Assigning Monetary Values to Unpaid Labour Using Input-Based Approaches: The Swiss Case

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1. Introduction

There are a number of reasons for wanting to ascribe a monetary value to unpaid labour activities. Firstly, unpaid labour generates wealth and contributes substantially to a society's welfare. Consequently, various national statistical bureaus have, in the past decade, calculated extended GDP measures, which include the value of unpaid labour. A second reason is that a monetary value for unpaid labour is often needed in litigation testimony, in which the value of unpaid labour is used to determine appropriate compensation in case of injury, death, or divorce. A third important reason for the valuation of time spent on unpaid labour is the general notion that "what is not valued, is usually not noticed". Most people may be aware that hundreds of hours are devoted to unpaid labour each year, yet the importance or value of this time has gone largely unnoticed. One could argue that only an explicit monetary valuation catches the public's attention.

This paper values unpaid labour activities in Switzerland using a combination of input-based approaches (see also Sousa-Poza, 1999, and Schmid et al., 1999).

2. Methodology

When valuing unpaid labour one distinguishes between an input and an output approach. The idea behind the output approach is to equate the value of the output produced by unpaid labour with the value of a corresponding good produced in the market. The input approach values the output produced by unpaid labour by solely considering the value of the labour that goes into a certain good. The input approach consists of two types of methods: the replacement cost methods and the opportunity cost methods. The replacement cost methods value unpaid labour by considering what it would cost to substitute paid activities for unpaid activities (e.g., if a maid were to be employed in the household). One usually distinguishes between the generalist and the specialist methods, where, in the first case, the wage rate of a generalist, and, in the second case, the wage rate of a specialist is used.

The opportunity cost methods try to quantify the forgone alternatives associated with performing a certain unpaid activity. These forgone alternatives can either be the "lost" wages (i.e., the potential wages if the individual only does unpaid work, or earned wages if the individual also does paid work), or the "reservation" wage, which corresponds to that wage rate which makes an
individual indifferent between a unit of time assigned to paid and a unit of time assigned to unpaid labour. Although the output method has some conceptual advantages compared to the input method, it is constrained by the difficulty in obtaining adequate data. As a result, most studies use the input approach. In this study two market replacement cost methods (generalist and specialist methods) and three opportunity cost methods (with gender-specific average wages, potential wages and reservation wages) are used. Potential wages are estimated with the aid of selectivity-corrected wage functions, and reservation wages are estimated with a censored regression model with unobserved stochastic threshold (see Maddala, 1983, pp. 174-178).

Five different wage concepts are used: "gross-paid", "gross-actual", "net-paid", "net-actual", "gross-gross-paid". "Gross" means before income tax deductions and including compulsory social security contributions (made by the employee). "Net" means after income tax deductions and excluding compulsory social security contributions. "Gross-gross" means before income tax deductions, after compulsory social security contributions, and after mandatory employer contributions. "Paid" ("actual") means that the hourly wage rates are based on paid ("actual") working time.

3. Data and Results

The data for this study are taken from the 1997 Swiss Labour Force Survey (SLFS). The SLFS is a nation-wide and representative survey conducted annually by the Swiss Federal Statistical Office. With telephonic interviews lasting approximately 20 minutes individuals are questioned on a number of labour-market related topics. The 1997 SLFS contains data on the time spent on unpaid labour. A total of 16,207 respondents were questioned on 14 individual unpaid labour activities, which can be collected into 4 broad categories: household work, child-care, care of elderly household members, and community services. Besides containing data on the time spent on unpaid labour, the SLFS data set also has a number of socio-demographic and earnings variables. Depending on the method used, and depending on the chosen wage concept, the value of unpaid labour ranges from 127,116 Mill. Fr. to 234,142 Mill. Fr. (approximately 34% to 63% of GDP) in 1997.

REFERENCES


FRENCH RÉSUMÉ

Cet article effectue une évaluation monétaire du travail non rémunéré à l'aide de différentes méthodes de l'input (deux méthodes des coûts du marché et trois méthodes des coûts d'opportunité) et sur la base des données de l'Enquête suisse sur la population active (ESPA) 1997. Les résultats démontrent que, selon la méthode utilisée et le concept de salaire choisi, la valeur du travail non rémunéré varie entre 34% et 63% du PIB en 1997.