

Effects of Child Care Costs and Child Care Subsidies on Single Mothers' Employment

NAWRS, August 2014

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Purpose of the Study

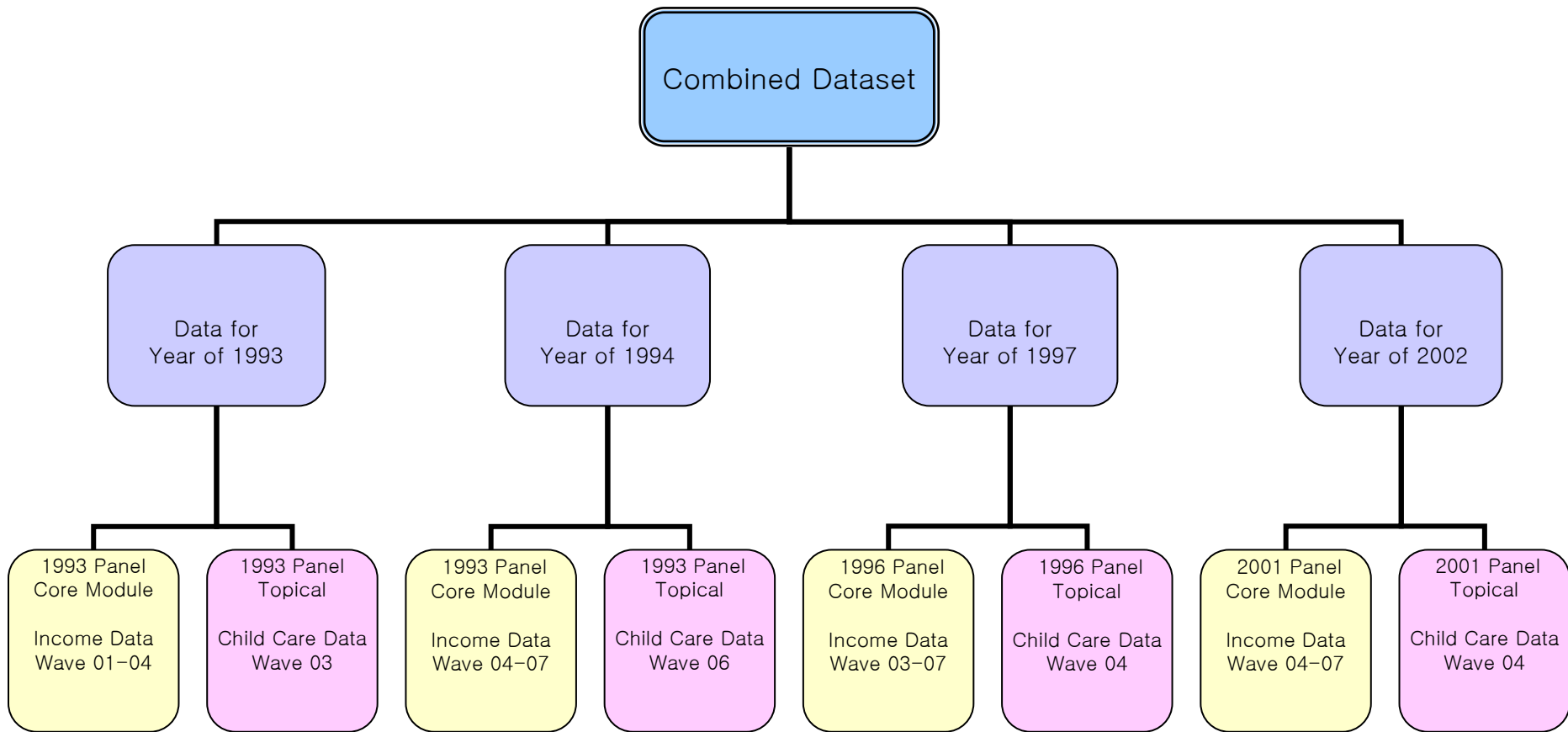
- The welfare reform replaced AFDC with TANF, which required welfare recipients to participate in work activities.
- The welfare reform expanded and consolidated federal spending on child care into one Child Care Development Fund (CCDF).
- Although many studies have explored single mothers' income or employment, few studies have examined child care costs resulting from the TANF work requirements.
- This study will examine
 - 1) effects of welfare policy on the probability of utilizing paid child care among low-income single mothers
 - 2) effects of child care subsidy receipt on child care costs
 - 3) effects of child care subsidy receipt on low-income single mothers' employment

Research Design

- Child Care Costs
 - Payments for Formal Daycare
 - Payments for Family, Relative Care
 - Payments for Non-relative Care
- Child Care Subsidy
 - employer, government, or others
- Sample
 - A single mother of children under the age of 18.
 - A family is defined as “low-income” if average family income falls below 200 percent of the official poverty level.

Data

- Survey of Income and Program Participation (SIPP) 1993, 1996, and 2001 panel data conducted by the Census Bureau
- Core and Topical modules of SIPP were used: income, demographic, and employment variables are from Core modules, variables of child care arrangements and child care costs are from Topical modules.
- Because of the limited availability of information on child care, the analysis was limited to four years, 1993, 1994, 1997, 2002.
- Two cohorts;
 - 1) 1993 and 1994, pre-welfare reform period
 - 2) 1997 and 2002, after welfare reform



Sample Description

Variables	1997 (n = 922)		χ^2	2002 (n = 755)		χ^2
	Subsidy Receipt (no)	Subsidy Receipt (yes)		Subsidy Receipt (no)	Subsidy Receipt (yes)	
	n = 804 %	n = 118 %		n = 642 %	n = 113 %	
Employment status			1.62			0.89
Working	72.4	78.0		70.9	75.2	
Not working	27.6	22.0		29.1	24.8	
Amount of child care costs			38.38**			51.95**
0	64.9	39.8		71.8	41.6	
1--5000	29.1	47.5		24.6	46.0	
5000-10000	4.7	5.9		2.7	10.6	
10000-15000	1.0	5.9		0.8	0.0	
>15000	0.3	0.9		0.2	1.8	
Number of weeks at the job			4.01			3.69
0 weeks	14.8	9.3		14.8	9.3	
1-26 weeks	13.4	15.3		15.0	11.5	
27-49 weeks	16.2	21.2		16.8	19.5	
50-52 weeks	55.6	54.2		55.3	61.1	
Age			14.65**			17.27**
Less 20	1.9	4.2		0.9	3.5	
20-30	34.8	49.2		32.1	46.0	
30-40	41.7	33.9		43.5	38.9	
40-50	20.3	11.0		21.2	10.6	
>50	1.4	1.7		2.3	0.9	
Education			5.11			3.09
Less than high school	23.9	14.8		23.2	15.9	
High school	37.4	39.1		35.5	37.2	
Some college	38.7	46.1		41.3	46.9	
Race			3.78			1.00
White	58.7	63.6		59.2	54.9	
Black	37.1	35.6		36.5	39.8	
Hispanic	2.2	0.9		3.3	3.5	
Other	2.0	0.0		1.1	1.8	
Number of children in the family			4.50			7.47
1	36.1	36.4		35.8	30.1	
2	37.1	31.4		37.1	32.7	
3	18.8	26.3		18.9	30.1	
>4	8.1	5.9		8.3	7.1	
Only mother and children in the family			1.25			1.78
Yes	81.3	85.6		80.5	85.8	
No	18.7	14.4		19.5	14.2	

Sample

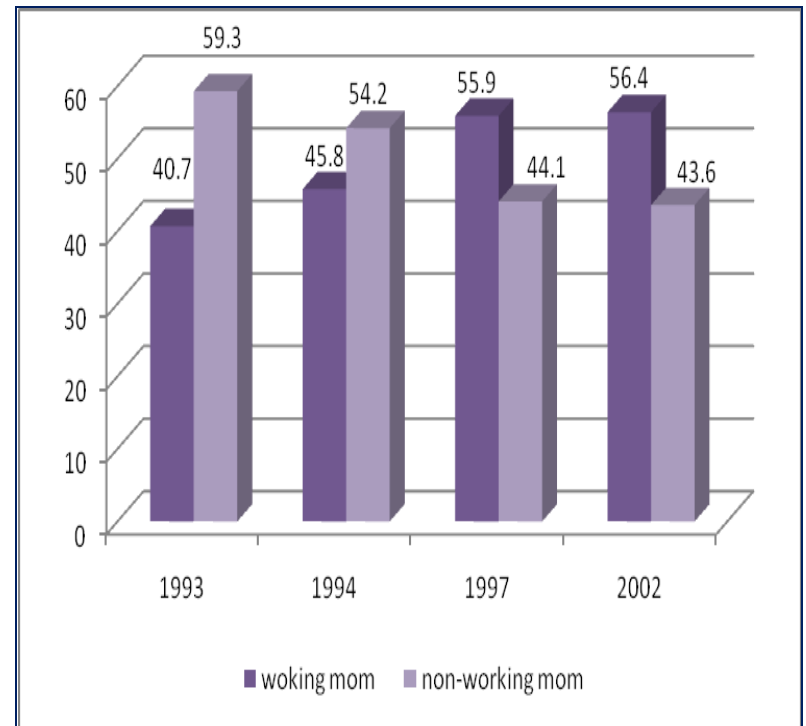
- Compared to low-income single mothers who did not receive subsidies, mothers with subsidies had a slightly higher employment rate, higher child care costs, and a higher number of weeks at their jobs.
- The Chi-square test shows that more than 60% of mothers with subsidies paid for child care compared with about 35% of mothers without subsidies, this difference was statistically significant.
- Mothers with subsidies tended to be younger, mostly in their twenties, whereas mothers without subsidy were in their thirties. This difference was statistically significant.

Employment

Single Mothers

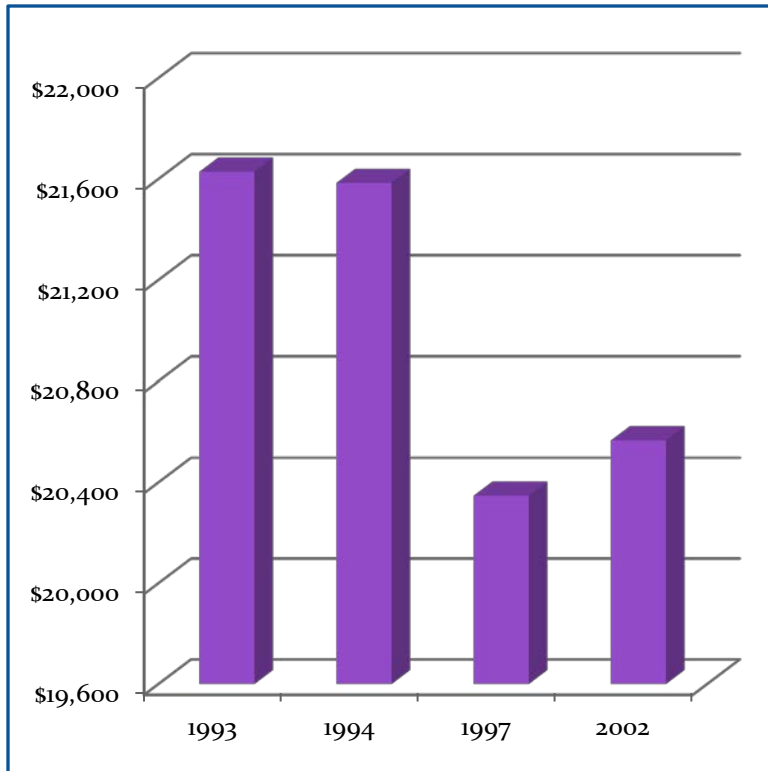


Low-Income Single Mothers

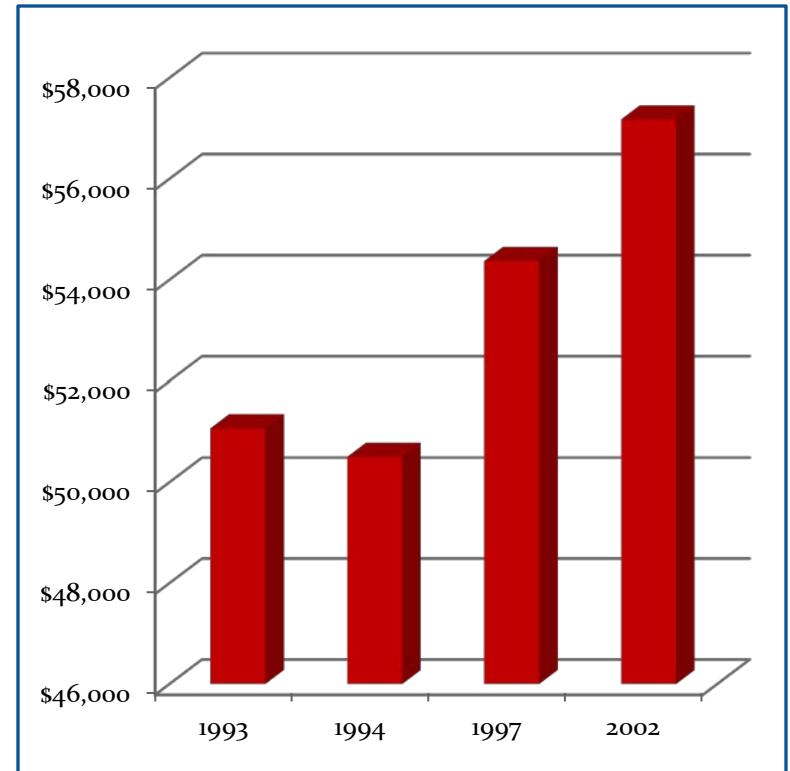


Net Disposable Income Changes

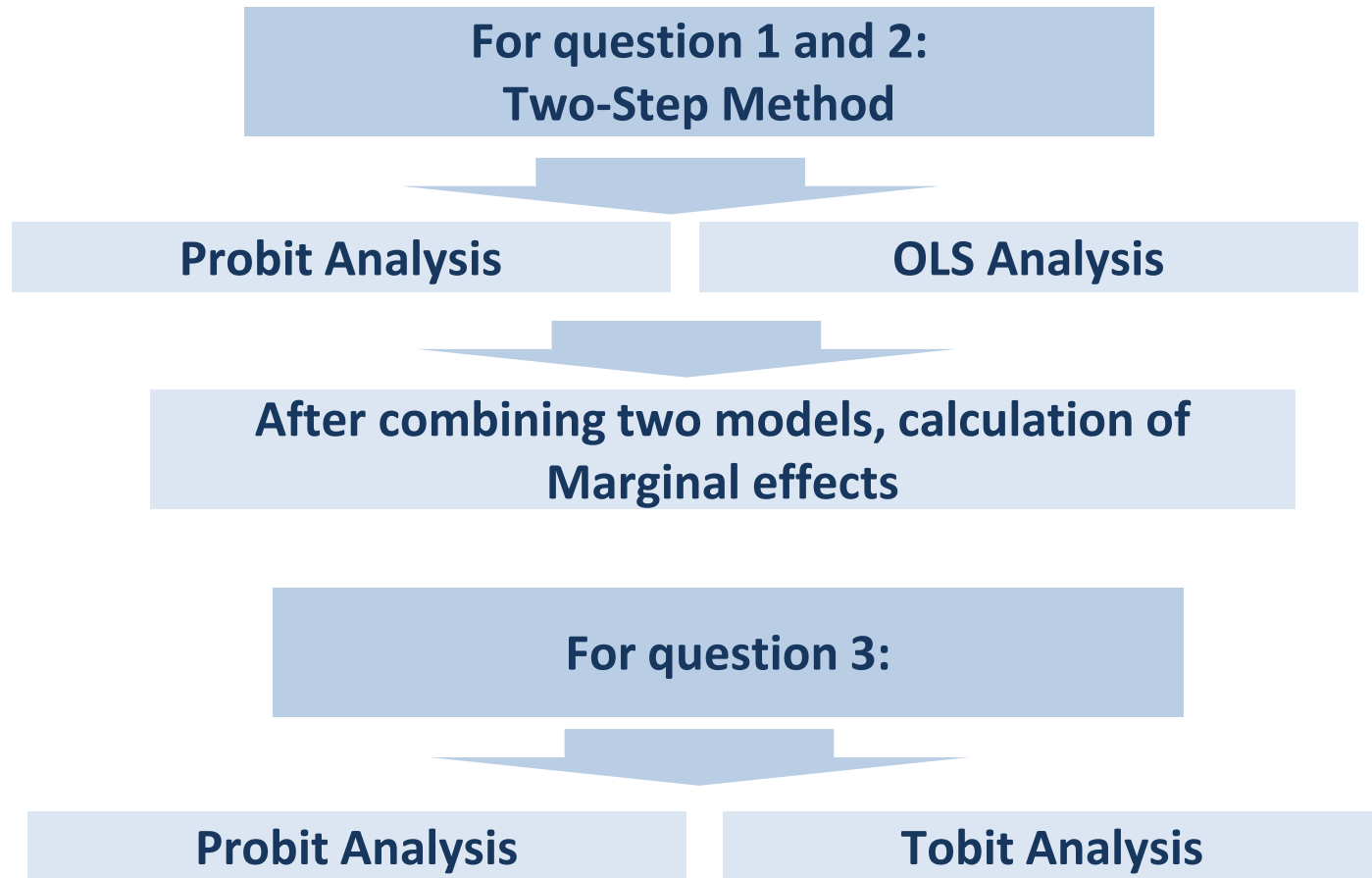
**Low-Income Single Mothers'
Net Disposable Income**



**High-Income Single Mothers'
Net Disposable Income**



Analysis Model



Research Question 1: Impacts of welfare policy on child care

Variables	Model 1 (Two-Step Model)		Model 2 (Two-Step Model)	
	Probit model of child care use (use=1)	OLS model of log(child care costs use=1)	Probit model of child care use (use=1)	OLS model of log(child care costs use=1)
After welfare reform	0.313***	-0.140	0.301***	-0.205
AFDC or TANF receipt	-0.502***	-1.539***	-0.184**	-0.686***
Age	0.171***	0.182**	0.131***	0.066
Age ²	-0.003***	-0.003***	-0.002***	-0.001
Black	0.293*	0.090	0.277	-0.007
White	0.351**	0.034	0.326*	-0.056
Hispanic	0.273*	0.307	0.244	0.163
New England	-0.119	-0.640*	-0.093	-0.632*
Mid-Atlantic	-0.166*	-0.599**	-0.123	-0.426*
East North Central	-0.120	-0.149	-0.124	-0.254
West North Central	0.164	-0.446*	0.174	-0.252
South Atlantic	-0.272***	-0.243	-0.257**	-0.076
East South Central	-0.357***	-0.489	-0.333**	-0.26
West South Central	-0.234**	-0.227	-0.226**	-0.147
Mountain	0.061	0.035	0.055	-0.009
Only mother and children family	0.509***	0.228	0.487***	0.103
Employment			0.631***	1.890***
Constant	-4.151***	4.814***	-3.897***	5.304***

Note: Models control for women's unemployment rates.

* $p < 0.05$, ** $p < 0.01$, *** $p < .001$

Research Question 1:

Have child care costs changed after welfare reform?

- Results show that welfare reform was associated with a significant increase in the utilization of paid child care among low-income single mothers.
- When controlling for employment status, the marginal effects indicate that child care costs increased by 46% after the reform.
- White, family consisting of just the mother and children, and being employed were associated with a higher utilization of child care.

Research Question 2: Impacts of child care subsidy on utilization of paid child care

Variables	Model 1 (Two-Step Model)		Model 2 (Two-Step Model)	
	Probit model of child care use (use=1)	OLS model of log(child care costs use=1)	Probit model of child care use(use=1)	OLS model of log(child care costs use=1)
Subsidy receipt	0.667***	0.248	0.649***	0.180
Year 2002	-0.165*	-0.051	-0.154*	0.013
Age	-0.014	0.186*	-0.034	0.075
Age ²	0.000	-0.003**	0.000	-0.002
Education	0.120**	0.140	0.098*	0.084
Number of children	0.019	-0.072	0.036	-0.007
Only mother and children in the family	0.416***	-0.053	0.405***	-0.075
New England	-0.098	-0.476	-0.115	-0.509
Mid-Atlantic	-0.183	-0.273	-0.170	-0.043
East North Central	-0.170	-0.076	-0.202	-0.204
West North Central	0.180	-0.249	0.133	-0.269
South Atlantic	-0.201	0.052	-0.242*	0.056
East South Central	-0.290*	-0.258	-0.340*	-0.217
West South Central	-0.122	-0.073	-0.161	-0.014
Mountain	-0.157	0.183	-0.194	0.097
Employment			0.430***	2.057***
Constant	-0.665	4.547***	-0.561	4.710***

Note: Models control for women's unemployment rates.

* $p < 0.05$, ** $p < 0.01$, *** $p < .001$

Research Question 2:

Does child care subsidy receipt encourage low-income single mothers to send on child care?

- Results show that low-income single mothers who received subsidies had a substantially higher probability of using paid child care by about 25%.
- Marginal effect of subsidies indicates that after controlling for employment status, low-income single mothers who received subsidies paid 3.7 times more for child care than those who did not receive subsidies.

Research Question 3: Impacts of child care subsidy on employment and working hours

Variable	Probit Model of Employment			Tobit Model of Number of Weeks in Jobs	
	Model 1	Model 2	Model 3	Model 1	Model 2
Subsidy receipt	0.155	0.232*	0.221*	1.135*	0.352
Year 2002	-0.051	-0.068	-0.094	0.088	0.402
Age		0.141***	0.139***	0.845***	0.348**
Age ²		-0.002***	-0.002***	-0.010***	-0.004*
Education			0.185***	0.936***	0.259
Number of children in the family			-0.116***	-0.592***	-0.166
Only mother and children in the family			0.102	0.908*	0.535
New England			0.121	0.000	-0.411
Mid-Atlantic			-0.062	-0.192	0.030
East North Central			0.199	0.494	-0.196
West North Central			0.396*	1.941*	0.522
South Atlantic			0.335**	2.080***	0.841*
East South Central			0.405**	2.327**	0.866
West South Central			0.324*	2.268***	1.044**
Mountain			0.227	0.280	-0.476
Employment					7.677***
Constant	0.597***	-1.977***	-2.388***	-12.494***	-7.800***

Note: Models control for women's unemployment rates.

* $p < 0.05$, ** $p < 0.01$, *** $p < .001$

Research Question 3:

Does child care subsidy have effects on employment status and longer duration of employment?

- Subsidy receipt had statistically significant effects on employment status ($\beta = 0.221$, $p < .05$). The marginal effect of subsidy receipt was calculated, and the results indicate that subsidy receipt was associated with a 6.7% higher probability of being employed among low-income single mothers.
- Issue of potential endogeneity between employment and subsidy receipt
- Mothers who are younger, with higher education, less number of children, are more likely to be employed.
- Subsidy receipt, education, age, number of children, and no other adults in the family are significantly associated with longer employment.

Conclusions

- More low-income single mothers paid for child care after welfare reform, and the amount of child care costs on average also increase by 46% after the reform.
- Families consisting of only a mother and children had a higher probability of using paid child care and spent more on child care than those with other adults in the family.
- Child care subsidy had statistically significant effects on employment, higher probability of being employed.

Policy Implications

- The high burden of child-care costs can prevent some women from seeking employment and cause others to leave their jobs prematurely. Access to affordable child care is a critical condition for employment for many single mothers.
- Childcare subsidy benefiting single mothers with low earnings will have a large impact on an increase in their economic well-being.
- High-quality child care is also essential because it can support children's healthy development and can provide low-income children with the extra boost they need to enter school ready to succeed.
- Single mothers with no other family members or adults in the house should be a primary target group for child-care subsidies.

Thank you!
Comments and questions?