## Chapter 7

# The Employment and Earnings of Nonresident Fathers in Wisconsin

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In this chapter, we describe several aspects of the labor market performance of a sample of fathers of children whose mothers participate in Wisconsin Works (W-2). We track labor market outcomes for these fathers during calendar years 1998 and 1999, after the AFDC program was replaced by the W-2 program. Welfare reform in this period had direct and dramatic consequences for resident parents on welfare (mostly mothers). The impact on nonresident fathers was generally indirect. However, aspects of welfare reform, particularly the end to low-income mothers' entitlement to cash assistance, have encouraged renewed interest in the potential to increase the child support paid by nonresident fathers. In this chapter we consider measures of nonresident parents' labor market outcomes, which have important implications for fathers' potential to provide economic support to their children.

The Child Support Demonstration Evaluation (CSDE) provided a context for assembling a unique set of data on a sample of nonresident fathers. Our analysis draws on data from the Survey of Wisconsin Works Families and merged administrative records primarily from the CARES and Unemployment Insurance (UI) reporting system. The administrative data have the advantage of including at least some information on all legal nonresident fathers. We use these data to consider fathers' employment and earnings, as reported to the UI system. The survey covers a broader range of outcomes, including hours worked, wages, occupation, and required job skills. However, because fewer than half of all fathers responded to the survey, the information may not be fully representative, despite the use of corrective weights.

We next describe overall evidence on three labor market outcomes—hourly wage rates, hours per week worked, and total earnings—for nonresident fathers in both 1998 and 1999. We also discuss fathers' occupations and reports of job skills, and their relationship to wages. Finally, we present some descriptive multivariate analyses of the patterns of employment and earnings.

<sup>&</sup>lt;sup>1</sup>The authors thank Sangeun Lee for initial construction and analysis of data on fathers' earnings and income, and Sangeun Lee and David Reznichek for data analysis and research assistance for this report. A preliminary version of this report was presented at the CSDE National Advisory Board meeting November 2000. The authors thank participants, and especially our discussants, Glen Cain and Rob Hollister, for helpful comments.

<sup>&</sup>lt;sup>2</sup>W-2 replaced AFDC in September 1997. All existing AFDC cases transitioned to W-2, or were closed, by March 1998.

<sup>&</sup>lt;sup>3</sup>One notable exception was the change in child support pass-through policy, which meant that for most fathers in Wisconsin, any current child support paid would go directly to their children, regardless of the mothers' receipt of cash payments. We report on the impacts of this aspect of W-2 on the labor market outcomes of resident fathers in Chapter 4.5 of Volume I.

 $<sup>^4</sup>$ These data sources are described in detail in Technical Reports 2 and 3 in Volume III , as well as in Chapter 3 of Volume I.

<sup>&</sup>lt;sup>5</sup>See Technical Report 5 for detailed information on the survey, and Technical Report 6 for details on the analysis of nonresponse and the resulting weights.

## Nonresident Fathers' Labor Market Outcomes in 1998 and 1999

Our data, designed to test the effects of an experimental full-pass-through child support arrangement, allow a more general assessment of nonresident fathers labor market outcomes. Prior to W-2, poor women with children were entitled to receive cash payments to support their children, but mothers face far more stringent work requirements since its implementation. The implied "out of home" demands that this creates for mothers place increased pressure on fathers' financial and time commitments to their children. Hence, information on the distributions of fathers' earnings and work time are of particular importance in the current policy environment, because they indicate the potential number of fathers who are able to contribute child support, the extent of their potential contributions, and the time that they are occupied in the labor market.

We know relatively little about the economic performance and status of nonresident fathers of poor children. Unlike resident mothers of poor children, nonresident fathers are sometimes difficult to identify. Moreover, unlike poor resident mothers, nonresident fathers are unlikely to be targeted participants in government programs (with the exception of child support enforcement). The information we use for our analysis comes from one of the better sources of data on poor nonresident fathers, though it is quite limited in many respects. As discussed in Volume III, Technical Report 5 (and summarized in Volume I, Chapter 3.2), response rates for nonresident fathers included in the Survey of Wisconsin Works Families were high relative to other similar efforts, but quite low in absolute terms. Over the full sample, only about one-third of fathers responded. We use weights designed to adjust for nonresponse (see Volume III, Technical Report 6), but our analysis suggests that our current estimates from the survey should be interpreted with caution.

We consider three measures of nonresident fathers' labor market outcomes: earnings (from administrative data), hours worked (from the survey), and wages (from the survey). In each case, we consider all fathers—those in the experimental and control groups of the CSDE.<sup>7</sup> Figure II.7.1 shows the distribution of annual earned income in 1998 and 1999 from UI records for all of the nonresident fathers. For all fathers, including those who were not working, earnings averaged \$7,120 in 1998, and \$7,500 in 1999. Among those with any earnings recorded, the mean was about \$11,580 in 1998 and \$12,680 in 1999 (medians were \$8,350 and \$9,420). A somewhat larger proportion of the fathers have no earnings in 1999 than in 1998 (41 percent vs. 38 percent). However, a small increase is recorded in the percentage of the nonresident fathers who earned more than \$20,000 per year, from 12.6 percent to 14.1 percent.

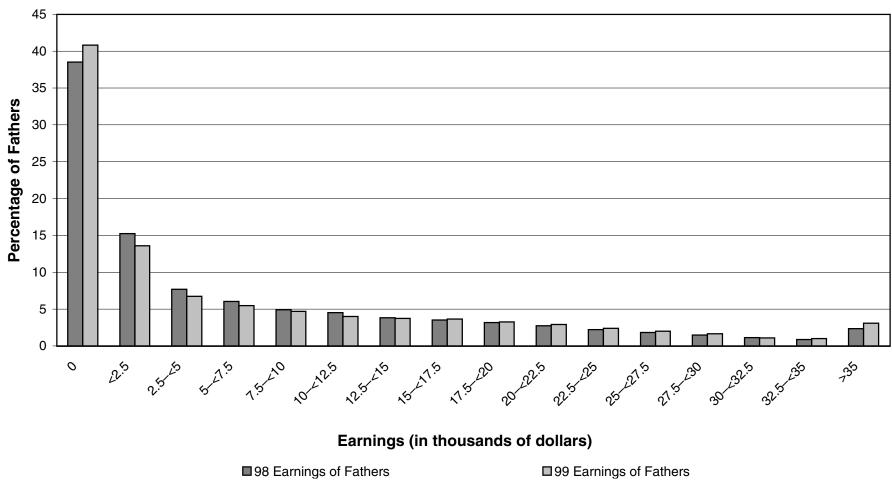
Table II.7.1 shows the cross-tabulation of 1998 and 1999 earnings for all fathers, using \$5,000 categories. Considering each row of the table, we see that for fathers initially earning between \$5,000 and \$34,000, about a third remain in the same category between the two years<sup>8</sup>. About the same

<sup>&</sup>lt;sup>6</sup>In Volume I, chapter 4, we demonstrate that the experiment failed to have a statistically significant effect on either the tie of fathers to the labor market or the intensity of their work and earnings.

<sup>&</sup>lt;sup>7</sup>We report on the impacts of this aspect of W-2 on the labor market outcomes of resident fathers in Chapter I.4.7 of Volume I. Because that analysis suggests at most modest impacts on the outcomes considered here, we include fathers in both the experimental and control groups in our analysis so as to maximize sample size.

<sup>&</sup>lt;sup>8</sup>Because a high proportion of all fathers have no earnings in either year, when we include this category in our calculation, about half of all fathers remain in the same category. When we use \$2,500 earnings categories (as in our discussion of mothers' earnings changes in Volume II, Chapter 4), we find that for those in the middle ranges, about 20 percent of fathers remain in the same category.

Figure II.7.1
Annual Earnings of Nonresident Fathers, 1998 and 1999



**Source:** Administrative Unemployment Insurance (UI) records; nonresident father sample.

**Sample Notes:** Total sample was 14,343 cases. Cases were missing due to no Social Security number (354) or no match with UI records (316). Total research population was 13,673.

Table II.7.1 Cross-Tabulation of Earnings of Nonresident Fathers in 1998 and 1999 (Row Percent Shown)

	Earnings in					I	n 1999				
	Thousands of Dollars	0	<5	5-<10	10 – <15	15 – <20	20 - <25	25 - < 30	30 – 35	>35	Total
In 1998	0	84	12	3	1	0	0	0	0	0	100
	<5	29	47	15	6	2	1	0	0	0	100
	5 – <10	10	28	27	20	11	3	1	0	0	100
	10 – <15	5	13	21	27	22	8	3	1	1	100
	15 – <20	3	8	10	14	33	22	7	2	1	100
	20 – <25	1	5	5	7	13	38	21	6	2	100
	25 – <30	1	4	2	6	7	16	36	20	8	100
	30 - 35	1	3	2	2	3	4	18	33	33	100
	>35	1	0	0	3	2	2	5	8	<b>79</b>	100
	All nonresident fathers	41	20	10	8	7	5	4	2	3	100

**Sample Notes:** Total sample was 14,343 cases. There were 670 missing case due to no matching Social Security number. Total research population was 13,673.

proportion of fathers move to a higher category as to a lower category. As a whole, these figures suggest substantial instability in earnings from year to year for these fathers, with many experiencing substantial decreases while others experience growth in earnings.

Our measure of earnings based on administrative records from the UI system suggests low rates of employment and fairly low earnings for many of those fathers who were employed. This data source has the advantage of including all fathers, even those who are difficult to locate for a survey interview. However, it has a number of serious limitations as well. As discussed in greater detail elsewhere, <sup>9</sup> UI data include only covered employment in Wisconsin, and they provide information on quarterly earnings but not on wages or hours work. With these limitations in mind, we also consider measures of fathers' labor market experiences as recorded in the survey. To help in interpreting the survey information, we first compare UI and survey reports of earnings—for which we have information from both data sources.

Table II.7.2 shows the differences between UI and survey reports of earnings. Mean UI earnings for fathers with any earnings reported in the UI data increased from \$11,585 in 1998 to \$12,679 in 1999 (first column). Mean earnings reported to the UI system are substantially higher when we restrict the sample to fathers who responded to the survey: \$13,045 in 1998 and \$13,735 in 1999. But, if we use the same data source, and sample, but use the survey weights to adjust for nonresponse (third column), the estimated values are, as expected, closer to those of the full sample. As shown in the third column, mean UI earnings for the survey sample using the weights are \$10,895 in 1998 and \$13,013. Although the survey weights result in a substantial narrowing of the gap between UI records for the research population and for the survey sample when we consider the level of earnings, they have a more modest effect on the percentage with any earnings. Among all fathers in the research population, 62 percent had some UI earnings. When we consider the sample of fathers for whom we have survey information, UI records show earnings for 82 percent. When we use the survey weights to adjust for nonresponse, the proportion with earnings—78 percent—is still much higher than for the entire research population.

Self-reported earnings in the survey are considerably higher than earnings recorded in the UI data. Considering the same sample, but using survey data to estimate earnings, our estimates are about \$3,000 to \$4,000 higher (comparing columns 3 and 4). Thus, even among fathers for whom we have information from both sources, there are discrepancies. In part, the UI records are not complete, because some types of employment are not covered, and only earnings within Wisconsin are included. However, on an individual level we also find substantial discrepancies in the other direction—with UI records showing substantially *higher* earnings than reported on the survey. Thus, the differences cannot be easily explained simply with reference to the earnings sources covered.<sup>11</sup>

While the representativeness and accuracy of the survey information on fathers require further investigation, the survey is a potentially valuable source of information on a population for which most sources of information are limited. We turn now to a discussion of fathers' wages, hours, and job characteristics, relying exclusively on data from the Survey of Wisconsin Works Families interviews of nonresident fathers.

Figure II.7.2 shows the 1998 and 1999 distributions of average hours worked per week for all nonresident fathers. Most fathers who worked reported working at least 40 hours per week in their most

<sup>&</sup>lt;sup>9</sup>See Volume III, Technical Report 3.

<sup>&</sup>lt;sup>10</sup>The weights employed here are the universal weights described in Volume III, Technical Report 5.

<sup>&</sup>lt;sup>11</sup>In ongoing analysis we are analyzing the differences in UI and survey reports, and evaluating alternative explanations.

Table II.7.2 Mean and Median Earnings, Survey and Administrative Data, 1998 and 1999

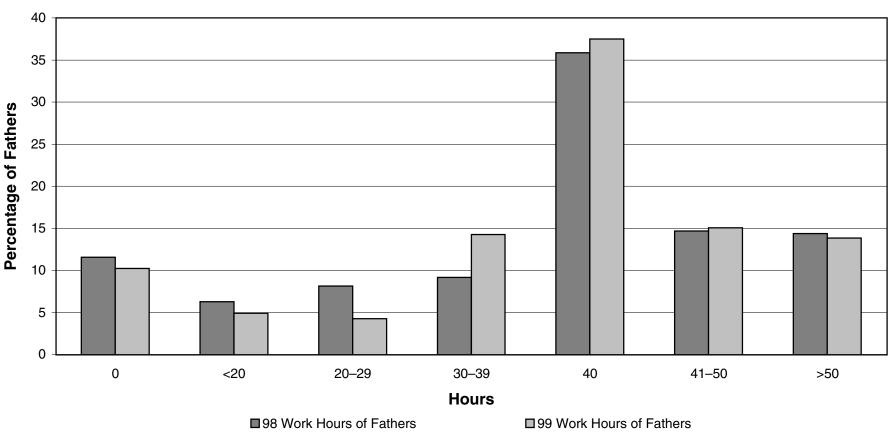
		UI Information		
	Research Population <sup>a</sup>	Survey Fathers (Unweighted) <sup>b</sup>	Survey Fathers (Weighted) <sup>b</sup>	Survey Information for Survey Fathers <sup>c</sup>
In 1998				
% with earnings	61.5%	81.7%	78.0%	81.2%
Mean (>0)	\$11,585	\$13,045	\$10,895	\$14,654
Median (>0)	\$8,345	\$10,912	\$7,907	\$12,000
In 1999				
% with earnings	59.2%	74.7%	71.2%	82.3%
Mean (>0)	\$12,679	\$13,735	\$13,013	\$17,383
Median (>0)	\$9,416	\$11,542	\$10,683	\$15,000

<sup>&</sup>lt;sup>a</sup>Total research population was 13,673 cases. Cases were missing due to no Social Security number (670).

<sup>&</sup>lt;sup>b</sup>Total sample in 1998 was 575. 18 cases were missing due to no SSN. Total sample in 1999 was 608. 12 cases were missing due to no SSN.

Total sample in 1998 was 575. 44 cases were missing because they did not answer if they worked, when they worked, or how much they earned. Total sample in 1999 was 608. 53 cases were missing because they did not answer if they worked, when they worked, or how much they earned.

Figure II.7.2
Usual Hours Worked per Week by Nonresident Fathers,
1998 and 1999



**Sample Notes:** Total sample was 575 cases in 1998. 13 cases did not answer if they worked, when they worked, or how many hours they worked. Total relevant sample in 1998 was 562. Total sample was 608 cases in 1999. 15 cases did not answer if they worked, when they worked, or how many hours they worked. Total relevant sample in 1999 was 593.

recent job. <sup>12</sup> Given the intensity of employment reported, it would appear that most fathers were not in a position to raise their earnings substantially by working more hours when they were employed. However, fathers who worked reported an average of eight to nine months worked per year in both 1998 and 1999. This suggests some potential for increased annual hours.

Though most fathers worked full time when they were working, there is a wide distribution of hourly wages. Figure II.7.3 presents the distribution of hourly wage rates in 1998 and 1999 for nonresident fathers who worked in these years; again the estimates are based on weighted observations. Median wages reported by these nonresident fathers were \$8.00 in 1998 and \$8.90 in 1999. (Mean wages were about \$9.50 in 1998 and \$9.70 in 1999.) There is a notable increase in the proportion of fathers reporting wages over \$9.00 per hour, from 37 percent of the fathers who worked in 1998 to 47 percent in 1999. Nonetheless, even in 1999 many fathers earned wages that would provide them with fairly limited incomes, even if they had worked full time, all year.

Of particular interest, given our focus, is the information on fathers' occupations and skills used on the job. In Table II.7.3 we show the distribution of fathers by the standard occupational categories in which they were employed. The table shows concentrations of fathers employed in both relatively high wage (for example, construction trades and fabricators) as well as very low wage occupations (for example, food service). Table II.7.4 shows the responses to a series of questions about job skills. Most respondents reported that their jobs required reading instructions (64 percent in 1998), keeping a close watch over gauges or dials (54 percent in 1998), and talking with customers face to face and doing arithmetic (51 percent and 50 percent in 1998). Relatively few said they supervised others (35 percent in 1998) or worked with computers (27 percent in 1998). Overall, wages were positively related to the number of skills used on the job—though the relationship is not monotonic. It is notable that talking with customers, either face to face or over the phone, is not associated with higher wages. Those who reported having to read instructions or forms, do arithmetic, or keep a close watch over gauges reported average wages at least a dollar higher than those in jobs not requiring the skill in both 1998 and 1999.

### **Correlates of Nonresident Fathers' Employment and Earnings**

Above, we described the level and distribution of a number of measures of nonresident fathers' labor market outcomes. The information from both administrative and survey sources reveals a diversity of outcomes. Many fathers have low earnings and report working in low-wage and low-skill employment. Others have quite high earnings—sufficient that were they to pay child support consistent with current policy, the resources provided to their children would be substantial. What factors account for the diversity of outcomes? A full explanation is beyond the scope of this report and potentially difficult to identify given the data available. However, here we present multivariate analyses designed to estimate the relationship between labor market outcomes and a given characteristic while other measured characteristics are held constant.

<sup>&</sup>lt;sup>12</sup>A comparison of survey reports of earnings and hours worked reveals substantial discrepancies. For example, 521 of 575 fathers reported hours worked in a job in the last 12 months when asked about their most recent employment. Of these fathers, 45 reported having no earnings in 1998, and 41 did not answer the question on 1998 earnings. Some of the discrepancy may be due to differences in timing (earnings are measured in the calendar years 1998 and 1999, and our measure of hours worked include only reports on jobs that ended no more than 12 months prior to interview, which was completed in spring 1999 for most fathers.

<sup>&</sup>lt;sup>13</sup>The concentration in particular categories reflects in part the definition of the occupational groups. Some of the groups encompass a large number of occupational categories.

Figure II.7.3

Average Hourly Wage of Nonresident Fathers, 1998 and 1999



**Sample Notes:** Total sample was 575 cases in 1998. Of them, 44 cases did not work during the past 12 months or refused to answer if they worked. 74 cases did not give wage information. Relevant sample was 457 in 1998. Total sample was 608 cases in 1999. Of them, 58 cases did not work during the past 12 months or refused to answer if they worked. 70 cases did not give wage information. Relevant sample was 480 in 1999.

Table II.7.3 Occupations of Nonresident Fathers

	In 1	998	In 1	999	Percent	Change
		Median		Median	D (	Median
Occupation Codes in Parentheses	Percent	Wage	Percent	Wage	Percent	Wage
Transportation and material moving (803–859)	9%	\$8.0	10%	\$9.2	6%	15%
Construction trades (553–599)	9	10.0	11	11.0	26	10
Garage related occupation, vehicle washers, hand packers (885–889)	7	7.0	7	7.5	-1	7
Food preparation and service (433–444)	7	6.3	5	7.0	-24	12
Fabricators, assemblers, and hand working; production inspectors,						
testers (783–799)	7	9.4	5	9.5	-31	1
Cleaning, building, and personal service (448–469)	7	7.5	6	7.3	-8	-3
Helpers, freight and material handlers (864–883)	6	8.5	4	8.8	-37	3
Metal and wood working operators(703–749)	6	7.5	8	10.0	38	33
Machine operators, assorted materials (753–779)	6	9.0	6	9.5	0	6
Sales (243–285)	5	7.0	6	8.0	4	14
Managerial (0–037)	5	10.0	3	8.0	-47	-20
Administrative support (303–389)	5	7.8	5	10.0	4	29
Mechanics and repairers (503–549)	5	8.5	6	10.0	28	18
Extractive, precision working (613–699)	4	11.0	6	9.0	43	-18
Professional specialty (043–199)	3	10.0	2	12.5	-25	25
Farming, forestry, and fishing (473–499)	3	7.0	5	7.0	64	0
Other occupations <sup>a</sup>	6	9.5	5	7.4	-7	-22

**Source:** Nonresident father survey sample.

**Sample Notes:** Total sample was 575 cases in 1998. Of these, 44 cases did not work during the past 12 months or refused to answer if they worked. Four cases had missing occupation. Relevant sample was 527 in 1998. Total sample was 608 cases in 1999. Of these, 58 cases did not work during the past 12 months or refused to answer if they worked. Three cases had missing occupation. Relevant sample was 547 in 1999.

<sup>a</sup>Other occupations include private household, protective service (403–427); technicians and related support (203–235); health aides and service (445–447); and military (903–905).

Table II.7.4 Job Skills of Nonresident Fathers

you simply	of Nonreside I	n 1998	I	n 1999
Job Skills	Percent	Median Wage	Percent	Median Wage
Did you read instructions, forms?				
No	36%	\$7.5	37%	\$8.0
Yes	64	8.5	63	9.4
Did you work with a computer?				
No	73	8.0	72	8.3
Yes	27	8.6	28	10.2
Did you do arithmetic, including change?				
No	50	7.5	48	8.1
Yes	50	9.0	52	9.5
Did you keep a close watch over gauges, dials?				
No	46	7.5	46	8.0
Yes	54	8.6	55	9.4
Did you talk with customers face to face?				
No	49	8.3	52	9.0
Yes	51	8.0	48	8.5
Did you talk with customers over the phone?				
No	66	8.0	67	8.9
Yes	34	8.0	33	8.5
Did you supervise other people?				
No	65	7.5	58	8.9
Yes	35	9.0	42	9.0
Number of skills reported				
0	9	6.5	11	7.5
1	15	7.5	12	8.5
2	16	8.0	16	8.9
3	17	8.5	17	9.0
4	17	9.3	17	9.5
5	13	8.7	13	10.0
6	11	9.2	8	9.6
7	3	8.4	7	8.5

**Sample Notes:** Total sample was 575 cases in 1998. Of these, 44 cases did not work during the past 12 months or refused to answer if they worked. Four cases had missing job skills. Relevant sample was 527 in 1998. Total sample was 608 cases in 1999. Of these, 58 cases did not work during the past 12 months or refused to answer if they worked. Three cases had missing job skills. Relevant sample was 547 in 1999.

We present results based on administrative data from the UI records and consider the correlates of having any earnings (being employed) and the level of earnings in 1999<sup>14</sup> for those fathers who are employed. Because our analysis is based on administrative data, we are limited in the variables we can include in our models. Because much of our information is from the administrative data system used in administering W-2, it refers to the resident mother, rather than directly to the nonresident father. In particular, we consider the relationship between nonresident fathers' employment and earnings and the following characteristics of the nonresident mother of his children:

- mother lives in Milwaukee county (compared to other counties)
- mother in lower tiers at entry into W-2
- years of education of the mother (high school degree and more than a high school degree, compared to no high school degree)
- mother black or other (compared to white)
- mother's age at entry into W-2 (26–30, 31–40, and 41+, compared to 25 or less)
- experimental (vs. control) group status

We also include the following information about the father or couple:

- father's prior history in the 8 quarters prior to mother's entry into W-2 (1–4 quarters, 5–7 quarters, and 8 quarters of work in 8 quarters prior to October 1, 1997, compared to zero quarters of work in prior period)
- divorce case (compared to legal father through paternity establishment)
- number of children with mother (2 and 3+ children, compared to 0 or 1)
- age of nonresident father's youngest child with the mother (3–5 years, 6–12 years, and 13+ years, compared to 0–2 years)
- child support arrearages of at least \$2,000 in the year of mother's entry into W-2

Our results are summarized in Table II.7.5. The first column summarizes results from a probit (limited dependent variable) model describing the correlates of the employment status of nonresident fathers. The multivariate model is fit over all 13,149 fathers in the research population. The model indicates that the human capital possessed by the father (e.g, his prior work history) is positively related to his being employed. Men whose children are living in Milwaukee are more likely to be employed, as are those whose youngest child is less than two years old, whose children live with a white mother (compared to a black mother) and a mother younger than 30 years of age (probably a good proxy for the father's age), and who have very large child support arrearages at the entry of the mother into the W-2 program. (The estimated model, together with a detailed description of statistically significant patterns is presented in Appendix Table II.7.1.)

The second column of Table II.7.5 shows the results of our second estimate, a least squares regression describing the correlates of the level of annual earnings for fathers employed in 1999. This multivariate model is estimated over 7,779 observations out of the 13,149 fathers included in the entire

<sup>&</sup>lt;sup>14</sup>We focus on 1999 because our explanatory variables include measures related to mothers' W-2 participation, and our research population includes individuals entering W-2 as late as July 1998. As such, 1998 outcomes that consider the full year (for example, earnings) include some period prior to entry.

Table II.7.5

Multivariate Analysis: Employment Outcomes for Nonresident Fathers, 1999

Professional Contest of Profes	Any Earnings in the UI	Earnings in the UI > 0
Mother in Milwaukee County	+++	
Mother's Tier at Entry (compared to upper)		
Lower		
Caretaker of Newborn		
Mother's Period of Entry (compared to Sep 1, 1997 to Mar 16, 1998)		
Mar 17, 1998 to May 10, 1998		+
May 11, 1998 to Jul 8, 1998		+
Mother's Education (compared to no high school degree)		
High school degree/GED		
Beyond high school		+++
Mother's Race (compared to White)		
Black		
Hispanic		
Other	+ +	
Mother's Age at Entry (compared to 25 years or younger)		
26–30 years		+++
31–40 years		+++
41 years or older		+++
Father's Work History in 8 Quarters Prior to October 1, 1997		
(compared to 0 quarters with any earnings in the UI)		
1–4 quarters	+++	++
5–7 quarters	+++	+++
8 quarters	+++	+++
Divorce Case (compared to paternity or mixed case) <sup>a</sup>		+++
Number of Father's Children Living with Mother at Entry (compared to 1	1)	
2 children		
3 or more children		

Table II.7.5, continued

	Any Earnings in the UI	Earnings in the UI > 0
Age of Father's Youngest Child at Entry (compared to 0-2 years)		
3–5 years		+++
6–12 years		+++
13 years or older		+++
Arrearages of over \$2,000 at baseline	+++	
Experimental group		

Source: Administrative Unemployment Insurance (UI) records; nonresident father sample.

**Notes:** "Any Earnings in the UI" is a probit; "Earnings in the UI >0" is ordinary least squares. "Earnings in the UI, >0" includes only those nonresident fathers with nonzero earnings (i.e., those who worked).

Key:	Positive	Negative
Significant at the 1% level	+++	
Significant at the 5% level	++	
Significant at the 10% level	+	_

Blanks indicate that the difference was not statistically significant.

<sup>a</sup>"Divorce case" refers to cases in which the parents are currently divorced or separated and father's responsibility is the result of children born while he was married to the resident mother. The alternative is cases in which the parents were not married but father's paternity was legally established.

research population and is presented in Appendix Table II.7.2. Men with children whose mother is white have about \$2,600 more earnings than men with children of a black mother. Similarly, as compared with men with no prior work experience over the prior two years, men who worked one to four quarters earned about \$1,100 more, men who worked five to seven quarters earned about \$4,500 more, and men who worked all eight quarters earned about \$13,000 more. The prior tie to the labor market is an important determinant of earnings.

Whereas men who had more children living with the mother showed no greater probability of being employed than men with fewer children, the relationship between number of children and earnings is negative. Interestingly, while men whose children lived with older mothers were less likely to be employed, their earnings were positively associated with the age of the mother. Similar patterns are seen for the age of the father's youngest child (while having an older youngest child was negatively associated with the probability of working, it was positively associated with the level of annual earnings) and with having arrearages in excess of \$2,000 (having large arrearages is positively related to working but negatively related to the level of earnings). Overall, work history is positively related to both employment probabilities and earnings; education (of the mother) is positively related to wages, but is not significantly related to probability of employment.

A number of results point to areas that require further analysis. For example, the higher earnings of fathers who have arrearages may be due to fathers with great earnings capacity being more likely to have higher child support orders, and therefore being at risk for higher arrearages. In addition, our measure of employment status (having any earnings reported in the UI system) is subject to error due to some fathers having earnings out of state, or in employment not covered by the UI system. This type of measurement error is less likely to affect our estimates of the level of earnings, which are conditional on at least some earnings in the UI system. This may account for some of the divergent results from the two sets of estimates.

#### Conclusions

Our results on the employment and earnings of nonresident fathers suggests the challenges they will face in meeting the expectation that they help support their children. According to administrative records, only about 60 percent of fathers are employed, and even among those with earnings recorded in the UI system, the levels are quite low—average earnings of about \$12,000 and median earnings of about \$9,000. Findings from the survey suggest that most fathers work close to full time when they are working, though many do not work for the full year. Few earn high wages.

The labor market performance of nonresident fathers is a topic that presents a number of challenges because of data limitations. Nonetheless, it is a topic of increasing importance. Nonresident fathers' potential economic support may be crucial to many children in the context of limited cash assistance for poor single-mother families. With the welfare reform of 1996, poor single mothers lost the entitlement to cash benefits that had previously guaranteed them at least minimal resources to provide for their children. W-2 cash payments are time-limited and generally require mothers to engage in work or work-like activities close to full time. Against this backdrop it is more difficult to argue that nonresident fathers' limited earnings potential should excuse their obligation to provide for their children. At the same time, our results make clear the difficulties most fathers will face, and they underline the importance of recent efforts to increase training and employment services for nonresident fathers.

Appendix Table II.7.1 Likelihood of Any Earnings in the Unemployment Insurance System for All Nonresident Fathers

Regression Ns <sup>a</sup> Log likelihood	13,1 -5,455. 0.09		13,1 -6,220.6	
Log likelihood	-5,455.	20988	-6,220.6	
Log likelihood	-5,455.	20988	-6,220.6	
•				.0.2.0
Mathanin Milwaultaa Caunty	0.09	0.0234	0.14	
Mother in Milwaukee County			0.11	0.0004
Mother's Tier at Entry (compared to upper)				
Lower	-0.01	0.8149	0.01	0.6538
Caretaker of Newborn	-0.02	0.819	-0.02	0.7421
Mother's Period of Entry (compared to Sep 1, 1997 to 1	Mar 16, 1998)	)		
Mar 17, 1998 to May 10, 1998	0.06	0.3612	0.00	0.9674
May 11, 1998 to Jul 8, 1998	-0.04	0.5647	0.02	0.7421
Mother's Education (compared to no high school degre	ee)			
High school degree/GED	0.02	0.5665	0.02	0.4523
Beyond high school	-0.06	0.2005	0.05	0.2429
Mother's Race (compared to white)				
Black	-0.05	0.20	-0.10	0.0118
Hispanic	-0.17	0.0104	-0.14	0.0255
Other	0.19	0.0116	0.15	0.0359
Mother's Age at Entry (compared to 25 years or young	ger)			
26–30 years	-0.06	0.102	-0.07	0.0444
31–40 years	-0.08	0.0489	-0.12	0.0023
41 years or older	-0.04	0.548	-0.17	0.016
Father's Work History in 8 Quarters Prior to Oct 1, 19	97			
(compared to 0 quarters with any earnings in the UI)				
1–4 quarters	1.25	< 0.0001	1.08	< 0.0001
5–7 quarters	2.04	< 0.0001	1.78	< 0.0001
8 quarters	2.89	<0.0001	2.37	<0.0001
Divorce Case (compared to legal father				
exists or paternity case) <sup>b</sup>	0.02	0.6021	0.00	0.9156
Number of Father's Children Living with Mother at En	ntry (compare	ed to 1)		
2 children	0.00	0.9403	-0.03	0.361
3 or more children	0.01	0.8508	-0.01	0.8076

Appendix Table II.7.1, continued

	In 19	98	In 19	99
	Coefficient	P-value	Coefficient	P-value
Age of Father's Youngest Child at Entry (com	pared to 0–2 years)			
3–5 years	-0.09	0.0231	-0.08	0.029
6–12 years	-0.14	0.0004	-0.08	0.0335
13 years or older	-0.25	0.0001	-0.19	0.0024
Arrearages of over \$2,000 at baseline	0.04	0.134	0.09	0.0017
Experimental group	0.02	0.5363	0.04	0.2609

**Source:** Administrative unemployment insurance (UI) records; nonresident father sample.

**Notes:** Probit model (dependent variable 1 = "had earnings in the UI during the year" versus 0 = "no earnings in the UI during the year"). Probability values of 0.05 or less are shown in bold type.

<sup>a</sup>Of 14,343 nonresident fathers, 670 had missing values for the dependent variable due to no matching Social Security number, and a further 524 cases were dropped from the regression because of missing values for the independent variables. These include 186 cases with children born within seven months of baseline and 296 cases with unknown or missing mother's race.

b"Divorce case" refers to cases in which the parents are currently divorced or separated and father's responsibility is the result of children born while he was married to the resident mother. The alternative is cases in which the parents were not married but father's paternity was legally established.

Annendix Table II 7.2

Regression Ns <sup>3</sup>		pendix Table II.7.2	or Nonreside	ent Fathers wit	h Work			
Regression Ns*	Latinings as Reported in the Chempioyin							
Adjusted R²       0.3093       0.2623         Mother in Milwaukee County       773.39       0.0124       522.31       0.12         Mother's Tier at Entry (compared to upper)       Lower       -6.81       0.9761       200.62       0.43         Caretaker of Newborn       276.90       0.574       336.09       0.54         Mother's Period of Entry (compared to Sep 1, 1997 to Mar 16, 1998)					P-value			
Adjusted R²       0.3093       0.2623         Mother in Milwaukee County       773.39       0.0124       522.31       0.12         Mother's Tier at Entry (compared to upper)       Lower       -6.81       0.9761       200.62       0.43         Caretaker of Newborn       276.90       0.574       336.09       0.54         Mother's Period of Entry (compared to Sep 1, 1997 to Mar 16, 1998)	Regression Ns <sup>a</sup>	8.0	067	7,779				
Mother's Tier at Entry (compared to upper)   Lower   .6.81   0.9761   200.62   0.43   336.09   0.54	_							
Mother's Tier at Entry (compared to upper)   Lower   .6.81   0.9761   200.62   0.43   276.90   0.574   336.09   0.54	Mother in Milwaukee County	773.39	0.0124	522.31	0.129			
Lower		,,,,,,,	000121	022.01	0.12			
Caretaker of Newborn   276.90   0.574   336.09   0.54		C 0.1	0.0761	200.62	0.4204			
Mother's Period of Entry (compared to Sep 1, 1997 to Mar 16, 1998)  Mar 17, 1998 to May 10, 1998								
Mar 17, 1998 to May 10, 1998	Caretaker of Newborn	276.90	0.574	336.09	0.5429			
May 11, 1998 to Jul 8, 1998	Mother's Period of Entry (compared to Sep 1	, 1997 to Mar 16, 1998	)					
Mother's Education (compared to no high school degree) High school degree/GED	Mar 17, 1998 to May 10, 1998	-162.29	0.7459	1,057.06	0.0611			
High school degree/GED	May 11, 1998 to Jul 8, 1998	1,003.94	0.0634	1,140.38	0.0565			
High school degree/GED	Mother's Education (compared to no high sch	nool degree)						
Beyond high school 1,562.54 <0.0001 1,759.07 <0.000  Mother's Race (compared to white)  Black -2,239.14 <0.0001 -2,645.11 <0.000 Hispanic 720.97 0.1455 141.86 0.79 Other -1,553.16 0.0051 -1,378.26 0.02  Mother's Age at Entry (compared to 25 years or younger)  26–30 years 940.74 0.001 1,154.35 0.00 31–40 years 2,053.05 <0.0001 2,615.56 <0.000 41 years or older 2,554.84 <0.0001 2,501.97 0.000  Father's Work History in 8 Quarters Prior to Oct 1, 1997 (compared to 0 quarters with any earnings in the UI)  1–4 quarters 1,608.09 0.0002 1,099.62 0.01:5–7 quarters 14,084.00 <0.0001 4,455.12 <0.000 8 quarters 14,084.00 <0.0001 12,815.00 <0.000  Divorce Case (compared to legal father exists or paternity case) 934.84 0.0043 1,118.59 0.00  Number of Father's Children Living with Mother at Entry (compared to 1)  2 children -780.56 0.0038 -1,083.10 0.00 3 or more children -1,565.36 <0.0001 -1,834.67 <0.000  Age of Father's Youngest Child at Entry (compared to 0-2 years) 3–5 years 1,412.22 <0.0001 1,519.16 <0.000 6–12 years 1,531.94 <0.0001 1,250.77 0.000			0.0306	411.07	0.1082			
Black		1,562.54	<0.0001	1,759.07	<0.0001			
Black	Mother's Race (compared to white)							
Hispanic 720.97 0.1455 141.86 0.79. Other -1,553.16 0.0051 -1,378.26 0.02.  Mother's Age at Entry (compared to 25 years or younger) 26–30 years 940.74 0.001 1,154.35 0.00 31–40 years 2,053.05 <0.0001 2,615.56 <0.00 41 years or older 2,554.84 <0.0001 2,501.97 0.00  Father's Work History in 8 Quarters Prior to Oct 1, 1997 (compared to 0 quarters with any earnings in the UI) 1–4 quarters 1,608.09 0.0002 1,099.62 0.01 5–7 quarters 5,419.35 <0.0001 4,455.12 <0.00 8 quarters 14,084.00 <0.0001 12,815.00 <0.00  Divorce Case (compared to legal father exists or paternity case) 934.84 0.0043 1,118.59 0.00  Number of Father's Children Living with Mother at Entry (compared to 1) 2 children -780.56 0.0038 -1,083.10 0.00 3 or more children -1,565.36 <0.0001 -1,834.67 <0.00  Age of Father's Youngest Child at Entry (compared to 0-2 years) 3–5 years 1,412.22 <0.0001 1,519.16 <0.00 6–12 years 1,531.94 <0.0001 1,250.77 0.00	• •	-2,239.14	< 0.0001	-2.645.11	<0.0001			
Other       -1,553.16       0.0051       -1,378.26       0.02         Mother's Age at Entry (compared to 25 years or younger)         26–30 years       940.74       0.001       1,154.35       0.00         31–40 years       2,053.05       <0.0001					0.795			
26–30 years 940.74 0.001 1,154.35 0.00 31–40 years 2,053.05 <0.0001 2,615.56 <0.000 41 years or older 2,554.84 <0.0001 2,501.97 0.000  Father's Work History in 8 Quarters Prior to Oct 1, 1997 (compared to 0 quarters with any earnings in the UI) 1–4 quarters 1,608.09 0.0002 1,099.62 0.01: 5–7 quarters 5,419.35 <0.0001 4,455.12 <0.000 8 quarters 14,084.00 <0.0001 12,815.00 <0.000  Divorce Case (compared to legal father exists or paternity case) 934.84 0.0043 1,118.59 0.00  Number of Father's Children Living with Mother at Entry (compared to 1) 2 children -780.56 0.0038 -1,083.10 0.000 3 or more children -1,565.36 <0.0001 -1,834.67 <0.000  Age of Father's Youngest Child at Entry (compared to 0-2 years) 3–5 years 1,412.22 <0.0001 1,519.16 <0.000 6–12 years 1,531.94 <0.0001 1,250.77 0.000	Other				0.026			
26–30 years 940.74 0.001 1,154.35 0.00 31–40 years 2,053.05 <0.0001 2,615.56 <0.000 41 years or older 2,554.84 <0.0001 2,501.97 0.000  Father's Work History in 8 Quarters Prior to Oct 1, 1997 (compared to 0 quarters with any earnings in the UI) 1–4 quarters 1,608.09 0.0002 1,099.62 0.01: 5–7 quarters 5,419.35 <0.0001 4,455.12 <0.000 8 quarters 14,084.00 <0.0001 12,815.00 <0.000  Divorce Case (compared to legal father exists or paternity case) 934.84 0.0043 1,118.59 0.00  Number of Father's Children Living with Mother at Entry (compared to 1) 2 children -780.56 0.0038 -1,083.10 0.000 3 or more children -1,565.36 <0.0001 -1,834.67 <0.000  Age of Father's Youngest Child at Entry (compared to 0-2 years) 3–5 years 1,412.22 <0.0001 1,519.16 <0.000 6–12 years 1,531.94 <0.0001 1,250.77 0.000	Mother's Age at Entry (compared to 25 years	or younger)						
31-40 years   2,053.05   <0.0001   2,615.56   <0.000		•	0.001	1,154.35	0.0003			
41 years or older 2,554.84 <0.0001 2,501.97 0.000  Father's Work History in 8 Quarters Prior to Oct 1, 1997 (compared to 0 quarters with any earnings in the UI)  1-4 quarters 1,608.09 0.0002 1,099.62 0.01: 5-7 quarters 5,419.35 <0.0001 4,455.12 <0.000 8 quarters 14,084.00 <0.0001 12,815.00 <0.000  Divorce Case (compared to legal father exists or paternity case) 934.84 0.0043 1,118.59 0.00  Number of Father's Children Living with Mother at Entry (compared to 1) 2 children -780.56 0.0038 -1,083.10 0.000 3 or more children -1,565.36 <0.0001 -1,834.67 <0.000  Age of Father's Youngest Child at Entry (compared to 0-2 years) 3-5 years 1,412.22 <0.0001 1,519.16 <0.000 6-12 years 1,531.94 <0.0001 1,250.77 0.000	•	2,053.05	< 0.0001		<0.0001			
(compared to 0 quarters with any earnings in the UI)         1-4 quarters       1,608.09       0.0002       1,099.62       0.015         5-7 quarters       5,419.35       <0.0001					0.0001			
(compared to 0 quarters with any earnings in the UI)         1-4 quarters       1,608.09       0.0002       1,099.62       0.015         5-7 quarters       5,419.35       <0.0001	Father's Work History in 8 Quarters Prior to	Oct 1, 1997						
5–7 quarters  5,419.35	• -							
8 quarters 14,084.00 <0.0001 12,815.00 <0.0001  Divorce Case (compared to legal father exists or paternity case) <sup>b</sup> 934.84 0.0043 1,118.59 0.0001  Number of Father's Children Living with Mother at Entry (compared to 1) 2 children -780.56 0.0038 -1,083.10 0.0001 3 or more children -1,565.36 <0.0001 -1,834.67 <0.0001  Age of Father's Youngest Child at Entry (compared to 0-2 years) 3-5 years 1,412.22 <0.0001 1,519.16 <0.0001 6-12 years 1,531.94 <0.0001 1,250.77 0.0001	1–4 quarters	1,608.09	0.0002	1,099.62	0.015			
Divorce Case (compared to legal father exists or paternity case) <sup>b</sup> Number of Father's Children Living with Mother at Entry (compared to 1)  2 children  -780.56  0.0038  -1,083.10  0.000  3 or more children  -1,565.36  -1,083.10  -1,834.67	5–7 quarters	5,419.35	< 0.0001	4,455.12	<0.0001			
exists or paternity case)b       934.84       0.0043       1,118.59       0.005         Number of Father's Children Living with Mother at Entry (compared to 1)       2 children       -780.56       0.0038       -1,083.10       0.006         3 or more children       -1,565.36       <0.0001	8 quarters	14,084.00	<0.0001	12,815.00	<0.0001			
Number of Father's Children Living with Mother at Entry (compared to 1)         2 children       -780.56       0.0038       -1,083.10       0.00         3 or more children       -1,565.36       <0.0001	Divorce Case (compared to legal father							
2 children -780.56 <b>0.0038</b> -1,083.10 <b>0.00</b> 3 or more children -1,565.36 <b>0.0001</b> -1,834.67 <b>0.000</b> Age of Father's Youngest Child at Entry (compared to 0-2 years) 3-5 years 1,412.22 <b>0.0001</b> 1,519.16 <b>0.00</b> 6-12 years 1,531.94 <b>0.0001</b> 1,250.77 <b>0.00</b>	exists or paternity case) <sup>b</sup>	934.84	0.0043	1,118.59	0.0023			
2 children -780.56 <b>0.0038</b> -1,083.10 <b>0.00</b> 3 or more children -1,565.36 <b>0.0001</b> -1,834.67 <b>0.000</b> Age of Father's Youngest Child at Entry (compared to 0-2 years) 3-5 years 1,412.22 <b>0.0001</b> 1,519.16 <b>0.00</b> 6-12 years 1,531.94 <b>0.0001</b> 1,250.77 <b>0.00</b>	Number of Father's Children Living with Mo	ther at Entry (compar	ed to 1)					
3 or more children -1,565.36 <b>&lt;0.0001</b> -1,834.67 <b>&lt;0.000</b> Age of Father's Youngest Child at Entry (compared to 0-2 years)  3–5 years 1,412.22 <b>&lt;0.0001</b> 1,519.16 <b>&lt;0.000</b> 6–12 years 1,531.94 <b>&lt;0.0001</b> 1,250.77 <b>0.000</b>	S	• • •	ŕ	-1,083.10	0.0003			
3–5 years 1,412.22 <b>&lt;0.0001</b> 1,519.16 <b>&lt;0.00</b> 6–12 years 1,531.94 <b>&lt;0.0001</b> 1,250.77 <b>0.00</b> 6	3 or more children				<0.0001			
3–5 years 1,412.22 <b>&lt;0.0001</b> 1,519.16 <b>&lt;0.00</b> 6–12 years 1,531.94 <b>&lt;0.0001</b> 1,250.77 <b>0.00</b> 6	Age of Father's Youngest Child at Entry (con	npared to 0-2 vears)						
6–12 years 1,531.94 <b>&lt;0.0001</b> 1,250.77 <b>0.00</b>	3–5 years	-	< 0.0001	1,519.16	<0.0001			
	•				0.0002			
	13 years or older	3,225.87	< 0.0001	2,980.22	<0.0001			

## Appendix Table II.7.2, continued

Earnings as Reported in the Unemployment Insurance System for Nonresident Fathers with Work

	In 19	98	In 19	99
	Coefficient	P-value	Coefficient	P-value
Arrearages of over \$2,000 at baseline	-1,374.78	<0.0001	-1,476.66	<0.0001
Experimental group	-244.42	0.3447	-114.68	0.6915

Source: Administrative Unemployment Insurance (UI) records; nonresident father sample.

**Notes:** Ordinary least squares model on only those nonresident fathers with non-zero earnings (dependent variable "total earnings in the UI during the year" in dollars). Probability values of 0.05 or less are shown in bold type.

<sup>a</sup>Of 14,343 nonresident fathers, 670 had missing values for the dependent variable due to no matching Social Security number. In 1998 5,263 cases had zero earnings and were not included. A further 343 cases were dropped from the regression because of missing values for the independent variables. These include 137 cases with children born within seven months of baseline and 180 cases with unknown or missing mother's race. In 1999 5,572 cases had zero earnings and were not included. A further 322 cases were dropped from the regression because of missing values for the independent variables. These include 127 cases with children born within seven months of baseline and 172 cases with unknown or missing mother's race.

b"Divorce case" refers to cases in which the parents are currently divorced or separated and father's responsibility is the result of children born while he was married to the resident mother. The alternative is cases in which the parents were not married but father's paternity was legally established.