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Equalization of paid working hours in the dual-earner household: Does it increase women's double burden?[#]

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Abstract

By using a sample of Swedish dual-earner households, this paper investigates how a transfer of time spent on paid work from the man to the woman influences their allocation of unpaid household work. It is found that their total time engaged in household work decreases. This result suggests that dual-earner households who equalize their paid working hours, will spend less time on work chores in the household that traditionally have been done by women. The conclusion is that women's dual role as breadwinner and provider of work and care in the household is associated with an increased workload for women.

Key Words: Labour supply, household work, intra-household time allocation, Sweden

JEL code: D13, J22

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1. Introduction

The traditional male breadwinner model family, in which husbands provide for earnings and wives for unpaid housework and childcare, has gradually eroded in most industrialized countries, and is nowadays being replaced with a dual-earner model family. The women's increased participation on the labour market, however, is not coupled with complete gender equality with respect to the allocation of time between labour-market work and unpaid household work. In North-European countries in particular, the dual-earner households rely to a large extent on women's part-time employment. Part-time work in combination with subsidized public child care and rights to obtain paid parental leave enable many women to combine labour-market work with the care for children and domestic work (See e.g. Sundström, 1997, for Sweden; Leth-Sørensen & Rohwer, 1997, for Denmark)

When women in dual-earner households increase their market-labour supply, they are often trapped into a "double burden" of both market work and domestic duties in the household (Hochschild, 1990). Women's double burden in dual-earner families could origin from cultural norms about gender roles that restrict sharing of household work (West & Zimmermann, 1987). It could also be a result of weak bargaining positions of women, when spouses bargaining about their time allocation (e.g. McElroy & Horney, 1981, and Lundberg & Pollak, 1993). Many studies indicate that gender roles evolves slowly, and that attitudes and norms regarding the division of labour between spouses takes time. (See Anxo & Carlin, 2004, for France, Álvarez & Miles, 2003, for Spain, Deding & Lausten, 2006, for Denmark)

Is the women's double burden a temporary effect of the transition from the male-breadwinner family model to the dual-earner family model, or is it a phenomenon that will persist as the equalization of paid working hours in the dual-earner family continues? This paper investigates empirically how the equalization of paid working hours in a dual earner family influences the double burden of women. Our strategy is to investigate the marginal effects on household work from a transfer of time spent on paid work from the man to the woman in the same household. Does such a transfer increase the total workload of the women?

Let us assume that a woman increases her paid working hours. At the same time, her unpaid household working hours reduce, but they reduce to a lesser extent than the increase of her paid working hours. This leads to less leisure during the weekdays and longer total working hours. However, this does not tell us how the woman's workload is affected. The woman's

workload (i.e. the amount of work to be done per unit of time), will be influenced by the cohabiting man's response to the woman's altered time allocation. If the man decreases his paid working hours and increases his unpaid work in the household by the same absolute amount as the woman's corresponding changes of paid and unpaid work, then it is simply a redistribution of working hours within the household, and we conclude that the woman's workload has not increased, although her total working hours have.¹ On the other hand, if the man responds by increasing his unpaid household work to a lesser extent than the woman decreases hers, then we conclude that the woman's workload increases as well as her working time. We thus want to find out how the man's supply of household work would respond to a transfer of paid working hours from the man to the woman in the same household.

In cross-sectional time-use data, the causality between the time use of men and women is ambiguous. For example, when we control for individual background variables and household characteristics, we may observe a household where both the woman and the man spend less time on unpaid household work and spend more time on the labour market than other couples in other households. However, it is not obvious that the woman in this particular household has an increased workload compared with the other women in the other households. Less time in the household for a woman might instead be caused by unobservable individual conditions that influence the time-use. For example, less unpaid work could be a result of a lower demand of household work in that particular household, which, in turn, influence the woman's and the man's market-labour supply decisions. Therefore we cannot be sure that what appears to be an increased workload for the woman in cross-sectional data, in reality is not perceived by the woman as the opposite.

This paper deals with this problem by using a panel of households which allows us to study the statistical dependency between *changes* of time-use for men and women in the same households. By studying the change of time-use, the unobservable individual conditions that influence the time-use and are constant over time cancel in the regression analysis. Other conditions that may influence the time-use and are changing over time are captured by the exogenous variables in the regression analysis. The size of the estimated substitution of time-use enables us to draw conclusions about the woman's workload in the case of an equalization of paid working hours in the household.

¹ Here, and in the rest of the paper, we disregard any effects on the workload of the changed working hours on the job.

The paper is organized as follows: Section 2 presents the empirical model and formulates testable hypotheses about women's workload. Section 3 presents the time-use data. Section 4 shows the result of the empirical analysis. Conclusions follow in section 5.

2. Empirical Strategy

This section describes a method to test if an equalization of paid working hours in a family with dual earners results in an increased double burden for the women.

A sample of N households are indexed by $f = 1, \dots, N$ for the women and $m = 1, \dots, N$ for the cohabitating men. There are two points of time $t = 1, 2$. Let us form the following equation:

$$h_{ft} = \alpha_0 + \gamma_0 d2_t + \alpha_1 l_{ft} + \alpha_2 l_{mt} + \alpha_3 x_t + \mu_f + \mu_m + \varepsilon_{ft} \quad (1)$$

where h_{ft} represent minutes of the woman's unpaid household work on the measurement day. The explanatory variables include a time-dummy $d2_t$ which equals zero when $t = 1$ and one when $t = 2$, minutes on paid work of the woman, l_{ft} , paid work of the man, l_{mt} , and household specific characteristics that influence women's household work, x_t . The unobservable effects are decomposed into (i) a time-invariant and unobservable individual effect of the woman on the woman's household work μ_f , (ii) a time-invariant and unobservable individual effect of the man on the woman's household work μ_m , and (iii) the residual term ε_{ft} which is assumed to satisfy the usual requirements for unbiased estimates by OLS.

By the same procedure, we obtain a similar equation for the cohabitating men in the households:

$$h_{mt} = \beta_0 + \delta_0 d2_t + \beta_1 l_{mt} + \beta_2 l_{ft} + \beta_3 x_t + \mu_m + \mu_f + \varepsilon_{mt} \quad (2)$$

The estimates of the parameters α_1 , and β_1 , are expected to be negative, since the time-constraint induces a person's increased paid work to decrease the same person's unpaid household work. The expected signs on α_2 , and β_2 can be positive, because increased paid work of a person's spouse could increase the same person's own unpaid household work. This

is consistent with the theory of comparative advantages in the intra-household division of labour (Becker, 1991), but also with the bargaining theory (Chiappori, 1997). On the other hand, zero effect supports the theories about the central roles of cultural norms in the determination of spouses' time-allocation (West & Zimmerman, 1987). A negative sign on α_2 , and β_2 is consistent with the theory about assortative mating in marriage market (Becker, 1991).

Equation (1) and (2) allow us to predict the effects on household work and leisure of a transfer of paid working hours in the dual-earner model family from the man to the woman: Each individual encounters a time constraint $T = l + h + s$, where s is minutes of leisure and sleep during the measurement day. A changing time allocation must therefore satisfy $dl + dh + ds = 0$, or by rearranging terms,

$$1 + \frac{dh}{dl} = -\frac{ds}{dl}. \quad (3)$$

It follows that if $dh/dl < 0$, then $dh/dl < -1$ is a necessary and sufficient condition for $ds/dl > 0$. It also follows that $dh/dl > -1$ is a necessary and sufficient condition for $ds/dl < 0$.

These conditions can be illustrated as in *Figure 1* below. The initial allocation of time is assumed to be in (for example) point F for the woman and point M for the man. Note that leisure is constant along the 45° line in $l - h$ space. The region above the 45° line implies decreased leisure, while the region below implies increased leisure. The slopes of the arrows are reflecting the marginal rate of substitution between household work and market work. These slopes decide whether leisure increases or decreases as a result of a transfer of working hours.

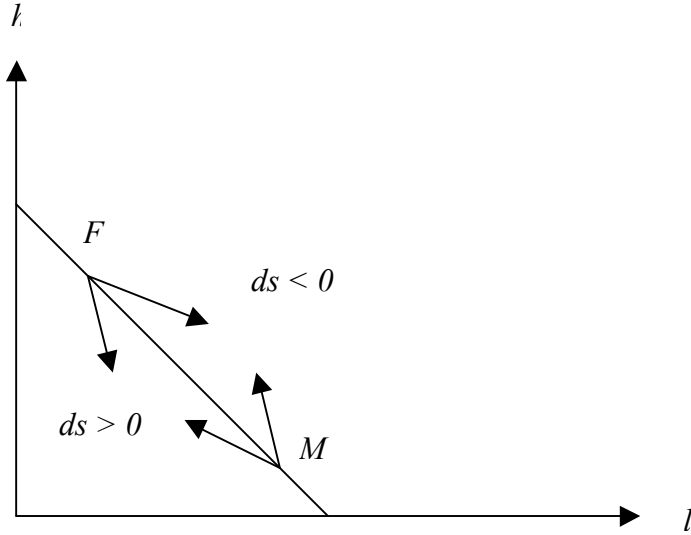


Figure 1: The marginal rate of substitution between l and h decides the effect on leisure from a transfer of working hours in a dual-earner model family from the man to the woman

A marginal transfer of paid working hours from the man to the woman entails $dl_f > 0$, $dl_m < 0$ and $\partial l_m / \partial l_f = -1$. By equation (1), we expect that $\alpha_1 = \partial h_f / \partial l_f < 0$ while the sign on $\alpha_2 = \partial h_f / \partial l_m$ is ambiguous. A transfer of working hours therefore leads to $dh_f / dl_f = \partial h_f / \partial l_f + (\partial h_f / \partial l_m)(\partial l_m / \partial l_f) = \partial h_f / \partial l_f - \partial h_f / \partial l_m = \alpha_1 - \alpha_2$. By (3) and Figure 1, it follows that $\alpha_1 - \alpha_2 > -1$ is consistent with decreasing leisure for the women. Intuitively, the husband's reallocation of time from the labour market to the household and leisure is not sufficient to create more leisure for the wife when she is increasing her supply of market labour.

This reasoning allows us to state the following hypotheses:

A transfer of paid working hours in a dual-earner model family from the man to the woman results in

(Hypothesis 1), decreased leisure for the woman in the household, $H_1: \alpha_1 - \alpha_2 > -1$

(Hypothesis 2), increased leisure for the man in the household, $H_2: \beta_1 - \beta_2 > -1$

(Hypothesis 3), less time on household work in the households, $H_3: \alpha_1 - \alpha_2 - \beta_1 + \beta_2 < 0$.

If Hypotheses 1 – 3 are confirmed empirically, then a transfer of paid working hours from the man to the woman leads to (i) increased total working hours of the woman, and (ii)

decreased unpaid household working hours of the household. With a constant household supply of paid working hours, it is reasonable to assume that there is a constant demand of household work. We thus find that women's amount of household work per unit of time increases, as well as their total working hours. Consequently, we conclude that a transfer of paid working hours in a dual-earner model family increases women's workload. This is consistent with the proposition that equalization of working hours in the dual-earner model family increases women's double burden of paid and unpaid work.

The estimation strategy is to use a two-period panel data, which is described in the next section. By difference over time to remove the unobserved individual effects μ_f and μ_m in (1) and (2), we obtain the two equations

$$\Delta h_f = \gamma_0 + \alpha_1 \Delta l_f + \alpha_2 \Delta l_m + \alpha_3 \Delta x + \Delta \varepsilon_f \quad (4)$$

$$\Delta h_m = \delta_0 + \beta_1 \Delta l_m + \beta_2 \Delta l_f + \beta_3 \Delta x + \Delta \varepsilon_m \quad (5)$$

Changes in the household time is dependent on a time-specific component, changes of own paid working hours, changes of spouse's paid working hours, and changes of other household characteristics. By adding the two equations (4) and (5), we receive:

$$(\Delta h_f + \Delta h_m) = (\gamma_0 + \delta_0) + (\alpha_1 + \beta_2) \Delta l_f + (\alpha_2 + \beta_1) \Delta l_m + (\alpha_3 + \beta_3) \Delta x + (\Delta \varepsilon_f + \Delta \varepsilon_m) \quad (6)$$

Equation (4) is used for testing *Hypothesis 1*, equation (5) for *Hypothesis 2*, and equation (6) is used for testing *Hypothesis 3*.

It is possible that the demand of female household work decreases (male household work increases) by some non-observable factors not included in Δx , which could have a positive effect on Δl_f in (4) (negative effect on Δl_m in (5)). It follows that $\Delta \varepsilon_f$ ($\Delta \varepsilon_m$) and Δl_f (Δl_m) could be negatively correlated, implying a negative bias in the estimates of α_1 (β_1). Consequently, the estimates on α_1 and β_1 can be interpreted as lower bounds for the test of *Hypothesis 1* and *Hypothesis 2*.

3. Data

The data comes from the Swedish HUS-survey (Household Market and Nonmarket Activities), which is based on a probability sample of individuals aged 18-74. Two waves, in 1984 and 1993, contained telephone interviews about time use during the previous day. In 1984 the sample size was 2,468 individuals, while in 1993 it was 3,218. Some individuals participated both in 1984 and in 1993; the size of this panel is 864 individuals. In each household consisting of a married or cohabiting couple, both partners were interviewed. The time-use survey is further described by Flood (1997) and Klevmarcken & Olovsson (1993).

This study will use the panel of time-use data for 1984 and 1993. However, only households with married or cohabiting couples will be included in the sample. Furthermore, as this study focuses on dual-earner households, only couples where both man and woman were employed in 1984 are included. As a result, the sample used in this study contains 172 households with reported time-use for both partners on two occasions, in 1984 and 1993.

In 50 of the 172 households, one or both of the partners were not employed in 1993. This means that they could be unemployed or not in the labour force. We therefore create a second sample where both partners were employed in both 1984 and 1993, which contains 122 households. By comparing *Sample 1* (N = 172) and *Sample 2* (N = 122), it will be studied how the inclusion of households that change their labour market status influences the results of the regression analysis in (4) – (6).

Finally, a third sample (N = 111) contains the households in *Sample 2* that reported a wage income in both 1984 and 1993. This sample allows us to include the changing wage ratio between the woman and the man as an independent variable in (4) – (6).

The variables *paid work* and *household work* are defined according to *Table 1* below. By definition, all other activities are regarded as “leisure”. This means that sleep, personal hygiene, as well as household-related activities other than “household work” such as childcare and maintenance and repairs on the home are gathered in this category of time use. A list of these leisure-activities can be found in the appendix. Household work is thus restricted to daily work chores that are typically included in “the second shift”.

Table 1: Definitions of variables in the time-use survey

Time-use variable	Minutes during the measurement day
Paid work	-1 Gainful employment not including breaks
	-2 Business travel
	-3 Other gainful employment, not including breaks
	-4 Other gainful employment, official job-related travel
	-5 Travel in connection with work or job search
	-6 Official job-related travel
Household work	-1 Preparing meal etc. for immediate consumption
	-2 Preparing meal etc. for later consumption
	-3 Doing dishes and putting away
	-4 Cleaning up at home
	-5 Washing, ironing etc.
	-6 Household management

The summary statistics of the 1984 and 1993 *Sample 1 – 3* are shown in *Table 2*. In *Sample 1*, there was an increased average male leisure between 1984 and 1993 ($37.3 - 20.2 = 17.1$ minutes), which is higher than the female counterpart ($21.8 - 17.6 = 4.2$ minutes). Average female paid work increased during the period while it decreased for men, but men still worked more on the labour market than what the women did in 1993. On the other hand, household work decreased for the women between 1984 and 1993, while it increased for the men, but the women continue to do more household work than men in 1993. *Table 2* also shows that around 30 percent of the households had children less than five years-old in 1984, while only 5 percent still had children less than five in 1993. Furthermore, around 84 percent of the households owned their house where they were living in 1984, while around 81 percent owned their house in 1993. Around 19 percent had moved from their house to an apartment or rented house, while around 17 percent had moved from an apartment or rented house to a house of their own in 1993.

Sample 2 and *3* demonstrates the same pattern as *Sample 1*, except that men seem to decrease their leisure, since their paid work decreases less or even increases between 1984 and 1993. In sum, *Sample 1 – 3* demonstrates that between 1984 and 1993, (i) leisure increased, except for men in *Sample 2 – 3*, (ii) household work decreased for women and increased for men, (iii) paid work increased for women and decreased market work for men, (iv) men still worked more on the labour market than women in 1993, and (v) women still worked more in the household than men in 1993.

Table 2: Summary statistics

Variable	Mean (Std.dev.)								
	Sample 1 (N = 172)			Sample 2 (N = 122)			Sample 3 (N =111)		
	1984	1993	Δ 93-84	1984	1993	Δ 93-84	1984	1993	Δ 93-84
Female household work (minutes)	186.4 (112.9)	164.6 (97.1)	-21.8 (147.7)	184.6 (109.8)	171.4 (100.9)	-13.2 (152.6)	181.7 (109.3)	171.7 (98.7)	-10.0 (149.4)
Male household work	60.4 (63.7)	80.6 (79.8)	20.2 (102.8)	62.8 (68.0)	78.8 (82.8)	16.0 (107.9)	63.7 (68.2)	76.7 (82.5)	13.0 (106.4)
Female paid work	177.3 (194.3)	195.0 (185.9)	17.6 (277.0)	174.2 (171.1)	181.6 (184.4)	7.5 (263.4)	178.5 (173.7)	187.6 (185.5)	9.1 (269.3)
Male paid work	330.1 (224.0)	292.8 (211.3)	-37.3 (303.9)	318.9 (207.6)	316.9 (207.7)	-2.06 (291.4)	311.9 (202.9)	320.5 (209.8)	8.6 (281.9)
Children less than 5 years-old (dummy)	.302 (.460)	.047 (.211)	-.255 (.512)	.336 (.474)	.025 (.156)	-.311 (.465)	.333 (.474)	.027 (.163)	-.306 (.463)
Own house (dummy)	.837 (.370)	.814 (.390)		.828 (.380)	.820 (.386)		.829 (.378)	.829 (.378)	
Wage ratio woman / man							.868 (.283)	.889 (.441)	.021 (.425)
Move from house between 84 and 93 (dummy)			.093 (.291)			.090 (.288)			.090 (.288)
Move to house between 84 and 93 (dummy)			.070 (.255)			.082 (.275)			.090 (.288)
Female age	37.7 (8.1)			36.4 (8.0)			36.4 (6.9)		
Male age	40.4 (8.7)			38.4 (7.5)			38.1 (7.3)		
Female years of education	11.0 (2.8)			11.4 (2.8)			11.6 (2.8)		
Male years of education	11.5 (3.6)			11.9 (3.3)			11.8 (3.2)		

Source: HUS Time-use survey 1984, 1993

4. Results

The estimated models (4) – (6) for *Sample 1* are shown in *Table 3* below.

The estimated coefficient for *female paid work* indicates that one hour increased paid work decreases household work by on average $0.25 \cdot 60 = 15$ minutes. Furthermore, one hour decreased *male paid work* decreases the female household work by on average $0.09 \cdot 60 = 5$ minutes. *Hypothesis 1* is supported if $\hat{\alpha}_1 - \hat{\alpha}_2 + 1 > 0$. A transformed equation estimates a coefficient $\hat{\alpha}_1 - \hat{\alpha}_2 + 1$ which is positive and statistically significant. It implies that one hour transfer of working hours from the man to the woman induces $0.67 \cdot 60 \approx 40$ minutes of less leisure for the women.

How does an equalization of working hours influence men's leisure? The regression analysis entails that one hour decreased paid work increases household work by on average $0.15 \cdot 60 = 9$ minutes. Furthermore, one hour increased female paid work increases male household work, but not statistically significant, by on average $0.02 \cdot 60 = 1$ minutes. *Hypothesis 2* is supported if $\hat{\beta}_1 - \hat{\beta}_2 + 1 > 0$. Estimates on the transformed coefficient $\hat{\beta}_1 - \hat{\beta}_2 + 1$, produce a positive and statistically significant effect on male leisure by $0.87 \cdot 60 \approx 52$ minutes. The hypothesis that equalization of working hours increases male leisure is therefore confirmed.

The final test is how the total supply of household work is affected. Estimates on the added equation $h_f + h_m$ show that one hour transfer of working hours from the man to the woman decreases the total household work by $0.20 \cdot 60 \approx 12$ minutes. Thus, *Hypothesis 3*, $\alpha_1 - \alpha_2 - \beta_1 + \beta_2 < 0$, is confirmed at the 1 % level.

Table 3: Estimation results of model (4)-(6) and Sample 1, standard errors in parenthesis

Independent variable	Dependent variable: Δ female household work	Dependent variable: Δ male household work
Intercept (time effect)	-13.1 (12.6)	15.2 (9.0)
Δ female paid work	-.247* (.037)	-.016 (.026)
Δ male paid work	.086* (.034)	-.145* (.024)
Δ children less than 5 years-old	-11.8 (21.9)	1.3 (15.7)
move from own house	27.2 (35.0)	8.9 (25.0)
move to own house	-9.8 (39.6)	-18.0 (28.3)
Number of cases	172	172
R ²	.234	.192
Hypothesis 1: $\alpha_1 - \alpha_2 + 1 > 0$	-.333 + 1 = .667* (.052)	-
Hypothesis 2: $\beta_1 - \beta_2 + 1 > 0$	-	-.129 + 1 = .871* (.037)
Hypothesis 3: $\alpha_1 - \alpha_2 - \beta_1 + \beta_2 < 0$		-.204* (.065)

* Statistically significant at the 0.01 level.

Table 4 shows the result of *Sample 2*, where there is no change of spouses' employment status between 1984 and 1993. The result is similar to the result of *Sample 1* in Table 3. A transfer of one paid working hour from the man to the woman entails $0.63 \cdot 60 = 38$ minutes less leisure for woman, $0.85 \cdot 60 = 51$ minutes more leisure for man, and $0.22 \cdot 60 = 13$ minutes less household work in the household.

Sample 3 (man and woman are wage earners in both 1984 and 1993) produces also similar results: $0.62 \cdot 60 = 37$ minutes less leisure for the woman, and $0.15 \cdot 60 = 9$ minutes more leisure for the man. Total household work decreases with 14 minutes. An increasing female wage in relation to the male wage in the same household has a positive but not statistically significant effect on the household work of both the man and the woman.

Table 4: Estimation results of model (4)-(6) and sample 2 and 3, standard errors in parenthesis

Independent variable	Dependent variable: Δ female household work		Dependent variable: Δ male household work	
	Sample 2	Sample 3	Sample 2	Sample 3
	Intercept (time effect)	-9.3 (16.3)	-15.6 (16.5)	22.5 (11.2)
Δ female paid work	-.259* (.048)	-.270* (.048)	-.029 (.033)	-.030 (.035)
Δ male paid work	.111* (.044)	.107** (.046)	-.180* (.030)	-.176* (.033)
Δ children less than 5 years-old	-1.6 (27.6)	20.4 (28.3)	-21.6 (19.0)	-11.5 (20.5)
move from own house	5.6 (44.4)	25.1 (45.4)	1.2 (30.6)	-5.5 (32.8)
move to own house	-20.8 (46.1)	-22.1 (44.9)	-.5 (31.8)	-.796 (32.5)
Δ female wage / male wage		29.4 (30.5)		13.5 (22.08)
Number of cases	122	111	122	111
R ²	.225	.259	.262	.237
Hypothesis 1: $\alpha_1 - \alpha_2 + 1 > 0$	-0.371 + 1 = .629* (.069)	-0.377 + 1 = .623* (.070)	-	-
Hypothesis 2: $\beta_1 - \beta_2 + 1 > 0$	-	-	-0.151 + 1 = .849* (.048)	-0.146 + 1 = .854* (.050)
Hypothesis 3: $\alpha_1 - \alpha_2 - \beta_1 + \beta_2 < 0$			Sample 2	
			-0.220* (.085)	
			Sample 3	
			-0.231* (.089)	

* Statistically significant at the 0.01 level; ** at the 0.05 level.

All of the three samples in Table 3 and 4 thus support Hypothesis 1 – 3. This leads us to conclude that an equalization of labour-market working hours in a dual-earner household with a constant household supply of paid work involves (i) an increased total labour supply of the women, (ii) a decreased total labour supply of the men, and (iii) a reduction of the household's total time that is engaged in household work. This means, in turn, that household work chores have to be done during a shorter amount of time, at the same time as women increase their total amount of working hours. Women's workload therefore increases.

It should be noted that the data does not support that a transfer of one hour of paid work from the woman to the man increases the man's workload. The men would on average increase their total working hours, but the household work chores could now be done during a longer

period of time, as the women would increase their time in the household more than the men would decrease their time on household work.

5. Conclusion

This paper presents empirical evidence of an increasing workload for women in dual-earner families that equalize their paid working hours while keeping their total supply of paid working hours constant. This result is based on a panel of time-use data from Swedish households in 1984 and 1993. Swedish households have been characterized as dual-earner families relatively early in comparison with other European nations, which makes Sweden an interesting case study of the consequences of women's dual roles in households and labour markets. By studying the changes of time-use in a panel data, it is possible to disregard the individual-specific and endogenous effects of household work on paid market work. The exogenous effect of an equalization of paid working hours becomes a reduction of the household's total amount of household work. The empirical pattern from the Swedish experience of dual-earner households is thus that equalization of paid working hours is significantly associated with less time in the household.

These results suggest that it is not unproblematic for dual-earner families to equalize their working hours. When the woman increases her hours of paid labour-market work, she does not seem to transfer a proportional share of her decreased household work to her husband. This is an important finding in the light of public policies that explicitly try to stimulate female labour supply. Equalization of labour-market working hours in the dual-earner model family does seem to bring about a risk of generating gender inequality, where women have to carry a double burden of household and labour-market work. This increased workload is a real disadvantage on the labour market, as it may result in less individual flexibility to change scheduled working hours, induce smaller margins to manage stressful situations on the job, increase sickness-absence, and lower the prospects for promotion and on-the-job training. Equalization of working hours could thus require public policies that enhance gender equality in the household.

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Appendix

Description of time-use variables in the HUS Time-use Survey 1984, 1993

Paid work	Gainful employment not including breaks Business travel, minutes Other gainful employment, not including breaks Other gainful employment, official job-related travel Travel in connection with work or job search Official job-related travel
Household work	Preparing meal etc. for immediate consumption Preparing meal etc. for later consumption Doing dishes and putting away Cleaning up at home Washing, ironing, etc. Household management,
Leisure and other	Lunch, coffee breaks etc. Other gainful employment, lunch, coffee breaks etc. Applying for work Military service Sleeping and resting Personal hygiene, changing clothes etc. Meals at home Active child care Meals outside the home Passive child care Care of sick child Care of sick adult Attending sick adult Care of animal Purchase of everyday goods and clothing Purchase of consumer durables Purchase of private services Purchase of other private services Purchase of public services, minutes Purchase of private & public health and medical care Purchase of private & public dental care Purchase of other public services Maintenance/repair of own home Maintenance/repair of motor vehicle

Leisure and other (cont.)	Maintenance/repair of boat Yard work Maintenance/repair of vacation home/lot Studies outside the home, official training institution Studies outside the home, further training on the job Other studies outside the home, hobby/leisure Studies at home in connection with official training Studies at home in connection with further training on the job Studies at home in connection with hobby/leisure Church services etc. Organizational activities Sports, walks Spectator activities outside the home Vacation travel and other trips outside home community Other recreational activities outside the home Hobby activities at home TV, radio, record player, video etc. Reading, not part of course work Entertaining guests at home etc Passive, unspecified Guest at someone else's house, visiting friends Meals outside the home at restaurant etc. Travel to and from military post Travel for charitable purposes, to help out Travel in connection with taking care of someone Travel in connection with shopping Travel in connection with maintenance/repairs Travel in connection with training and studies Travel for recreation and pleasure Telephone calls Writing/reading letters Conversations between household members Conversations with persons other than household members Doesn't remember, refuses to answer, time unaccounted for
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