

FEMALE LABOR FORCE PARTICIPATION IN THE UNITED STATES: IMPACT OF INCOME TAXES DURING 1990-2000

Nisar Ahmad
Assistant Professor,
Department of Economics and Finance,
Sultan Qaboos University, Oman.
Email: nisar@squ.edu.om

Amjad Naveed
(corresponding author)
Post Doc fellow,
Department of Business and Economics,
University of Southern Denmark.
Alsion-2, 6400-Sønderborg, DK.
Email: amjadn@sam.sdu.dk

Rayhaneh Esmailzadeh
Ministry of Community and Social Services Toronto,
Ontario, M3M 3A3, Canada
Email: rayhaneh_e@yahoo.com

ABSTRACT

In this study, we investigate female labor force participation in the U.S. over the period 1990-2000. Using aggregated data at the state level; we examine the impact of state income taxes on labor force participation. A linear probability model is specified for women, aged 16 and above, across 50 U.S states and the District of Columbia on a biannual basis. The model is estimated using a Fixed Effects method in order to control for unobserved heterogeneity. We find that income taxes are non-linearly related to female labor force participation. Child care has a positive effect on female labor force participation. Furthermore, increasing income tax does not prevent females from joining the labor force up to 7.1 percent while above that level reduces the participation rate.

JEL Codes: J21, H20, C23,

Keywords: Female labor supply, Taxation, US labor market, Panel Data, Fixed Effect Model

1: Introduction

One of the most significant developments in the United States since World War II is the increase in the female labor force participation rate. The female labor force approximately doubled from 31.4 percent in 1947 to 60 percent in 2000 (Blau and Kahn, 2005). More women are being encouraged into the labor market these days. Among others, improvement of educational levels, reduction in fertility rate, the expansion of welfare programs, and the improvement of the income tax system are the key factors in increasing the female labor force participation.

This paper examines the impact of income taxes on labor force participation of American women among other exogenous variables such as level of education, total fertility, unemployment rate, child care, and race. The analysis is done on a group of women (aged sixteen years and over) across fifty U.S. states and the District of Columbia over the period 1990-2000 on a biannual basis. The parameters are estimated using a linear probability model.

More specifically, this paper investigates how economic factors such as income taxes, childcare subsidies, fertility, education, unemployment rate and other labor market determinants influence the labor supply of women. Female labor force participation is considerably more sensitive to their wages than is men's. The difference is usually explained by the traditional behavior of females in families in which they choose primarily among market work, home production, and leisure (Blau and Kahn, 2005; Becker, 1965; and Mincer, 1962). Government policies like income taxes, child care benefits, paid parental leave, and other programs affect the behavior of women's decision to work. Furthermore, fertility is an important factor determining the female labor force participation rate.

In this study, we find that income taxes are non-linearly related to labor force participation of females. The increase in income taxes does not prevent females from joining the labor force up to 7.1 percent; however, tax rates above that level reduce their hours of work and increase the time for leisure. The progressive tax (Bracket) does not have a significant effect on the female labor force participation rate. The unemployment rate among females all increases female labor force participation. The increase in the level of education for women reduces the fertility rate which eventually increases labor force participation. The effect of education is also

significant on the female labor force participation rate. Child care subsidy has a positive effect on the female labor force participation rate. From a policy point of view, child care subsidies can help mothers to tolerate income tax burdens. These results have important policy implications with regards to the female labor force participation.

The remainder of the paper is organized as follows. Section 2 offers a short review of the literature. A short discussion on the important changes in income taxes and welfare program in the US is offered in Section 3, while Section 4 presents the methodological approach to testing the hypothesis. Section 5 contains the results, and Section 6 concludes the discussion with respect to policy point of viewpoint.

2: Theoretical Foundation and literature

The theoretical foundation of the link between tax and female labor supply Boskin and Sheshinski (1983), where tax system affects the labor supply decisions of married women more significantly than men and single women. The reason can be explained based on an optimal tax system definition in which the total dead weight tax rates are lower for those individuals whose labor supply is more elastic and, thus, more sensitive to marginal tax rates. The impact of policy changes on labor force participation could be more significant for women (Triest, 1990).

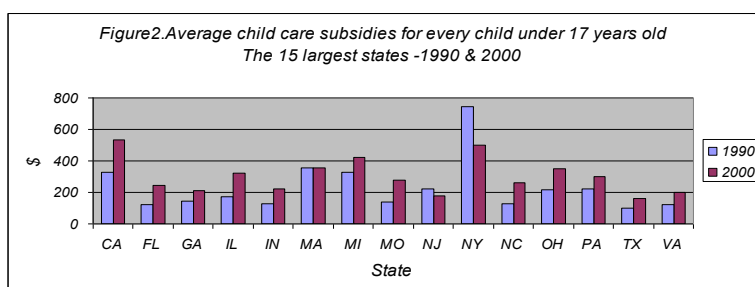
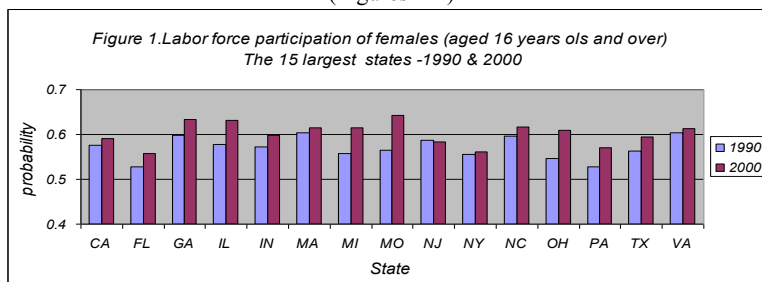
A recent study by Jaumotte (2003) consider the aggregated data for seventeen OECD countries over the period 1985-1999, Jaumotte found a negative relationship between high marginal tax rates and labor supply of females. Based on a cross sectional study in 1970 by Nakamura (1981), American wives would tend to spend more time at home with their families and in other non-market work activities if their income tax rates were lower, although another study by Hausman and Wise (1976) predicts that wives would work more hours if the income tax burden on their earnings were less.

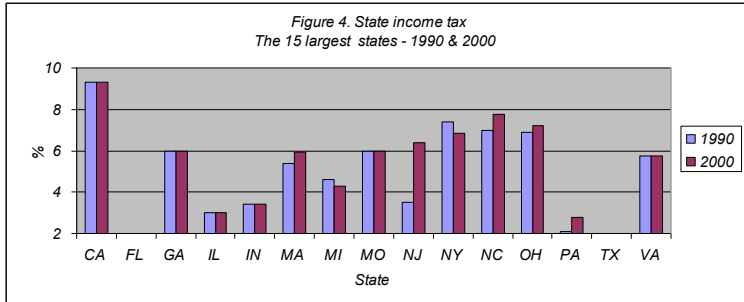
There are still many economic arguments about the behavior of females labor force with respect to income tax changes. For instance, Blau and Kahn (2005) shows that female became less responsive to policy changes in 2000, and their own wage elasticities reduced significantly during the 1980-2000 period. Furthermore, they also argue that the response of women towards changes in their husbands' wage is substantially less in 2000 compared to 1980.

Hoffman (2005) concludes that high tax rates affect more to the decisions to work. Especially, for secondary earners (wives), changes in earnings due to higher taxes have different effects on the labor supply that can be explained by either a substitution or an income effect. If the net wage of women due to higher tax rates decreases, the opportunity cost of time spent in home production is reduced. Therefore, women will not join the labor force or, at least, reduce their hours of work. However, if leisure is a normal good, the decrease in wage makes women work more to compensate for less income. Therefore, the probability of labor force participation, due to the income effect, increases in this case. For a woman who is currently not working, the decreases in tax rate have only a substitution effect and provide her a work incentive.

Many micro-econometric studies for the United States find a positive elasticity of female labor force participation to child care subsidies, or a negative elasticity to child care costs (Gelback, 2002). The U.S. now has some special programs (child care subsidies) to encourage mothers to participate in the labor force. Figure 2 shows a substantial increase in child care subsidies for children under seventeen in most states between 1990 and 2000. Hoffman (2005), the effect of child care subsidies on a woman's decision to work in the market depends on the marginal value of time in the labor market or MVT_m . In fact, if MVT_m for a woman is greater than the value of the last hour of time spent in either leisure or household production (i.e. no labor market work), she will join the labor force; otherwise, she will choose not to work.

(Figures 1-4)

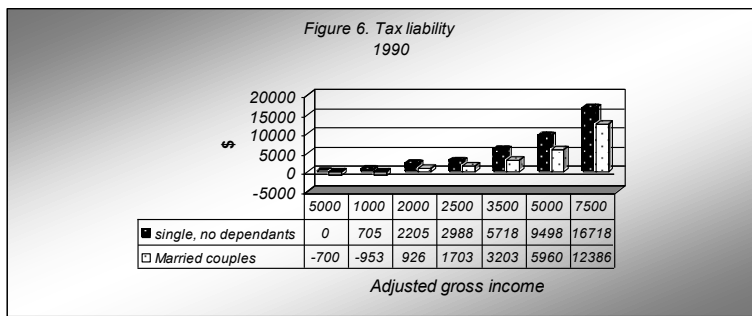
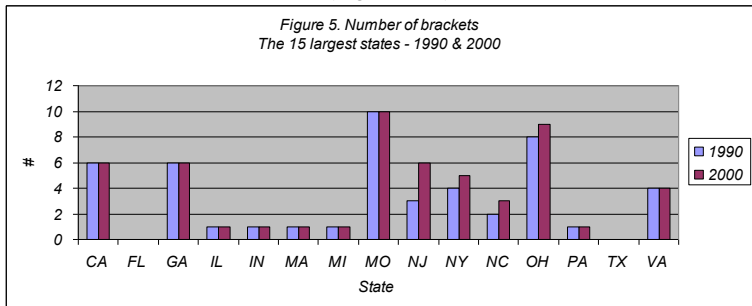


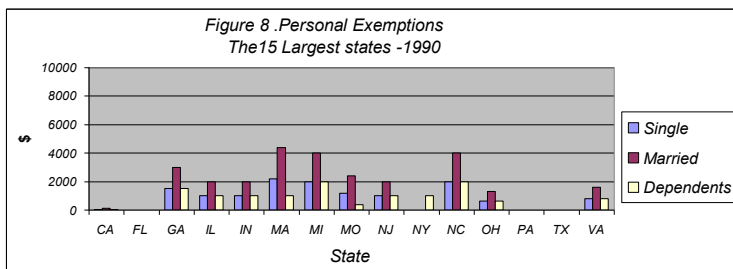
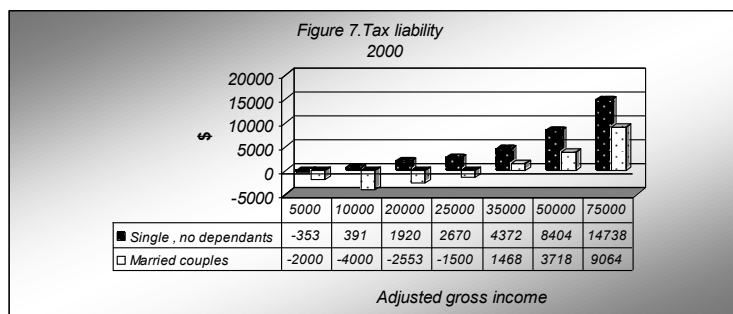


Source: Statistical Abstract of the United States, 1990 -2000 and the Book of the States, published by the council of state Governments, 1990-2000.

According to Sleebos (2003), women having more children, may in some cases increase their labor force participation, although much the economic literature finds a negative relationship between fertility and labor force participation of females. However, many developed countries now have policies designed to encourage childbearing while working, for example, the Earned Income Tax Credit in the U.S. Hoffman (2005) also argues that the personal exemption acts as an implicit subsidy to births because it decreases the taxes that a family with children must pay. As this subsidy reduces the price of child services for mothers, a higher level of labor force participation is achieved without reducing fertility and even perhaps with a small increase in fertility.

(Figures 5-8)





Source: Statistical Abstract of the United States, 1990 -2000 and the Book of the States, published by the council of state Governments, 1990-2000.

3: Income taxes and welfare Reforms in the US (1990-2000)

There were two major changes in the U.S federal income taxes between 1990 and 2000. In 1993, the Earned Income Tax Credit (EITC) was expanded to cover nineteen million low-income families, and in 1997, the Tax Payer Act (TPA) introduced a child tax credit for those with young children and a tuition tax credit for those with college-age children. As a result, every income category saw its effective tax rates going down by 0.9 to 1.7 percentage points (Stiglitz, 1999).

State income tax rates and the number of tax brackets also changed in many states during this period. Figures 4 and 5 show state income tax rates and the number of tax brackets for the fifteen largest states in 1990 and 2000. The tax system in the United States is now based on family income. For two individuals who get married, the tax liabilities are altered. Figures 6 and 7 show significant changes in the tax liabilities, paid by single and married couples, according to their adjusted gross income between 1990 and 2000. Specifically, we see a reduction in the tax liability in each income tax bracket between 1990 and 2000.

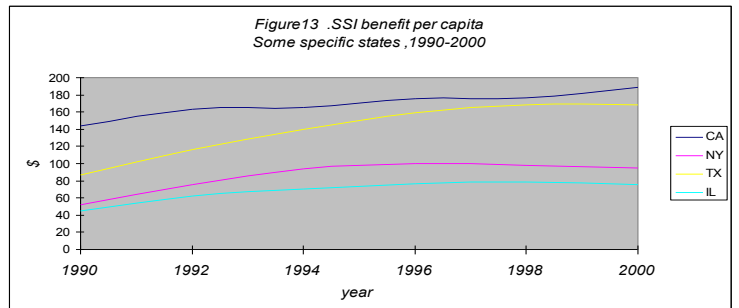
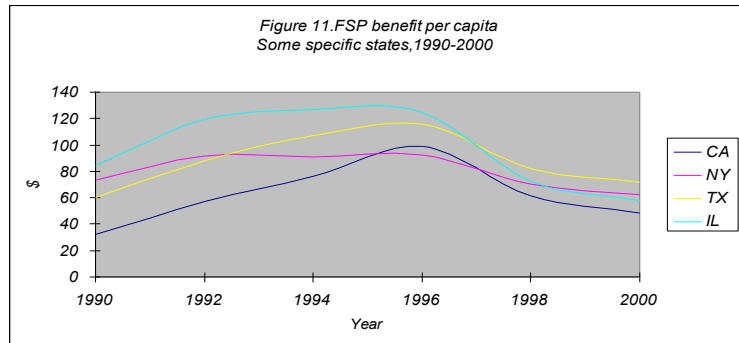
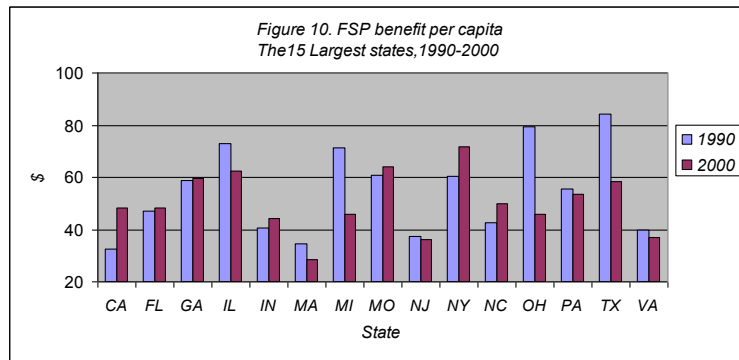
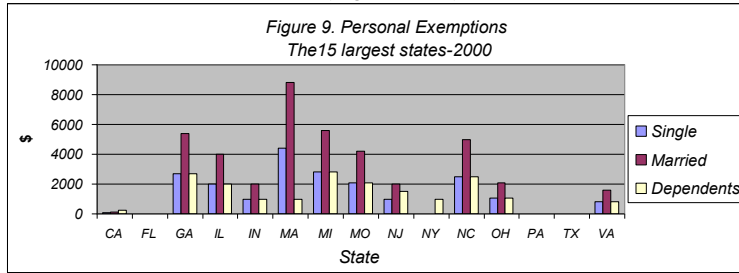
Families with dependent children are allowed exemptions for each child, and families with both parents working outside the home are allowed a tax credit for child care, which differs across states. In Figures 8 and 9, we see tax exemption changes for single and married couples with dependents for the fifteen largest states between 1990 and 2000. As these figures show, the tax exemption has increased from 1990 to 2000.

The U.S. federal income tax has also some other characteristics that cause taxpayers to behave differently according to their annual income. As it is based on the annual, not the lifetime income, two individuals with the same lifetime income may pay different taxes, and, therefore, their responses to income tax changes should be different. As the tax system in the U.S. is progressive, which means that the tax rate increases with income, the use of an annual measure of income should affect people with fixed and variable incomes differently.

The United States also has other special programs for low-income workers, such as the Food Stamp Program (FSP), Supplemental Security Income (SSI), and Aid to Families with Dependent Children (AFDC), which since 1996 is known as Temporary Assistance for Needy Families (TANF).

After 1996, FSP benefit per capita decreased to induce recipients to support themselves through work, although it still provided better support to poor families in 2000 compared to 1990 in most states. SSI benefit per capita has also increased in most states during the 1990-2000 period. After 1994, the number of AFDC (TANF) recipients per capita reduced in most states, and in some states like California and New York this trend was sharp (Figures 10-15). Like tax rules in earnings, this public assistance reduces if earnings increase. However, as these benefits reductions are independent across different programs, the family faces a huge reduction in their benefits as a result of increasing earnings which leads to a disincentive to work.

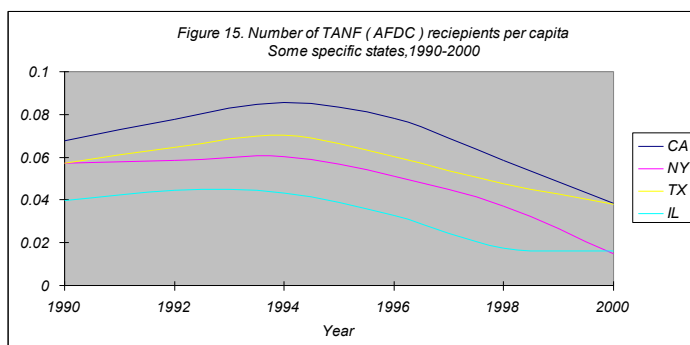
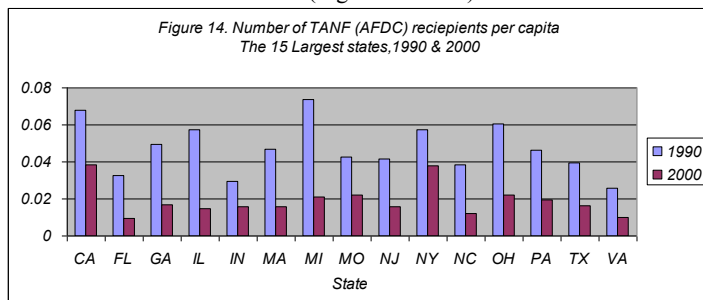
(Figures 9-12)



Source: Statistical Abstract of the United States, 1990 -2000 and the Book of the States, published by the council of state Governments, 1990-2000.

To see how income tax earnings and public assistance programs act if they combine and how they differ across states, we may consider the state of California in 1996. According to Blundell and Macurdy (1999), for a single-parent family with two children and earnings up to \$750 a month, net transfers from the government initially rose due to an increase in EITC, regardless of the combination of programs in which the family participated (FSP, AFDC). If it was the only program the family participated in, they only had to pay the social security tax. However, since both FSP and AFDC benefits declined more rapidly with earnings than EITC rose, a family who also participated in all programs ended up losing twenty-three cents out of every dollar earned up to \$750 a month. After some level of earnings (\$750/month), EITC and other benefits declined as well. Note that the reversal trend was faster when the family participated in all programs and slower if it participated in only EITC. For \$750-\$1500 a month earned, the family had to pay 89 percent of their earnings (just eleven cents left out of each dollar gained), so it was completely clear that AFDC recipients preferred to stay at home or, at least, work less.

(Figures 14 & 15)



Source: Statistical Abstract of the United States, 1990 -2000 and the Book of the States, published by the council of state Governments, 1990-2000.

In order to figure out, how these programs differ across states, Blundell and Macurdy compare South Carolina with California, as South Carolina in the early 1990s was the opposite of California in terms of distribution of state AFDC benefit levels. They found that since South Carolina families received lower benefits than those in California, the net transfers they received were below those of California families with monthly earnings between \$1250 and \$1500 when in both states this program (AFDC) stopped paying benefits. They also argued that California’s implicit tax rates on earnings were much higher while the benefit reduction rates for earnings below \$1250 a month were the same in both states. For California, the loss of benefits was larger, so people who worked in this state faced a large reduction in their income.

During 1985-1996, net governmental transfers changed in California in the same way as in other states. In addition to the expansion of the EITC program in 1993, AFDC benefit reduction rates in the U.S have decreased during this period. In Figure 15, we show the number of AFDC (TANF) recipients per capita, which increased between 1990 and 1994 for California as well as for other states, and then decreased between 1994 and 2000.

In our model, we consider the effect of AFDC and some other benefits from the government to needy families in each state. We use them as a proxy for *Child care*.¹ Among special programs for low-income families, only AFDC (TANF) differs based on state residency and the rest are provided by the federal government. We ignore the effect of the federal income taxes in our estimation as there is little variation in this over the time period considered. In our model, income taxes thus refer to each state’s highest marginal income tax rate.

4: Data and Methodology

To estimate a linear probability model, we use aggregated data at the state level in each time period between 1990 and 2000 on a biannual basis. The definitions of all explanatory and dependent variables, used in our model, are as follows:

- *LFPF (percent)*: Labor force participation of females (aged sixteen years and over) for each state in each time period
- *Tax (percent)*: Highest income tax rate for each state in each time period
- *Bracket (number)*: The number of income tax brackets for each state in each time period
- *Child care (dollar per child)*: Average child care subsidies for every child under seventeen for each state in each time period (The sum of “ Temporary Assistance to Needy Families (TANF) “ , “Children and family services (Head start)¹”, and “Foster care and adoption assistance” divided by the number of children under seventeen)
- *Educ (percent)*: Percentage of people (aged twenty-five years and more) with bachelor’s degree or more for each state in each time period
- *Fertility (number per woman)*: Live births per woman (aged fifteen to forty-four years) for each state in each time period

¹ Admittedly, this is a poor proxy because we do not know how much of the AFDC benefit was used for children but we did not have any better alternative

- *Unemp (percent)*: Unemployment rate of females (aged sixteen years and over) for each state in each time period
- *White (number per total)*: Number of white people per total population for each state in each time period
- *Black (number per total)*: Number of black people per total population for each state in each time period

The main source of data in this study is Statistical Abstract of the US (1990-2000), Department of Bureau of Labor Statistics, and U.S Census Bureau.

Table1. Statistical summaries of exogenous variables used in the model

Variables	Obs	Mean	Std. Dev	Min	Max
LFPF	306	0.603	0.046	0.426	0.703
Child care	306	337.5	248.6	67.0	2605.0
Educ	306	22.599	4.820	11.400	38.300
Fertility	306	1.993	0.200	1.560	2.655
Tax	306	5.609	3.243	0.000	14.600
Bracket	306	3.758	3.036	0.000	10.000
Unemp	306	5.191	1.481	2.000	9.200
White	306	0.828	0.142	0.240	0.990
Black	306	0.111	0.121	0.003	0.700

4.1: Models Specification

The model used in this study is a panel data linear probability model, which estimates the probability of female participation with respect to policy changes (income tax changes), controlling for other explanatory variables such as level of education, fertility rate, child care, unemployment rate, and race.

The linear probability model is simply:

$$y_{st} = X_{st}\beta + \mu_s + \epsilon_{st}$$

where μ_s is a state specific (time-invariant) variable which captures the culture, taste for work, average state economic climates, and other fixed effects in each state. y_{st} denotes labor force participation of females sixteen years and over for state s at time t (*LFPF*) and X_{st} consists

of control variables in our model such as *Educ, Fertility, Child care, Unemp, White, Black, Tax, Bracket*

We consider a quadratic relationship between *Tax* and *LFPF* to show how the marginal effect of *Tax* on *LFPF* changes by an income tax level.

$$LFPF_{st} = \beta_0 + \beta_1 Educ_{st} + \beta_2 Fertility_{st} + \beta_3 Child\ care_{st} + \beta_4 Unemp_{st} + \beta_5 White_{st} +$$

$$\beta_6 Black_{st} + \beta_7 Tax_{st} + \beta_8 Tax^2_{st} + \mu_s + \epsilon_{st}$$

(Model 1)

As seen, model 1 does not control for the number of tax brackets (*Bracket*). We use a Fixed Effects method in order to control for the unobserved state-specific variable, μ_s . Table 1 reports the statistical summaries of explanatory variables used in the model. In Table 2, we show results from the OLS and Fixed Effects regression techniques of Model 1.

In Model 2, we consider *Bracket* as an independent variable among all other exogenous variables to control for the number of brackets in our regression, and to find whether this variable is significant or not (Table3). This variable captures the degree of tax progressivity in our model.

$$LFPF_{st} = \beta_0 + \beta_1 Educ_{st} + \beta_2 Fertility_{st} + \beta_3 Child\ care_{st} + \beta_4 Unemp_{st} + \beta_5 White_{st} +$$

$$\beta_6 Black_{st} + \beta_7 Tax_{st} + \beta_8 Tax^2_{st} + \beta_9 Bracket_{st} + \mu_s + \epsilon_{st}$$

(Model 2)

5: Empirical results

5.1: Results from Model 1

OLS Results: We find that for some coefficients (*Educ* and *Unemp*) which are significant at 95 percent confidence level, the coefficient signs generally agree with our expectations. However, the coefficient for *Fertility* is significant at 95 percent confidence level, its sign is opposite of what we expect. Another surprising result is that *Childcare* is not a significant determinant of female labor force participation. However, the *OLS* results ignore the possible correlation between unobserved state-specific effects and the observable factors controlled for in the regression. Thus, a more appropriate specification in this context is the Fixed Effects regression.

Fixed Effects Results: According to our results, more educated females (with a bachelor degree or above) have a greater intention to join the labor force. *Educ* is statistically significant at 2.5 percent level with a t-statistic of 6.16. It shows that 10 percent increase in the level of education female labor force participation increases by 3.7 percent.

Fertility has a negative effect on labor force participation of females and is significant at 2.5 percent level. As we discussed before, the effect of fertility on female participation depends on the number and variety of programs that the government has considered for women with children. The United States has no policy specifically design to increase fertility, although some economists refer to the U.S federal income tax as childbirth subsidies because it decreases taxes for females with children (Hoffman, 2005). Our model ignores the effect of the federal income tax as it is the same for all states. We consider only state income taxes in our regression. Our results show that if every woman has one more live birth, the probability that she will join the labor force, decreases about 4 percent, controlling for other exogenous variables in the model.

Table2. Parameter estimates of Model 1 (OLS and Fixed Effects)

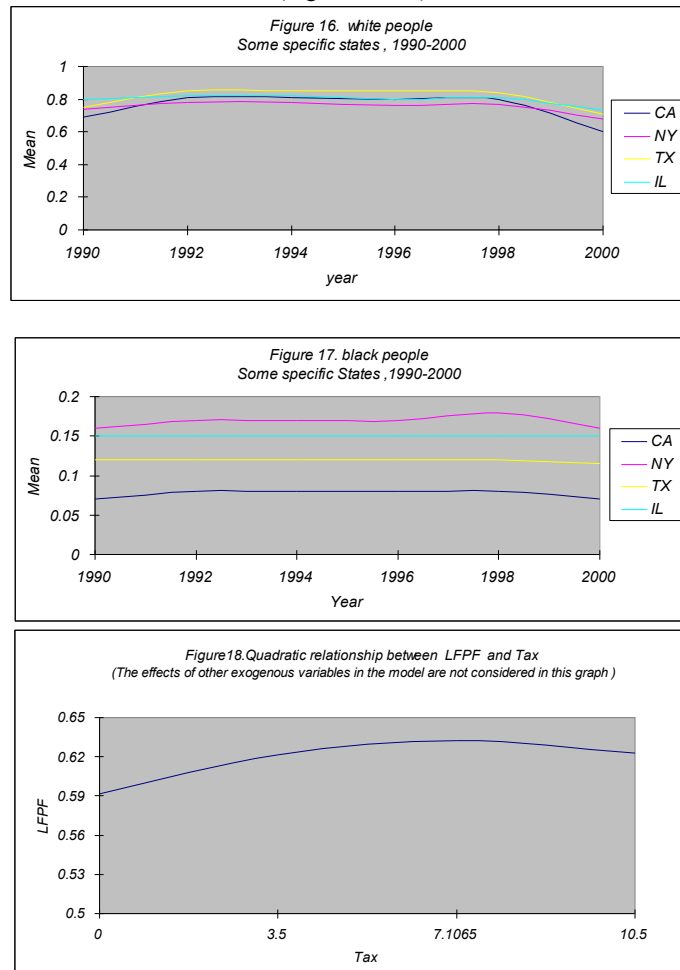
Variables	Coefficient-OLS (t-stat)	Coefficient-FE (z-stat)
Educ	0.0036292 (7.84)	0.003756 (6.16)
Fertility	0.0203661 (1.92)	-0.0393739 (-2.35)
Child care	8.34e-06 (0.90)	0.0000151 (2.30)
Unemp	-0.0150772 (-10.11)	-0.0061344 (-4.55)
White	0.0348529 (1.63)	0.0039987 (0.10)
Black	0.0133578 (0.52)	-0.0215521 (-0.48)
Tax	-0.0066196 (-3.91)	0.0113889 (2.29)
Tax ²	0 .000579 (3.57)	-0.0008013 (-2.23)
Constant	0.5378671 (13.93)	0.5916318 (10.77)
R ²	R-squared : 0.5106 Adj R-Squared:0.4974	With in : 0.3972 Between: 0.1302 Overall : 0.1710
Overall test	F(8, 297)=38 .73 Prob > F = 0.0000	F(8,247) =20.34 Prob > F=0.0000

Child care exerts a positive significant effect on labor participation of females. According to our findings, controlling for other explanatory variables, if the government spends annually hundred dollars more for every child under seventeen in a family, labor force participation of females is motivated by about 0.15 percent a year. Female labor force can be affected positively or negatively by *Child care* subsidies based on the marginal value of time in the labor market for mothers who decide to stay at home and take care of their children or work outside.

Unemp (female unemployment rate) is a regional variable that affects female labor force participation negatively as we expect. This variable is statistically significant at 2.5 percent level. According to our findings, controlling for other explanatory variables, if the female unemployment rate decreases 1 percent a year, female participation rate increases by 0.61 percent.

White and *Black* variables are insignificant. Due to the data limitation exclusively for females, these variables are used as proxies in our model. They also change very slowly in most states during the time period between 1990 and 2000 (Figures 16 and 17), so it is difficult to distinguish the effect of these variables from the time-constant unobserved variable, μ_s , through a Fixed Effects method.

(Figures 16-18)



Source: Statistical Abstract of the United States, 1990 -2000 and the Book of the States, published by the council of state Governments, 1990-2000.

Based on our results, the income taxes have a diminishing effect on labor force participation of females. As the coefficient on *Tax* is positive and the coefficient on Tax^2 is negative, the quadratic has a parabolic shape. There is always a turning point where the effect of *Tax* on *LFPF* is zero (Figure 18). The value of *Tax* at this point is 7.1 percent which means that female participation rates increase with a higher income tax rate below 7.1 percent. In fact, in spite of the higher income tax rate, females continue working more and more. The reason could be a high future value of working which induced them to stay in the labor force. Other reason can be that “high tax states” spend more on the public sector and thereby improving job opportunities for women. After approximately 7 percent of an income tax rate, the behavior of women changes in the opposite direction as they decrease their labor force participation. We get this result through Model 1 in which *Tax* and Tax^2 both are significant at 2.5 percent significant level with different signs.

According to our findings, the labor supply decisions of women can be affected positively or negatively based on an income tax level. If the income tax rate is less than 7.1 percent, the income effect is greater than the substitution effect of a wage decrease. In fact, the value of market work is higher for females that induce them to stay in labor force despite the higher income taxes. However, after roughly 7 percent of income tax rate, as we see in Figure 18, females substitute leisure and work at home instead

of market work (substitution effect of a wage decrease). They do not have any incentive to work. Increasing income taxes decreases the net wage for females so they stop working or, at least, reduce their hours of work.

5.2: Results from Model 1

In this model, the effect of *Bracket* among all other exogenous variables on *LFPP* is considered. OLS and Fixed Effects estimates of the coefficients of Model 2 are shown in Table3.

OLS Results: The number of tax bracket (*Bracket*) has a negative sign and is significant at 10 percent level. It means that if the number of brackets diminishes one number, the probability that females join the labor force, increases by 0.14 percent, controlling for other exogenous variables. Among all other exogenous variables in our model, *Educ*, *Fertility* and *Unemp* are highly significant at 95 percent confidence level.

Fixed Effects Results: The number of tax bracket (*Bracket*) is insignificant in with a fixed effect on model 2. This variable does not play a significant role in our estimation. The estimate of Bracket is constant in most states in the period between 1990 and 2000. It changes only in some states and for some years (Figure5). Therefore, it should be difficult to distinguish the effect of *Bracket* from the time-constant unobserved variable, μ_s , through a Fixed Effects method. All other exogenous variables are significant at 95 percent confidence level, except for *White* and *Black* as we mentioned before.

Table3. Parameter estimates of Model 2 (OLS and Fixed Effects)

Variables	Coefficient-OLS (t-stat)	Coefficient-FE (t-stat)
Educ	0.0034752 (7.28)	0.0037594 (6.08)
Fertility	0.0237143 (2.17)	-0.0393473 (-2.35)
Child care	6.96e-06 (0.74)	0.0000151 (2.29)
Unemp	-.0152734 (-10.2)	-0.0061317 (-4.54)
White	0.0333146 (1.56)	0.0039383 (0.10)
Black	0.013051(0.51)	-0.021534 (-0.48)
Tax	-0.0055635 (-2.96)	0.0114275 (2.24)
Tax ²	0.0005797(3.57)	-0.0008009 (-2.22)
Bracket	-0.0014016 (-1.3)	-0.0001102 (-0.04)
Constant	0.536782(13.92)	0.5917231 (10.74)
R ²	R-squared : 0.5134 Adj R-Squared: 0.4986	With in : 0.3972 Between: 0.1310 Overall : 0.1718
Overall test	F(9, 296)= 34.7 Prob > F = 0.0000	F(9,246) = 18.01 Prob > F = 0.0000

6: Conclusion

This paper examines the factors underlying female labor force participation in the 50 U.S. states and the District of Columbia over the period of 1990-2000. For the empirical purpose, we use fixed effects method which considered better for the control of

unobserved heterogeneity (state-specific and time-specific characteristics). Based on our analysis, several conclusions come from our research as follows.

The education has a significant impact on female labor force participation rate which means that educated women have more intention to work. This result is also consistent with the study by Blau and Kahn (2005). Child care has a positive effect on the female labor force participation rate. From a policy point of view, child care subsidies can help mothers to tolerate income tax burdens. The increase in income taxes does not prevent females from joining the labor force up to 7.1 percent; however, tax rates above that level reduce their hours of work and increase the time for leisure. One reason for this relationship can be that “high tax states” spend more on the public sector and thereby improving job opportunities for women if the tax rate is below 7.1 percent. The progressive tax (Bracket) does not have a significant effect on the female labor force participation rate.

Some important policy measures can be drawn from this study. For example, improving child care programs, keeping income taxes in the boundary below turning point (7.1 percent), fostering female education, and also providing more job opportunities may encourage females to participate in the labor force and could be effective measures.

References

- Becker, G.S. (1965). A theory of the allocation of time. *The Economic Journal*, 75(299), 493-517.
- Blundell, R., and T. MaCurdy (1999). *Labor Supply: A Review of Alternative Approaches*. Handbook of Labor Economics, 3, 1559-1695.
- Boskin, M.J., and E. Sheshinski (1983). Optimal tax treatment of the family: couples. *Journal of Public Economics*, 20(3), 281-297.
- Blau, F. D., & Kahn, L. M. (2005). *Changes in the labor supply behavior of married women: 1980-2000* (No. w11230). National Bureau of Economic Research.
- Gelbach, J.B. (2002). Public schooling for young children and maternal labor supply. *The American Economic Review*, 92(1), 307-322.
- Hausman, J.A., and D.A. Wise (1976) “The evaluation of results from truncated samples: The New Jersey income maintenance Experiment. *Annals of Economic and Social Measurement*, 5, 421-445.
- Hoffman, S.D., and S.L. AVERETT (2005). *Women and the Economy, Family, Work, and Pay* (New York: Pearson Addison Wesley).
- Jaumotte, F., (2003). Labor force participation of women: empirical evidence on the role of policy and other determinants in OECD countries. *OECD Economic Studies*, 37, 51-106.
- Juhn, C., and K.M. Murphy (1997). Wage inequality and family labor supply. *Journal of Labor Economics*, 15, 72-97.
- Mincer, J., (1962). Labor force participation of women. *National Bureau of Economic Research Conference Series*, 14, 63-97.
- Nakamura, A., and M., (1981). A comparison of the labor force behavior of women in the United States and Canada, with special attention to the impact of income taxes. *Econometrica*, 49(2), 451-489.
- Sleebos, J.E., (2003). *Low fertility rates in OECD countries: facts and policy responses*. OECD social, employment and migration working papers, No. 13.
- Stiglitz, J.E., and (1999) *Economics of the Public Sector* (New York / London: W.W. Norton and Company).
- Triest, R.K., (1990). The effect of income taxation on labor supply in the United States. *The Journal of Human Resources*, 25 (3), 491-516.