## **Basic Income Project**

The goal of this project is to expand the existing OSPC-incubated modeling suite to allow for the evaluation of reforms, in year 2015, that repeal major welfare and transfer programs and replace them with a guaranteed basic income financed by a broad-based progressive income tax. More specifically, we wish to analyze reforms in this pattern:

- A) Repeal tax, means tested transfer programs, and social insurance programs.
- B) Pay each registered US citizen \$X per week, allowing for differential payments by age.
- C) Finance the system with a broad-based progressive income tax. (e.g., 10% under and Y% over \$50.000 where Y is calibrated to hit some deficit target).

Achieving this objective will require augmenting a pre-existing CPS-based database designed for tax analysis. In particular, we will expand the CPS-based database to include benefits and participation data for major programs as well as implicit marginal tax rates from the benefits phase-ins and phase-outs.

For the many programs, benefits data are available on the CPS, but there is often under reporting as compared to administrative totals. For these programs<sup>3</sup>, we will augment the existing benefit data to make sure the total number of recipients and total benefits match the administrative totals. Following the imputation routine by Moffit and Scholz<sup>4</sup> (2010), we plan to implement a two-step procedure. First, compute a propensity score for each current non-recipient, and add those with highest score as recipients, until total number of recipients hits administrative data. Second, augment the benefits amount proportionally across all the recipients to match the aggregate total.

However, for some programs, such as the Affordable Care Act's Premium Tax Credits, no information is available on the CPS. We will need to statistically match them from multiple datasets or impute from other sources.<sup>5</sup>

Finally, it is important to understand the implicit marginal tax rates faced by tax units on the dataset so that we can include basic labor supply effects when estimating the cost of repealing and replacing the programs. For each program that we've obtained benefit data, either through CPS or imputations, we will estimate MTRs through an econometric approach, by estimating regressions with benefits as the dependent variable, income and assets as independent variables, and demographic characteristics as classifiers. We will estimate these regressions on the 'real' data that already exist on the CPS and other surveys rather than after the benefits have been adjusted in the two-stage process described above. We anticipate potential problems to solve, as most of our target programs have complicated rules varied by state. Thus, we are using the EITC

Means-tested transfer programs: TANF, Food stamps, Medicaid, General Assistance, Public Housing, WIC, Supplemental Security Income (SSI), ACA.

Social Insurance programs: Social Security Retirement (OASI), Social Security Disability Insurance (DI), Unemployment Insurance, Medicare, Workers Compensation, Veterans Benefits.

<sup>&</sup>lt;sup>1</sup> The core database is constructed from March 2013, March 2014 and March 2015 Current Population Survey (CPS). Tax filing units are constructed, high income units are imputed, and various tax credit and deduction items are imputed. See Quantria Strategies (2015).

<sup>2</sup> Currently programs we want to incorporate include:

<sup>&</sup>lt;sup>3</sup> Programs where benefit information is available on the CPS include: TANF, WIC, Food stamps, SSI, OASI, DI, Worker's Compensation, Unemployment Insurance.

Trends in the Level and Distribution of Income Support. http://www.nber.org/chapters/c11969

<sup>&</sup>lt;sup>5</sup> The ACT PTC will be computed from OSPC's calculator. Medicare will come from Medical Expenditure Penal Survey (MEPS). Currently we're not sure where to obtain Medicaid/CHIP micro data.

as an example to verify the regression-based methodology since we can calculate the EITC marginal tax rates directly from a micro-simulation model as a comparison.

If all three steps mentioned above are finished for each of our target programs, we will want to extrapolate the benefits and imputed marginal tax rates for years in the future.