

# **Labour Supply Implications of a Negative Income Tax Plan**

## **Impôt négatif sur le revenu et l'offre de travail : quelques effets**

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Résumé de l'article

À partir du modèle économique traditionnel du choix entre le loisir et le revenu, sont estimées séparément à l'aide de régression linéaire à deux étapes dites des moindres carrés doubles les fonctions d'offre de travail pour jeunes hommes et jeunes femmes.

Cette procédure permet d'obtenir des simulations de l'effet de diverses combinaisons de taux de taxation négative et de transferts absolus de revenus sur l'offre de travail de ces groupes.

L'étude démontre qu'un programme de taxation négative du revenu conduit à de fortes réductions dans l'offre de travail de ces groupes. Elle démontre aussi qu'un programme de taxation négative du revenu conduit à de fortes réductions dans l'offre de travail des jeunes gens et plus particulièrement chez les femmes.

# Labour Supply Implications of a Negative Income Tax Plan

Arun S. Roy

*This study demonstrates that a Negative Income Tax Plan can be expected to result in fairly large reductions in the supply of work effort in the case of younger workers. The potential reductions in labour supply of female workers appear to be particularly large.*

## A THEORETICAL FRAMEWORK

When a Negative Income Tax (henceforth referred to as NIT)<sup>1</sup> plan is introduced, the allocation decision of an individual worker between market and non-market activities can be represented as maximizing a utility function of the following form:<sup>2</sup>

$$(1) \quad U = U(X, N); \quad \frac{\partial U}{\partial X} > 0, \quad \frac{\partial U}{\partial N} > 0$$

subject to the budget constraint

$$(2) \quad X - G - (1 - \alpha)[WL + Y] = 0$$

where

$$[WL + Y] < B$$

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<sup>1</sup> For a discussion of the case for a NIT and several of its variants, see GREEN (1967) and GOLLADAY and HAVEMAN (1977).

<sup>2</sup> It is assumed that the utility function is "well-behaved" and possesses the usual properties, viz., the function is twice differentiable and that the second order conditions hold.

and where  $N$  = time spent on non-market activity;  $L$  = time spent on market activity;  $W$  = market wage rate;  $X$  = total income which includes income from non-employment sources;  $X \equiv WL + Y$ , where  $Y$  is non-employment income;<sup>3</sup>  $G$  = minimum guaranteed income;  $\alpha$  = negative tax rate ( $0 < \alpha < 1$ );  $B$  = "break-even" level of income ( $B = G/\alpha$  by definition)

The budget constraint implies that if the family's income before income subsidy is nil, it receives the full income subsidy,  $G$ . As the family's income  $[WL + Y]$  increases, the income subsidy gets reduced by the tax rate,  $\alpha$ . The budget constraint as specified above further implies that the family will be eligible for income subsidy only if its income before income subsidy is less than the break-even level of income,  $B$ .

By introducing the Lagrangian multiplier and by using Cramer's Rule, and also after making several substitutions, the solution for labour supply can be written in the following differential equation from assuming that  $W$  and  $Y$  are given exogenously<sup>4</sup>.

$$(3) \quad dL = - \frac{W}{(1-\alpha)} \left( \frac{\partial L}{\partial W} \right)_{dU=0} \cdot d\alpha + \frac{1}{(1-\alpha)} [dG - (WL + Y) d\alpha] \frac{\partial L}{\partial Y}$$

Note that a change in the level of the income guarantee *per se* has only an income effect on labour supply and no substitution effect. But a change in the negative tax rate *per se* has both an income effect as well as a substitution effect on labour supply.

## RESEARCH METHODOLOGY

A labour supply function was fitted by applying a Two Stage Least Squares procedure in the following form:<sup>5</sup>

$$(4) \quad L = \alpha_0 + \alpha_1 \hat{W} + \alpha_2 \hat{Y} + \sum_{i=1}^n \beta_i K_i + \epsilon$$

<sup>3</sup> Due to data limitations, income of the spouse or of any other earning member in the family is treated in the present study as non-employment income of the individual in question.

<sup>4</sup> For derivation of this result, see Poddar (ROY) (1976).

<sup>5</sup> In the first stage observed non-employment income and wage rate were regressed on all exogenous variables. In the second stage (see Eqn. (4) above), the fitted values of non-

where  $L$  = individual worker's labour supply;  $\hat{W}$  = individual worker's fitted wage rate;  $\hat{Y}$  = fitted non-employment income;  $K$  = a set of "control" variables that are expected to influence the individual worker's labour supply;<sup>6</sup>  $\epsilon$  = a random error term.

Equation (4) was estimated for younger males and younger females in separate regressions<sup>7</sup>. The estimates of the income and substitution effects of a change in the wage rate were derived from the labour supply functions of the form represented by Equation (4). These income and substitution parameters were then substituted into Equation (3) and simulations were obtained at alternative combinations of the minimum guarantee level,  $G$ , and the negative tax rate,  $\alpha$ . The variables,  $W$ ,  $L$ , and  $Y$  in Equation (3) refer to equilibrium values of the wage rate, labour supply, and non-employment income respectively. Sample means of these variables were used as equilibrium values.

## DATA AND EMPIRICAL RESULTS

The present study is based on a sample of unemployed workers who had approached Canada Manpower Centres for jobs. This was a national sample survey covering all Canada Manpower Centres during June, 1970 (*Survey of Unemployed CMC Clients*). The present study focuses on a selected group of younger workers aged 14-24, excluding those who had engaged in any schooling activity during the one year preceding the survey.

In Table 1, potential changes in the annual weeks of labour force participation are shown for younger males and females at varying combinations of  $G$  (minimum guarantee level) and  $\alpha$  (negative tax rate). At a given negative tax rate, every increase in the guarantee level results in a larger reduction in labour supply. For instance, for youth males at a given tax rate of .30, every \$1,000 increase in the guarantee level reduces labour supply by 3.1 weeks. Also at a given guarantee level every increase in the tax rate

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employment income and wage rate were used as the appropriate regressors. Different combinations of controlled variables were used in the two stages to take care of the identification problem. A Two Stage Least Squares method (or strictly speaking an Instrumental variables approach) was used to purge the income coefficient of any cross-substitution effect and a possible estimation bias. For a discussion on this point see Poddar (ROY) (1976), pp. 26-29.

6 These control variables were age, education, working status of spouse, marital status, area unemployment rate, and variables to make adjustment for occupational and regional variations in labour supply.

7 Step-wise regressions were run with weeks of labour force participation (weeks employed *plus* weeks looking for work during the past twelve-month period) as the dependent variable. The regression results can be obtained from the author on request.

**TABLE 1**  
**Potential Changes in Labour Supply at Varying Combinations**  
**of Negative Tax Rate and Guarantee Level -**  
**Youth Males and Youth Females**

$\alpha$ G(\$)	MALES					FEMALES				
	.30	.40	.50	.60	.70	.30	.40	.50	.60	.70
2,000	- 5,4	- 6				- 7,9	- 7,4			
3,000	- 8,5	- 9	-11,2	-13,5		- 8,1	- 7,6	-18,9	-27,8	
4,000	-11,6	-12	-15,6	-18,5	-24,5	- 8,3	- 7,8	-19,1	-28,0	-43,5
5,000	-14,7	-15	-20	-23,5	-31,5	- 8,5	- 8,0	-19,3	-28,2	-43,8
6,000	-17,8	-18	-24,4	-28,5	-38,5	- 8,7	- 8,2	-19,5	-28,4	-44,1

**NOTES:**

1. Labour supply in the present study refers to the annual weeks of labour force participation.
2. Income and substitution parameters obtained from the TSLS regressions have been used for simulation. For youth males: substitution effect = .09 and income coefficient = -.0022. For youth females: substitution effect = .32 and income coefficient = -.0001. These income and substitution parameters continue to be used in Tables 2 to 4.
3. Mean values of the wage rate and labour supply for the samples have been used as equilibrium values.
4. A pre-subsidy family income of \$5,000 has been assumed for simulations shown in this table.

results in a larger reduction in labour supply. On the other hand, an increase in the guarantee level keeping the (negative) tax rate constant, leads to a smaller reduction in labour supply in the case of younger females than males. This is because an increase in income subsidy has only an income effect (and no substitution effect) and the magnitude of the income effect has been found to be very small for younger females (see Notes at the end of Table 1).

In the case of youth males, at the mean pre-subsidy income level of the sample (weighted by income distribution of the group), the selected scheme ( $G = \$5,000$ ;  $\alpha = .50$ )<sup>8</sup> is expected to reduce labour supply by 19.1 weeks annually<sup>9</sup> - ten weeks being attributable to the income effect and nine weeks to the substitution effect (see Table 2).

<sup>8</sup> For easy comparisons, the same parameters are used in Tables 2 to 4.

<sup>9</sup> If a guarantee level of \$4,000 is applied, the negative tax rate remaining the same (i.e.,  $\alpha = .50$ ), this would imply a labour supply reduction of 15 weeks approximately. And at a guarantee level of \$3,000, this would imply a labour supply reduction of 10 weeks.

TABLE 2

Potential Changes in Labour Supply Due to Introduction of  
a Selected NIT - Youth Males and Youth Females

NIT Parameters: G (minimum guarantee level) = \$5,000,  
 $\alpha$  (negative tax rate) = .50; B (break-even income level) = \$10,000

<i>Pre-Subsidy Income (X)</i>	<i>MALE</i>			<i>FEMALE</i>		
	<i>Due to Income Effect (weeks)</i>	<i>Due to Substitution (weeks)</i>	<i>Total Effect (weeks)</i>	<i>Due to Income Effect (weeks)</i>	<i>Due to Substitution Effect (weeks)</i>	<i>Total Effect (weeks)</i>
\$						
3,000	-15,4	-9	-24,4	-.7	-18,6	-19,3
4,000	-13,2	-9	-22,2	-.6	-18,6	-19,2
5,000	-11,0	-9	-20,0	-.5	-18,6	-19,1
6,000	- 8,8	-9	-17,8	-.4	-18,6	-19,0
7,000	- 6,6	-9	-15,6	-.3	-18,6	-18,9
8,000	- 4,4	-9	-13,4	-.2	-18,6	-18,8
9,000	- 2,2	-9	-11,2	-.1	-18,6	-18,7
10,000	0	-9	- 9	0	-18,6	-18,6
Weighted Mean						
5,400 (5,560 for females)	-10,1	-9	-19,1	-.4	-18,6	-19,0

## NOTES:

1. See Notes 1 to 3 at the end of Table 1.
2. The same NIT parameters continue to be used in Table 3 and 4.

In the case of youth females also, the expected reduction is 19 weeks annually - almost the whole of this being attributable to the substitution effect<sup>10</sup>. Relative to the mean labour supply, this implies a larger reduction in the case of females (63 per cent) than in the case of males (48 per cent)<sup>11</sup>.

The implications of the expected reductions in labour supply for income levels of the target group are indicated in Table 3 for males and Table 4 for females<sup>12</sup>. See notes at the end of Table 3.

In Table 3 and Table 4, the difference between the final transfer and the initial supplement reflects the effect of reductions in labour supply on the transfer cost of the program. It provides a measure of the extent to which transfer costs will be under-estimated by the failure to take labour supply effects into account. The present study shows that the addition to the transfer cost of the selected program due to labour supply reductions is likely to be quite substantial for younger workers. As a proportion to the initial subsidy, addition to the transfer cost due to reductions in labour supply is estimated to be 56 per cent for younger males and 78 per cent for younger females.

The increase in income level after adjustments have been made for loss in earnings resulting from labour supply reductions is 19 per cent of the pre-subsidy income in the case of males and 8 per cent in the case of females.

The increase in income per \$100 of transfer is estimated to be \$28 in the case of males and \$12 in the case of females.

To sum up, this study demonstrates that a NIT can be expected to result in fairly large reductions in the supply of work effort in the case of younger workers having characteristics similar to the samples used in the present study. The potential reductions in labour supply of female workers appear to be particularly large. Subject to qualifications noted above it will thus be more expensive to raise the income level of those households where a large proportion of income comes from younger earners in general and younger female earners in particular.

<sup>10</sup> If a guarantee level of \$4,000 is applied, the negative tax rate remaining the same (i.e.,  $\alpha = .50$ ), this would imply a labour supply reduction of 18.8 weeks. And at a guarantee level of \$3,000, this would imply a labour supply reduction of 18.6 weeks.

<sup>11</sup> The effect of the current income tax is ignored.

<sup>12</sup> In estimating the effect of a reduction in time spent in labour force on income, it has been assumed that the pre-subsidy income consists of only earned income and the household consists of only one earning member. This means that for families with other sources of income or with earning members other than the respondent, estimated losses in earnings will be less than those shown in Tables 3 and 4. It has also been assumed that the number of weeks of employment is diminished in the same proportion as the number of weeks spent in the labour force.

TABLE 3

**Potential Impact of a Selected NIT on Labour Supply  
and Income - Youth Males**

**NIT Parameters: G (minimum guarantee level) = \$5,000,  
 $\alpha$  (negative tax rate) = .50; B (break-even income level) = \$10,000**

<i>Pre-Subsidy Income (X) (\$)</i>	<i>Initial Income Supplement (\$) I</i>	<i>Per Cent Reduction in Labour Supply P</i>	<i>Loss in Earnings (\$) E</i>	<i>Post- Subsidy Income (\$) X'</i>	<i>Final Transfer (\$) FT</i>
0	5,000	—	—	5,000	5,000
3,000	3,500	61	1,830	5,585	4,415
4,000	3,000	55	2,200	5,900	4,100
5,000	2,500	50	2,500	6,250	3,750
6,000	2,000	45	2,700	6,650	3,350
7,000	1,500	39	2,730	7,135	2,865
8,000	1,000	34	2,720	7,640	2,360
9,000	500	28	2,520	8,240	1,760
10,000	0	23	230	9,885	115
<b>Weighted Mean</b>					
5,400	2,300	48	2,592	6,404	3,596

## NOTES:

1. The difference between the pre-subsidy income (X) and the break-even level of income (B) times the negative tax rate ( $\alpha$ ) gives the amount of the supplement that each family would receive in the absence of any change in its earnings from the pre-subsidy income. Thus the initial income subsidy,  $I = (B - X)\alpha$ .
2. Assuming that the pre-subsidy income consists entirely of earnings of the respondent, we apply the total percentage reduction in labour force participation (p) to get the loss in earnings (E) due to a reduction in the labour supply. Thus  $E = X \cdot p$ .
3. The post-subsidy income (X') is obtained as the pre-subsidy income, X, plus the initial income subsidy, I, less the portion of lost earnings that is not filled in through a further increase in the subsidy. Thus  $X' = X + I - p(1 - \alpha)E$ .
4. The final transfer (FT) equals the initial income subsidy, I, plus the amount required to fill in lost earnings at the tax rate of the scheme,  $\alpha$ . Thus  $FT = I + \alpha E$ .
5. Also see Notes 1 to 3 at the end of Table 1.

## A COMPARISON WITH FINDINGS BY OTHER RESEARCHERS

In the U.S.A. (and to a limited extent in Canada), research on labour supply implications of a negative income tax plan has proceeded along two channels:



- (i) a number of Negative Income Tax (NIT) experiments have been conducted;<sup>13</sup> and
- (ii) a series of nonexperimental studies have been made by individual researchers from time to time.

TABLE 4

**Potential Impact of a Selected NIT on Labour Supply  
and Income - Youth Females**

**NIT Parameters:** G (minimum guarantee level) = \$5,000,  
 $\alpha$ (negative tan rate); B (break-even income level) = \$10,000.

<i>Pre-Subsidy Income (X) (\$)</i>	<i>Initial Income Supplement (\$) I</i>	<i>Per Cent Reduction in Labour Supply P</i>	<i>Loss in Earnings (\$) E</i>	<i>Post- Subsidy Income (\$) X'</i>	<i>Final Transfer (\$) FT</i>
0	5,000	—	—	5,000	5,000
3,000	3,500	64	1,920	5,540	4,460
4,000	3,000	64	2,560	5,720	4,280
5,000	2,500	64	3,200	5,900	4,100
6,000	2,000	63	3,780	6,110	3,890
7,000	1,500	63	4,410	6,295	3,705
8,000	1,000	62	4,960	6,520	3,480
9,000	500	62	5,580	6,710	3,290
10,000	0	62	6,200	6,900	3,100
<b>Weighted Mean</b>					
5,560	2,240	63	3,502	6,049	3,991

## NOTES:

See Notes at the end of Table 3.

<sup>13</sup> In the U.S.A. the following four NIT experiments (more popularly known as Graduated Work Incentive Experiments) have been conducted: the New Jersey - Pennsylvania Experiment, the Rural Income Maintenance Experiment, the Garry (Indiana) Experiment, and the Seattle-Denver Experiment. For details see PECHMAN, J. and TIMPANE, P.M. (ed.) 1975; also see symposium articles on the subject in *Journal of Human Resources*, 9 (Spring, 1974).

The NIT experiments in the U.S.A. have stimulated a great deal of active interest in Canada. A NIT experiment called MINCOME MANITOBA is presently in progress<sup>14</sup>. It will be several years before any results become available from the Canadian experiment. The American experiments generally demonstrate absence of any significant disincentive effects in the case of prime-age male heads of household. In the case of white wives, however, larger reductions in labour supply have often been reported.

The labour supply implications of a NIT presented here should be clearly distinguished from the results obtained from the actual negative income tax experiments. The results of the NIT experiments show the *ex post* response of the participants to a guaranteed annual income scheme and to changes in its parameters over time. In the approach adopted here by contrast, we estimate the income and substitution effects of a change in the wage rate from a *cross-section* of individuals and use these estimates to derive the likely labour supply effects of a NIT with hypothetical levels of minimum income subsidy and negative tax rates. Limitations common to a cross-section study, therefore, apply to the results. In particular, it has to be assumed that the cross-section findings across individuals can be used as valid predictors of unobserved time-series behaviour for individuals. Secondly, it is also necessary to assume that the estimated labour supply response to different pretax wage rates in our cross-section data can be used probably by extrapolating outside the range of our wage rate observations to predict the response to different combinations of income guarantee and tax rate.

The results that are more relevant and somewhat more appropriate for comparison with those of the present study are the empirical findings based on nonexperimental data. But a number of problems arise in an effort to compare the present one with these. First, as far as this author is aware there is no similar study based on non-experimental data for Canada. The previous empirical evidence in this area is all based on the U.S. data. Second, these U.S. studies usually focus on prime age males and married females or female family heads. There is hardly any relevant evidence on younger workers. Third, most studies report on *hours* of market work and not *weeks* as in the present study. Finally, the impact of a NIT plan depends not only upon the parameters of the plan and the income and substitution parameters, but also upon the equilibrium wage rate and labour supply. These are very often not reported.

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<sup>14</sup> See HIKEL *et al* (1974).

Inspite of the difficulties and problems mentioned above, a few selected studies have been listed in Table 5 to provide an idea about how the results of the present study compare with others. The percentage reduction in labour supply (hours of work) is computed and shown in each case. To facilitate comparison, same program parameters have been assumed for the NIT plan and equilibrium values of the wage rate, labour supply etc.<sup>15</sup> (See notes at the end of Table 5)

The percentage reductions in labour supply as shown in Table 5 reflect only the differences in the income and substitution elasticity parameters obtained in various studies. They do not reflect the sample characteristics since the equilibrium (mean) wage rate, labour supply etc. have been assumed to be the same in all cases.

One of the main empirical findings of the present study that proportionately there would be a greater reduction in the labour supply of younger females than males seems to be quite reasonable. Women especially the married ones have a wider variety of nonmarket uses of time in housekeeping and child care than men. A negative tax by reducing the effective wage rate would induce a greater substitution of non-market work for market work in the case of females than males. Men, on the contrary, are more committed to labour market than women due to the existing institutional structure. The above finding is also consistent with the available empirical evidence as is indicated by Table 5<sup>16</sup>.

<sup>15</sup> Since several researchers report only elasticity parameters instead of income and substitution effects, Equation (3) is rewritten in elasticity form by multiplying the first term by  $(\bar{L}/\bar{L})$  and the second term by  $(\bar{W}/\bar{W})$ , and thus:

$$dL = - \frac{L}{(1 - \alpha)} E^S d\alpha + \frac{1}{W(1 - \alpha)} E^Y [dG - (WL + Y) d\alpha]$$

where:

$E^S$  = Substitution Elasticity evaluated at the sample means and is equal to

$$\left( \frac{\partial L}{\partial W} \right) \frac{\bar{W}}{\bar{L}} dU = 0$$

$E^Y$  = Income Elasticity evaluated at the sample means and is equal to

$$\left( \frac{L}{W} \cdot \bar{W} \right)$$

$\bar{W}$ ,  $\bar{L}$  = mean wage rate and labour supply respectively.

<sup>16</sup> Also see, SMITH, 1975.

**TABLE 5**  
**Changes in Labour Supply Due to Introduction of a NIT -**  
**Estimates Obtained from other Studies and the Present Study -**  
**Males and Females**

	<i>Authors</i>	<i>Data Source</i>	<i>Demographic Group</i>	<i>Per cent Reduction in Labour Supply (Annual Hours of Work)**</i>
(i)	For Males			
1.	The Present Author	Survey of Unemployed CMC Clients (Canada), 1970	14-24 years; income < \$11,000	50
2.	Tella, Tella and Green	U.S. Survey of Economic Opportunity (SEO), 1967	Family Heads, 18-64, wage per hour, \$3.00	30
3.	Greenberg and Kosters	SEO <sup>a</sup> - 1967	Married (males) in labour force 62 years; income < \$15,000	49
4.	Boskin	SEO - 1967	Husbands 20 to 59 (white)	27
5.	Rosen and Welch	U.S. Census, 1960	Employed Husbands, income < \$10,000	40
(ii)	For Females			
1.	The Present Author	Survey of Unemployed CMC	14-24 years, income < \$11,000	61
2.	Tella, Tella and Green	SEO - 1967	Wives, wage per hour \$3.00	52
3.	Parker	SEO - 1967	Female head, poor, near poor with children	50
4.	Boskin	SEO - 1967	Wives 21 to 59	18
5.	Kalachek and Raines	CPS* - 1966	Females 21 to 64 - low-income families	100
6.	Hall	SEO - 1967	Wives 21 to 59	100

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NOTES: 1. Compiled and computed from Cain and Watts (ed.) (1973). For further details see Cain and Watts (ed.) (1973). Where a range of estimates has been provided by the author, the average of the two has been used.

2. The following parameters have been used for the NIT;  $G = \$5,000$  and  $\alpha = .50$ .

3. The following equilibrium (mean) values have been used:  $\bar{W}$  = mean hourly wage rate = \$2.50;  $\bar{L}$  = mean annual labour supply = 2,000 hours,  $\bar{Y}$  = mean nonemployment income = 0;  $\bar{WL}$  = mean family income = \$5,000.

<sup>a</sup> Survey of Economic Opportunity, U.S.

\* Current Population Survey, U.S.

\*\* The present study uses weeks spent in the labour force as the labour supply measure. To facilitate comparison, the weeks measure has been converted into an annual hours measure by assuming the mean labour supply to be 2,000 hours annually and the mean wage to be \$2.50 as has been done in the case of the other studies. This clearly involves the assumption that the weeks and hours of market work have the same elasticity with respect to changes in wage rate and income.

Some special features of the data base and characteristics of the sample used in this study should be clearly borne in mind while interpreting the results. The sample used here, as already noted, consisted of persons who personally visited Canada Manpower Centres for placement in jobs. Also, the sample included only those persons who were without employment during the survey week. Thus the sample is likely to be more representative of unemployed than the Canadian labour force in general. Furthermore, it is not all groups of unemployed who approach Canada Manpower Centres for services. It is basically "blue collar" workers with relatively high job turnover rate who approach Canada Manpower Centres for assistance<sup>17</sup>.

For policy making purposes, it is important that the analysis relates to the "working poor" which is the target group for an income maintenance program such as NIT. Although it is not precisely known how far the sample used is representative of working poor of the youth population in Canada, it appears that NIT is likely to affect a sizable segment of this group consisting of relatively low-income workers engaged in low-wage occupations and experiencing a high rate of job turnover<sup>18</sup>.

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<sup>17</sup> This is clearly evidenced by the registration data of Canada Manpower Centres.

<sup>18</sup> See Poddar (ROY), 1976.

## Impôt négatif sur le revenu et l'offre de travail: quelques effets

À partir du modèle économique traditionnel du choix entre le loisir et le revenu, sont estimées séparément à l'aide de régression linéaire à deux étapes dites des moindres carrés doubles les fonctions d'offre de travail pour jeunes hommes et jeunes femmes.

Cette procédure permet d'obtenir des simulations de l'effet de diverses combinaisons de taux de taxation négative et de transferts absolus de revenus sur l'offre de travail de ces groupes.

L'étude démontre qu'un programme de taxation négative du revenu conduit à de fortes réductions dans l'offre de travail de ces groupes. Elle démontre aussi qu'un programme de taxation négative du revenu conduit à de fortes réductions dans l'offre de travail des jeunes gens et plus particulièrement chez les femmes.

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