Urban Poverty

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Motivation

- Society should give each citizen a fair chance to develop their own capacities.
- Poverty is partially caused by a lack of education and training, a lack of medical care, a lack of affordable, quality housing, and a shortage of adequate jobs that pay a living wage to low skill individuals.
- We have already seen that it does not make sense to attempt redistribution at the local or city level.
- Welfare programs should be primarily financed by the federal government and maybe supplemented by the state governments.
- The federal government must coordinate its programs with state and local efforts to be effective.
- Cities have a comparative advantage to deliver social and welfare services.

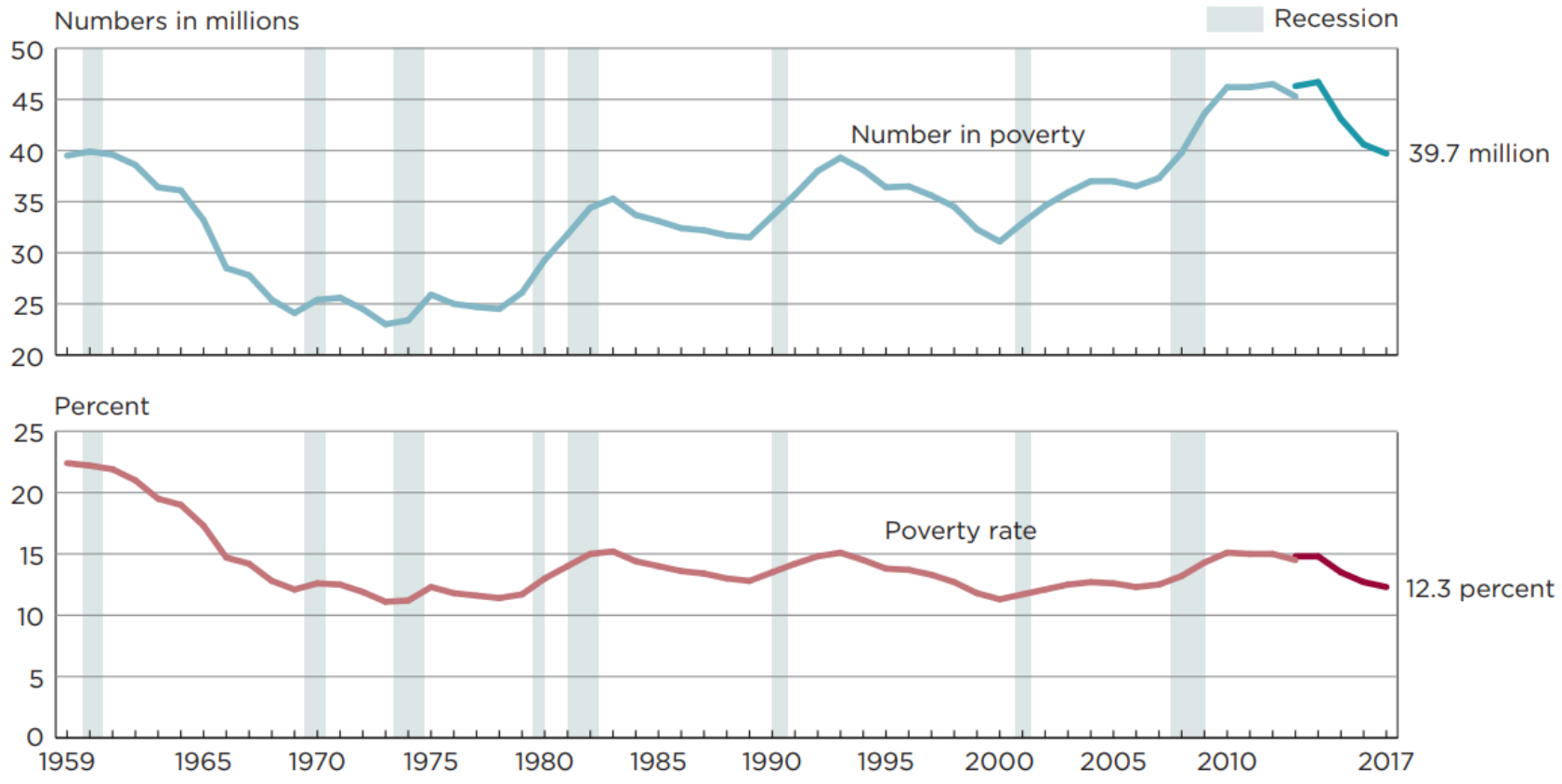
Who is poor?

- The official definition of poverty was developed by the Social Security Administration in 1984.
- The definition is based on the minimum amount of income a family would need to purchase food and provide shelter for all family members.
- This standard has remained roughly in place since then, though updated by the CPI to allow for national inflation.
- Note that there is no adjustment for regional differences in cost of living.
- The following table list poverty thresholds for families.

Poverty Thresholds for 2017 by Size of Family

Size of Family	No Child	One Child	Two Children
One Person			
Under 65 years	12,752		
65 years and over	11,756		
Two People			
Householder under 65 years	16,414	16,895	
Householder over 65 years	14,816	16,831	
Three People	19,173	19,730	19,749
Four People	25,283	25,696	24,858

Poverty Rate in U.S.



Poverty Rates in U.S. Cities in 2016

City	Median Household Income	Families below Poverty Line
New York	$58,856	18.9%
Los Angeles	$54,432	19.5%
Chicago	$53,006	19.1%
Houston	$47,793	20.8%
Phoenix	$52,062	20.3%
Philadelphia	$41,449	25.7%
San Antonio	$49,268	18.5%
San Diego	$71,481	13.1%
Dallas	$47,243	19.4%
San Jose	$101,940	10.7%

Fiscal Implications of Poverty for Cities

Poverty has, at least, three adverse effects on city finances:

- Poor families pay only minimal amounts of city taxes.
- Poor families need city services such as health care, housing, child services, and schooling.
- Poor families may create negative externalities:
  - higher crime rates,
  - children are not "school-ready,"
  - less housing and neighborhood maintenance.
- Who should bear the burden for these expenditures?
- According to the Independent Budget Office, it costs $93,000 annually for a four-person family of immigrants staying in a shelter and with two kids attending public schools in NYC in 2022.

Human Capital and Poverty

The main factors that determine earnings and labor market participation are the following:

- Ability at birth: there are large differences in IQ scores among very young children.
- Human capital acquired in school, in the family and neighborhood, work experience, etc.
- Health: poor health can lead to disabilities.
- Effort and Access to Opportunities: search intensities, mismatch.
- Luck

Poor individuals tend to have a number of these factors that contribute to their poverty.

What can we do to relief poverty?

- To address poverty, we need a large variety of government programs that deal with the different causes and consequences of poverty.
- There is clearly not a single program or strategy in the US to solve this problem.
- The lack of a uniform approach has to led to calls for a guarantee minimum income (GMI) which is also known as universal basic income.
- In 2020 there were 131 million households in the US. If you gave every household a GMI of $20,000 that would cost $2.62 trillion which is more than three the size of the defense budget.
- In the absence of a comprehensive GMI program, we need to rely on a variety of cleverly designed programs and interventions that target different sub-populations.

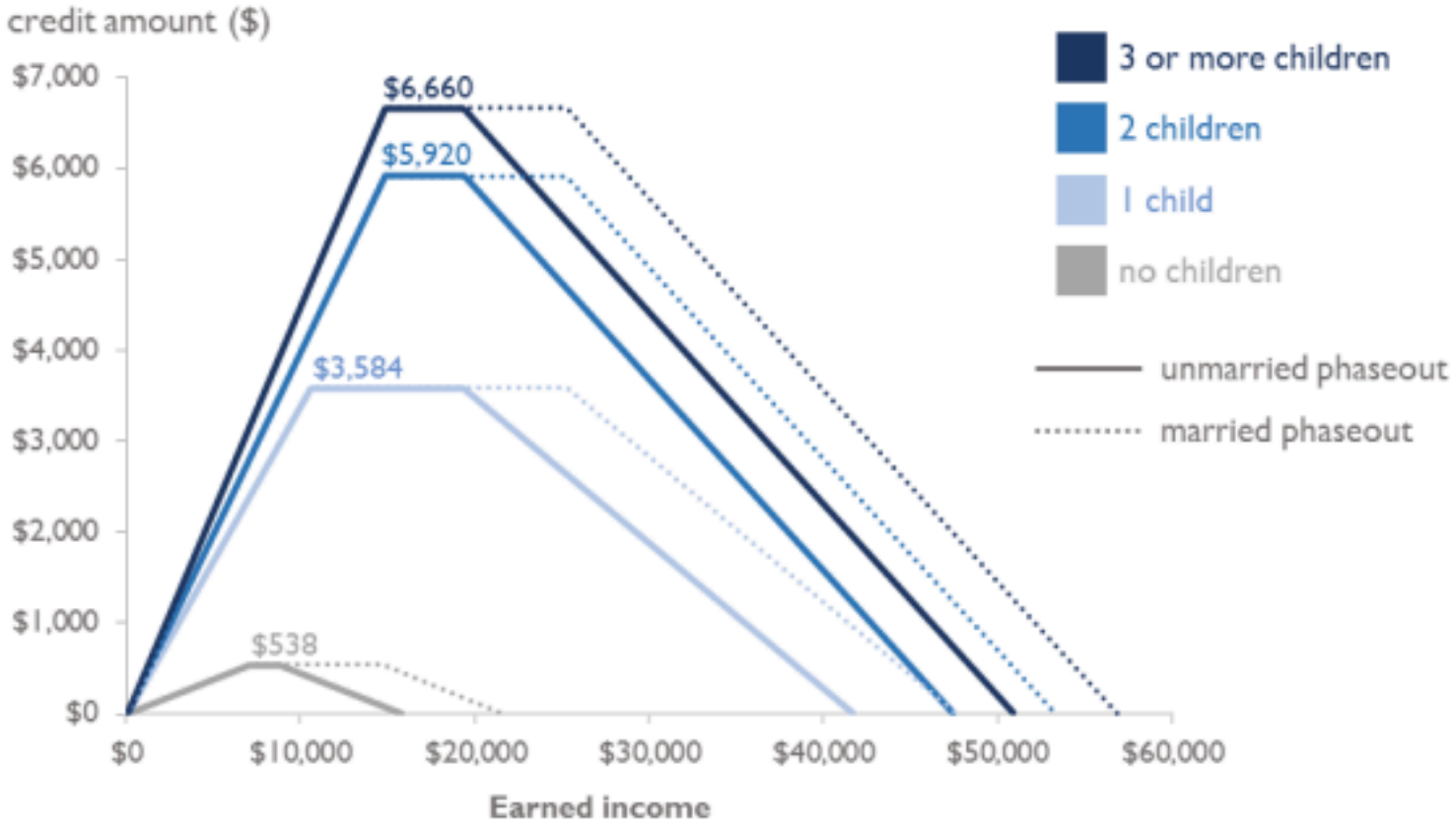
Federal and State Transfers

- The federal governments pays the greatest share of the direct costs of poverty.
- The main federal programs are called:
  1. Temporary Assistance for Needy Families (TANF),
  2. Medicaid,
  3. Supplemental Nutrition Assistance Program (SNAP),
  4. Earned Income Tax Credit (EITC): negative income tax
  5. Public Housing and Housing Voucher Programs,
  6. Supplemental Security Income (SSI): help aged, blind, and disabled people, who have little or no income.
  7. Child Nutrition and Child Health Care Programs,
- States often have supplemental programs that provide direct aid to counties and cities.

Some Facts about Government Assistance Programs

- The fraction of the households that received government assistance in 2012 (and the total expenditures in 2011):
  - EITC: 23 percent. ($56B)
  - Medicaid: 15.3 percent ($266B)
  - SNAP: 13.4 percent. ($82B)
  - Housing Assistance: 4.2 percent. ($49B)
  - SSI: 3 percent. ($50B)
  - TANF or General Assistance (GA): 1 percent. ($20B)
  - Child Nutrition and Health Care ($30B)
- Nearly half of all children in the U.S. – 46.7 percent – received some form of government assistance at some point during 2012.
- Total federal and state welfare spending in 2011 was $927B.

EITC Amount by Number of Qualifying Children, Marital Status, and Income, 2020



Welfare Caseloads

- The Center on Budget and Policy Priorities (2018) reports that over the last two decades, the national TANF average monthly caseload has fallen by almost two-thirds – from 4.4 million families in 1996 to 1.36 million families in 2016.
- Note that this decrease happened even as poverty has worsened.
- The number of families with children in poverty hit a low of 5.1 million in 2000, but has since risen to over 5.8 million in 2016.
- Overall, only 23 percent of all eligible families received TANF in 2016.
- Most poor households have, at least, one working adult.

Adverse Incentives of Government Programs

- When creating anti-poverty, cash-transfer programs, we face a dilemma.
- Cash transfers need to be phased out as income rises.
- Since recipient start losing benefits as they make more income, they face very high marginal tax rates.
- These high marginal tax rates provides strong disincentives to work.

Adverse Incentives of Government Programs

- Suppose we design a welfare system which guarantees \$10,000 in household income, but phases out the benefits using a linear schedule so that a household making \$20,000 receives no subsidy.
- The implied welfare system is given by:

$$m^n = \max\{10,000 + 0.5\ m^g, m^g\} \tag{1}$$

  where m^n is after-tax-and-transfer or net income and m^g is before-tax-and-transfer or gross income.
- If gross income is less than \$20,000, the marginal tax rate is given by

$$\frac{dm^n}{dm_g} = 0.5 \tag{2}$$

- Households in the income range between $[0, 20,000]$ face a 50 percent marginal tax rate!

How Bad Were these Disincentive Effects?

- Yelowitz (1996) tried to approximate the impact of the existing welfare programs on low- and moderate income households' budget sets.
- He also controlled for the following programs and expenses:
  - Earned Income Tax Credit: negative income tax for low income households.
  - Before the welfare reform bill of 1996 the welfare program was called Aid to Families with Dependent Children (AFDC).
  - Taxes: Social Security and Medicare Taxes, Federal Income Taxes, State Income Taxes, and City Income Taxes.
  - Work Expenses: transportation, clothing, and day care expenses.

Earnings versus Total Income

Earnings	EITC	AFDC Medicare	Food Stamps	Housing Subsidy	Social Security	State Tax	Federal Tax	Work Expenses	Total Income
0	0	8359	2722	8136	0	0	0	0	19217
5000	2000	5799	2590	7224	-383	0	0	-1500	20730
10000	3556	0	2438	6024	-765	0	0	-3000	18253
15000	2842	0	1538	4824	-1148	0	-420	-4200	18436
20000	1789	0	0	3624	-1683	-260	-616	-5200	18123
25000	736	0	0	0	-1913	-794	-700	-5400	16929
30000	0	0	0	0	-2295	-1628	-840	-5400	19837
50000	0	0	0	0	-3825	-5187	-1400	-5400	34188

Earnings and benefits after four months for a mother with two children in 1996.
Calculated by Yelowitz (1996), Public Housing and Labor Supply.

Adverse Incentive Effects of Taxation

- Consider an individual that has preferences defined over leisure Z and consumption C.
- The individual has a fixed time endowment denoted by $\bar{L}$.
- The individual has exogenous non-labor income I.
- The individual can supply labor L at a fixed wage rate w.
- Labor supply is subject to a proportional income tax at rate t.

The Budget and the Time Constraint

The budget constraint faced by the individual can be written as:

$$C = (1-t)\, w\, L + I \tag{3}$$

Then there is also a time constraint which is given by:

$$\bar{L} = Z + L \tag{4}$$

Substituting the time constraint into the budget constraint yields:

$$C = (1-t)\, w\, (\bar{L} - Z) + I \tag{5}$$

which can be written as

$$C + (1-t)\, w\, Z = (1-t)\, w\, \bar{L} + I \tag{6}$$

Full Income and Net-Wage

The term

$$M = (1-t)\, w\, \bar{L} + I \tag{7}$$

is also referred to as "full income", i.e. the amount of income that the individual could realize if he did not consume any leisure. The term

$$\tilde{w} = (1-t)\, w \tag{8}$$

is referred to as the "net wage" or the after tax wage rate.

Preferences

Suppose that preferences over leisure and consumption are given:

$$U(C, Z) \;=\; \alpha \log C \;+\; (1-\alpha) \log Z \tag{9}$$

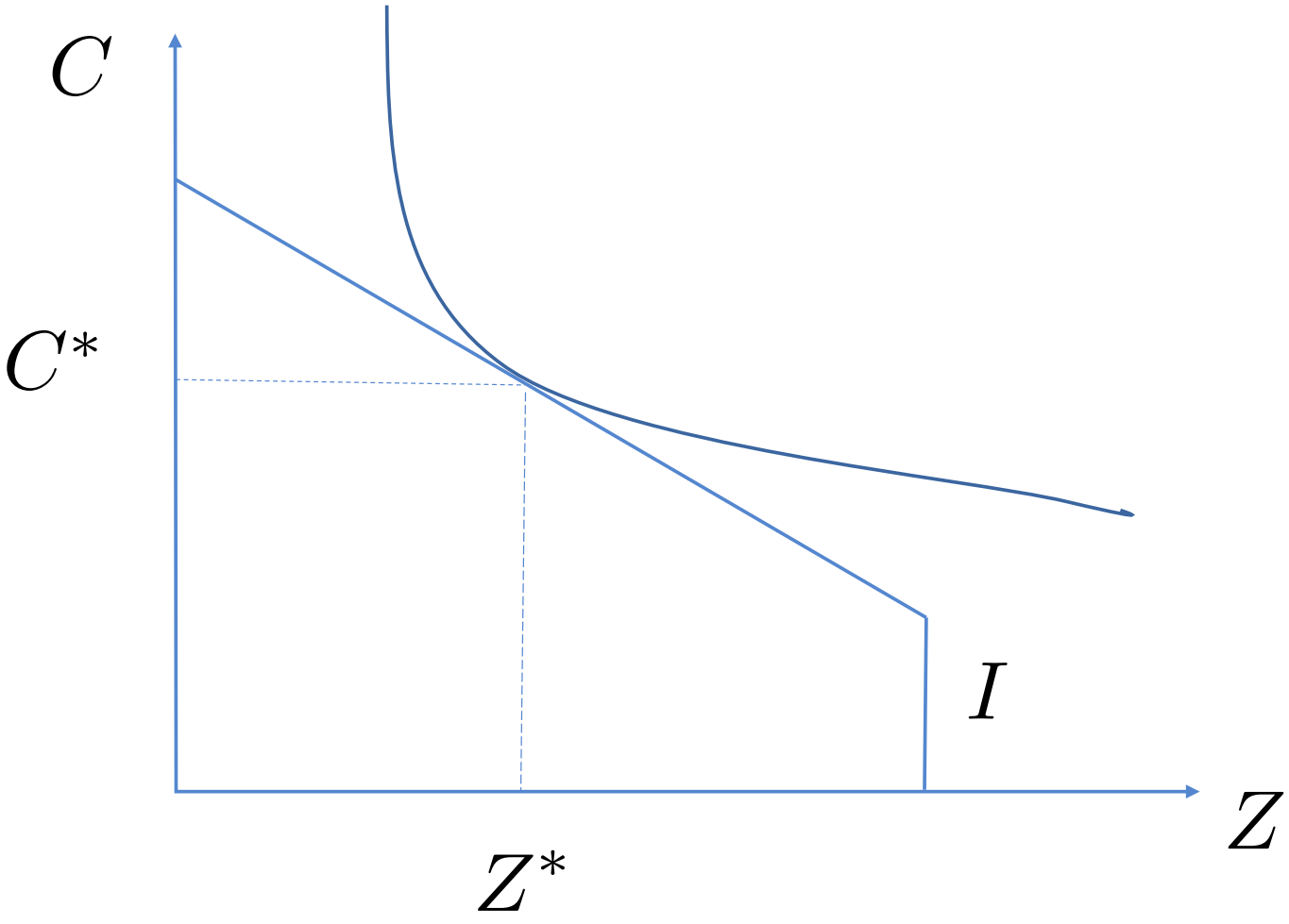
which is equivalent to saying that

$$U(C, L) \;=\; \alpha \log C \;+\; (1-\alpha) \log(\bar{L} - L) \tag{10}$$

Substituting the budget constraint into the objective function yields

$$V(L) \;=\; \alpha \log(\tilde{w} L + I) \;+\; (1-\alpha) \log(\bar{L} - L) \tag{11}$$

Optimal Labor Supply



Labor Supply

The first order condition for L is given by:

$$V'(L) \;=\; \alpha \frac{1}{\tilde{w}L + I}\,\tilde{w} \;-\; (1-\alpha)\frac{1}{\bar{L} - L} \;=\; 0 \qquad (12)$$

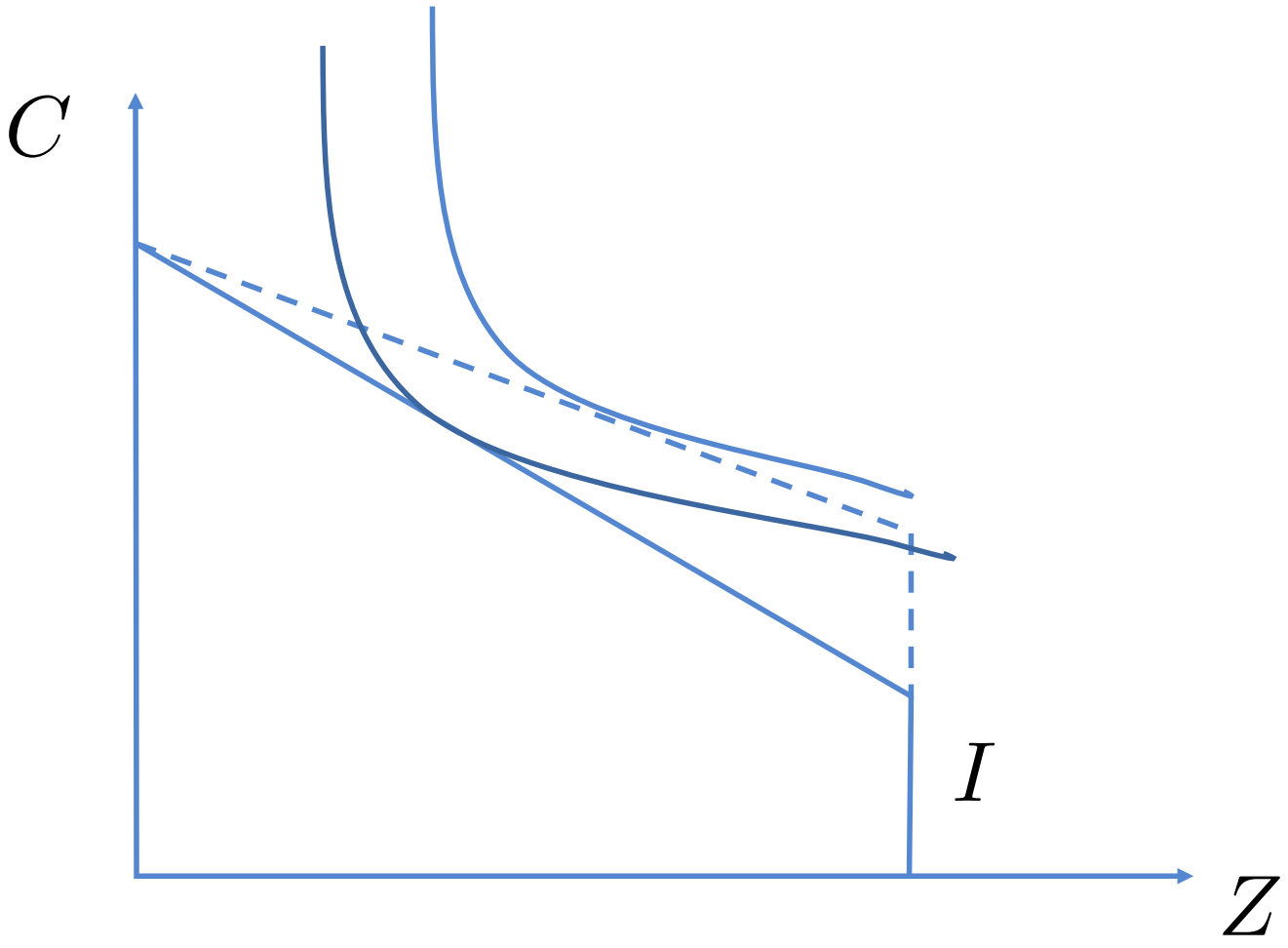
which can be written as:

$$V'(L) \;=\; \alpha\,(\bar{L} - L)\,\tilde{w} \;-\; (1-\alpha)(\tilde{w}L + I) \;=\; 0 \qquad (13)$$

Solving for L yields:

$$L \;=\; \alpha\,\bar{L} \;-\; \frac{1-\alpha}{(1-t)w} I \qquad (14)$$

The Effects of the Welfare System



Incentive Effects of Taxation

Suppose we want to know who the individual would respond to an tax increase. Taking derivatives of the labor supply function, we obtain:

$$\begin{aligned} \frac{\partial L}{\partial t} &= -(-1)\frac{1-\alpha}{(1-t)^2 w}(-1)\, I \\ &= -\frac{1-\alpha}{(1-t)^2 w}\, I \\ &< 0 \end{aligned} \tag{15}$$

Thus an increase in taxes will decrease labor supply in this example.

The Canadian Self-Sufficiency Project

- The Self-Sufficiency Project was a Canadian experiment in the 1990s.
- It provided a generous, time-limited earnings supplement available to single parents who had been on welfare for a least a year.
- The objective was to incentivize the parents to leave welfare and find full-time work.
- It basically doubled the earning of individuals that found work during the first three years.
- It was terminated after three years.
- Michalopoulos, Robins and Card (2005) evaluated this program.

Do These Adverse Incentive Effects Matter?

- The subsidy increased employment by 43% in the short-run, relative to control group.
- The rate of welfare enrollment fell by roughly the same amount.
- After five years, the impact of the short term subsidy was zero.
- The intervention had no long term effects on employment and welfare.

Reforming Cash Assistance Programs

Improving the design of cash transfer programs:

- Smooth the welfare trap by raising the qualifying income (poverty level).
- Reward work using programs by extending the earned income tax credit.
- Regulate work behavior by requiring unemployed welfare recipients to actively search for work and participate in job training programs.

Some questions remain:

- How effective are these incentives in a recession?
- Does it make to enforce term limits in a recession?

Moving To Opportunity

- The Moving To Opportunity Experiment was conducted in the 1990's.
- It provided targeted vouchers to households living in hight poverty housing projects.
- It thus provided incentives to move to better (higher quality) neighborhoods.
- Many studies that focused on short term effects on.

Did Children Benefit from MTO?

- Chetty, Hendren, and Katz (2015) study the long-term impact of MTO on the earnings of children that participated in MTO.
- They find evidence that the program caused economic gains.
- Children who moved from high-poverty areas to low-poverty areas when they were less than 13 years old enjoyed mean incomes nearly a third higher than children who did not move.
- The study also finds that children who moved when they were older than 13 years old fell behind their peers who stayed in high-poverty areas.

Summary

- Poverty among adults is often due to a lack of human capital and thus a lack of marketable skills that are required for many jobs paying a living-wage.
- Individuals that cannot work or support themselves require unconditional cash transfers (SSI, Medicaid, SNAP).
- Individuals who can work need financial incentives to participate in the labor market since market wages are often too low. The most effective way to provide these work incentives is a negative income tax (EITC).
- A welfare system needs to provide incentives to low-skill individuals to acquire additional human capital (Job Corps).
- Finally, we need programs that directly target poverty among children and their parents (Child Tax Credits, Housing Vouchers, Free Lunch in Schools).