure? Family Time Devoted to Children in the United States." with Nancy Folbre, Kade Finnoff, and Alison Fuligni, Demography 42:2 (May 2005): 373-90. "What is Child Care? Lessons from Time Use Surveys of Major English-Speaking Countries", with Nancy Folbre, Review of Economics of the Household 5 (2007): 223-48.
"Making Do and Getting By: Non-Market Work and Elderly Women's Standards of Living in the U.S.", with Nancy Folbre and Cordelia Reimers, Journal of Women, Politics \& Policy, Spring of 2009 (Volume 30, 2-3).


[^0]:    ${ }^{1}$ These numbers are computed for the entire male and female population. Data on total work hours by marital status is not available. The ratio for Korea is based on the Korean Time Use Survey 1999 and that for Italy is computed for 1988-1989.
    ${ }^{2}$ The part-time employment is defined as working for less than 30 hours per week, except Japan with its being less than 35 hours. The part-time rate for Korea is for civilian employment while that for the United States is for wage earners and salaried employees. The date on the rate of part-time work of women by presence of children is not available for Korea and Japan, but the rates are higher for women with children for other countries (OECD, 2002).

[^1]:    ${ }^{3}$ See Shon (2000) for the detailed description of the survey design, sampling process, and the quality of the Survey. My description here heavily relies on them.

[^2]:    Note. From Korean Time Use Survey, 2004.

