Going from no program to program can only reduce labor supply.

PROWRA - 1996 Welfare reform

(*) Negative income effect: could bump you up to a position at which you begin to invest in less liquid assets (houses?) which leaves you with less liquid income. (positive liquid income effect)

HR Block in poor neighborhoods - files for EITC for eligible people. (Need to file tax returns to get EITC)

$h(w, p, y)$ = uncompensated labor supply

$h^c(w, p, y)$ = compensated

$$dh = \frac{\partial h}{\partial w} dw + \frac{\partial h}{\partial y} dy$$

$$= \underbrace{\left(\frac{\partial h^c}{\partial w} + \frac{\partial h}{\partial y} h \right)}_{\text{slutsky}} dw + \frac{\partial h}{\partial y} dy$$

$$= \frac{\partial h^c}{\partial w} dw + \frac{\partial h}{\partial y} [h\,dw + dy]$$

G = guarantee

Before	After	Δ	
w	$(1-t)w$	$-tw$	(dw)
y_0	$(G-ty_0)+y_0$	$(G-ty_0)$	(dy)

$$\Rightarrow dh = \frac{\partial h^c}{\partial w}(-tw) + \frac{\partial h}{\partial y}(-twh + (G - ty))$$

$$= \frac{\partial h^c}{\partial w}(-tw) + \frac{\partial h}{\partial y}(\underbrace{G - t(wh+y)}_{\text{subsidy } (S)})$$

$$= \frac{\partial h^c}{\partial w}(-tw) + \frac{\partial h}{\partial y} S \quad < 0$$

$$\underbrace{\underbrace{>0}_{<0} \quad \underbrace{<0}_{<0}}_{<0} \qquad \underbrace{\underbrace{<0}_{>0} \quad \underbrace{>0}_{<0}}_{<0}$$

$$\Rightarrow \frac{dh}{h} = d\ln h = \frac{\partial h^c}{\partial w}\frac{w}{h}(-t) + \frac{\partial h}{\partial y}\cdot\frac{y}{h}\left(\frac{S}{y}\right)$$

$$= -t\,\varepsilon_{h^c,w} + \frac{S}{y}\varepsilon_{h,y}$$

Ashenfelter 1978 - Uses rural NIT data

$$d\ln h = \eta^c(-t) + \eta^y \frac{S}{y}$$

$$d\ln h_{ij} = -\eta^c t_j + \eta^y \frac{S_{ij}}{y_i}$$

Fairly successful but two things wrong: attrition, and:
- raw treatment control differences are showing us that the treated guys are earning less (data collectors were naive)
- incentive to say "wife isn't working" (tax fraud, not elasticity)