





The EITC Disincentive: A Reply to Paul Trampe

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Abstract

Paul Trampe raises an important point in his piece, "The EITC Disincentive: The Effects on Hours Worked from the Phase-Out of the Earned Income Tax Credit." His main thesis is that the EITC is expected to lead to a reduction in hours worked for those in the phase-out region of the credit, and furthermore, that the literature has not given much attention to the issue. After summarizing the literature, Trampe goes on to present some estimates of his own on the impact of the EITC on hours worked for women in the phase-out region of the credit.

I agree with his point that we expect hours to decrease. In my view, however, it has been examined in the literature. But the literature has failed to find a consistent negative impact of the EITC on hours worked. This, I think, is a bit of a puzzle. That puzzle led Nada Eissa and I (Eissa and Hoynes 2006) to review the literature along with a theoretical discussion as to why hours might not respond.

The discussion and analysis in Trampe's work, however, is not up to the standards of the papers he cites. In this reply to his comment, I discuss several omissions, errors in interpretation, and problems with his empirical analysis.

THE THEORY

Trampe's analysis of the impact of the EITC on labor supply ignores the income effect of the EITC. This leads to misstatements about the expected impacts of the EITC. Basic labor supply theory shows that an increase in income will lead to a reduction in labor force participation and hours work. This is known as the income effect. Theory also shows that a compensated increase in wages leads to an increase in labor force participation and hours worked. This is known as the

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wage or substitution effect

The expected impact of the EITC on hours worked varies with the region of the credit. In the phase-in region, the EITC leads to an ambiguous impact on hours worked due to the negative income effect and positive substitution effect. Trampe, by ignoring the income effect, incorrectly concludes that the EITC is work-promoting in the phase-in region. In the flat region, the EITC produces a negative income effect leading to an unambiguous reduction in hours worked. Again, by ignoring the income effect, Trampe (311) makes an incorrect statement ("those in the flat range do not face a disincentive"). In the phase-out region, the EITC produces a negative income and negative substitution effect leading to an unambiguous reduction in hours worked. Moreover, the phase-out of the credit alters the budget set in such a way that some taxpayers with incomes beyond the phase-out region may choose to reduce their hours of work and take advantage of the credit.

With this background, one can see that, among those likely to be affected by the EITC, hours are expected to decrease for all those except possibly those in the phase-in region. It is this observation that leads many researchers to examine overall hours worked rather than focusing on the selected sample of those in the phase-out range (more on this later). While not mentioned by Trampe, many authors limit their sample to less educated women in an effort to target those most likely to be impacted by the EITC.

THE EXISTING LITERATURE

The literature review in Trampe's comment is missing many EITC papers that are relevant for his analysis. I briefly mention them here. Meyer and Rosenbaum (2000) present estimates using many different control groups. Further, Meyer and Rosenbaum (2001) is cited by Trampe but an important feature of their work is overlooked. Trampe states in his criticism of Eissa and Hoynes that they "do not mention one caveat, namely, that over this same time period, AFDC was being reformed with the main effect being to push recipients into jobs" (310). Meyer and Rosenbaum use data during the welfare reform period and very carefully control for its impacts.

Further, Meyer and Rosenbaum's NBER working paper version of their 2001 *QJE* paper (Meyer and Rosenbaum 1999) extends their method to examine impacts of the EITC on hours worked. This should be recognized.

While Trampe focuses his review on single mothers, it is important to also recognize my work with Nada Eissa which examines impacts of the EITC on the labor force participation (Eissa and Hoynes 2004) and hours worked (Eissa and Hoynes 2006) of married couples. This is quite important given that in Trampe's own empirical analysis he pools single women and married women.

Interpreting the Literature

At several points in the comment, Trampe cites descriptive statistics on trends in labor supply alongside estimates of the impacts of the EITC on labor supply. Obviously, descriptive trends are not conclusive as to the impact of individual policies because there is much else changing over time. The second paragraph in the section "Previous studies: Labor Force Expansion" (310) makes this mistake.

Trampe presents Figure IX from my work with Nada Eissa (Eissa and Hoynes 2005) to illustrate the tendency in the literature to misread graphs. I disagree with his analysis and conclusions. First, Trampe states that "they do not comment on the dramatic increase in hours worked by single women without children starting in 1984 which was not accompanied by a similar increase for those with children" (313). The EITC did not expand until the Tax Reform Act of 1986 so any change by single women without children prior to 1986 is not relevant. Our statement holds if, as one should, one looks POST the policy expansions. Second, Trampe states that "They also do not comment on the dramatic rise and subsequent fall in hours for those without children between 1997 and 2000 while the hours of those with children stay relatively constant" (313). There was no policy change after 1993 so any fluctuation between 1997 and 2000 should not have anything to do with the program! With these basic errors in analysis, it seems quite inappropriate later to state that "Eissa and Hoynes are not the only authors who seem to overlook facets of their own figure..." (314).

CRITIQUE OF TRAMPE'S ECONOMETRIC ANALYSIS

The basic approach taken in the comment is to create a sample of observations for women with income in the phase-out region of the credit. Then Trampe regresses hours (for those working) on various demographic controls and the EITC phase-out rate that the woman faces. The sample includes observations pre and post 1993 Omnibus Reconciliation Act expansion.

The fundamental problem with this approach is that it ignores the selected nature of the sample. As EITC expands, labor force participation increases which can lead to changes in the composition of the sample of those in the phase-out range. For example, what if women who enter the labor force work fewer hours than women already in the labor force? The hours will decrease with the expansion of the EITC yet (in this simple example) there was no reduction in hours worked! This is a very old problem in empirical labor supply and there are many approaches that are used to solve this basic endogeneity problem. One is to model the actual net of tax wage and income values and use instrumental variables to deal with endogeneity. That is the strategy taken by Eissa and Hoynes

(2004). Another alternative is to use structural modeling (Heim 2005, Keane and Moffitt 1998).

Ignoring the selection problem, however, there remains a fundamental problem with the empirical model. The main policy variable, the phase-out rate, varies with family size and year. I suspect that the majority of the identification comes from the tax-reform induced yearly variation in the phase-out rate. That, in and of itself, is fine. The problem is that there is no control for year fixed effects in the model. Therefore, if there are any other factors that vary by year (labor market effects, other trends, other policies) the estimates will be biased unless there are perfect controls for these features (and in point of fact, there are NO controls of this sort in the model). This is a fundamental problem with the empirical model and in fact is the main reason that people use control groups; ideally they are selected such that they face the same environment except for not facing the policy change.

The empirical analysis pools both single and married women: "In the phase-out income range, which today reaches past \$35,000 a year, female headed households are much less dominant. In the 600 randomly selected households for my study 197 were single parent households headed by women" (315). This seems fine (in fact note that Eissa and Hoynes (2004, 2006) already have recognized this issue and this motivated our analysis of the impacts of the EITC on the labor supply of married couples) but the results should be separately estimated for the two groups. The determinants of labor supply of married couples differ from singles and this should be reflected in the empirical model. This would also seem important given the interest in comparing results to the literature, where single and married women are always analyzed separately.

Finally, why limit the analysis to a random sample of 200 households in the phase out region? The CPS has much larger samples than this and there is no reason to do this with modern computing opportunities. The larger samples will also allow for stratifying results by marital status.

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Go to September 2007 Table of Contents with links to articles