

The application of the covariate balancing propensity score estimation to the labor supply decision in the context of the universal child benefit in Poland

The program *Rodzina 500 Plus* is one of the most significant policy interventions affecting the household sector in Poland in recent years. Introduced in the second quarter of 2016, with an estimated annual cost of 2% of GDP, it provides financial support to families with two children or more (an unconditional transfer of 500 PLN each underage kid, except for the first-born, support is also provided to low income families with only one child). Around 2.7 million families bringing up to 3.7 million children will participate in this program.

Economic theory posits that unconditional transfers may result in a decrease in labor supply, especially for the second earner. The drop in labor force participation, especially among women, is predicted to 200-300 thou. people from the calibrated *ex ante* microsimulation models. The ex post verification of the effects of *Rodzina 500 Plus* is difficult, however, because every eligible family obtains it: there is no way to meaningfully compare recipients to non-recipients to infer that a group of individuals left the labor market *because* of the child support instrument. We will provide the first formal and detailed treatment on this phenomenon.

In order to provide that evaluation, we will develop a novel statistical method. It proposes meaningful comparisons between eligible and ineligible households to give an estimate of the probable effects of *Rodzina 500 Plus* on labor supply decisions. We will propose various comparison groups and pay specific attention to married women acting as second earners and households with women as single earners.

Estimated differences between labor supply in both groups in all of these comparisons, the so-called *local effects*, will enable us to provide a thorough evaluation of impact of the large scale policy instrument in Poland. We will be able to identify subpopulations of households that decrease their labor supply responding to the program and therefore put the assessment of the program in appropriate context. If parents that obtained a benefit quit their jobs in order to take better care of the children as basic financial needs become satisfied, the side effects of the program on labor market need not necessarily be perceived as undesirable by the policy maker.