Welfare & Transfers: Questions & Topics

Econ 35003 Human Capital, Markets, and the Family

Overarching Issues

- Universal and targeted support.
 - Topic of Ackerloff paper
 - Central conclusion: one could have universal (say UBI) but would be too costly if set levels to support truly needy
- Cost of redistribution in terms of changed incentives & behavior.
 - cf Harvey Rosen's textbook
 - Welfare economics ideas would probably lead to equal distribution *except* incentives (for innovation and growth) altered

Distortions

- There is ongoing discussion of the merits of the welfare state and the distortions it creates-if any
 - Catalogue distortions
 - Evidence for distortions

Transfers – Do They Alleviate Poverty?

- Transfers seem to be effective in alleviating poverty Are they?
 - There seems to be agreement on "yes" in principle
 - Questions on how much they alleviate poverty

Welfare Dependency

- If transfers alleviate poverty, is there still danger of creating a welfare dependent group (or groups) with little incentive to attach to the larger society
 - Is this a problem? Some claim that the War on Poverty created the culture of the inner city neighborhood and the rural poverty in Appalachia and other places in America
 - What is the evidence that the welfare state creates poverty traps?
 - The research of Ziliak suggests that intergenerational poverty was not alleviated by Clinton's welfare reform (we should post this paper)
 - What is your take on this set of issues?
 - Intergenerational poverty is the important issue here
 - "Culture of Poverty" a common buzzword. Is there a "culture of poverty"?

Income Transfers vs Targeted Strategies

- Do income transfers per se give the best approach for child development or are there better strategies?
 - Specifically what is the evidence on the Child Tax Credit (CTC)
 - And the NRC report on policies to promote child welfare
 - What is the best evidence?
- Some points from Robert Moffitt:
 - CTC effect on labor should be covered in point above.
 - No evidence of CTC effect on child development
 - May be better to focus on effect of *transfers* on children (not limiting to CTC)
 - Contrast *transfers* vs targeted human capital policies (e.g. Perry Preschool)

How Effective is the US Safety Net?

Additional Questions

- How do you define poverty temporally? One paradigm thinks of poverty as lifetime condition while another is measuring are you poor in one year even if you use all your resources from the future.
 - How do each of these definitions map to policy solutions? What assumptions do we need to make about the lifetime optimizing decisions of families?
- How do various demographic factors affect our conception and measures of poverty: (1) family size and structure, (2) declining fertility rates
- Do welfare programs help mitigate the losses from technical change? (Both skill-biased change and automation in general)

Welfare Programs, Labor Supply, and Marginal Tax Rates

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> Chicago 350 25 May, 2022

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Welfare Tax Rates	IA. Basic Model IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes
Jutline	

- I. Welfare Programs and Labor Supply: Theory
 - A. The Standard Static Model
 - B. Effect of Tax Rates
 - C. Other Programs and Other Models
 - D. Optimality
- II. Facts and Research on Welfare Tax Rates
 - A. Facts
 - B. Research
- III. Unresolved Questions

 IA. Basic Model

 IB. Effect of Tax Rates

 IC. Other Programs and Models

 ID. Optimality

 IIA. Facts

 IIB. Research on Effects of Welfare Taxes

IA. Basic Static Model

Max U(H, Y; θ) subject to a budget constraint (b.c.)
b.c.:

$$WH + N + B = Y \tag{1}$$

$$B = Max(0, G - tWH - rN)$$
(2)

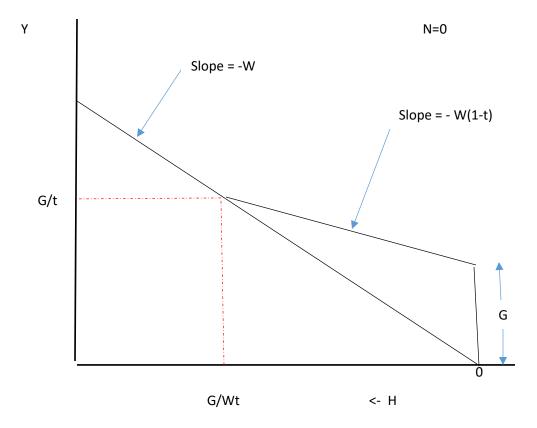
H=hours of work, Y=take-home income, θ =preferences W=hourly wage, N=nontransfer nonlabor income B=welfare benefit, G = guarantee (maximum benefit, which the individual receives if she has no earned income and no nonlabor income)

t="tax rate" on earnings (it is really a "benefit reduction rate" (the amount by which *B* is reduced for every extra dollar of earnings), r=tax rate on nonlabor income

Welfare Tax Rates	. Basic Model . Effect of Tax Rates . Other Programs and Models 0. Optimality A. Facts 3. Research on Effects of Welfare Taxes

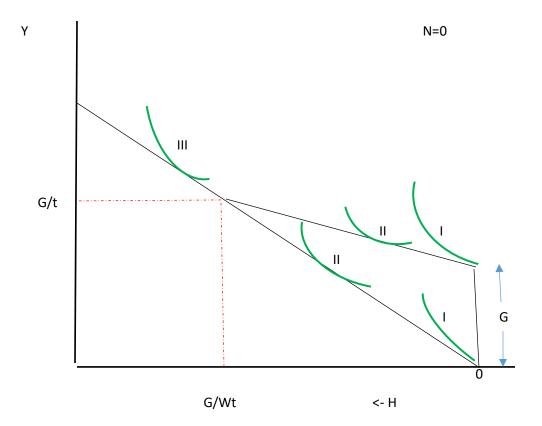
• Substituting the expression for *B* into the b.c., it becomes

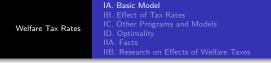
$$W(1-t)H + G + (1-r)N = Y$$



Welfare Tax Rates	IA. Basic Model IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes

- Adding indifference curves for 3 different types of people
- H will either not change or will fall, unambiguously
- Income effects and substitution effects go in the same direction (more income, lower net wage)
- How to write down a formal model of the choice of *H*, given that which "segment" a person is on, is a matter of choice





- Define V(W̃, Ñ; θ) as the max utility if the bc has slope W̃ and intercept Ñ
- Define *P* as a dummy variable =1 if on the lower segment (on welfare) and =0 if on the upper segment (off welfare)
- Define H = H(W, N; θ) as the choice of H if the b.c. has slope -W and intercept N
- So $H = H[W(1-t), G + (1-r)N; \theta]$ or $H = H[W, N; \theta]$
- It's the same function in both cases
- Then the "total" labor supply function can be written

IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes

$$H = H[W(1 - tP), N + P(G - rN); \theta]$$
(3)

$$P = 1 \text{ if } \Delta V \ge 0, P = 0 \text{ if } \Delta V < 0 \tag{4}$$

$$\Delta V = P^* = V[W(1-t), G + N(1-r); \theta] - V[W, N; \theta]$$
 (5)

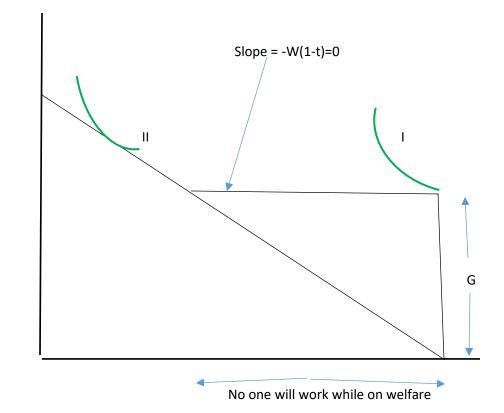
A reservation wage W^r can be defined as the W which makes(5)=0. Wages above that result in P=0 and wages below it result in P=1.

Econometrics: *P* is endogenous in (3) \rightarrow cannot estimate by OLS Estimate jointly (ML, MOM, NLS)

IV not possible: nonparametrically not identified; the two decisions are not separable

Welfare Tax Rates	IA. Basic Model IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes
IB. Reducing t (=NIT)	

- A common proposal to increase work incentives in welfare programs: reduce *t*
- Milton Friedman, James Tobin, Robert Lampman
- Graphical illustration of t = 1:



Y



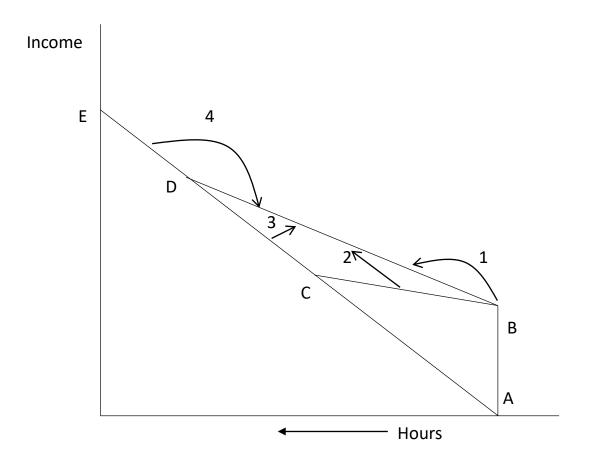
- But reducing t has negative effects on H as well as positive ones: see graph
- From the prior equations:

$$H = H[W(1 - tP), N + P(G - rN); \theta]$$
(6)

$$P = 1 \text{ if } \Delta V \ge 0, P = 0 \text{ if } \Delta V < 0 \tag{7}$$

$$\Delta V = P^* = V[W(1-t), G + N(1-r); \theta] - V[W, N; \theta]$$
(8)

 Reduction in t increases H in (6) but, from (8), induces some to increase P from 0 to 1, which decreases H in (6)

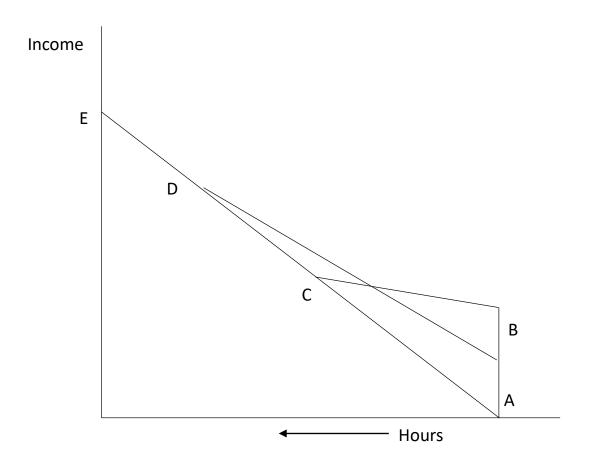


Welfare Tax Rates	IA. Basic Model IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes

- The fraction of welfare recipients who work has to increase
- Number of people on welfare rises
- Costs of the program may rise: ambiguous in sign (some new recipients, but recipients who work more may have a lower benefit)
- Net effect can differ for any specific population: depends on how many people are in each category and the size of their LS responses

Welfare Tax Rat	IA. Basic Model IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes

- Friedman proposed an expenditure-constant reduction in t
- Lower G at the same time as lower t
- Still ambiguous in sign although, in the limit, must raise *H* at the point where the program disappears





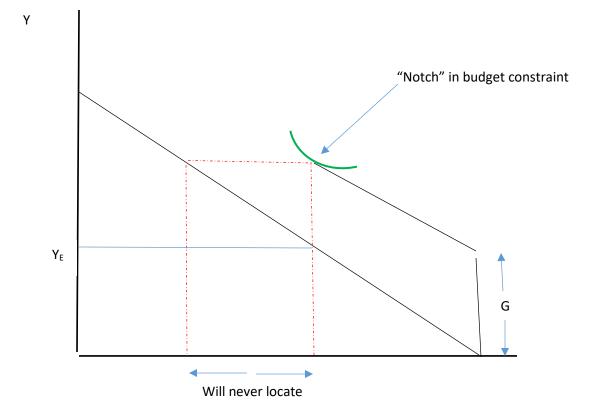
• Welfare program with benefit defined by

$$B = G \quad \text{if} \quad WH + N < Y_E \tag{9}$$

$$B = 0$$
 otherwise (10)

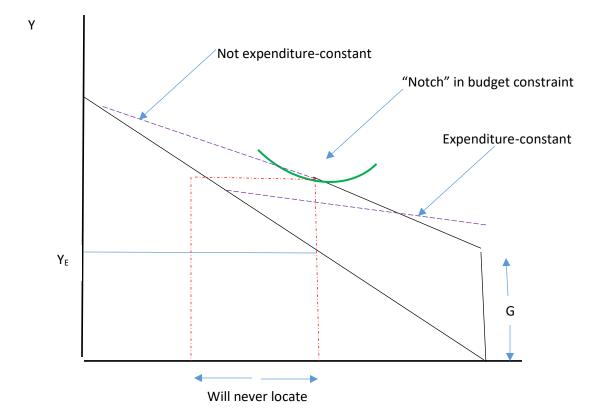
• Need to use direct U function at the notch

• Graphically:



Welfare Tax Rates	IA. Basic Model IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes

- Will an expenditure-constant smoothing out the kink increase LS?
- Not necessarily: see figure
- Could just extend the b.c. upward (not expenditure-constant)
- Then you have an NIT, reduction in *t*: net effect on H is ambiguous in sign





Nonparticipating Eligibles

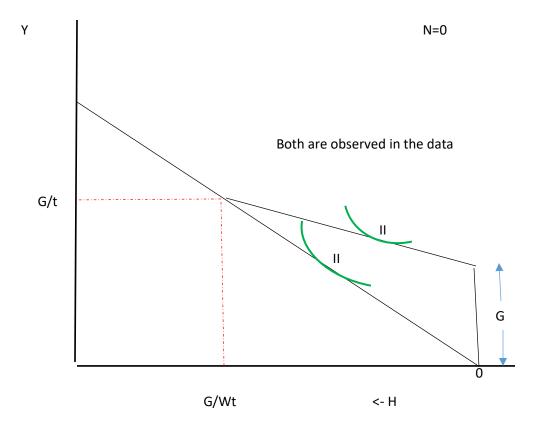
- A universal feature of all transfer programs: some eligibles do not participate
- Fixed costs? Stigma? Information? Difficult to pin down
- Putting a "cost" variable into the U function, it can be modeled as:

$$H_i = H[W_i(1 - tP_i), N_i + P_i(G - rN_i); \theta_i]$$

$$P_i^* = V[W_i(1-t), G + N_i(1-r); \theta_i] - V[W_i, N_i; \theta_i] - \phi_i$$

$$P_i = \mathbb{1}(P_i^* \ge 0)$$

where ϕ is the fixed (utility) cost. Now the two decisions are separable and if an observable is available for ϕ then 2-stage estimation procedures can be used



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-Kind Transfers		

- In-Kind rather than Cash welfare programs: housing, medical care, food coupons
- Are subsidizing a consumption good as well as leisure, need to know whether they are complements or substitutes
- Does not have the same effects as cash (in fact, could have opposite signs)
- See Chan-Moffitt

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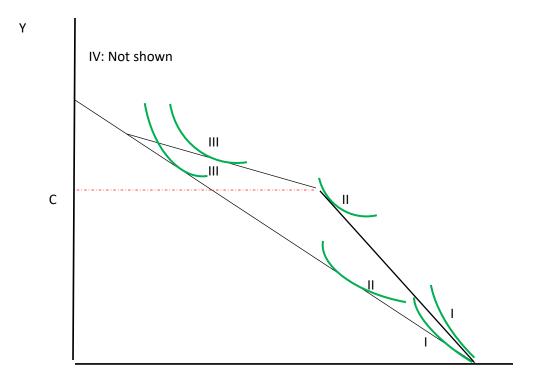
Earnings Subsidy Programs

Pay benefit

B = sWH if WH < C

B = Max[0, sC - t(WH - C)] if $WH \ge C$

- (U.S. has a "flat" region in between the two segments)
- Increase net wage to W(1+s) in lower ranges, but reduces it to W(1-t) in upper ranges, like a more traditional welfare program
- Ambiguous effects on *H* but perhaps more likely to have a positive effect on *H* given the work incentives at low *H*
- But, again, only positive effects on probability of working any positive *H*
- Graphically:



Persons I and II increase labor supply

Person III and IV (who starts above the eligibility point) reduce labor supply

Welfare Tax Rate	IA. Basic Model IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes
Dynamic Models	

- Introduce two dynamic features at the same time: preference persistence and human capital
- Will capture with three equations
- Instantaneous U function:

$$U(H_t, Y_t, P_t; H_{t-1}, P_{t-1}, \theta, \phi, \epsilon_{\theta t}, \epsilon_{\phi t})$$
(11)

Lagged H and P represent preference persistence ϵ terms represent shocks

Welfard	• Tax Rates	IA. Basic Model IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes	

• Other two equations: wage and human capital processes

$$W = g(K_t, \epsilon_{Wt}) \tag{12}$$

$$K_t = f(K_{t-1}, H_{t-1})$$
 (13)

so a learning-by-doing specification

• An initial condition K_0 starts the process.

Welfare Tax Rates	IA. Basic Model IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes

• Assume intertemporal optimization, with value function

$$V_t(H_t, Y_t, P_t; H_{t-1}, P_{t-1}, \theta, \phi, \epsilon_{\theta t}, \epsilon_{\phi t}) =$$

$$\max_{H_t,P_t} [U(H_t, Y_t, P_t; H_{t-1}, P_{t-1}, \theta, \phi, \epsilon_{\theta t}, \epsilon_{\phi t})]$$

 $+\beta E_t V_{t+1}(H_t, Y_t, P_t; \theta, \phi)]$

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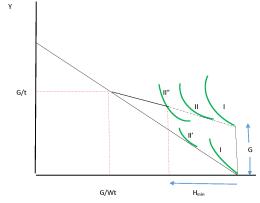
- New effects compared to static model:
 - (1) Get larger H disincentives because of preference persistence
 - (2) Get more welfare participation because of preference persistence
 - (3) Human capital effects create bimodal response in H and P
 - (4) Shocks imply that welfare has an insurance value

Recent Work

Reform #3: Work Requirements

- Several reforms mainly tried only in U.S.
- In simplest form, simply set B = 0 if $H < H_{min}$, where H_{min} is the minimum hours of work required
- Results: will increase H for some, leave others' H unchanged
- But utility falls and income falls for some
- Graphically:

Introduction and Outline	Transfers	Taxes	Recent Work
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Person II either increases H and Y falls (II') or increases H and Y rises (II'')

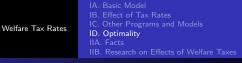
Introduction and Outline	Transfers	Taxes	Recent Work
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- Evidence: no clean evidence because work requirements usually implemented at the same time as other changes, hard to separate
- Actual implementation of work requirements is also complex
- But (rough) evidence supports the theory: *H* rises for large fraction of the population but *H* falls for some fraction (with consequent reductions in *Y*)
- But (rough) evidence looks like H up on average
- Fraction of population on welfare falls



ID. Optimality

- Iron Law: You can't lower the MTR in one range without raising it in another, expenditure fixed
- It's a social optimization problem: are the work increases from the MTR reductions more socially desirable than the work decreases in another range?
- Classic formulation: Mirrlees (1971)
- Mirrlees more concerned with the general problem of raising government revenue when lump sum transfers cannot be made and the only tool is taxation of observed earnings, which has work disincentives
- But the same framework can be used to choose benefit formulas for welfare programs



The Mirrlees Set-Up

- Each individual *i* in the population has utility function $U(H_i, Y_i)$
- There is a distribution of wage rates W_i and nonlabor income N_i
- Government chooses the budget constraint $Y_i = C(W_iH_i, N_i)$ knowing that individuals will choose H_i optimally given the constraint (W_i and H_i are unobserved)
- Government chooses it to maximize the SWF $W = \int_0^N G(u_i) f(i) di$

where f(i) is the population distribution frequency and N is the size of the population



- Also need a prod possibility constraint, i.e., total income equals total consumption
- G is generalized utilitarian; G(u) = u is exact utilitarian; G allowed to deviate from that ("social welfare weights")
- cardinal utility needed
- Solution: very few general results but concluded that:

1. NIT-style result: lump sum payment at H = 0, positive MTR there

- 2. Set higher marginal tax rates where f(i) is sparse
- Some results for top MTR, too, but will not discuss

	Welfare Tax Rates	IA. Basic Model IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes
Later results		

- If elasticities vary with W_i , have lower MTRs where elasticities are high
- Diamond(1980), Saez (2002), Laroque (2005): Mirrless model gives MTR>0 everywhere but nonwork not allowed or at least elasticities continuous
- But if extensive margin (participation) elasticities are greater than intensive margin elasticities, can get MTR<0 at bottom
- Many later papers showing can get this: negative MTR at bottom, then phaseout later

Welfare Tax I	IA. Basic Model IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes

- Targeting (Akerlof): if some demographic groups have higher elasticities than others, give them low MTRs
- But have to be careful about generating incentives to change groups
- Inequality aversion (Atkinson) in the SWF: popular in the literature, but really a different thing
- Bottom line: need to know elasticities, proportions of the population, and social welfare weights

 Welfare Tax Rates
 IA. Basic Model

 IB. Effect of Tax Rates
 IB. Effect of Tax Rates

 ID. Optimality
 IIA. Facts

 IIB. Research on Effects of Welfare Taxes

 IIA. Facts:
 What are the MTRs in US programs?

- First: What are the major programs?
- Second: What are the MTRs in those programs?
- Go through both questions in detail

The Landscape in 2007

	No.Recips(000)	Expends(mil)
Medicaid	54,800	\$328,900
School Food	40,700	10,900
SNAP	26,500	30,400
EITC	24,600	48,500
WIC	8,300	5,400
SSI	7,400	41,200
Housing	5,100	39,400
TANF	4,100	11,600

Medicaid:

- Large entitlement program
- Subsidized medical care, zero copay
- Children, institutionalized elderly, other elderly and disabled
- Children: used to be tied to AFDC/TANF, now much less so
- 1980s expansions to non-AFDC individuals; and SCHIP, covering additional children
- Continuing into 1990s, family income eligibility levels for children were raised (e.g., 200% FPL)
- Some parents covered, low income cutoffs

SNAP and Other Food Programs:

- SNAP Food allotments, debit card mechanism
- Near-universal, closest to Neg Income Tax (universal eligibility)
- Caseload growing in last few years
- USDA has been actively expanding eligibility
- Relaxed asset eligibility limits
- Simplified eligibility procedures
- Outreach to community to encourage applications
- Automatic eligibility for recipients of other programs

EITC:

- Tax credit for workers with children, subsidy rate as high as 45% up to \$20,000 (marrieds), then phased out, approximate 21% rate
- Main expansions of benefit schedule: in 1980s/1990s
- Distributionally, helps those most in the \$10K-\$30K range
- Generally taken as a refund and used to draw down debt
- Tax credit is not counted as income by other transfer programs

CTC (Child Tax Credit):

- Worth mentioning here even if not as large as EITC
- Tax credit for families with children, but not fully refundable
- Began in 1998
- Generally, get very little refund unless you have tax liability, so the credit typically grows as income grow
- Eventually phased out at a very low rate, families with incomes up to \$100k can get it

<u>SSI</u>:

- Cash for elderly (65+), blind, disabled (80% of recipients)
- High caseload growth rates, especially disabled children but also adults with mental health and back pain (rules; benefits vs wages; medical determination test)
- Some movement into it from TANF; 2000s restoration of immigrant eligibility

Subsidized Housing:

- Some public housing, but more subsidized rent in private housing market
- Important program in terms of expenditures, less so in terms of caseloads because it is not an entitlement (fixed number of available units far less than demand, waiting lists are years long)
- Universal eligibility but families with children get priority on the waiting list

TANF

- Used to be called AFDC
- Cash program for low-income children (mostly) in single parent households but many two-parent as well
- Has drastically declined in importance after 1996 welfare reform (time limits, work requirements, block grant that eliminated entitlement nature)
- 7th in terms of recips, 5th in terms of expenditure
- Caseload in 2007 only a fraction of what is was in the 1960s

MTRs in Individual Programs

- See <u>Economic Effects of Means-Tested</u> <u>Transfers</u>, individual chapters
- Also Maag et al. (2012), CBO (2012, 2015), Kosar and Moffitt (2018)

- <u>Medicaid</u>: MTR=0 up to eligibility notch, where MTR=100%
- Has been no change in that structure over time but income eligibility levels are risen, pushing the notch up the income distribution (ACA)
- <u>SNAP</u>: MTR=24%-30% but have a gross income limit which creates a notch
- No change over time
- <u>EITC</u>: MTR as low as -45% and about 21% in phaseout range
- Huge increase in 1990s; minor changes since then

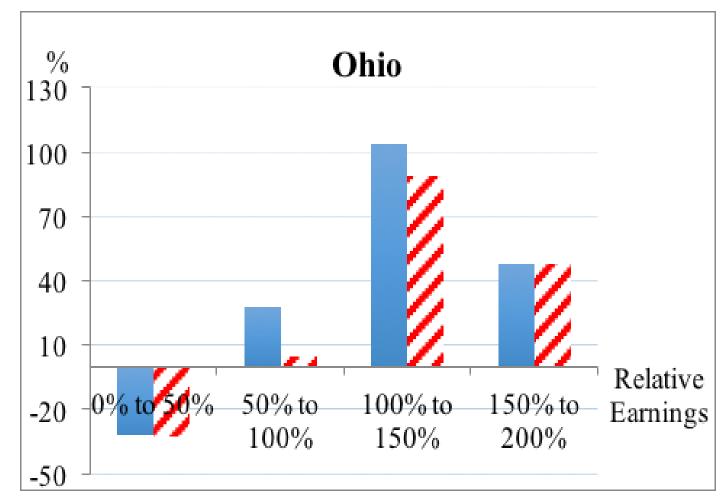
- <u>TANF</u>: MTR=100% pre-1996 and 50% (modal value) post-1996
- So a major decline over time
- <u>Subsidized Housing</u>: MTR=10%-30%
- No change over time
- <u>SSI</u>: MTR=50%
- No change over time
- <u>CTC</u>: MTR<0 then >0
- Introduced in 1998, but only minor change since then; but big change in 1998

Bottom line:

 Some changes in MTRs over time but not a lot. Exceptions: Medicaid, TANF, EITC, CTC.

- Cumulative Marginal Tax Rates (CTRs)
- If receive benefits from more than one program, CTRs obviously higher
- Illustration: Take the two most commonlyreceived programs
 - (1) Medicaid
 - (2) SNAP
- Medicaid is state-specific, so take one state: Ohio

Single mother, 2 kids, Taxes+Medicaid+SNAP 1997 (blue) and 2007 (red)



- Let's look across all 51 states and jurisdictions in 2007, calculate median CTRs
- Taxes + Medicaid + SNAP

0-50% FPL -31% 50%-100% FPL 7% 100%-150% FPL 81% 150%-200% FPL 51%

Marginal Tax Rate for Households Participating in SNAP and Medicaid, 1983 and 2014

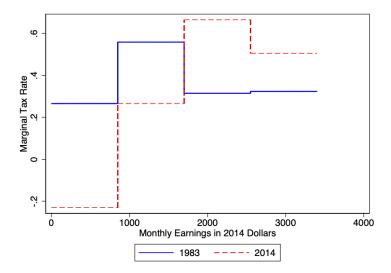
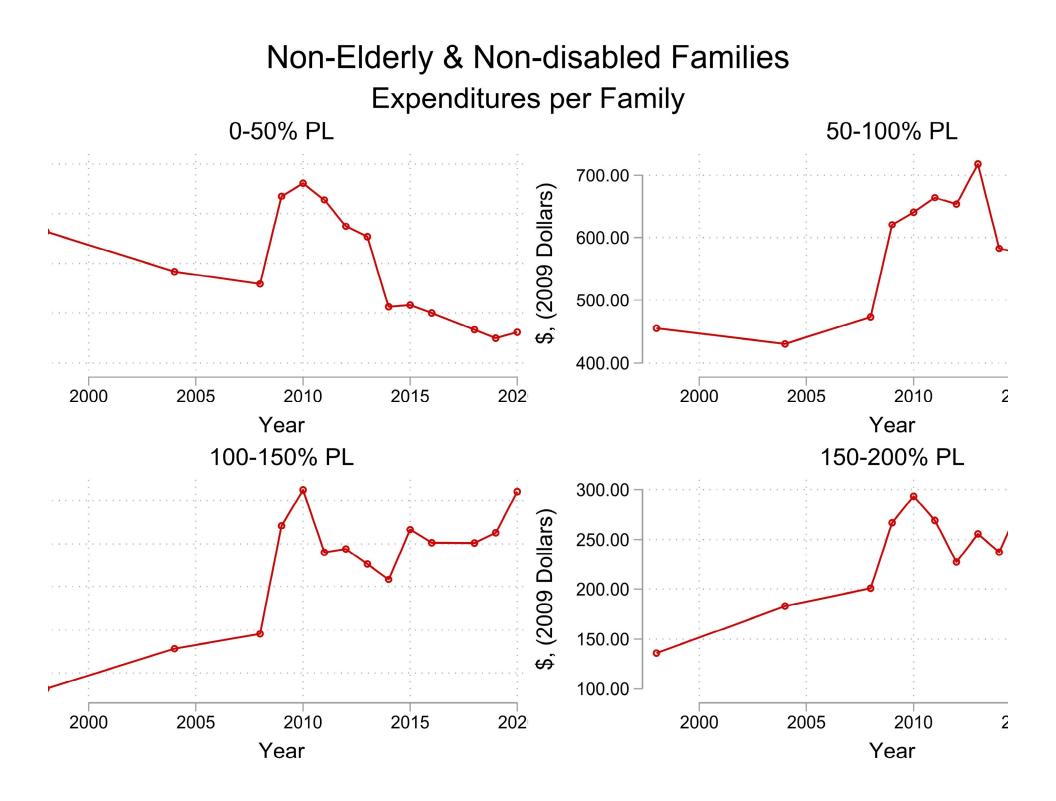


Figure: Nation Median. Calculated in \$850/month income increments. 📱 🔊 🔍



Introduction and Outline Transfers Taxes Recent Work

U.S. Results: Effects of Welfare Programs on Labor Supply

- Empirical estimates of substitution and income elasticities from last lecture imply that effects on men should be small and on married women should be large
- Single mothers: should be negative and large on the extensive margin
- Studies of old AFDC program support these findings for single mothers (see reviews cited in Chan-Moffitt)
- But studies of Medicaid (including the ACA) and SNAP show very small effects
- Maybe it is better to supply programs in-kind instead of cash?
- But studies of housing programs show large negative effects
- EITC? Is an earnings subsidy: see below.

Introduction and Outline	Transfers	Taxes	Recent Work
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- Ignoring that method of calculating the effect of a welfare program, there are some other estimates of the total effect
- U.S. experiments in the 1970s: RCTs, experimental group got a new welfare program with a particular *G* and *t*, control group did not
- Experimental-control difference in *H*: *H* fell by 7% and 17% for men and women, respectively; ended up being regarded as fairly large (implied large earnings reductions)

 IA. Basic Model

 IB. Effect of Tax Rates

 IC. Other Programs and Models

 ID. Optimality

 IIA. Basic Model

 ID. Optimality

 IIA. Basic Model

 ID. Optimality

 IIB. Research on Effects of Welfare Taxes

 Negative Income Tax Experiments

- RCTs in the 1970s and 1980s
- Randomly assigned treatment group to different arms with different *G* and *t*
- One summary of the results from the largest experiment in Seattle and Denver (Burtless 1987):

Negative Income Tax Plan	(1) Work Effo Among Recipients	(2) ort Change In Entire Population	(3) Percent Receiving Benefits ^a	(4) Net Additional Cost ^b	(5) Population Earnings Reduction ^b	(6) (5) ÷ (4)
75% Poverty Line G Husband-Wife Female Heads Total	duarantee/50 – 9.5% – 6.7	% Tax Rate - 1.4% - 2.4	.19 .61 .24	\$15.5 .8 16.3	\$ 9.0 .4 9.4	.58 .50 .58
Alternative Estimate Husband-Wife Female Heads Total	- 6.5 7.9	8 9.0	.17 .57 .22	11.5 - 4.8 6.7	5.1 - 3.0 2.1	.44 .62 .31
75% Poverty Line G Husband-Wife Female Heads Total	Guarantee/70 - 15.8% - 9.3	% Tax Rate 5% - 1.2	.07 .51 .12	\$ 5.5 - 1.0 4.5	\$ 2.2 .0 2.2	.40 .49
Alternative Estimate Husband-Wife Female Heads Total	- 8.0 5.2	.0 11.5	.06 .43 .10	1.2 - 6.5 - 5.3	7 -3.7 -4.4	 .57 .83
100% Poverty Line Husband-Wife Female Heads Total	Guarantee/5 - 10.0% - 12.0	0% Tax Rate - 3.5% - 7.1	.39 .73 .43	\$51.9 9.2 61.1	\$27.1 1.8 28.9	.52 .20 .47
Alternative Estimate Husband-Wife Female Heads Total	- 9.8 - 2.2	- 3.4 1.5	.39 .71 .43	51.4 4.1 55.5	26.7 6 26.1	.52 — .47
100% Poverty Line Husband-Wife Female Heads Total	-20.6% -14.9	0% Tax Rate - 1.5% - 5.3	.15 .61 .20	\$19.6 6.1 25.7	\$ 8.6 1.0 9.6	.44 .16 .37
Alternative Estimate Husband-Wife Female Heads Total	- 10.7 - 4.4	9 5.4	.14 .57 .19	14.8 .6 15.4	5.2 - 1.8 3.4	.35 .22

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	Welfare Tax Rates	 IA. Basic Model IB. Effect of Tax Rates IC. Other Programs and Models ID. Optimality IIA. Facts IIB. Research on Effects of Welfare Taxes
Simulations		

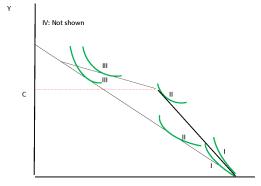
- Alternative approach: just take a range of income and substitution elasticities from the literature
- Combine with a representative sample of the US population with data on W, N, etc.
- Just simulate mean responses to different G and t

TABLE 5

EFFECT OF AFDC ON MEAN WEEKLY HOURS OF WORK OF ALL U.S. FEMALE FAMILY HEADS

	Benefit-Reduction Rate			
	1.00	0.75	0.50	0.25
Low elasticities				
G = 0.50	-0.81	-0.49	-0.35	-0.33
G = 0.75	-2.18	-1.08	-0.68	-0.55
G = 1.00	-4.02	-1.74	-1.00	-0.64
High elasticities				
G = 0.50	-2.06	-2.22	-2.02	-2.26
G = 0.75	-4.62	-4.99	-4.29	-3.87
G = 1.00	-7.34	-7.92	-6.50	-5.31

Introduction and Outline	Transfers	Taxes	Recent Work
	000000000000000000000000000000000000000		



Persons I and II increase labor supply

Person III and IV (who starts above the eligibility point) reduce labor supply

Introduction and Outline	Transfers	Taxes	Recent Work
	000000000000000000000000000000000000000		

Empirical Findings

- Both US and UK have earnings subsidies, structured somewhat differently
- U.S.: 2% to 5% increase in fraction of H > 0 for single mothers, no change in H conditional on working (perhaps positive and negative effects cancel out)
- No effect on married men H
- Small reduction in *H* > 0 and (maybe) conditional *H* for married women
- U.K.: similar or larger positive effects on single mother H
- Similar effects on married women H
- But some small positive effects of H on men
- Welfare programs at the same time? Cover the H = 0 population?

Optimality

- Mirrlees tends to be ignored by policy makers
- Lowering t in one range must mean raising it in another, unless you increase government expenditures (EITC example)
- Offsetting labor supply decisions
- And solution requires social welfare weights: whose utility do you care about the most (utilitarian: lower income)

Conditionality

- Make benefits contingent on work
- Work requirements
- But predictable effects
- 1990s RCTs in US: negative effects on income, increased poverty
- Why: age-earnings profiles are too flat
- Need something with an HC component

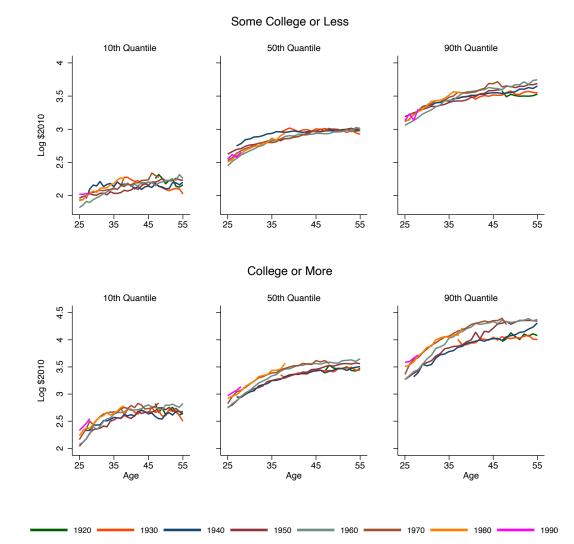


Figure 2. Distribution of Life Cycle Real Hourly Wages of Men across Cohorts

- Better conditionality: require training, education, etc.
- Education: good payoff
- Training: past programs: not so much
- Latest wave: "sector based" programs: + impacts

Labor Supply Effects of the Child Tax Credit

- CTC: through tax system, credit for families with children
- At bottom: originally, could only offset taxable income, meaning few people below \$20k/year got anything
- Then: amended that, allowed a small tax credit for earnings above a threshold, but the credit was capped
- At top: very slow phaseout, can get it over \$100k

- Biden: proposed to make it "refundable"
- Meaning could get it even without positive tax liability
- Same as an NIT

• Unfortunately, they have been no studies of the old CTC and its effect on labor supply

- If had been, might have been able to extrapolate
- In the absence, have to calibrate a labor supply model and forecast

- No one has done that right: take a traditional static model with labor supply, substitution and income elasticities, and forecast
- What people have done is a cruder simulation where you take a sample of people, examine their current hours of work, apply some elasticities to predict how much they will move
- Not in the context of a formal model: no wage rate, nonlabor supply, budget constraints, etc.

- Most common approach: just apply a "extension margin employment elasticity"
- I.e., what fraction of a population would work if the monetary gain from working (vs not working) changed by X%
- Best estimates were have are from responses to the EITC, which show positive elasticities for single mothers, about 0 for married fathers, and small negative for married mothers

- Three characteristics that any good study should satisfy:
- 1. Different elasticities for married men, married women, and single mothers
- 2. Only conduct elasticities in the income range where the EITC pertains, roughly \$40k and below
- 3. Use the latest EITC elasticities: for single mothers, they have fallen dramatically over time as the employment rate of single mothers have risen

- Only one paper satisfies these criteria: Bastian (2022)
- 411,000 parents would stop working