# Child Care Tax Credits: A Supply-Side Success Story

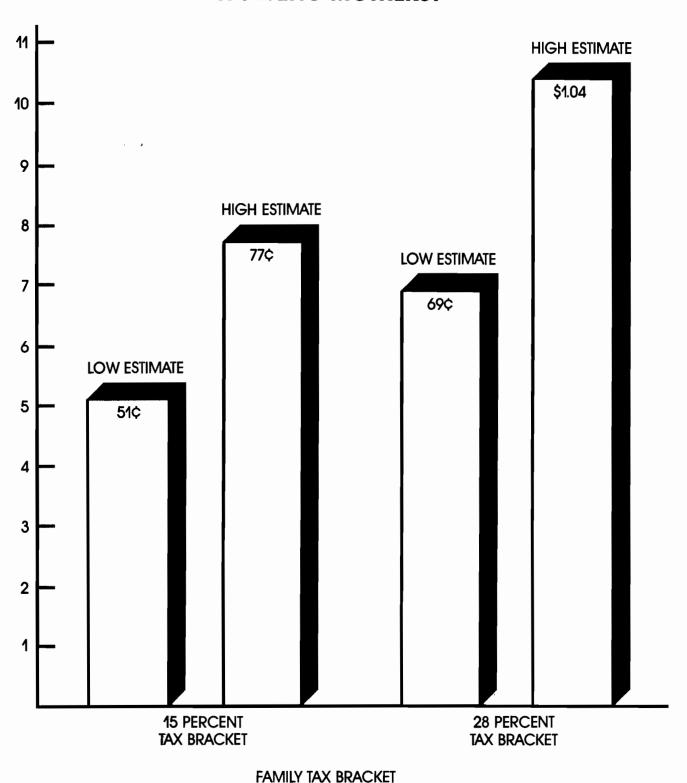
by

David R. Henderson

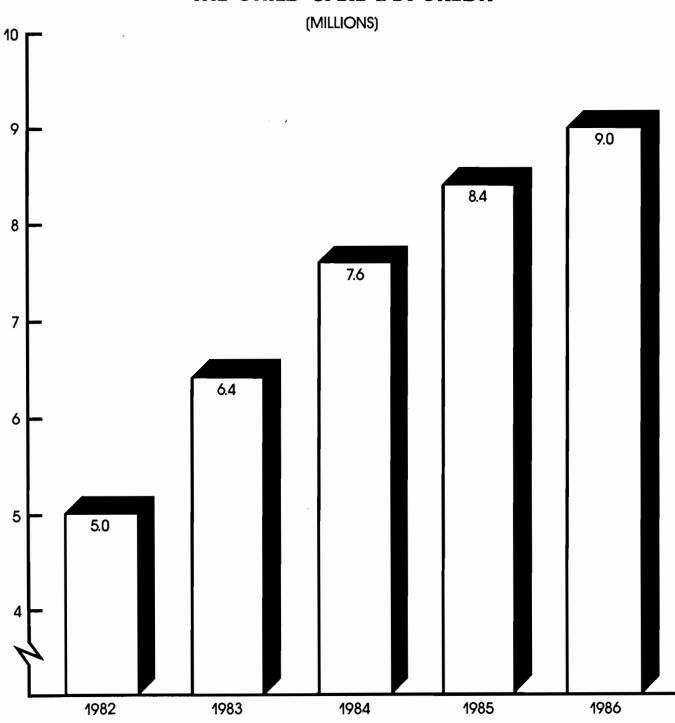
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# HOW MUCH OF THE CHILD CARE TAX CREDIT IS RETURNED IN ADDITIONAL TAXES PAID BY WORKING MOTHERS?

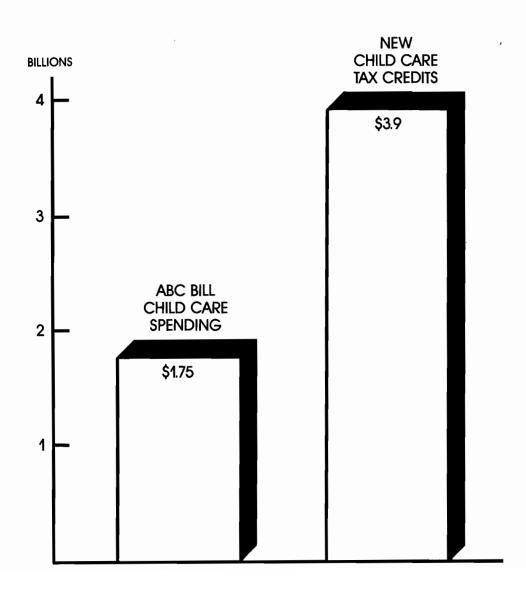


#### NUMBER OF FAMILIES CLAIMING THE CHILD CARE TAX CREDIT



SOURCE: INTERNAL REVENUE SERVICE

# PROGRAMS WITH EQUAL EFFECTS ON THE FEDERAL DEFICIT



#### **EXECUTIVE SUMMARY**

If the federal government is going to subsidize child care, which approach is better: tax credits for working families or another government spending program? The current system relies on tax credits and is producing an enormous supply-side response.

- Currently, families with working parents receive about \$4 billion each year in income tax credits to offset partly child care expenses.
- Because these tax credits encourage women to enter the labor market, our annual GNP is as much as \$8.4 billion higher than it otherwise would be.
- Because the additional income earned by working women is taxed, as much as \$3.5 billion of the \$4 billion in tax credits (89 percent) is returned to government in the form of work-related taxes.

Almost all leading child care proposals before Congress show a hostility toward the tax credit for middle-income families -- those earning \$28,000 a year or more. Some bills would even eliminate the credit for all but low-income families. Yet it is among middle-income families that the tax credit generates its greatest supply-side response.

- Middle-income working mothers return at least 69 cents in new taxes for each dollar they receive in child care tax credits.
- By some estimates, government makes a "profit" on middle-income families by receiving more than a dollar in new taxes for each dollar of tax credits.

The ABC bill, recently passed by the U.S. Senate, is a grab bag of benefits designed to appease almost every constituency -- three types of refundable tax credits and \$1.75 billion a year in spending subsidies that will empower state government bureaucracies rather than day-care customers. The ABC bill's spending may produce no supply side response -- no increase either in GNP or government revenue. Even if there is a supply-side response, the impact will be far less than the impact of using tax credits.

- Instead of the \$1.75 billion in new spending, Congress could create \$3.9 billion in new tax credits -- thereby doubling the credits now available to all working families -- and produce the same net impact on the federal deficit.
- The tax credits would produce six times as many jobs and add six times as much to GNP as spending under the ABC bill.

The ABC bill also would require more government regulation at the state level, despite evidence that unnecessary regulations already diminish the supply of private day-care. Zoning laws, anti-homework laws, day-care licensing requirements, and many other city and state regulations prevent qualified caretakers from offering their services. The so-called shortage of day-care is caused by too much government.

#### INTRODUCTION1

The child care tax credit is one of the most successful supply-side provisions of the tax code. This provision entitles working parents to a credit against income taxes of up to 30 percent of child care expenses for children under age 13.2

According to the conventional view, this program costs the federal government about \$4 billion per year. This view, however, ignores the supply-side response of working mothers.<sup>3</sup> As it turns out, the decision to work on the part of women with small children is highly sensitive to the cost of child care. Specifically, each 10 percent reduction in the cost of child care increases the number of mothers who work by almost 4 percent.<sup>4</sup> Thus,

- If federal tax policy were to cut the child care cost by 50 percent, the number of working mothers would increase by 20 percent.
- If tax policy were to completely offset the cost of child care, about 87 percent of women with young children would participate in the labor market.

#### REVENUE GAIN FROM THE TAX CREDIT

Under current law, the tax credit applies to child care expenses up to \$4,800 per year.<sup>5</sup> Working families receive a tax credit equal to a percent of expenses incurred, and the maximum credit varies with family income. For families earning \$28,000 per year or more, the maximum credit is equal to 20 percent of expenses, or \$960. For families earning less than \$10,000, the maximum credit is equal to 30 percent of expenses, or \$1,440.<sup>6</sup> Federal tax policy, then, lowers the cost of child care by as much as \$960 for middle-income families and by as much as \$1,440 for low-income families.

To qualify for the tax credit, parents must work. Thus, in a two-adult family both parents must be working. Because of the child care tax credit, many women have entered the labor

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<sup>&</sup>lt;sup>2</sup>The credit applied to children under age 15 prior to January 1, 1989.

<sup>&</sup>lt;sup>3</sup>See Roberta Ott Barnes, "The Distributional Effects of Alternative Child Care Proposals," Urban Institute, October 1988, for an example of this approach.

<sup>&</sup>lt;sup>4</sup>David M. Blau and Philip K. Robins, "Child-Care Costs and Family Labor Supply," *Review of Economics and Statistics*, Vol. LXX, No. 3, August 1988, pp. 374-381.

<sup>&</sup>lt;sup>5</sup>Expenses up to \$2,400 may be claimed for one child. Expenses up to \$4,800 may be claimed for two or more children.

<sup>&</sup>lt;sup>6</sup>Beginning at an annual income of \$10,000, the 30 percent credit is reduced by one percentage point for each additional \$2,000 of income until the 20 percent credit is reached.

market.<sup>7</sup> No one knows for certain how many women are working *because* of the child care credit, but a casual look at the evidence suggests the number is probably quite large.

- The tax reform act of 1981 (ERTA) created a more generous child care tax credit and other tax incentives for working mothers.8
- Following these reforms, the number of families claiming the child care tax credit soared -- from 5 million in 1982 to 9 million in 1986.9

Increase in the number of Working Mothers. From studies cited in Appendix A, we can infer the impact of the tax credits and conclude that as many as 730 thousand working mothers have entered the labor market because of the credits.

Increase in GNP and Work-Related Taxes. These working mothers increase our nation's output of goods and services and add to our GNP. In general, for each \$1 of tax credit, we are getting at least \$1.40 in additional production. Moreover, their income generates new tax revenue for government at all levels -- federal income tax and payroll tax, state and city income taxes and employment taxes. As a result, more than half of the revenues lost through the child care tax credit are repaid through other work-related taxes. Overall,

- The \$4 billion annual revenue loss associated with the child care tax credit leads to as much as \$8.4 billion in additional output by working mothers.
- As much as \$3.5 billion of the \$4 billion revenue loss (or 89 percent of the total) is returned to government in the form of work-related taxes.

These and other effects of the child care tax credit on the U.S. economy are presented in Table I, where both a low and a high estimate are given in each category. For reasons explained in Appendix A, the high estimate is more likely to be correct.

<sup>&</sup>lt;sup>7</sup>Technically, the law applies to men as well as women. As a practical matter, the law affects mainly the labor market activities of women.

<sup>&</sup>lt;sup>8</sup>A tax deduction for working mothers was first adopted in 1954, on the theory that such deductions were equivalent to business expenses. The law allowed a deduction of up to \$600 of expenses and was phased out for families earning between \$4,500 and \$5,100. In 1976, the deduction was converted to a tax credit. The 1981 tax reform act raised both the ceiling on the credit and the percentage credit for lower-income families.

<sup>&</sup>lt;sup>9</sup>Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means, 1989 Edition, Committee on Ways and Means, U.S. House of Representatives, Table 15. Between 1976 and 1981, the number of families claiming the credit increased by an average of 384 thousand per year. Between 1981 and 1986, the average annual rate of increase more than doubled to 874 thousand per year. Following the 1986 tax reform, which moved many low-income families off the tax rolls, the number of families claiming the credit was projected to fall to 8.2 million in 1988, and to rise continuously thereafter.

<sup>&</sup>lt;sup>10</sup>These and other calculations reported in this study are based on the analysis in the Appendix.

TABLE I

# THE EFFECTS OF THE CHILD CARE TAX CREDIT ON THE U.S. ECONOMY

	Low Estimate	High Estimate
Total Tax Credit Dollars	\$4 billion	\$4 billion
Increase in GNP:		
Total	\$5.6 billion	\$8.4 billion
Per Dollar of Tax Credit	\$1.40	\$2.10
Increase in Government Revenue:		
Total	\$2.4 billion	\$3.5 billion
Per Dollar of Tax Credit	\$.59	\$.89
Increase in Jobs	485 thousand	730 thousand

Source: Appendix A

#### FOR MIDDLE-INCOME FAMILIES

A frequent complaint about the child care tax credit is that it amounts to a federal subsidy to higher-income families. Almost half of all child care credit dollars currently go to families in the top 30 percent of the income distribution while only 3 percent of these dollars go to families in the bottom 30 percent.<sup>11</sup> Because of this, some child care proposals before Congress would eliminate even middle-income families from eligibility for the credit.

One reason so few low-income families take advantage of the tax credit may be that many have been removed from the tax rolls by tax reform. 12 The tax credit is of little value to families who owe no federal income tax. To remedy this situation, several bills now in Congress would make the tax credit "refundable." Families who owe little or no income tax would be able to deduct the credit from any taxes owed and would be entitled to a negative income tax -- a refund from the IRS. 13

That most child care tax credit dollars go to middle-income families does not mean, however, that the tax credit is unwise or undesirable. It is from middle-income families that the federal government currently gets its highest supply-side return. In fact, government is probably getting back more than a dollar for every dollar of tax credits given to middle-income families. The reason is that the income of a working mother in a middle-income family is taxed at a higher rate, even if her own job pays a low wage. As Table II shows,

- Among low-income families, the government gets as much as 77 cents in additional tax revenue for every \$1 it loses through the child care tax credit for working parents.
- Among middle-income families in the 28 percent tax bracket, government revenues increase by as much as \$1.04 for every \$1 lost through the tax credit.
- Among high-income families in the 33 percent tax bracket, government gets as much as \$1.14 in additional taxes for every \$1 of tax credit.

Table III shows that the higher a family's income, the more likely it is to take advantage of the child care tax credit. Amost half of the tax credits go to families with incomes of \$32,050 or higher. But these families also generate the highest additional tax revenue per dollar of tax credit. In other words, the government's method of "investing" in child care is to rebate more dollars to those families that give it the highest return.

The goal of tax policies is not necessarily to maximize government revenue based on supply-side responses. On the other hand, considering the size of the federal deficit, the supply-side response is not irrelevant. If anything, Table II makes a prima facie case for increasing child care credit at every level of family income and financing this policy by reducing other federal expenditures, such as income transfer programs that have a negative supply-side effect.

<sup>&</sup>lt;sup>11</sup>Barnes, "The Distributional Effects of Alternative Child Care Proposals."

<sup>&</sup>lt;sup>12</sup>Another reason is that low-income families are less likely to "purchase" child care. According to Douglas J. Besharov of the American Enterprise Institute, about 60 percent of families with incomes under \$15,000 use unpaid relatives for child care. See *Family Affairs*, Vol. 2, No. 1, Spring, 1989, p. 4.

<sup>&</sup>lt;sup>13</sup>An analysis of the effects of a refundable tax credit is presented below.

TABLE II

# ADDITIONAL TAXES PAID BECAUSE THE CHILD CARE TAX CREDIT INDUCES MORE WOMEN TO WORK

Family Tax Bracket	New Tax Revenue  Per Dollar of Tax Credit
15% Tax Bracket1	\$ .51 - \$ .77
28% Tax Bracket	\$ .69 - \$1.04
33% Tax Bracket	\$ .76 - \$1.14

<sup>1</sup>Family income less than \$10,000.

Source: Appendix A

TABLE III

# TAX SUBSIDIES AND REVENUE RETURNS FROM THE CHILD CARE TAX CREDIT

Family <u>Income</u> 1	Percent of Families 1	Percent of Total Credit <u>Dollars</u> 1	Additional Taxes Paid Per Dollar <u>of Tax Credit</u>
0 - \$12,000	30%	3.3%	51¢ - 77¢
\$12,000 - \$20,700	20%	20.3%	49¢ - 74¢
\$20,700 - \$32,050	20%	27.3%	49¢ - 74¢
\$32,050 +	<u>30 %</u>	<u>49.3%</u>	<u>69¢ - 104¢</u>
All families	100%	100.0%	59¢ - 89¢

<sup>&</sup>lt;sup>1</sup>Based on 1985 dollars.

Source: For columns 1, 2 and 3, Roberta Ott Barnes, "The Distributional Effects of Alternative Child Care Proposals," Urban Institute, October 1988. For Column 4, Appendix A.

#### OTHER TAX BREAKS FOR CHILD CARE

The child care tax credit is not the only way federal tax policy defrays child care costs. In fact, many working parents who would otherwise qualify do not even take advantage of the tax credit because Uncle Sam has provided more generous ways of getting income tax relief. One way is for employers to provide day-care for their employees' children. Clearly, this is an employee benefit -- fully comparable to the payment of wages. Under current law, however, the employer can deduct day-care services as a business expense and the benefit is not included in the employee's taxable income. Employers can also create flexible spending accounts (FSAs) which allow employees to allocate up to \$5,000 in pre-tax wages for various purposes: pension funds, health insurance, day-care expenses. Currently, 14

- As many as 3,500 large companies provide child care benefits for their employees.
- As many as 1,500 employers offer flexible spending account options to their employees.

To appreciate how valuable these tax-subsidized benefits are, consider the following options for middle-income working mothers:

- Under the child care tax credit, the maximum tax benefit is \$960.
- Under the flexible spending account option the maximum tax benefit is \$2,500.<sup>15</sup>
- If the employer provides day-care services directly, the tax benefit is unlimited.

Through its tax policies the federal government is in effect willing to pay as much as \$960 of day-care expenses through the tax credit, as much as \$2,500 through the FSAs, and an unlimited amount through employer deductions for employer-provided day-care. The more generous provisions in the tax code, however, are employer-based and tend to benefit only employees of large companies. In general, only companies with many employees can justify the cost of directly providing day-care. Moreover, as a practical matter, only large and medium-size companies can afford to set up sophisticated FSAs. As a result, the benefits of these policies largely bypass small business -- the sector of the economy that is experiencing the fastest growth and creating most of the new jobs.

<sup>&</sup>lt;sup>14</sup>Jaclyn Fierman, "Child Care: What Works -- And Doesn't," Fortune, November 21, 1988, pp. 163-176.

<sup>15</sup>The individual is assumed to face a 50 percent marginal tax rate (federal income tax, state and local income tax, and FICA tax combined). Thus, the tax benefit is 50 percent of \$5,000. Note: under the Family Support Act of 1989, a family must choose between either the Dependent Care Credit (DCC) or a flexible spending account. I thank Roberta Barnes for pointing this out.

### THE ECONOMIC IMPORTANCE OF TAX BREAKS FOR WORKING MOTHERS

An implicit goal of the Reagan Administration was to encourage wives and mothers to participate in the labor market. This goal was pursued by sharply lowering tax rates on the income of working wives<sup>16</sup> and by expanding tax subsidies for day-care. The dual incentive, perhaps combined with other social and economic forces, has had an enormous impact:

- In 1950, only 12 percent of married women with children under age 6 were in the labor market.
- By 1987, 57 percent of these women were in the labor market.<sup>17</sup>

This is a remarkable transformation of the American workplace. David Bloom, a Columbia University economist, has called it "the most dramatic labor market change that has ever taken place." 18

From a purely economic perspective, the increase in working mothers is important for a number of reasons. By international standards, adult American women are a highly educated group -- a rich pool of talent and ability that can contribute to our national output and help us to stay competitive in international markets. Working mothers will become increasingly important in the future, as labor becomes more scarce.<sup>19</sup> It is estimated that between now and the year 2000, two-thirds of all new employees will be women, and 85 percent of those will get pregnant.<sup>20</sup>

#### MAKING THE TAX CREDIT REFUNDABLE

An alleged problem with the current policy is that the tax credit is reaching fewer and fewer low-income families. What is often ignored is that this has happened primarily because the Tax Reform Act of 1986 took millions of low-income people off the tax roles. Since the tax credit is valuable only to the extent that child care expenses can be subtracted from income taxes owed, it has no value to families with no tax liability. Table IV shows the maximum possible child care credit available to a working mother with two or more children in 1990. As the Table shows,

<sup>&</sup>lt;sup>16</sup>In the 1981 tax reform, working wives received a 31 percent reduction in federal income taxes, compared with a 23 percent reduction for other taxpayers. See David R. Henderson, "Analyzing the Reagan Record," NCPA Policy Report No. 114, October, 1984, p. 17. Although the special tax provision for working wives was eliminated in the 1986 tax reform, many working women experienced additional tax relief when the marginal tax rates for families were reduced to 15, 28 and 33 percent.

<sup>&</sup>lt;sup>17</sup>See Statistical Abstract of the United States, 1975 and 1988. Refers to families with a husband present in the household.

<sup>18</sup>Quoted in Fierman, "Child Care: What Works -- And Doesn't."

<sup>&</sup>lt;sup>19</sup>See U.S. Department of Labor, Labor Market Shortages, January 1989.

<sup>&</sup>lt;sup>20</sup>Fierman, "Child Care: What Works -- And Doesn't."

- In 1990, a single working mother with two children and an income of \$10,000 will get no benefit from the child care tax credit.
- The actual benefit to a woman with an income of \$14,000 will be only one-third of the theoretical tax credit.

For these reasons, the leading bills being considered by Congress would make the tax credit refundable. Families with no tax liability would be entitled to an IRS refund. Because families receiving the refundable credit would have no income tax liability, however, the only additional tax revenue generated by a working mother would be from the Social Security payroll tax. Thus government's return for each dollar of refundable tax credit would be between 23 and 35 cents, much lower than the return from middle-income mothers.

So far, Congress has paid almost no attention to the supply-side consequences of different child care proposals. Yet as Table V shows, proposals that look very similar on the surface can have markedly different effects on the federal budget. Because this issue is so important, we will briefly review some major types of proposals before Congress.

TABLE IV

THE INABILITY OF LOW-INCOME FAMILIES TO

TAKE ADVANTAGE OF THE TAX CREDIT

(1990)

Family <u>Income</u>	Tax Credit	Theoretical Maximum <u>Credit</u> 1	Actual Maximum <u>Credit</u> 1
\$10,000	30%	\$1,440	0
14,000	28%	1,344	\$465
18,000	26%	1,248	1,065
22,000	24%	1,152	1,152
26,000	22%	1,056	1,056
30,000	20%	960	960

<sup>&</sup>lt;sup>1</sup>Assumes single head of household with two or more children.

Source: Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means, 1989 Edition, Committee on Ways and Means, U.S. House of Representatives, March 15, 1989, Table 18.

Proposals to Make the Existing Credit Refundable. A number of bills before Congress would make the current tax credit either wholly or partly refundable. If the tax credit were made fully refundable, the number of new credit dollars going to families with incomes of \$12,000 or less would increase by almost sevenfold.<sup>21</sup> Higher-income families would be unaffected by this change. As noted above, however, each new dollar of tax credit would generate only 23 to 35 cents of new government revenue, compared to the current 59 to 89 cents.

Proposals to Finance Refundable Tax Credits by Reducing the Credits Available to Upper-Middle Income Families. An example is the bill introduced by Rudy Boschwitz (R-MN). This bill purports to be revenue neutral because for each dollar of refundable tax credits given to low-income families a dollar of tax credits would be taken from higher-income families. In other words, the bill intends to redistribute tax credits from the less poor to the more poor. When the supply-side response is taken into account, however, the bill would actually increase the federal deficit by more than \$500 million. The reason is that the middle-class tax credits it eliminates currently return about 87 cents per dollar of tax credit, while the new refundable tax credits would return about 29 cents. Thus each tax credit dollar redistributed would cost the government 58 cents in in tax revenues.

Proposals to Liberalize the Existing Credit and Make It Refundable. A number of proposals would both increase the amount of the current tax credit and make it partially refundable. For example, under the original proposal by Senator Robert Packwood (R-OR), the tax credit would be increased to 40 percent for low-income families and would be phased down to 20 percent at an income of \$44,000 rather than the current level of \$28,000. The credit would also be 70 percent refundable. As Table V shows, liberalization plus refundability gives the government a higher supply-side return than refundability alone.

Proposals to Create Refundability and to Sever the Link Between the Tax Credit and Work. A number of proposals, popular among Republicans in Congress, would attempt to sever the link between the tax credit and work. For example, a bill proposed by Senator Malcolm Wallop (R-WY) and Representative Clyde Holloway (R-LA) contains many anti-supply-side features. The proposal, which is not depicted in Table V, would replace the existing credit with a new per-child credit containing the following features: (1) it would reduce the allowable maximum for most families who now claim the credit, (2) it would redistribute tax credit dollars from the less poor to the more poor, and (3) it would require that only one adult per family work—thus providing a "child care" tax break to two-parent families in which a non-working wife remains in the home.<sup>23</sup>

<sup>&</sup>lt;sup>21</sup>Based on static revenue estimates generated by the Urban Institute's micro-simulation model. Results reported in an Urban Institute Briefing Memorandum by Roberta Barnes and Linda Giannarelli, December 12, 1988.

<sup>&</sup>lt;sup>22</sup>The Urban Institute's static revenue analysis estimates the bill will increase government revenue by \$60 million.

<sup>&</sup>lt;sup>23</sup>Single women with children would have to work in order to be eligible for the credit.

GOVERNMENT REVENUE PER NEW DOLLAR OF TAX CREDIT UNDER DIFFERENT PROPOSALS<sup>1</sup>

TABLE V

#### New Tax Credits:

Income	Current <u>Law</u>	Fully <u>Refundable</u>	Boschwitz Bill	Packwood <sup>2</sup> Bill
0 - 12,000	64¢	29¢	29¢	30¢
12,000 - 20,700	62¢	28¢	28¢	44¢
20,700 - 32,050	62¢	28¢	28¢	52¢
32,050 +	87¢	0	-87¢	-
All Families	74¢	29¢	-58¢	43¢

<sup>&</sup>lt;sup>1</sup>Based on the mid-point between the high and low estimates in Table III

Source: Prepared by the NCPA based on estimates of the static distribution of the credits in Roberta Barnes and Linda Giannarelli, "Briefing Memorandum," Urban Institute, December 12, 1988, and the dynamic estimates in Appendix A.

<sup>&</sup>lt;sup>2</sup>Original Packwood proposal.

#### LEADING PROPOSALS BEFORE CONGRESS

In the last session of Congress, as many as 100 bills relating to children or child care were introduced, and in the current session child care has again become a major political issue. The two proposals that have received the most national visibility are (1) the Bush Administration proposal, advanced principally by Senator Robert Dole (R-Kansas), and (2) the ABC proposal, advanced principally by Senator Christopher Dodd (D-Conn.)

The Bush Administration Proposal. President Bush has proposed a child care credit up to \$1,000 per child for families with children under age four.<sup>24</sup> The proposal differs from the current child care tax credit in two ways. First, the credit would apply only to families earning less than \$13,000 in 1990 and less than \$20,000 in 1994. Second, the proposal would require that only one adult in a two-parent family work, and would not require evidence of out-of-pocket child care expenses. Thus, the proposal really amounts to an increase in the after-tax income of low-income families with children rather than tax relief for day-care expenses.

Both these departures from the current system are also departures from a sound supply-side strategy. By limiting the credit to families with low incomes, the proposal ignores the fact that higher-income families presently generate much higher revenue returns. By making the credit available to two-parent families regardless of whether the mother works and irrespective of actual child-care expenses, the proposal would encourage low-income mothers to quit work.

The Bush proposal purports to be pro-traditional family and is strongly supported by the mothers-should-be-home-with-their-children lobby. The reality is quite different, however. As a practical matter, very few two-adult families have an annual income less than \$13,000. The proposal initially would have virtually no impact unless it succeeded in separating single mothers from their children by inducing them either to enter the labor market or to remain there. Once the threshold reaches \$20,000, more two-parent families would be affected, but with negative supply-side effects. The greater the number of women in two-parent families who remain at home, the lower the national output and government revenue.

The Bush Administration would not reduce the current child care tax credit available for middle-income families. But the decision to create a different kind of tax credit for low-income families represents a major break with the supply-side philosophy of the Reagan Administration.

The ABC Bill. The approach favored by many Congressional Democrats -- embodied in the Act for Better Child Care bill (ABC) -- is to create a new government spending program. Although the Senate bill was amended many times to appease different constituencies, its original purpose was clear -- to create federal subsidies for day-care centers and to subject these centers to federal regulations.

The watered-down and frequently-amended version -- recently passed by the Senate -- provides for \$1.75 billion per year in spending and another \$2 billion per year in three types of

<sup>&</sup>lt;sup>24</sup>The Senate version of the proposal was introduced by Robert Dole (R-KS). The tax credit would be refundable. The existing Dependent Care Tax Credit would also be made refundable. Families could claim either credit but not both.

<sup>&</sup>lt;sup>25</sup>See Phyllis Schlafly, *Who Will Rock the Cradle?* (Washington, D.C.: Eagle Forum Education and Legal Defense Fund, 1989); and Allan C. Brownfeld, "Why Does the Child Care Debate Neglect the Child?" *Human Events*, July 1, 1989, p. 10 ff.

refundable tax credits.<sup>26</sup> The \$1.75 billion would be given to state governments to spend with the requirement that 70 percent of the funds<sup>27</sup> be used for families below the state's median income.<sup>28</sup> The funds would not necessarily be restricted to day-care centers.

Because the bill gives enormous discretion to state governments, no one can be certain what the program's specific effects will be. However, we do know that spending under the ABC bill will differ from the current "tax expenditures" for child care in two important ways:

- 1. Whereas the tax credit puts funds directly in the hands of parents, under the ABC bill these funds would be filtered through state bureaucracies already influenced by the day-care lobby. Although the bill allows states to create vouchers that would permit parental choice, this provision is deceptive. First, the ABC bill does not require states to create vouchers. Second, even if states do create vouchers, parents will be able to use them only at officially approved day-care centers. If the sponsors of the bill really wanted to empower parents rather than the day-care bureaucracy, they would simply have liberalized existing tax credits.
- 2. Whereas the tax credit treats equally all families with the same income, there is no such provision in the ABC bill. Under the bill, the state may choose beneficiaries according to unspecified criteria.

These two departures from current policy mean that there is no guarantee of a supply-side response from the \$1.225 billion spending in subsidies under the ABC bill. For example, a very likely outcome is that parents with children already in day-care would be first in line. Since the \$1.225 billion in direct subsidies (70 percent of the \$1.75 billion) would not be nearly enough to satisfy all claimants,<sup>29</sup> it is quite possible that none of the money would go to parents whose children are not now in day-care. The result: no additional women in the labor force and no government return on the \$1.75 billion.

The other extreme possibility is that the subsidies would be distributed in much the same way tax credit dollars are allocated. For example, suppose that 100 mothers apply for subsidies, 90 of whom work and have children in day-care and 10 of whom do not. Suppose also that the state government can fund only 40 percent of the applicants and funds 36 mothers with children already in day-care and four potential working mothers. In this extreme case where the subsidies go proportionately to both sets of families, the subsidies would have much the same supply-side effect as tax credits. However, because only 70 cents on the federal dollar would reach parents, the subsidies would have only 70 percent of the supply-side effect of current tax credits. And remember: this second scenario is the most favorable to the ABC approach. The reality is likely to be somewhere between the two extremes. If instead the \$1.75 billion were used to expand the

<sup>&</sup>lt;sup>26</sup>The current dependent care tax credit is made 90 percent refundable; the current earned income tax credit is expanded to allow refunds up to \$750 per year per child under age four; and a new refundable credit of up to \$500 per year per family is created to pay for health insurance for children of low-income working families. Eligible families may claim all three credits.

<sup>&</sup>lt;sup>27</sup>The remaining 30 percent is to distributed as follows: 8 percent for administration, 10 percent to increase the quantity of day-care and 12 percent to increase the quality of day-care.

<sup>&</sup>lt;sup>28</sup>The national median is \$32,777 for a family of four.

<sup>&</sup>lt;sup>29</sup>Senator Pete Domenici (R-NM) estimates that it would cost at least \$20 billion a year to meet the full demand. See Brownfeld, "Why Does the Child Care Debate Neglect the Child?" p.17.

#### TABLE VI

## PROGRAMS THAT HAVE AN EQUAL IMPACT ON THE FEDERAL DEFICIT

	Senate ABC Spending <sup>1</sup>	New <u>Tax Credits</u>
Total Spending/Credits:	\$1.75 billion	\$3.9 billion
Addition to Federal Deficit:	\$1.4 billion	\$1.4 billion
Direct Benefit for Families	\$1.2 billion	\$3.9 billion
Addition to GNP	\$1.1 billion	\$6.6 billion
New Jobs	91 thousand	570 thousand
	House ABC Spending <sup>2</sup>	New <u>Tax Credits</u>
Total Spending/Credits:	\$2.5 billion	\$5.5 billion
Addition to Federal Deficit:	\$1.9 billion	\$1.9 billion
Direct Benefit for Families	\$1.75 billion	\$5.5 billion
Addition to GNP	\$1.5 billion	\$9.4 billion
New Jobs	130 thousand	814 thousand

<sup>&</sup>lt;sup>1</sup>Assumes that ABC spending of \$1.75 billion would add \$1.4 billion to the federal deficit --calculated by assuming 70 percent of funds go to day-care subsidies, that subsidies have one-half the effect of tax credits on the employment of women and that tax credits generate 65 cents in new government revenue per \$1 of credit. The 65 cent estimate is the mid-point between the high and low estimates of government revenue return per dollar of tax credit after removing the effect of state and local income taxes.

<sup>&</sup>lt;sup>2</sup>Assumes that ABC spending of \$2.5 billion would add \$1.9 billion to the federal deficit -- calculated under the same assumptions as in note 1.

current tax credit, GNP would increase by as much as \$3.68 billion and government would get at least half of the funds back in work-related taxes.

One way to compare the ABC bill to tax credits is by its effects on the federal deficit.

- A reasonable prediction is that the spending under the Senate version of the ABC bill would increase the federal deficit by at least \$1.4 billion.
- The same impact on the deficit could be achieved by increasing the current child care tax credits by \$3.9 billion.
- This \$3.9 billion would double the child care credits available to all working families.

These results are shown in Table VI along with similar estimates for the House version of the ABC bill. Note that for an equal impact on the federal deficit, tax credits create more than six times as many jobs and add more than six times as much to GNP as ABC spending.

#### INCREASING THE SUPPLY OF DAY-CARE SERVICES

One argument to justify federal subsidies to day-care centers through the ABC bill is that there is a shortage of day-care services. Those making this argument overlook four important points:

- 1. Over the last decade there has been an explosion of home-based, women-owned businesses. As many as 23 million Americans are currently doing some work at home.<sup>30</sup> Although both men and women are turning to homework with increasing frequency, women run most small home-based businesses. Currently about 63 percent of all sole proprietorships in the U.S. are operated from private residences, and more than 70 percent of them are managed by women.<sup>31</sup> Given the ease with which women begin home-based businesses and the success they have operating them, the market should have no problem supplying any quantity of day-care services consumers demand.
- 2. Arbitrary government regulations are keeping many qualified day-care providers from offering their services to working mothers. State and local licensing laws, zoning regulations, anti-homework laws, and many other regulations depress the supply of day-care services. Often, these regulations impose arbitrary and impossible-to-meet restrictions on providers -- restrictions that bear little relationship to the issue of "quality."
- 3. Because of arbitrary government regulations, many day-care operators provide services illegally and are therefore not counted in official estimates of the supply. It is estimated that as many as 80 percent of day-care

<sup>&</sup>lt;sup>30</sup>Joanne Pratt, "Legal Barriers to Home-Based Work", National Center for Policy Analysis, Policy Report No. 129, September 1987.

<sup>31</sup>Ibid.

providers who operate in their homes are unlicensed. In many cases these providers are operating illegally, although their customers are presumedly satisfied. When "caught," they simply shut down rather than attempt to deal with the regulatory bureaucracy.<sup>32</sup>

4. The ABC bill would greatly expand the number of government regulations, creating an even greater "shortage" of day-care services. Although ostensibly designed to encourage the supply of day-care services, the ABC bill would actually discourage potential suppliers. The bill encourages states to enforce existing licensing requirements and create new ones. It would also create a new layer of federal bureaucracy, paving the way for federal regulations and controls.

The following is a brief summary of the obstacles faced by consumers and producers in the market for child care services.

#### State Licensing Laws

State licensing laws often impose arbitrary restrictions on the number of children per daycare provider, the number of square feet of playing space per child, etc. Although adopted for the ostensible purpose of maintaining "quality," these laws serve a more sinister purpose. They are often the result of pressure from the day-care lobby in its attempt to keep businesses and people operating out of their homes from competing with the organized day-care industry.

In one case, a company in Berkeley, California, wanted to set up a day-care facility for its employees. Among other things,<sup>33</sup>

- The company was told that its facility could not share any common ground with the rest of the building -- a separate entrance, separate bathrooms and a separate kitchen were required.
- California's licensing law also required 35 square feet per child inside the building and 75 square feet outside.

The first set of requirements conflicted with Berkeley's local zoning ordinances and the second was impossible to meet in an urban setting. The result: the company abandoned its plans for a day-care facility.

### Zoning Ordinances, Anti-Homework Laws and Other City Regulations

A host of laws at the local level constitute a formidable barrier to would-be day-care providers. Currently, about 90 percent of all U.S. cities place restrictions on home-based work. These include requirements that no outside employee may work in the home; that only one family member may work in the business; that only one business may be operated from each home; that only one room of a house may be used for business purposes; that a separate entrance must be

<sup>&</sup>lt;sup>32</sup>Virginia Postrel, "Who's Behind the Day-Care Crisis?" Reason, June, 1989, p. 24.

<sup>&</sup>lt;sup>33</sup>*Ibid.*, p. 25.

maintained for business customers; and that no business inventory may be stored in a garage. Among the many and sometimes bizarre regulations:<sup>34</sup>

- In Blaine, Minnesota, a home-based tutor in math, English or a foreign language may not tutor more than one student at a time.
- In Long Beach, California, ministers, priests and rabbis may not give religious instruction in the home.
- In Dallas, home-based businesses may not be listed in the yellow pages of the telephone directory.
- In Downey, California, a garage may not be used for home-based work.
- In Rockford, Illinois, there can be no more than one home occupation in any single residence.
- In Chicago, there is virtually a total ban on home-based work, including a ban on connecting a home computer to an office computer.

Unless state law specifically overrides these ordinances, they apply to day-care as well as other businesses. For example, local officials told a California woman that to operate a day-care facility in her home,<sup>35</sup>

- She had to have separate bathrooms for teachers and for children, commercial rather than household locks on her doors and a commercial thermostat in her refrigerator.
- She had to get the approval of 14 neighbors in nearby homes.
- No child could arrive before 8:00 in the morning or remain beyond 5:30 in the afternoon.

#### The Quality of Child Care and Child Abuse

The special interest lobby for the day-care industry usually argues that government regulations are needed to ensure a minimum quality of care. All too often they shamelessly play on public fears about sexual abuse of children -- fears heightened by a few recent scandals. Yet the regulations seldom relate to the problem. Even a fairly straightforward regulation can backfire:<sup>36</sup>

- A criminal record check can prevent a well-qualified woman from operating a day-care facility because she was caught with a marijuana cigarette in her youth.
- Yet this type of regulation did not stop a Colorado day-care operator previously acquitted of sexual abuse charges on grounds of insanity.

<sup>34</sup>Pratt, "Legal Barriers to Home-Based Work."

<sup>&</sup>lt;sup>35</sup>Some of these restrictions were successfully contested. See Postrel, "Who's Behind the Day-Care Crisis?"

<sup>&</sup>lt;sup>36</sup>*Ibid.*, p. 24.

#### Regulation vs. Certification

Advocates of regulation often forget that the only real advantage a government agency has over an individual family is in gathering certain types of information about the suppliers of day-care services (credentials, training, record of service). Once the information is gathered it can readily be shared with consumers. A regulatory agency -- possibly in a distant city and with far less motivation -- is at a distinct disadvantage in gathering the types of information that is best obtained by parents making frequent visits and on-site inspections.

By certifying standards, a government agency *may* be able to help parents make better-informed choices. But, once the information is shared, there is no argument for substituting the judgment of bureaucrats (far from the scene and subject to political pressures) for the judgment of parents.<sup>37</sup>

<sup>37</sup>For an extensive analysis of the harmful effects of occupational licensing regulations, see Milton Friedman, Capitalism and Freedom (Chicago: University of Chicago Press, 1961); S. David Young, The Role of Experts: Occupational Licensing in America (Washington, D.C.: Cato Institute, 1987); and John Goodman, Regulation of Medical Care: Is the Price Too High?) (Washington, D.C.: Cato Institute, 1980).

#### CONCLUSION

The above analysis has strong implications for some child care proposals currently before Congress:

- 1. The total elimination of the tax credits for middle-income families, advanced in some Congressional proposals, is unwise. The reason: well over half, and possibly all, of the static revenue gain from abolishing the credit would be offset by a dynamic revenue loss.
- 2. President Bush's proposal, favored by many Congressional Republicans, would sever the link between work and tax credits for many low-income families. This would simply mean tax breaks for these families and would eliminate many of the work incentives of the current child care tax credit. It would tend to reduce the employment of women and lead to an even greater loss of tax revenue than is currently estimated.
- 3. The new spending program created under the ABC proposal, favored by many Congressional Democrats, is the worst of the alternatives. It would transfer more money from taxpayers to government. Far from empowering working mothers, it would give money and power to another layer of bureaucracy in ways that would not necessarily lead to any additional work, additional output, or additional government revenue.
- 4. If Congress wishes to increase current subsidies for child care, the ideal approach is to liberalize the existing child care tax credit -- leaving supply-side incentives intact and guaranteeing a high return on our child care tax credit investment.

NOTE: Nothing written here is to be construed as necessarily reflecting the views of the National Center for Policy Analysis or as an attempt to aid or hinder passage of any bill before Congress.

#### TECHNICAL APPENDIX

by

David R. Henderson

and

John C. Goodman

In this appendix we use the Blau and Robins estimate<sup>1</sup> of the elasticity of employment with respect to child care costs, along with other information, to estimate the revenue effects of the child care tax credit.<sup>2</sup> Assume that

(1) W = aPb

where,

W = the percent of mothers who are working;

a = a constant term;

P = the expenditure for child care; and

 $\mathbf{b}$  = the elasticity of work with respect to  $\mathbf{P}$ .

With a child care tax credit,

 $(2) P = \overline{P}(1-r)$ 

where,

 $\bar{\mathbf{P}}$  = the market price of child care; and

 $\mathbf{r}$  = the percent of tax credit

From Blau and Robins, we know that the elasticity, **b**, is -0.38. Under current law, the tax credit, **r**, is equal to 30 percent of allowable expenses for families with an annual income up to \$10,000. Beyond that, the tax credit drops by one percentage point for each additional \$2,000 of taxable income, reaching 20 percent for a family with an income of \$28,000 or higher. Thus, (1-r) is equal to 0.7 for a family with an income of \$10,000 and 0.8 for a family with an income of \$28,000.

<sup>&</sup>lt;sup>1</sup>Blau and Robins, "Child Care Costs and Family Labor Supply."

<sup>&</sup>lt;sup>2</sup>For a similar method of estimation, with similar results, see David R. Henderson, "The Supply-Side Tax Revenue Effects of the Child Care Tax Credit," *Journal of Policy Analysis and Management*, 1989, forthcoming.

Currently, the average weekly price of child care in a day-care facility is \$66. There is considerable variation among cities around the country, however, with the average weekly price ranging from \$104 in New York City to \$39 in Ogden, Utah.<sup>3</sup> In addition, families may also purchase child care by hiring a sitter to come to their own home or by placing their children in day-care in someone else's home. These options cause even greater variation in price. A survey by Louis Harris and Associates found that, on the average, families spend \$2,280 per year per child for child care -- or \$43.85 per week based on a 50-week workyear. This number varied considerably with family income, family structure, location and other factors.<sup>4</sup>

In 1986, the latest year for which statistics are available, about 62 percent of women with children under age 18 were employed. The 62 percent figure is a national average, with the percent being lower for women with younger children and higher for women with older children. This number also undoubtedly varies with other differences among families.

Any global estimate of the effects of the child care tax credit on the decision of women to enter the labor market must ignore the many important differences among women and among families. In Table A-1, however, we present the results of sensitivity analysis -- using different values for  $\overline{P}$  and W. Note that under a broad range of assumptions, the effect of the child care tax credit on the labor market participation of mothers is quite high.

<sup>&</sup>lt;sup>3</sup>U.S. News and World Report, June 5, 1989, p. 69.

<sup>&</sup>lt;sup>4</sup>The Philip Morris Companies, Inc. Family Survey II: Child Care (New York: Philip Morris Companies, Inc., 1989), p. 15.

TABLE A-I

# PERCENT OF WOMEN WHO WORK BECAUSE OF THE CHILD CARE TAX CREDIT<sup>1</sup>

(Sensitivity Analysis)

Tax <u>Credit</u>	$\overline{P}$ =\$66 $\underline{W}$ =.62	$\overline{P}$ =\$66 $\underline{W}$ =.50	$\overline{P}$ =\$66 $\underline{W}$ =.70	$\overline{P}$ =\$44 $\underline{W}$ =.62	$\overline{P}$ =\$44 $\underline{W}$ =.50	$\overline{P}$ =\$44 $\underline{W}$ =.70
30%	8.8%	6.3%	8.9%	8.8%	6.3%	8.9%
28%	7.3%	5.9%	8.2%	7.3%	5.9%	8.2%
26%	6.7%	5.4%	7.6%	6.7%	5.4%	7.6%
24%	6.1%	5.0%	6.9%	6.1%	5.0%	6.9%
22%	5.6%	4.5%	6.3%	5.6%	4.5%	6.3%
20%	5.0%	4.1%	5.7%	5.0%	4.1%	5.7%

<sup>&</sup>lt;sup>1</sup>Entries are expressed as a percent of all women with children.

Because the federal government has created the dependent child care credit, it loses revenue. On the other hand, because the credit induces women at the margin to enter the labor market and earn taxable income, governments at all levels gain additional income. We can express these revenue losses and gains as follows.

- (3) Static Revenue Loss =  $W \times N \times \overline{P} \times r$ From the Tax Credit
- (4) Dynamic Revenue Gain =  $\Delta W \times N \times Y \times MTR$ From the Tax Credit

where N is the number of women with children,  $\Delta W$  is the change in the percent of women with children who work because of the tax credit, Y is the average weekly wage and MTR is the marginal tax rate. Note that *all* working women who are eligible receive the tax credit, whereas there is a supply-side offset to this revenue loss only to the extent that the credit induces women who would not otherwise have done so to earn taxable income.

If we assume that national averages apply, then the work week is 33 hours and the wage is \$7.00 per hour. Thus, the average weekly wage is \$231, and the average annual wage is \$11,550 based on a 50-week workyear. In addition, 62 percent of women with children work and their average weekly child care expense is \$44.

Under these assumptions we can calculate the additional earnings (addition to GNP) due to the tax credit for different levels of gross family income -- i.e., for different values of **r**. If we further assume a payroll tax rate of 15 percent, and state and local marginal income tax rates of 4 percent and 6 percent (for federal income tax brackets of 15 and 28 percent respectively),<sup>5</sup> we can calculate the additional government revenue due to the tax credit for different levels of family income.

For low-income families who receive the full 30 percent credit, government receives about 77 cents back in new work-related taxes for each dollar of the tax credit. For families in the 28 percent federal income tax bracket, government receives \$1.04 in new revenue for each dollar of tax credit. For families in the 33 percent bracket, government receives \$1.14 in new taxes for each

<sup>&</sup>lt;sup>5</sup>Although a working wife is assumed to earn a low income, her marginal tax bracket may be high because of her husband's income.

dollar of tax credit. In a similar way, we can calculate a supply-side return for different tax credits, such as those depicted in the first column of Table A-II.

TABLE A-II

## ADDITIONAL GOVERNMENT REVENUE PER DOLLAR OF TAX CREDIT

(Sensitivity Analysis)

Tax	<b>P</b> =\$44	<b>P</b> =\$66	<b>P</b> =\$66	<b>P</b> =\$44	<b>P</b> =\$44	$\bar{P}$ =\$33
<u>Credit</u>	Y = \$231	Y = \$231	Y = \$347	Y = \$347	Y = \$116	Y = \$116
30%	\$ .77	\$ .51	\$ .77	\$1.15	\$ .38	\$ .51
28%	.75	.50	.75	1.13	.38	.50
26%	.74	.49	.74	1.10	.37	.49
24%	.74	.49	.74	1.10	.37	.49
22%	.74	.49	.74	1.10	.37	.49
20%	1.04	.69	1.04	1.55	.52	.69

Table A-II also presents results for other values of the weekly wage and day-care cost. These other values may be important because national averages may obscure important differences among the groups entitled to different percentage tax credits. Thus the table contains an average weekly wage equal to one-half the national average, and one that is 50 percent greater than the national average. Similarly, the table contains the average weekly price of child care in a day-care center (\$66) and child care costs of one-half that amount (\$33). For the parameters selected, the return to government ranges from a low of 37 cents for each dollar of tax credit to a high of \$1.55.

We can place limits on these values, however, by making some reasonable assumptions. Assume that women in families in the 28 percent income tax bracket either match the national average or pay higher-than-average child care costs. If they earn above the national average, they

definitely pay higher-than-average child care costs.<sup>6</sup> Assume the reverse is true for families in the 15 percent income tax bracket. Women in these families either match the national average or pay lower-than-average child care costs. If they earn lower-than-average wages, they definitely pay lower-than-average child care costs. These assumptions allow us to place a lower and an upper bound on the range of values for families in different income groups as depicted in Table A-III.

Note that in the last column of Table A-III, the high estimate for the return to government on each dollar of tax credit obtained by assuming that all women match the national average in terms of wages and child care costs. The low estimate is obtained by assuming that women in the 28 percent income tax bracket pay higher-than-average child care costs, while women in the 15 percent bracket pay below-average costs.

TABLE A-III

TAX CREDIT BY FAMILY INCOME

Family <u>Income</u>	Average <u>Tax Credit</u>	Marginal Tax Rate	Additional Taxes Paid Per Dollar <u>of Credit</u>
0 - \$12,000	30 %	34%	.5177
\$12,000 - \$20,700	26%	34%	.4974
\$20,700 - \$32,050	22%	34%	.4974
\$32,050 +	20%	49%	.69 - 1.04

For reasons discussed in the text, not all working mothers take advantage of the child care tax credit. Table A-IV, for example, presents the Urban Institute's estimate on the distribution of tax credits under the current system. Although the 30 percent of families with incomes of \$12,000 or less receive the most generous tax credit, they claim only 3.3 percent of total tax credit dollars.

<sup>&</sup>lt;sup>6</sup>For supporting evidence, see *The Philip Morris Companies, Inc. Family Survey II: Child Care*, pp. 14-15.

#### TABLE A-IV

## DISTRIBUTION OF THE CURRENT TAX CREDIT

Family Income	Percent of Total Credit Dollars
0 - \$12,000	3.3%
\$12,000 - \$20,700	20.3%
\$20,700 - \$32,050	27.1%
\$32,050 +	49.3%

Using the Urban Institute's estimate of where child care tax dollars currently go, and combining this estimate with the results presented in Table A-III, we can derive an economy-wide approximation of the effects of the credit. For example, based on the distribution of credit dollars shown in Table A-IV, the weighted average revenue return to government for each dollar of tax credit is between 59 and 89 cents. Thus with \$4 billion of tax credits, government revenues increase by between \$2.36 and \$3.54 billion. Given a weighted average marginal tax rate of 42 percent, this implies a net addition to GNP of \$5.6 to \$8.4 billion. Given an average annual wage of \$11,550, this implies that the tax credit has led to between 485 and 730 thousand new jobs. These results are depicted in Table A-V.

It is important to note that the upper bound of these estimates is more consistent with the results of Table A-I. If 730 thousand women are induced to enter the labor market because of the child care tax credit, this represents a little more than 8 percent of the families who claim the credit. This is within the range that the results of Table A-I would lead us to expect.

#### TABLE A-V

# AN APPROXIMATION OF THE EFFECTS OF THE CHILD CARE TAX CREDIT ON THE ECONOMY

Total Tax Credit Dollars: \$4 billion

Increase in GNP: \$5.6 - \$8.4 billion

Increase in Government Revenues: \$2.4 - \$3.5 billion

Increase in Jobs: 485 - 730 thousand

#### Estimates Using a Different Approach

The above results are based on Blau and Robins' estimate of the elasticity of married women's employment with respect to the cost of child care. Our confidence in these results would be increased if they were confirmed by other methods.

Fortunately, another straightforward method of computing the child care tax credit's effect on tax revenues is available. Instead of using the elasticity of women's employment with respect to the cost of child care, one can use the elasticity of women's employment with respect to the wage.<sup>7</sup> With this approach, the child care tax credit is treated as an increase in the net wage.

The method of computing the effect of the tax credit on work and therefore on tax revenues is as follows. The working woman's annual gross pay is \$11,550.8 Her marginal and average federal income tax rate is about 0.15, the marginal and average Social Security tax rate is 0.075,9 and the marginal and average state income tax rate is about 0.04, for a total marginal and average tax rate on labor income of 0.265. Therefore the net pay is (1 - 0.265) x \$11,550, or \$8,489.

<sup>&</sup>lt;sup>7</sup>Estimates of the elasticity of working with respect to the wage range from 0.4 to 1.5. See James P. Smith, ed., *Female Labor Supply: Theory and Estimation* (Princeton: Princeton University Press, 1980)

<sup>&</sup>lt;sup>8</sup>Calculated as follows: \$7.00 per hour x 33 hours per week x 50 weeks per year.

<sup>&</sup>lt;sup>9</sup>This is the employee's share of the Social Security tax.

But, assuming the woman pays for child care for only one child, the tax credit reduces the cost of day-care by 30% of \$2400, or by \$720. Thus the additional after-tax income from the woman's choice to work is \$8,489 + \$720, or \$9,209. Removing the tax credit would reduce the after-tax income by 7.8 percent. If the relevant labor supply elasticity is 1.0, removing the tax credit would cause a 7.8 percent decrease in the number of women working. Thus the number of women working would fall to 54.2 percent.

In general, the revenue gains and losses from the tax credit are as follows:

- (5) Static Revenue Loss = W x N x \$2,400 x r From the Tax Credit
- (6) Dynamic Revenue Gain =  $\Delta W \times N \times \$11,550 \times MTR$ From the Tax Credit

Using equations (5) and (6) we can compute the percent of the revenue loss from the child care tax credit recaptured by taxes on increased earnings -- for different elasticity estimates for both low-income and middle-income working mothers. These estimates are reproduced in Table A-VI.

TABLE A-VI
GOVERNMENT REVENUE GAIN PER DOLLAR OF TAX CREDIT

<b>Elasticity</b>	Low-Income	Middle-Income
0.4	26 %	38 %
1.0	44 %	76 %
1.5	62 %	114 %

For an elasticity of 1.0, the estimates of the percent of the tax credit that is recaptured is close to the lower-bound estimate done with the first method. For an elasticity of 1.5, the estimates are close to the upper bound estimated by the previous method. The estimates in Table A-VI are more consistent with the previous findings for middle-income women, than for low-

income women, however. At least for middle-income women, the range of estimates made with the first method fall well within the range of estimates in Table A-VI.

For low-income families, government gets 26 to 62 cents in additional tax revenue for every \$1 the federal government loses through the child care tax credit for working parents. For middle-income families, governments get 38 to 114 cents per dollar lost. In short, at least one quarter and possibly all of the revenue "loss" typically estimated from the child tax-care credit is a phantom loss. It is gained back because more mothers are motivated to work.

#### ABOUT THE AUTHOR

David R. Henderson is an Associate Professor of Economics at the Naval Postgrad School in Monterey, California, and Senior Fellow of the National Center for Policy Analysis. was formerly a Senior Economist with President Reagan's Council of Economic Advisers.	uate He