Gender norms, work hours, and corrective taxation

Thomas Aronsson, David Granlund*

Department of Economics, Umeå School of Business and Economics, Umeå University, SE-901 87 Umeå, Sweden

Abstract

This paper deals with optimal income taxation based on a household model, where men and women allocate their time between market work and household production, and where households differ depending on which spouse has the comparative advantage in market work. The purpose is to analyze the tax policy implications of gender norms represented by a market work norm for men and household work norm for women. We show how the optimal (corrective) tax policy depends on the definition of social norms, the preferences for obeying these norms, and whether men or women have the comparative advantage in market work. Two extreme results are that (i) corrective taxation should not be used at all if the norms are based on the mean value of market work and household work, respectively, given that all households have the same preferences, and (ii) only the majority household type should be taxed at the margin if the norms are instead based on the modal value.

1. Introduction

Although women's hours of market work and men's contribution to household work have increased during the latest decades, women still do considerably more household work and less market work than men. According to the U.S. Bureau of Labor Statistics (2010), US wives do 80% more household work and spend one third less time in market work than their husbands. Also, women working full time in the labor market seem to do more household work than their male counterparts (Berardo, Shehan, and Gerald, 1987; Gershuny and Sullivan, 2003; Sullivan, 2000). Therefore, Becker's (1981) description of an efficient household, where the allocation of time between household work and market work is based solely on comparative advantage, might not give the whole picture. Instead, a considerable amount of evidence suggests that gender norms, or gender ideology more generally, are also important determinants of how spouses allocate their time (e.g., Bianchi et al., 2000; Geist, 2005; Greenstein, 1996; Perrucci et al., 1978; Romme, 1990; Ross, 1987). Gender norms may lead to lower utility through the (perceived) costs of deviating from the behavior prescribed by the norms. They may also reduce welfare through their influence on household behavior; e.g., by making women with a comparative advantage in market work, relative to their husbands, specialize in household work. For these reasons, it is relevant to analyze the policy incentives associated with gender norms and their effects on household behavior.

The purpose of the present paper is to analyze how gender norms, measured as a market work norm for men and household work norm for women, affect the incentives underlying optimal income taxation of households. The literature on optimal income taxation of couples only includes a few earlier studies; none of them incorporating effects of social interaction. Instead, major issues in this literature are whether joint taxation of couples is optimal (Brett, 2007; Cremer et al., 2007; Schroyen, 2003), and how secondary earnings ought to be taxed (Kleven et al., 2009). Our paper differs from the aforementioned studies primarily by focusing on the tax policy implications of work-related gender norms. We consider a model with two household-types, which differ with respect to whether the man or the woman has the comparative advantage in market work, i.e., earns the higher before-tax wage rate. In each household, the man and woman allocate their respective time-endowment between market work, household production, and leisure, and the time spent in household production generates a household public good. The analysis will be carried out for a welfarist government, whose objective function accurately reflects the preferences of the households combined into a social welfare function. Therefore, the government attempts to internalize the externalities caused by the social norms.1

1 In the working paper version of the paper (Aronsson and Granlund, 2013), we also analyze the optimal tax policy of a paternalist (or non-welfarist) government that disregards the disutility perceived by each household if deviating from the social norms.
We model the gender norms as a market work norm for men and a household work norm for women, as we interpret the evidence reported for the United States by Ross (1987) and Bianchi et al. (2000) and those reported by Geist (2005) for ten developed countries as supporting the existence of such norms. These scholars base their assessments of gender norms on the extent to which respondents agree or disagree with statements like “It is much better for everyone if the man earns the main living and the woman takes care of the home and family” and “Preschool children are likely to suffer if their mother is employed.” In short, the responses suggest that such gender norms may exist, according to which the man should be the main achiever outside the home, while the woman’s main responsibility is to take care of the home and family.

There is also evidence showing that gender related work norms have changed quite rapidly. For example, Brewster and Padavic (2000) find that the proportion of American respondents that agree with the statement “Preschool children are likely to suffer if their mother is employed” has dropped from 70 to 54% between 1977 and 1985 and find similar changes for other gender norm questions. Several sociological studies (e.g., Brewster and Padavic, 2000; Mason and Lu, 1988; Thornton et al., 1983) suggest that these changes can be driven by changes in the actual division between paid and unpaid work, in particular the large change in women’s time allocation. Based on this literature, we model the norms as a weighted average of the time women in different household-types spend in household work and a weighted average of the time men in different household-types spend in market work, respectively. This is a very general approach, as it only restricts the norms to be in the range of observed behavior. Two interesting special cases – with very different implications for tax policy – follow when the norms are based on mean value and modal value, respectively, for market work and household work.

It has also been recognized that the interdependencies among households in the gender division of work can be explained by gender identity, i.e., doing tasks that are normal for one’s gender will strengthen one’s gender identity (see Hook, 2006; Bianchi et al., 2000; Sani, 2014). For this reason, we model the norms as based on within-gender comparisons, even though an affirmative answer to the statement that “...the man earns the main living...” may also be consistent with across gender comparisons.

Our paper is also related to economics literature showing that social norms affect individual behavior. More specifically, both the obedience and disobedience of such norms are associated with costs to the individual; the former in terms of lost “intrinsically” utility (which reflects the objective that the consumer would maximize in the absence of social norms), and the latter in terms of lost utility through deviation from the behavior that norm obedience requires. As such, and in line with the empirical evidence discussed above, endogenous social norms may lead to interdependent behavior as well as a tendency toward conformity. These are aspects that our model attempts to capture. To our knowledge, however, the only earlier study dealing with the effects of labor market related social norms on optimal income tax policy is Aronsson and Sjögren (2010), which is based on a model with single-individual households. They focus on a norm for the hours of market work in combination with a participation norm (that one should earn one’s living from work instead of social benefits). Our study differs from theirs in at least three ways: (i) we consider a household model where each household contains two members; (ii) our model contains household production; and (iii) we consider a mix of norms referring to market work for males and household work for females.

The outline of the study is as follows. In Section 2, we present the basic structure of the model, where each household decides upon its private consumption as well as the time spent in market work and household work by the male and female, and also characterize the household choices conditional on the tax policy decided upon by the government. Section 3 contains the optimal tax problem as well as the outcome in terms of optimal marginal taxes. We summarize and discuss the results in Section 4.

2. The model

The economy consists of two household-types, denoted by subscripts 1 and 2, each of which comprises a male and female, denoted by subscript m and f, respectively. The households differ with respect to the member’s earnings potential in the labor market as represented by the before-tax hourly wage rates: in households of type 1 the man earns \( w_m \) and the woman \( w_f < w_m \); in households of type 2 the opposite holds, i.e., the man earns \( w_m \) and the woman \( w_f \). The number of households of type \( j \) is denoted \( \eta_j \).

The utility function facing a household of type \( j \) is given by

\[
U_j = \alpha^m(c_j^m) + \alpha^f(c_j^f) + \alpha^m(z_{jm}) + \alpha^f(z_{jf}) - \frac{1}{2} \beta^j (\ell_{jm} - \ell_{m})^2 - \frac{1}{2} \kappa^j (d_{jf} - d_f)^2 \quad \text{for } j = 1, 2,
\]

where \( c \) denotes private consumption, \( x \) denotes a domestically produced household public good, and \( z \) denotes leisure. Leisure is, in turn, defined as a time endowment, \( \Gamma \), less the time spent in household work, \( d \), and in market work, \( t \), such that \( z_{jm} = \Gamma - \ell_{jm} - d_{jm} \) and \( z_{jf} = \Gamma - \ell_{jf} - d_{jf} \). The functions \( \alpha^m, \alpha^f, \alpha^m \), and \( \alpha^f \) are all increasing in their respective argument, strictly concave, and all goods are normal. The additive utility function allows us to derive comparative statics for the hours of work spent in household production (which simplifies the interpretation of the results); it is not important for the structure of the tax formulas derived below.\(^7\)

\(^2\) Bianchi et al. (2000) use the answers to four questions included in the US National Survey of Families and Households; the two stated in the text and “It is all right for mothers to work full time when their youngest child is under 5”; and “A husband whose wife is working full-time should spend just as many hours doing housework as his wife.”

\(^3\) Geist (2005) used four questions from the International Social Survey Program: two questions are similar to the first two used by Bianchi et al. and one is a reversed formulation of the first of these. The last is “All in all, family life suffers if the woman has a full-time job.” The six questions used by Ross are similar, see Ross (1987, p. 823).

\(^4\) Mean value norms are based on the assumption that all people contributing to a specific norm will do so to the same extent, which is in line with much of the economics literature on externalities (which typically focuses on “atmospheric” externalities). Yet, it is not necessarily the case that all group members contribute to the same extent to the norm. Group norms may, instead, reflect similarities within the group and possibly also differences to other groups (e.g., Hogg and Reid, 2000). In our simple model, modal norms will have this character, since they are based on the behavior of the majority within the group.

\(^5\) See Blomquist (1993) for an early theoretical study of interdependent behavior in terms the labor supply, showing that endogenous social norms have important implications for the effects of taxes on work hours. In his study, the norm is measured as the average action (labor supply and consumption, respectively) in the population as a whole. See also Fischer and Huddart (2008) for a similar approach to norm formation; yet in another context. A conformity norm for leisure, common to men and women, is analyzed by Burda et al. (2007) in an attempt to explain the close similarity between men and women with respect to the total working time (the sum of market work and household work). Grodner and Kniesner (2006) analyze how economic policy affects household work by the male and female, and also characterize the household work by the male and female, and also characterize the household production as well as the time spent in market work and household work by the male and female, and also characterize the household choices conditional on the tax policy decided upon by the government. Section 3 contains the optimal tax problem as well as the outcome in terms of optimal marginal taxes. We summarize and discuss the results in Section 4.
دریافت فوری
متن کامل مقاله
امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات