

# The relationship between hours of outsourced domestic services and female earnings: Evidence from a Swedish tax reform 

Karin Halldén*, Anders Stenberg<br>Swedish Institute for Social Research (SOFI), Stockholm University, SE-106 91, Stockholm, Sweden

## ARTICLE INFO

## JEL classification:

H20
J16
J22
Keywords:
Domestic work
Outsourcing
Female earnings
Paid work
Unpaid work


#### Abstract

The negative relationship between women's time in paid and unpaid work is well established in empirical research. We contribute to this literature with an analysis of Swedish population register data 2000-2010 covering a tax discount reform introduced in 2007 which implied a $50 \%$ cost reduction for outsourcing of domestic work. We use difference-in-difference propensity score matching to estimate the extent to which purchases of domestic work implies increased time in paid work approximated by earnings. For our samples of married women, the results indicate that domestic outsourcing corresponding to $2.0-3.5$ percent of full-time work ( $40-70 \mathrm{~h}$ per year) increase labor market work by a similar amount, $2.4-3.6 \%$ of annual earnings. We discuss several possible explanations as to why these estimates are substantially higher than reported by previous studies.


## 1. Introduction

In OECD countries, a majority of coupled families are dual-earners, with women on average working fewer hours and at lower wages than their partners (OECD, 2010). Theory and empirical observations commonly attribute a large share of women's labor market disadvantages to the fact that they perform most of the routine housework (e.g., Bryan \& Sevilla-Sanz, 2011; Hersch \& Stratton, 2002; Maani \& Cruickshank, 2010; Noonan, 2001). Several current studies indicate that women increase their time in paid work when time spent doing domestic work and caring for children decreases. This may happen following, for example, increased access to child care, inflow of low-skilled workers, or technological improvements in household appliances (e.g., Baker, Gruber, \& Milligan, 2008; Berlinski \& Galiani, 2007; Coen-Pirani, León, \& Lugauer, 2010; Cortés \& Pan, 2013; Cortés \& Tessada, 2011; Furtado \& Hock, 2010; Hook, 2010; Lefebvre \& Merrigan, 2008). However, the estimated effects of such relaxed time constraints on women's labor market work are often based on analyses of population averages, with limited information on the actual changes in individual households' time restrictions. Consequently, there is no consensus view on the effect size, how this may vary with the tasks being outsourced or to what extent the relationship is non-linear.

To efficiently design policies with the aim of increasing women's working hours and improving women's chances in the labor market relative to men, there is need for a more precise understanding of the
relationship between fewer hours of domestic work and female labor supply. The effect sizes may well be non-linear, for instance if increase labor market work hours at a decreasing rate. From a gender equality perspective, such policies could improve women's ability to combine family with labor market work. More generally, it could increase labor supply to meet the challenges of an aging population that many OECD countries face at present (Burniaux, Duval, \& Jaumotte, 2003).

The purpose of this study is, first, to test the hypothesis that a relaxed time constraint following purchases of domestic services is linked to an increase in female labor supply. Second, if there is such a relation, the purpose is also to assess the effect size of this relationship. Our analyses are based on data from a tax discount policy implemented July 1st 2007 which reduced the consumer price of purchasing domestic services by 50 percent. With access to population data, we have information about the amount of tax rebates at the household level which are used to approximate hours of domestic work outsourced. Moreover, since we can identify both households and individuals; changes in households' domestic outsourcing over the period 2007-2010 can be linked to changes in individuals' annual earnings. The article's main contribution to the literature is that the quality and the size of the data make it possible to directly analyze the change in annual earnings, as a proxy for the labor supply response, of those who actually purchase domestic services. Data also allows us to distinguish between households based on the amount of households services purchased. This is unusual in the literature since survey data typically include a limited

[^0]number of observations, and studies of population averages may hide large effects for certain subgroups. Policies that directly subsidize and stimulate the domestic services sector exist in several European countries, for example Belgium (Titres-services), Denmark (Hjemmeservice), Finland (Kotitalousvähennys), France (Chèque Emploi-/Titre EmploiService), Germany (Haushaltsnahe Beschäftigungsverhältnisse) and Spain (Special Regime). The results provided by our study might therefore also be of potential policy relevance beyond the national context of Sweden. In the concluding section, we also briefly discuss the much more difficult task of a more comprehensive evaluation of the reform, which would consider its broader implications.

## 2. Stylized facts, theory and empirical findings

### 2.1. Stylized facts

It is well-established that women worldwide tend to perform the majority of all housework (e.g., Treas \& Drobnič, 2010), with the difference between men's and women's hours of domestic work being larger among couples with children (c.f., Bernardt, Noack, \& Hovde Lyngstad, 2008 using data from Norway and Sweden). Longitudinal studies demonstrate that there is little change in men's hours of housework when they become parents, while the amount of time women spend in domestic work increases (Baxter, Hewitt, \& Haynes, 2008 on Australian data; Boye, 2008 studying Sweden; Kühhirt, 2012 using data from West Germany). The gender gap in housework has declined over time, primarily because women spend a smaller amount of time in unpaid work and less as a result of an increase in men's time spent on housework (Evertsson \& Nermo, 2004 studying Sweden and U.S.; Hook, 2006; Hook, 2010 using data from 19 and 20 countries respectively). Data from the Hook, 2010 European Social Survey (ESS) indicates that Swedish women spend approximately 15 h per week on domestic work compared to 10 h for men (own calculations). This gender difference of five hours is moderate compared to many other European countries.

### 2.2. Theoretical accounts and previous empirical studies

There are several plausible explanations for the observed gender gap in housework. One is household specialization (Becker, 1991; Becker, 1985; Mincer \& Polachek, 1974), i.e. that family members specialize in different activities to maximize household utility. More time in housework may (i) reduce women's hours of labor market work, (ii) reduce women's wages relative to men through reduced labor market effort given a similar number of hours of labor market work, and/or (iii) reduce labor market hours and wages by altering women's investments in labor market human capital.

The relative resource bargaining perspective provides a second potential explanation. It assumes that household work is intrinsically bad and that women have weaker bargaining power due to lower income or education relative to their male partners (Blood \& Wolfe, 1960). This hypothesis has received empirical support (Bianchi, Milkie, Sayer, \& Robinson, 2000 examining U.S. data; Bittman, England, Sayer, Folbre, \& Matheson, 2003 using American and Australian data; Evertsson \& Nermo, 2004; Evertsson \& Nermo, 2007 studying Sweden and U.S.; Killewald \& Gough, 2010 on U.S. data), although some researchers (e.g., Gupta, 2007 studying data from U.S.) have claimed that absolute rather than relative resources are more important. Several studies based on cross-sectional data have also argued in favor of the buying out hypothesis (Cohen, 1998; Gupta, 2007; Treas \& de Ruijter, 2008 - all these studies use U.S. data), which predicts that women will use their own resources to purchase domestic services allowing their labor supply to increase. Killewald (2011) questions the relevance of this hypothesis, as she only finds a weak link between American women's earnings and their time devoted to housework.

A third explanation is that women are doing gender, i.e., expressing
themselves as feminine, when they engage in housework (Bianchi et al., 2000; Fenstermaker \& West, 2002; Schneider, 2012; West \& Zimmerman, 1987). Moreover, gender norms could make a neat household more important in demonstrating one's character as a good spouse for women than for men (Bianchi et al., 2000). Some studies have found that women who out-earn their husbands spend more time in housework than other women (Bittman et al., 2003 on data from U.S.; Evertsson \& Nermo, 2004 on data from both U.S. and Sweden (through this result was found only for U.S.)), which the authors tend to interpreted as compensatory gender display and hence partly supporting a doing gender account.

Several empirical studies have reported that relaxed time constraints (due to outsourced household duties) affect the labor market work of, primarily, high-skilled women and women with children. For example, Attanasio, Low, and Sánchez-Marcos, 2008 attributed the observed increase in American women's labor supply between cohorts born in the 1940s and the 1950s to relaxed time restrictions due to reduced child care prices. Hook (2010) presents cross country evidence indicating that public child care stimulates women's labor market work, and Maani and Cruickshank' meta analyses (2010) find a negative effect of housework on wages. Overall, the evidence suggests that relaxed time constraints due to outsourcing of domestic work and child care have a positive effect on women's labor market work, primarily for high-skilled women or mothers of small children (e.g., Baker et al., 2008 on Canadian data; Berlinski \& Galiani, 2007 on data from Argentina; Coen-Pirani et al., 2010 on U.S. data; Cortés \& Pan, 2013 on data from Hong Kong; Cortés \& Tessada, 2011 on U.S. data; EstévezAbe, 2015 studying 22 countries; Furtado \& Hock, 2010 on data from U.S.; Hook, 2010 using data from 19 countries; Lefebvre \& Merrigan, 2008 on data from Canada). ${ }^{1}$ However, precise estimates of the increase in women's paid work have been difficult to obtain because previous analyses have generally been based either on survey data, with a limited number of respondents, or on aggregate data where the time saved could vary across households, from potentially a substantial number of hours to close to zero for those household that already had sufficient child care arrangements. The data used in this study allows us to separately examine households with different amounts of purchased domestic services.

An issue which is relatively unexplored is whether the relation between outsourced work and working hours is linear, such that the probability of working additional hours increases gradually with the number of hours set free through outsourcing. It may also be that hours worked increase at a decreasing rate or, alternatively, there may be threshold effects if individuals make discrete decisions on whether to increase hours worked, generating "jumps" in the relationship between hours of domestic services outsourced and increased hours in labor market work (Becker, 1985; p34-35). ${ }^{2}$

Another important issue is potential heterogeneity in the labor supply response across households and across different types of subsidized tasks. High income households are typically much more likely to purchase domestic services (e.g., Baxter et al., 2008 using Australian data). It is also possible that the level of annual earnings in the period prior to purchases of domestic services is a predictor of the labor supply response. If households are able to afford outsourcing to increase time in leisure, one would expect a small labor supply response. This might be most expected among high earners, whereas individuals and households that earn less may to a higher extent increase labor supply. On the other hand, as high earnings may reflect high hourly wages, additional work hours will yield a higher reward (compared to individuals with lower hourly wages) and potentially a larger labor

[^1]
# https://daneshyari.com/en/article/7409884 

Download Persian Version:

## https://daneshyari.com/article/7409884

## Daneshyari.com


[^0]:    * Corresponding author.

    E-mail addresses: karin.hallden@sofi.su.se (K. Halldén), anders.stenberg@sofi.su.se (A. Stenberg).
    https://doi.org/10.1016/j.rssm.2018.04.003
    Received 14 September 2017; Received in revised form 28 February 2018; Accepted 13 April 2018
    Available online 19 April 2018
    0276-5624/ © 2018 Elsevier Ltd. All rights reserved.

[^1]:    ${ }^{1}$ But see for example Windebank (2007) who use cross-sectional survey data from France and argues that the influence of the French outsourcing tax rebate reform (Chèque Emploi-/Titre Emploi-Service) had a very marginal impact for time gains.
    ${ }^{2}$ For example, labor supply may go from part-time to full-time.

