Social Subsidies and Marketization: the role of gender and skill

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Average market hours of work in broadly similar countries across the OECD vary widely. For example, during the early 2000s, weekly market hours per adult aged 20-64 in the United States were about 28, while they ranged from 19 to 25 in a sample of European countries. These differences in hours persist even after controlling for demographic differences between countries.

We show that the majority of the cross-country differences in market hours are driven by the hours of women, especially women without a college degree. We also find that social subsidies on family care that lower the cost of outsourcing home production play an important role in accounting for women's market hours. When calibrated to the data, social subsidies and taxes together can account for a substantial fraction of the cross-country differences in market hours by gender and education.

We show that taxes are negatively associated with market hours for each of the gender-skill groups. More importantly, when account is taken for the presence of social subsidies on family care, such as child care and elderly care, this negative association becomes even stronger for low-skilled women. A similar negative association is also found for all sectors of the economy, but is especially large for the substitutable service sector.

Motivated by these empirical findings, we develop a multi-sector model to study the quantitative effects of taxes and subsidies on market hours. The model consists of three market sectors producing goods, non-substitutable services, and substitutable services. It also distinguishes four types of labour inputs, male and female with low or high skill, and production in each sector involves all four types of inputs. A representative household allocates time to market work, home production, and leisure for each gender-skill group.

As taxes increase, households reduce their market hours and devote more time to leisure and home production. The reduction is larger for women than for men, because home production is mainly performed by women. As low-skilled women have lower wages, and therefore the lowest opportunity cost of not working in the market, the shift of time away from the market is the largest for them. Moreover, the reduction in market hours is also larger for the substitutable service sector, because this sector produces close substitutes to home services.

In contrast, social subsidies on family care reduce the price of substitutable market services, and thus increase the incentive to marketise home services, which results in more female market hours, especially among the low-skilled. Social subsidies help to reconcile the labour supply patterns observed in Nordic countries, where both taxes and subsidies are high, and women have relatively high market hours of work.

Our mechanism can rationalize why European countries have a smaller gender wage gap. In particular, the fall in the relative supply of female market hours in countries with high taxes reduces such wage gap.