

## COMMENTS

### “TAX CREDITS FOR RESIDENTIAL ENERGY EFFICIENCY: AN EVALUATION OF INDIVIDUAL TAX FILER DATA” BY ANDRE R. NEVEU AND MOLLY SHERLOCK

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#### SUMMARY OF FINDINGS

**M**OLLY SHERLOCK SAID IN HER PRESENTATION that she wanted to describe what the taxpayers taking the residential energy efficiency tax credit look like. The answer is that they look like me. In the interest of full disclosure, I must say that my wife and I took the credit in 2009 for a new high efficiency furnace and air conditioning system in our home. Looking at her results, it is fair to say the credit claimants look a lot like us in general. In fact, we are probably in the data set used by these authors.

This is a very interesting paper that models which taxpayers claim residential energy efficiency tax credits. It is quite preliminary as it simply estimates a logit model of credit claims by taxpayers, but it can easily be extended to consider additional issues.

#### Econometric Issues

First, a logit model is estimated, explaining the likelihood of a taxpayer claiming the credit. I would like to see a sample selection model to control for the sample selection bias clearly involved in this issue. In the first stage, a logit model is estimated explaining the likelihood of claiming the credit, using many of the variables the authors currently have in their logit model. Then in the second stage the amount of the credit claimed is modeled, contingent on tax liability status and other factors.

Second, the American Recovery and Reinvestment Act of 2009 changes in the credit for 2009, and 2010 changed both the credit percentage (increased from 10 percent to 30 percent of eligible

expenditures) and the credit cap (increased from \$300 per item to a total of \$1,500). That provides an opportunity to examine how credit take-up rates changed with the credit parameters' changes, which have not been exploited in this study, but could be.

Third, the change in the position of the energy credit in the “stack” on the tax form in 2010, and therefore in the position it takes in the computation of tax liability, may provide a very nice way to examine the likelihood of filing for the credit and the sensitivity of filing to remaining tax liability.

Fourth, it would be interesting to estimate a simultaneous equations tobit (SET) model in which there is a binary selection equation and a credit equation. The tobit modeling approach is required for the censored tax credit data.

#### Policy Issues

The non-refundability of the credit is a policy issue worthy of further consideration in order to improve the design of the credit to achieve its objectives.

The authors rightly raise the issue of infra-marginal purchases of energy efficiency related equipment. Suggestions for how to re-design the credit to encourage marginal rather than infra-marginal purchases would be helpful.

The issue of tax evasion, or fraudulent claims of the energy credit, is also worthy of further consideration. You could more accurately proxy homeownership by including property tax deductions along with mortgage interest deductions. Suggestions for important compliance information that should be included on Form 5695 would be helpful.