

How Much is Enough: Feasibility of Welfare to Work for Single Mothers

Consumer Expenditure Survey data for 1995-96 were used to compare expenditure levels and characteristics of single mothers receiving welfare to those who do not and to develop regression based estimates of basic expenditures. Welfare recipients were generally younger, had more children, less education; were more likely to be nonwhite and rent, less likely to receive alimony or child support. Estimates of basic expenditures indicate full-time employment at the minimum wage is insufficient to cover basic expenses.

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Introduction

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), signed by President Clinton in August, 1996 replaced the existing federal welfare system with block grants to the states and altered welfare eligibility. A significant feature of the new law that "ended welfare as we know it" is the five year lifetime limit on receiving welfare and the requirement that recipients begin working within two years after receiving benefits (Greenberg and Savner, 1996).

Single mothers are disproportionately represented among the poor, and hence among welfare recipients. Ruggles (1992) found that whether one measured poverty using the official thresholds, 50% of median income, a measure based on housing consumption or a measure based on an updated food multiplier, female headed households represented the highest percent of the poor in 1988 compared to other family types. Conditions had not changed by 1997; poverty was still higher for female headed households, as was their participation in public assistance programs. Currently, more than one-half of all single mothers and their children fall below the official poverty threshold (Dalaker and Naifeh, 1998; US Bureau of the Census, 1998). Triest (1994) found poverty rates for female headed households with preschool aged children were almost six times higher than the rates of other family types. Half of all mothers raising children alone rely on welfare to meet their basic expenses (Edin and Lein, 1997). To realize the goal of welfare to work for single mothers, former welfare recipients must earn enough to cover basic expenses. The purpose of this paper is: (1) to compare the expenditure levels and characteristics of single mothers who receive welfare to those who do not receive welfare and (2) to develop regression based estimates of basic expenditures of single mothers.

Review of Literature

Certainly, food, clothing, shelter are basic expenditures. As a support program for the poor, welfare has focused on such basics in the form of food stamps and housing subsidies. The official poverty threshold, a measure often used to indicate whether or not a person qualified for welfare receipt, is based on the cost of a minimal diet (Fisher, 1992). Recent critics of the official poverty measure argue that expenditures on items such as clothing, shelter, utilities, household supplies, personal care, and transportation should be used along with food expenditure as measures of basic expenditures when evaluating poverty status (Citro and Michael, 1995).

A "living wage" is the amount of earnings necessary for an individual or family to meet basic expenditures. Items such as food, clothing, housing and utilities, childcare, transportation, basic household and personal care are typically included in calculations of a living wage. Costs for such things as entertainment, gifts, toys, tobacco or alcohol are generally excluded (Carlson and Theodore, 1995; Steuernagle, 1995; Zimmerman and Garkovich, 1998). Early in this century, the living wage concept was used to argue for establishment of a minimum wage (Zimmerman and Garkovich, 1998). In the 1960s, working full time for minimum wage resulted in earnings just above the poverty line; that is no longer true (Whitener and Parker, 1997). Today, full time employment (2000 hours) at the minimum wage of \$5.15 per hour would generate an annual before tax income of \$10,300. That amount is about \$300 below the poverty level for a family of two and over \$5000 below the poverty level for a family of four (Whitener and Parker, 1997; Zimmerman and Garkovich, 1998). Consequently, the living wage concept is central to debate about the ability of current welfare recipients to fully fund basic expenditures from labor income.

Expenditure patterns of female headed households have been studied. Using 1972-73 Consumer Expenditure (CES) data, Epstein (1979) found one-parent households spent fewer dollars but a higher proportion of income on food and housing compared to two parent households, despite the fact two parent households were larger and more two-parent households were homeowners. One-parent households spent fewer dollars and a smaller portion of the budget on transportation compared to two parent households. Using the same data, Horton and Hafstrom (1985) found expenditures for total food and food at home were higher for older female headed households. Shelter expenses were lower for those under ages 45-54, but higher for those who were older. Education of the female head was positively associated with spending on clothing, shelter, and household expenses. Black female household heads spent less on shelter, more on food at home and clothing compared to nonblack female household heads. City dwellers spent less on household expenses; rural residents spent less on shelter than small town residents did. Compared to residents of the North Central region, female headed households in the South spent less on shelter while North East residents spent more on total food and food at home.

Using the 1984-85 CES, Lino (1990) found a positive income elasticity for food, clothing, housing, and transportation. Larger households spent more for food and transportation. Female headed households spent significantly more on clothing compared to male-headed households. Household heads aged 30 to 40 spent significantly more for food and transportation compared to younger household heads. Nonwhite household heads spent significantly more than white household heads on food, housing, and transportation. Education and housing expenditures were significantly and positively related.

Passero (1996) used the 1992-94 CES to examine differences between families that did and did not receive welfare benefits (food stamps, government income and housing support, Medicaid, and Supplemental Security Income). Welfare recipients were younger and larger than nonrecipient families and had fewer earners. Recipient families were more likely to be single parent families and renters versus homeowners. Expenditure levels for recipient families were about half that of nonrecipient families. A larger share of the budget was applied to necessities among recipient families.

Zimmerman and Garkovich (1998) estimated the amount of income a single mother with two children would need to cover basic expenses in rural Kentucky. The cost for housing, utilities, child care, gasoline, and car insurance were based on sample data from seven rural Kentucky counties. Estimates for car care expenses, food, health care, and clothing were based on data from the 1994-95 CES for minimum wage income earners residing in the Southern region. They concluded earnings of nearly \$20,000 per year or \$9.85 per hour net of taxes were needed to meet basic expenses, considerably more than the current minimum wage of \$5.15 per hour before tax.

This study expands on previous research in these ways: (1) the broad definition of basic expenditure is based on critique of the official poverty measure (Citro and Michael, 1995; Zimmerman and Garkovich, 1998); (2) expenditures occur prior to PRWORA so cannot be influenced by that act (3) 1995 data reflect spending pattern changes that may have occurred since previous studies were conducted; (4) although similar in concept to Zimmerman and Garkovich (1998), this study focuses on expenditures of a national sample of urban and rural residents; and (5) influence of various socio-economic and demographic characteristics on expenditures are examined and expenditure levels for single female headed households with various characteristics are estimated.

Method

Data

The interview portion 1995-96 Consumer Expenditure Survey was used. Each interview was treated as a separate observation. Approximately 5,000 consumer units are surveyed each quarter in a rotating panel design. Consumer units contribute five consecutive quarters of data; new participants replace about 20% of the sample each quarter (U.S. Department of Labor, 1995).

Sample

Selection rules used in this study were being a complete income reporter and being a single female household head with at least one child under age 18. Sample size was 995.

Empirical Model

The empirical model used in this study is based on neo-classical economic theory. Single female-headed households are assumed to allocate scarce resources among available goods and services so as to maximize utility. Expenditures are assumed to depend on income as well as tastes and preferences. Prices were considered to be

constant across all families. The empirical model may be written as:

$$Y = b_0 + \sum b_i x_i + e \quad (1)$$

where Y is the dollar amount of annual expenditures for a given expenditure category; b_0 is a constant term; b_i is a vector of regression coefficients; x_i is a vector of socio-economic and demographic variables; and e is a random error term.

Dependent Variables

The dependent variables were dollar expenditures on food, apparel, housing, utilities, health, transportation, childcare, and other expenses (personal care, entertainment, reading, education, tobacco and smoking, cash contributions, personal insurance and pensions, and miscellaneous) as reported in the summary expenditure categories in the CES (US Department of Labor, 1995). Although treated as a separate category in other studies, in this study, personal care was grouped with other expenditures because annual dollar outlay was relatively small.

Independent Variables

Age of the female household head was measured in years. Age was expected to be positively associated with food expenditures (Horton and Hafstrom, 1985; Lino, 1990). Education was a categorical variable: less than high school, high school degree (reference category), some college, college degree or more. Education was expected to be positively associated with apparel and housing costs (Horton and Hafstrom, 1985; Lino, 1990). Race was coded 1 if white, 0 otherwise. Being white was expected to be associated with higher housing expenditures but lower food and apparel expenditures (Horton and Hafstrom, 1985).

Number of children was a continuous variable. Larger household size was expected to be positively associated with food and transportation expenditures (Lino, 1990).

Family before tax income was measured in dollars. The log of family income before tax was used in the regression analyses to account for nonlinearity. Dummy variables indicated various forms of income receipt. Nonwage income was coded 1 if child support or alimony was received, 0 otherwise. Food in-kind transfers was coded 1 if food stamp receipt was reported, 0 otherwise. Housing in-kind transfers was coded 1 if the household lived in government housing or if government paid part of the housing cost, 0 otherwise. Government money transfer was coded 1 if receipt of public assistance or welfare was reported, 0 otherwise.

Homeownership controlled for differential housing expenses due to maintenance of own home versus a rental property and proxied (albeit crudely) household wealth. Homeowners were expected to spend more on housing and utilities than renters.

Region controlled for regional differences in cost of living. Since the CES only indicates the region of urban residents, region was coded as a set of four categorical variables, coded 1 if an urban resident of a specific region, 0 otherwise. Rural residence was the omitted category.

Findings

Table 1 presents sample characteristics. A t test of mean differences between those who received some form of welfare (government income support or in-kind transfers of food or housing) and those who did not was completed. Not surprisingly, average levels of before tax income and average level of expenditures for all expenditure categories were significantly lower for those who received welfare compared to those who did not. Compared to nonwelfare recipients, welfare recipients were generally younger, had more children, less education, and were more likely to be nonwhite and a renter, less likely to receive alimony or child support.

Table 2 reports regression results for the eight expenditure categories. Results were consistent with previous research (Horton and Hafstrom, 1985; Lino, 1990; Passero, 1996). Age was significantly and positively associated with expenditures for food, utilities, health, and other; significantly and negatively associated with expenditures for apparel, housing, and child care. Heads with less than a high school education spent significantly less on housing, utilities, health, and other compared to heads with a high school degree. Heads with some college spent significantly more on housing, health, and child care, and significantly less for utilities compared to heads with a high school degree. Heads with a college degree spent significantly more on apparel, housing, child care, and other compared to heads with a high school degree. White household heads spent significantly less on apparel and more on health than nonwhite household heads did. Having more children under age 18 was positively and

significantly associated with spending on food, apparel, housing, and utilities. Family before tax income was significantly and positively associated with spending on all eight expenditure categories. Those who received in-kind food transfers spent significantly less on housing, utilities, health, child care, and other than those who did not receive such transfers. Those with in-kind housing transfers spent significantly less on housing compared to those without such transfers. Receipt of government money transfers was associated with significantly lower child care expenditures. Homeowners spent significantly more on apparel, utilities, transportation, and other compared to renters. Region of residence mattered only for housing, where all urban residents spent significantly more than rural residents; for transportation, where Southern residents spent significantly more than rural residents; and for child care, where Western residents spent significantly more than rural residents.

Table 1
 Characteristics of single parent female headed households that do and do not receive welfare

	Receive Welfare	Do Not Receive Welfare		Receive Welfare	Do Not Receive Welfare
Means:			Proportions:		
Before tax family income	\$10,697 ^a	\$23,464	Education		
Expenditures			< High school	32	11
Food	\$3,757	\$4,250	High school	43	46
Housing	\$4,171	\$7,339	Some college	23	30
Utility	\$1,594	\$2,227	College degree	2	13
Apparel	\$1,120	\$1,479	White	60	67
Child care	\$237	\$676	Receive alimony or child support	26	42
Health	\$204	\$1,123	Region		
Transportation	\$2,418	\$4,709	Northeast	21	17
Other	\$3,194	\$7,284	urban		
Age of HH head	32	38	Midwest urban	23	19
N. children < 18	2.0	1.5	South urban	23	41
			West urban	24	14
			Rural	9	9
			Home owner	13	47

^a Statistically significant differences at the .05 level are indicated in bold print

Expenditure Estimates

The regression equations were used to estimate expenditures for six case scenarios. Case 1 is a single mother aged 35 who has a high school education, is white, with two children. She has no nonwage income, government transfer income or government in-kind transfers for food or housing. The log of median income is used in the estimate. She is a renter in the urban South. Cases 2 through 6 resemble case 1 in every respect except: in case 2 race is nonwhite, in case 3 education is less than high school, in case 4 region of residence is rural, in case 5 the number of children is 3, in case 6 the log of 50% of median income is used.

For each case, estimates for the eight expenditure categories were generated. These were summed and divided by 2000 (standard full time employment hours) to estimate an after tax "living wage." Results were \$11.66, \$11.79, \$10.28, \$8.85, \$12.47, \$9.79, respectively. It could be argued that including "other", a category not used in previous research, makes these estimates high. However, if the estimates are computed for case 1 though case 6 excluding other expenditures from the calculations, the resulting estimated needed wages still remain well above the minimum wage at \$9.00, \$9.26, \$7.97, \$6.50, \$9.75, and \$7.81 respectively. Interestingly, the estimate of \$9.89 obtained by Zimmerman and Garkovich (1998) for Kentucky is not too different.

Limitations, Summary and Implications

This study has limitations: (1) the limitations that apply to any expenditure based basic need assessment, of course, apply here as well (see Ruggles, 1992), (2) use of the same empirical model across expenditure categories facilitated comparisons but, given the low adjusted R² for some regressions, perhaps other models should be considered (Abdel-Ghany and Schwenk, 1993), and (3) estimates of state level or regional rural expenditures cannot be obtained from the public use CES.

PRWORA mandates a transition from welfare to work. This mandate assumes sufficient wages can be earned by former welfare recipients to cover basic expenses. This study presents evidence that meeting such a mandate is likely to be difficult for single mothers. For the sample cases examined in this study, results indicate that

Table 2
Multiple regression analysis of select characteristics of single parent female headed households on various expenditure categories (unstandardized coefficients).

Variable	Food	Apparel	Housing	Utilities
Age HH head	28.13**	-14.43*	-39.88*	11.26*
Education HH head				
< High school	39.24	-32.64	-832.21*	-329.29***
Some college	152.44	88.35	831.29**	-194.47*
College	438.64	435.83*	6220.11***	-.84
White HH head	275.22	-500.06***	169.83	-116.20
No. Children < 18	684.32***	178.38**	468.26**	180.84***
Log of family before tax income	252.09*	583.11***	1070.95***	182.80**
Receive:				
Non wage income	-235.78	92.38	244.68	82.69
Food in kind transfers	-247.69	-289.49	-1371.15**	-231.24*
Housing in kind transfers	-108.03	-113.49	-1580.85***	-108.56
Government money transfers	4.59	281.53	-480.00	28.53
Home owner	306.83	275.32*	11.69	639.30***
Region				
Northeast urban	589.33	3.02	3279.39***	108.37
Midwest urban	134.51	146.48	2116.55***	38.66
South urban	315.36	-27.30	1833.29***	167.56
West urban	-29.67	233.35	4275.29***	-172.98
Constant	-996.75	-3933.74***	-5929.15**	-515.21
Adjusted R ²	.09	.11	.34	.21

Table 2 (continued)

Variable	Health	Transportation	Child Care	Other
Age HH head	15.12**	-17.29	-45.83***	34.40*
Education HH head				
< High school	-150.21**	-860.90	96.84	-682.67*
Some college	181.61*	554.11	426.46***	438.81
College	199.11	359.67	1491.90***	3723.27***
White HH head	247.51**	-616.75	19.45	249.71
No. Children < 18	-2.51	11.54	-29.27	136.83
Log of family before tax income	178.50**	1053.94*	120.63*	1940.29***
Receive:				
Non wage income	26.79	-200.91	75.61	220.31
Food in kind transfers	-568.99***	827.05	-273.60*	-1111.10**
Housing in kind transfers	63.73	1157.71	-1.49	155.15
Government money transfers	-129.91	-355.10	-233.00*	-325.64
Home owner	86.63	4182.59***	103.07	1682.20***
Region				
Northeast urban	79.69	676.01	23.13	603.77
Midwest urban	103.63	379.00	150.43	561.67
South urban	90.09	2575.64*	49.19	605.68
West urban	70.35	2185.44	274.22*	160.80
Constant	-1581.89**	-7830.78	762.40	-15488.70
Adjusted R ²	.20	.07	.23	.47

* p < .05, ** p < .01, *** p < .001

to cover estimated total expenditures, after tax wages would need to range between \$8.85 to \$11.79 per hour. When a more conservative estimate that excludes other expenses is used, needed wages after tax range from \$6.50 to \$9.75. The case results suggest the minimum wage is not likely to be a living wage for single mothers leaving welfare for work.

Those who currently receive welfare are generally younger, with more children, and less education than nonrecipients. Also, recipients are more likely to be nonwhite, rent rather than own a home, and less likely to receive alimony or child support. Of these characteristics, lower levels of education and larger family size present barriers to full-time participation in the labor market and to receipt of wages above minimum wage.

Ceasing government income support does not eliminate the need for education to obtain a job or for dependable, affordable child care and reliable transportation to enable single mothers to keep the job. Failure to attend to these needs means failure of the plan of welfare to work; placing greater demand on social service agencies and informal support networks provided by family, neighbors, and charitable organizations.

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Endnotes:

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