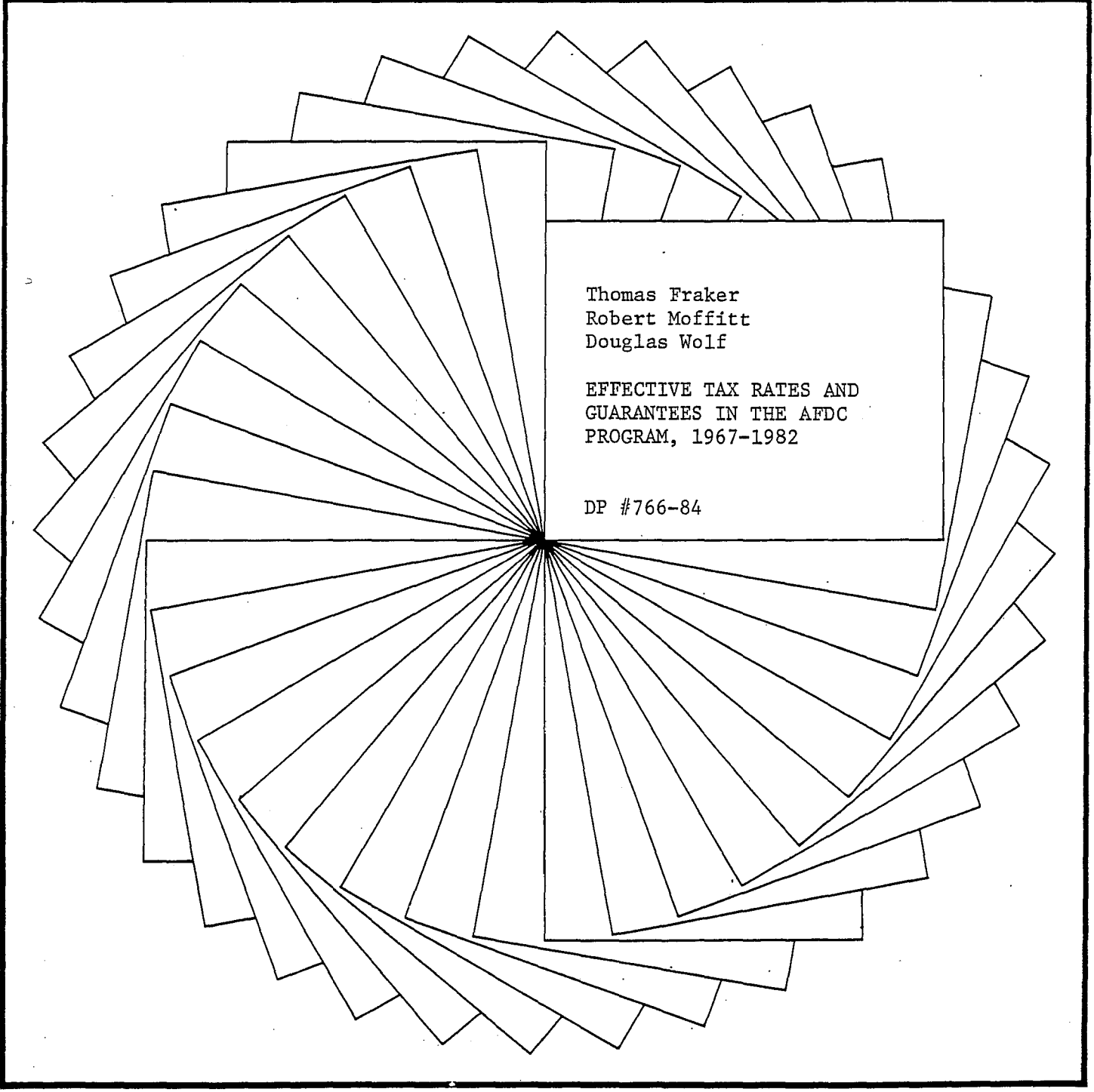

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GUARANTEES IN THE AFDC
PROGRAM, 1967-1982

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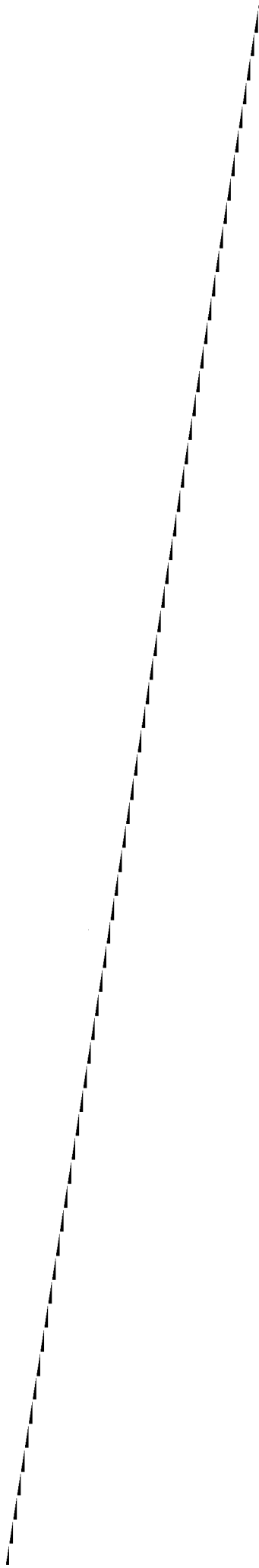
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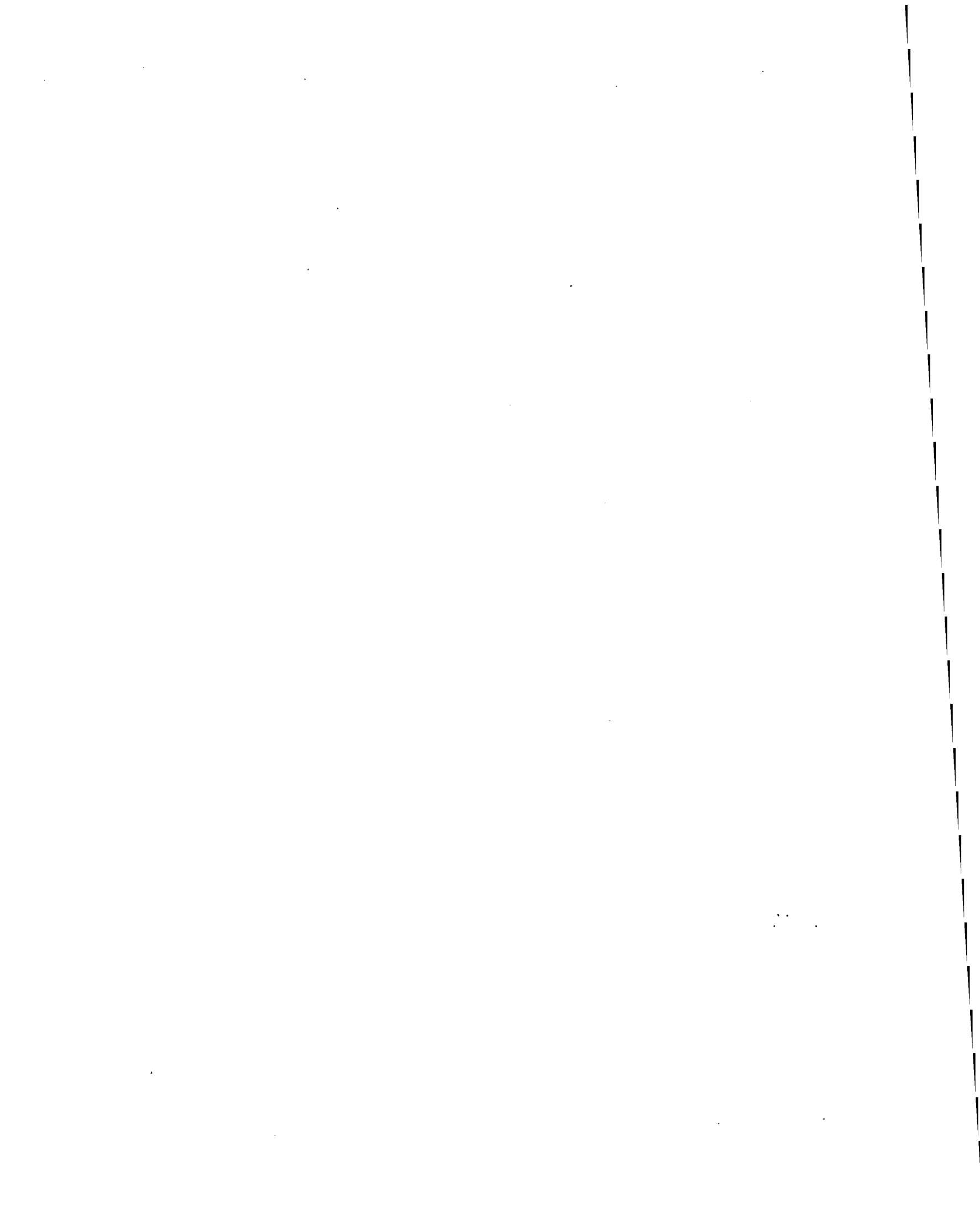
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ABSTRACT

Estimates of effective tax rates on earned and unearned income and estimates of effective guarantees in the AFDC program by state are provided for the period 1967-1982. The results indicate that effective real guarantees fell every year from 1967 to 1981, but stabilized in 1982. Effective tax rates on unearned income rose steadily from 1967 to 1981 and took a particularly large additional jump in 1982. Effective tax rates on earned income fell after 1967, but then gradually rose throughout the 1970s until 1982, when they took a much larger jump. Thus guarantees fell and tax rates rose over the 1970s as tight budgets forced states to restrict benefits, and tax rates were pushed even higher in the early 1980s by federal legislation.



The estimation of "effective" tax rates in the Aid to Families with Dependent Children (AFDC) program has been discussed in several papers over the past 10 years. Lurie (1974) first noted the difference between "nominal," or officially stated, tax rates and effective tax rates and provided estimates of the latter for 1971. Lurie hypothesized that because of income- and earnings-related deductions in the AFDC benefit formula and the imposition by states of various restrictions on benefits, effective tax rates may be lower than nominal tax rates. Lurie's 1971 estimates supported that prediction. Hutchens (1978) provided additional estimates comparing effective tax rates in 1967 and 1971, a period over which the nominal rate was reduced from 100 to 67 percent. Hutchens found that the effective rate also fell over that period, by about 28 percent. In a study of only one state, Moffitt (1979) provided additional evidence that effective tax rates are lower than nominal rates.¹

This paper reports the results of a comprehensive set of effective tax rate estimations over the period 1967-1982. The estimates are of interest for several reasons. First, the above studies cover only the late 1960s and early 1970s. It is of interest to determine whether effective tax rates continued to be below nominal rates throughout the 1970s and, in addition, whether there was any trend in the tax rates over this period. For example, it is well known that real benefit levels fell during the 1970s (Kasten and Todd, 1983), as states failed to increase guarantee levels to keep up with inflation. Did states also allow the tax rates to

¹Hutchens has also estimated effective tax rates for 1979 for 14 states, reported in an unpublished memorandum. He found no change in those rates from 1971 to 1979.

change? Second, the Omnibus Budget Reconciliation Act of 1981 established two different nominal tax rates on earnings: 67 percent during the first four months of earnings and 100 percent thereafter. This legislation also placed a ceiling on deductible child care expenses and replaced the variable deduction for work-related expenses with a standard deduction. Our estimates show how effective tax rates changed as a result of this legislation. Third, a comprehensive set of effective tax rate estimates should be useful in studies of labor-supply effects of the AFDC program and in studies of state AFDC decision-making.²

EFFECTIVE TAX RATES AND GUARANTEES, 1967-1982

To estimate effective tax rates and guarantees over the period 1967-1979 we utilize the same data base used in the above-cited studies. This data base consists of a set of federal AFDC surveys conducted biennially over the period, each of which consists of random samples drawn from the caseloads of each of the 50 states and the District of Columbia. Data on all variables used in the AFDC benefit calculation are included in the data base. Sample sizes are fairly large, ranging from a low of 15,000 to a high of 60,000 over the years. Despite these large samples, however, some states with small AFDC caseloads lack sufficient observations to estimate our equations. In only two years, 1967 and 1977, were sample

²The 1975 estimates were obtained by Moffitt (1983) and have already been used in published studies by Gramlich (1982) and Moffitt (1983) and in unpublished work by G. Jakobson and D. Feaster. The 1979 rates are currently being used by the authors in a study of AFDC and food stamp labor-supply incentives. Several researchers in this field have also expressed interest in having such estimates available for use in other studies.

sizes large enough to estimate our equations on all 51 jurisdictions (50 states are the District of Columbia)--see Appendix B. About 30 states, constituting over 90 percent of the national caseload, have sufficient data for estimation in all seven survey years in the 1967-1979 period.

For the years 1981 and 1982, we utilize special samples drawn from the May 1981 and May 1982 Quality Control (QC) program. As part of its quality control system the Department of Health and Human Services samples a relatively small fraction of each state's caseload each month and recomputes eligibility and benefits. The QC samples for the two months just mentioned were converted by DHHS to research files and were kindly made available to the authors. The main disadvantage of these data is the small size of the samples--approximately six thousand cases in each of the two months. This problem is particularly severe for estimating the effective tax rates on earnings, for only 10-15 percent of the caseload normally has such income. Because the 1981 legislation eliminated many earners from the rolls, even fewer cases have earnings in 1982. As a result, only about one-fourth of the states have sufficient cases with earnings to estimate an effective tax rate on earnings.

The basic strategy of the estimation is to regress the benefit received by a household on its income. The coefficient on income measures the effective tax rate and the intercept measures the effective guarantee. We break up income into earned and unearned components, and we also enter variables for family size to pick up variations in the guarantee. Our equation is:

$$B = \alpha_0 + \alpha_1 K_2 + \alpha_2 K_3 - tE - rN + \epsilon,$$

where B is the (monthly) benefit; K_2 equals one if there are at least two children in the family, and zero otherwise; K_3 equals the number of children in excess of two, and zero if there are only one or two children in the family; E is gross monthly earnings; N is monthly unearned income; and ϵ is an error term. Hence, the guarantee for a family of four (a mother and three children) is $(\alpha_0 + \alpha_1 + \alpha_2)$.³ The coefficient "t" measures the tax rate on earnings and the coefficient "r" measures the tax rate on unearned income. We do not use ordinary least squares to estimate the equation because a truncation problem exists: those cases with low values of the error term are not in the sample because they have zero benefits and thus are not recipients. (This issue has been discussed previously; see Hutchens, 1978.) We instead use a truncated Tobit procedure that provides consistent estimates of the coefficients. The technique is described in Appendix A.⁴

Because our estimations provide so many coefficients--five parameters for each state for each year--we will present and discuss only summary results in the text. Specifically, we will present the effective tax rates "t" and "r" averaged over states for each year, as well as the effective guarantee for a family of four. The individual state values of

³We should note that, because there are significant nonlinearities in the benefit formula (see the studies by Lurie and Hutchens), our coefficients should be interpreted as average marginal tax rates. We doubt that, from a behavioral point of view, recipients perceive much more than average rates.

⁴OLS regressions were also estimated, and showed coefficients quite close to those we present. The reason is that the R^2 's in the regressions were usually very high; as a consequence, the variance of the error term is small and does not cause very much bias. Nevertheless, we present the maximum likelihood estimates because they are consistent.

these estimates for each year are shown in Appendix B. The individual coefficients α_0 , α_1 , and α_2 for each state for each year (which are necessary to calculate guarantees for other family sizes) are available upon request from the authors.⁵

Table 1 summarizes our results. The first column shows the effective family-of-four guarantees by year in 1967 dollars. As the table indicates, real guarantees fell every year from 1967 to 1981. Although nominal guarantees rose in every year, they rose by less than inflation. However, in 1982 the real guarantee stabilized somewhat and is close to its 1981 value. This suggests that states may have stopped lowering the real AFDC guarantee level in compensation for the other benefit reductions in the 1981 legislation.

Column (2) of the table shows the coefficient of variation of the guarantee. This column provides some measure of whether cross-state inequality in benefits increased or decreased over this period. As the results indicate, there was a slow but clear increase in cross-state inequality.

In the next two columns of the table we present our estimates of "r," the effective tax rate on unearned income. Because of the small 1981 and 1982 samples, only 22 states have estimates of "r" for all years (these are large states, however, constituting nearly 80 percent of the national

⁵We should note at this point that the tax rates for the individual states presented in Appendix B show considerable variation from year to year. These variations should be interpreted as resulting from sampling error (since there are so few cases with income) rather than changes in state benefit rules. Thus the estimate for a state in a particular year is less reliable than the average of its estimates over time.

caseload). Therefore the table first shows the estimates of "r" for the 30 states for which we have estimates for all of the survey years 1967-1979. Interestingly, the results show that tax rates on unearned income steadily rose over this period, from a low of 58 percent in 1967 to 80 percent in 1979. Apparently the reductions in the real guarantee were accompanied by increased stringency in the other parts of the formula, perhaps by the elimination or reduction in real deductions or by direct increases in tax rates. Moreover, as column (4) indicates, the tax rate on unearned income jumped to 98 percent in 1982, no doubt because of the 1981 legislation, which had taken effect by 1982. The nominal tax rate on this income is 100 percent, so it appears that a consequence of the legislation has been to push the effective tax rate on unearned income close to its nominal level (the 98 is not statistically different from 100).

Columns (5) - (8) show the results of our estimations of effective tax rates on earnings. Again because of small sample sizes, we first present results for the 29 states for which we could obtain estimates for all of the years 1967-1979. It should be noted that nominal tax rates were 100 percent in 1967 and 67 percent in 1971-1979 (1969 is an in-between year in which some of the states had 100 percent tax rates and some had 67 percent rates). As column (5) of the table indicates, our findings confirm once more that effective tax rates are below nominal ones, presumably because of the availability of earnings-related deductions and because of various restrictions in the benefit formula (see Lurie, 1974). In addition, the results show that effective tax rates fell from 32 percent to 16 percent between 1967 and 1971. But they also show that tax rates steadily rose throughout the 1970s. By 1979 the tax rate was back up to 28

TABLE 1
EFFECTIVE MONTHLY AFDC GUARANTEES AND TAX RATES
FOR A FAMILY OF FOUR, 1967-1982

	Effective Real Guarantee		Effective Tax Rates on Unearned Income		Effective Tax Rates on Earned Income			
	Mean (1)	Coeff. of Variation (2)	(3)	(4)	(5)	(6)	(7)	(8)
1967	\$161	.37	.58	.55	.32	.35	.33	.41
1969	156	.37	.60	.60	.29	.35	.34	.42
1971	153	.40	.64	.62	.16	.19	.16	.23
1973	149	.39	.74	.73	.19	.19	.17	.22
1975	147	.38	.77	.77	.24	.27	.21	.30
1977	141	.40	.82	.79	.24	.27	.24	.33
1979	131	.39	.80	.79	.28	.28	.28	.32
1981	113	.41	--	.84	.25	.26	.22	.24
1982	111	.43	--	.98	--	--	--	--
With Deduction	--	--	--	--	--	.40	--	.54
Without Deduction	--	--	--	--	--	--	.43	.70
No. of States	31	31	30	22	29	10	10	4

Deflated by the CPI in 1967 dollars.

percent, close to the level that had prevailed in 1967. Thus the general tightening of state formulas in the 1970s appears also to have affected tax rates on earnings.

Our estimation of 1982 earnings tax rates is complicated not only by small sample sizes in the QC files but also by virtue of a provision in the 1981 legislation that the nominal tax rate be 67 percent for the first four consecutive months during which a recipient has earnings, after which it rises to 100 percent. Our data set tells us whether a case was subject to the 67 percent rule or the 100 percent rule (i.e., whether the "30-and-one-third" deduction was being applied), enabling us to estimate separate coefficients on earnings for those receiving and not receiving the deduction. Unfortunately, this worsens the problem of small numbers of earners. Furthermore, the 1981 legislation eliminated many earners from the AFDC rolls--only 7 percent of the sample had any earnings at all for 1982. Consequently, only 10 states have a complete set of 1967-1981 tax rates and a 1982 tax rate with a deduction; only 10 states have a complete set of 1967-1981 tax rates and a 1982 tax rate without a deduction; and only 4 states have a complete set of 1967-1981 tax rates and both 1982 earnings tax rates.

The last three columns in Table 1 show the results for these subsamples of states. First note that, regardless of the sample used, the above-noted trends over the 1967-1979 period hold--falling rates from 1967-1973, followed by increasing rates. Second, the table indicates that tax rates rose significantly in 1982 for those no longer receiving the deduction--an increase of 22-46 percent (i.e., either .21 to .43, or .24 to .70).⁶ Third, the table shows that the tax rate rose by 15-21

percent even for those retaining the deduction. This increase was presumably a result of the 1981 legislation, which tightened work-related deductions. Our best estimate of the difference between the tax rates with and without the deduction in 1982 is 15 percent (.70 minus .55).⁷

CONCLUSIONS

We have found that effective real guarantees fell and effective tax rates on both earned and unearned income rose over the 1970s, as states tightened the AFDC benefit formula. The Omnibus Budget Reconciliation Act of 1981 resulted in further increases in effective tax rates, raising them to levels exceeding those of any in the fifteen-year period 1967-1982. Despite these increases, effective tax rates on earnings remained below their nominal levels.

⁶The 22 percent increase is based upon a 43 percent average tax rate in 1982 (shown in Table 1), an average which contains two significant outliers (-3 and -13 percent, as shown in Appendix B). These outliers appear to result from unusually strong correlations among the independent variables, a problem exacerbated by the small samples of earners in the two states. The 1981-1982 increase of 46 percent found in the third sample is probably more reliable, being based upon four states for which larger sample sizes of earners were available.

⁷Because the 10 states in columns (6) and (7) are overlapping but not identical, one cannot directly compare the two 1982 tax rates so obtained. In addition, the 43 percent tax rate in column (7) contains two outliers and is not reliable (see n.5).

We should note that the increase in tax rates in 1982 may be downwardly biased. If individuals respond to high tax rates by reducing earnings, then those states for which we have found no earners on the rolls may have higher average tax rates than those for which we do have estimates. For example, if labor-supply theory strictly applies, one would never be able to estimate a 100 percent tax rate because there would be no individuals with earnings on the rolls.

APPENDIX A
ESTIMATION TECHNIQUE

A modification in the standard Tobit procedure is required because the limit values ($B = 0$) are not in the sample.* The required modification was outlined in a paper by Hausman and Wise (1977) and requires constructing the probabilities of observing a benefit value of B conditional upon its being positive. According to Bayes' Law, a conditional density equals an unconditional density divided by the probability of the conditioning event; hence the requisite conditional density here is the unconditional probability density of observing a value of B , divided by the probability that B is positive. The log likelihood function is the sum of these logged probabilities:

$$L = \sum_{\text{all obs.}} \log[g(z_1)/(1 - F(z_2))],$$

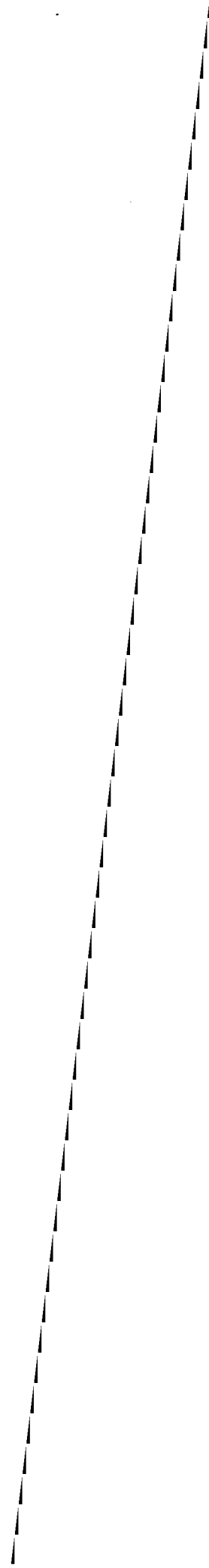
where g is the normal density, F is the normal distribution function,

$$z_1 = (B - \alpha_0 - \alpha_1 K_2 - \alpha_2 K_3 + tE + rN)/\sigma,$$

$$z_2 = (-\alpha_0 - \alpha_1 K_2 - \alpha_2 K_3 + tE + rN)/\sigma,$$

and σ is the standard error of ϵ , assumed to be distributed $N(0, \sigma^2)$.

*In the 1982 equation the lower limit value is 10 rather than 0; this reflects the minimum benefit provision included in the 1981 OBRA legislation.



APPENDIX B

Tables B-1 to B-3 present the individual state AFDC guarantee amounts, tax rates on earnings, and tax rates on unearned income, respectively. A dash in an entry indicates that the sample size was insufficient to estimate the value for that state in that year. Note too that occasionally the tax rates are negative or greater than 100 percent; both of these cases are to be ascribed to sampling error arising from too few cases with income (often only 5 to 10 cases), together with the omission of some relevant budget variable from the equation.

TABLE B-1

EFFECTIVE NOMINAL GUARANTEES FOR A FAMILY OF FOUR
(dollars per month)

	1967	1969	1971	1973	1975	1977	1979	1981	1982
ALABAMA	75	78	67	90	128	143	149	142	145
ALASKA	142	--	--	--	--	386	437	--	--
ARIZONA	139	161	154	153	171	178	--	214	221
ARKANSAS	89	91	101	128	143	170	186	183	161
CALIFORNIA	213	219	221	279	307	393	411	538	596
COLORADO	163	183	219	226	250	263	317	327	368
CONNECTICUT	246	260	275	306	339	347	426	478	508
DELAWARE	146	--	159	152	--	289	--	--	--
D.C.	160	--	226	245	294	305	309	328	356
FLORIDA	71	119	113	124	168	168	191	217	233
GEORGIA	122	122	127	136	142	133	146	185	220
HAWAII	196	--	--	334	--	432	--	477	--
IDAHO	223	--	--	--	--	324	344	--	--
ILLINOIS	199	206	229	246	311	302	322	359	361
INDIANA	156	160	150	171	229	230	368	281	290
IOWA	242	248	240	241	--	359	386	400	415
KANSAS	222	237	243	240	275	297	313	342	348
KENTUCKY	144	148	152	162	229	228	202	237	229
LOUISIANA	120	115	93	104	143	149	163	195	220
MAINE	147	145	179	167	226	282	257	353	379
MARYLAND	176	181	190	195	221	238	326	319	324
MASSACHUSETTS	246	267	283	--	322	342	389	437	456
MICHIGAN	219	227	280	301	368	397	472	513	494
MINNESOTA	262	266	297	303	355	356	419	452	505

Table B-1 continued

	1967	1969	1971	1973	1975	1977	1979	1981	1982
MISSISSIPPI	40	51	48	62	64	64	113	114	120
MISSOURI	111	122	129	126	152	174	245	277	284
MONTANA	181	--	--	189	--	223	--	--	--
NEBRASKA	185	184	185	188	--	291	--	--	--
NEVADA	143	--	--	--	--	220	368	--	--
NEW HAMPSHIRE	209	--	--	--	--	311	--	--	--
NEW JERSEY	261	289	297	310	349	350	376	407	404
NEW MEXICO	152	--	156	139	--	181	--	241	265
NEW YORK	238	261	306	283	389	420	423	430	459
NORTH CAROLINA	131	144	148	143	198	195	196	202	208
NORTH DAKOTA	245	--	--	250	--	344	381	--	--
OHIO	165	172	176	177	204	248	285	326	331
OKLAHOMA	166	164	173	172	--	256	302	327	322
OREGON	190	200	211	241	306	374	413	400	346
PENNSYLVANIA	194	249	284	283	326	357	357	376	378
RHODE ISLAND	197	223	213	270	--	351	--	379	--
SOUTH CAROLINA	86	94	90	98	116	112	122	151	160
SOUTH DAKOTA	199	--	--	221	--	262	--	--	--
TENNESSEE	120	120	128	125	131	132	144	143	148
TEXAS	112	92	136	136	140	132	140	132	133
UTAH	183	--	188	249	291	325	--	--	--
VERMONT	233	--	--	--	--	364	--	--	--
VIRGINIA	157	193	231	227	258	253	279	299	297
WASHINGTON	226	235	268	298	319	379	422	439	529
WEST VIRGINIA	126	123	131	181	218	220	224	211	215
WISCONSIN	217	214	230	282	360	404	431	509	558
WYOMING	184	--	--	--	--	248	--	--	--
MEAN	172	177	189	204	241	273	301	317	324

TABLE B-2
EFFECTIVE TAX RATES ON EARNINGS
(percentages)

	1967	1969	1971	1973	1975	1977	1979	1981	1982	
									With Ded.	Without Ded.
ALABAMA	29	29	4	16	18	19	32	14	--	30
ALASKA	7	--	--	--	--	23	27	--	--	--
ARIZONA	31	49	27	23	26	32	--	--	--	--
ARKANSAS	18	11	7	7	6	17	20	16	--	--
CALIFORNIA	33	17	2	25	23	27	26	27	48	61
COLORADO	28	21	37	32	39	36	40	--	--	49
CONNECTICUT	41	27	14	22	43	42	41	43	17	--
DELAWARE	15	--	5	16	--	29	--	--	--	--
D. C.	19	--	13	18	25	24	30	33	--	--
FLORIDA	7	31	14	18	25	12	21	15	--	--
GEORGIA	16	20	5	13	14	14	13	23	--	--
HAWAII	53	--	--	20	--	34	--	22	--	--
IDAHO	47	--	--	--	--	29	29	--	--	--
ILLINOIS	40	26	22	23	32	34	55	41	--	--
INDIANA	21	16	1	4	19	12	17	22	24	--
IOWA	46	42	27	23	--	23	24	25	--	--
KANSAS	28	24	13	23	38	36	47	48	--	--
KENTUCKY	40	21	14	17	20	17	21	10	--	--
LOUISIANA	30	25	19	18	25	27	28	28	48	--
MAINE	17	5	0	-1	6	20	31	18	--	-13
MARYLAND	45	44	22	21	21	23	18	26	--	49
MASSACHUSETTS	20	30	38	--	27	27	28	21	32	74
MICHIGAN	51	56	39	-13	36	35	36	18	78	71
MINNESOTA	40	42	27	20	23	18	27	26	38	--
MISSISSIPPI	8	16	7	3	4	6	13	8	--	9
MISSOURI	13	14	9	6	2	5	22	22	--	74
MONTANA	35	--	--	24	--	30	--	--	--	--

Table B-2 (continued)

	1967	1969	1971	1973	1975	1977	1979	1981	1982	
									With Ded.	Without Ded.
NEBRASKA	26	17	5	6	--	31	--	--	--	--
NEVADA	24	--	--	--	--	12	42	--	--	--
NEW HAMPSHIRE	47	--	--	--	--	92	--	--	--	--
NEW JERSEY	46	30	18	26	28	26	28	32	--	--
NEW MEXICO	45	--	17	20	--	28	--	--	--	--
NEW YORK	34	32	24	24	33	29	30	41	--	--
NORTH CAROLINA	53	58	23	24	28	27	25	21	--	--
NORTH DAKOTA	50	--	--	35	--	26	34	--	--	--
OHIO	35	19	21	17	38	37	47	47	--	--
OKLAHOMA	24	25	23	31	--	42	46	14	44	--
OREGON	41	20	32	42	34	22	28	22	--	--
PENNSYLVANIA	28	31	20	29	25	30	29	29	29	--
RHODE ISLAND	38	21	33	23	--	39	--	47	--	--
SOUTH CAROLINA	28	41	16	11	17	10	13	14	25	--
SOUTH DAKOTA	52	--	--	17	--	33	--	--	--	--
TENNESSEE	18	17	9	11	11	15	16	15	--	--
TEXAS	25	23	18	22	28	19	31	14	--	--
UTAH	37	--	33	34	38	37	--	--	--	--
VERMONT	44	--	--	--	--	43	--	--	--	--
VIRGINIA	55	63	20	40	39	36	38	33	--	-2
WASHINGTON	50	56	25	39	36	41	37	32	46	78
WEST VIRGINIA	20	9	17	31	38	42	31	--	--	--
WISCONSIN	31	39	27	36	25	27	27	19	42	68
WYOMING	39	--	--	--	--	34	--	--	--	--
MEAN	32	29	18	21	25	27	29	25	39	46

TABLE B-3
EFFECTIVE TAX RATES ON UNEARNED INCOME
(percentages)

	1967	1969	1971	1973	1975	1977	1979	1981	1982
ALABAMA	45	47	51	75	84	89	100	96	103
ALASKA	8	--	--	--	--	87	96	--	--
ARIZONA	48	58	68	53	53	88	--	--	--
ARKANSAS	15	30	21	30	35	75	101	90	76
CALIFORNIA	49	47	44	103	89	93	85	93	105
COLORADO	65	23	67	97	83	81	--	--	50
CONNECTICUT	86	81	101	92	90	96	106	103	99
DELAWARE	16	--	26	40	--	92	--	--	--
D.C.	81	--	56	57	73	89	98	--	--
FLORIDA	8	61	58	61	95	61	68	106	89
GEORGIA	32	36	35	55	54	81	93	101	79
HAWAII	69	--	--	105	--	78	--	--	--
IDAHO	88	--	--	--	--	105	88	--	--
ILLINOIS	83	67	68	69	97	98	86	81	99
INDIANA	23	28	16	26	64	42	43	57	40
IOWA	78	71	84	94	--	76	64	75	--
KANSAS	86	98	90	90	95	80	98	98	--
KENTUCKY	73	75	71	97	94	110	108	54	100
LOUISIANA	37	30	92	96	77	106	94	32	102
MAINE	29	12	25	18	41	105	97	142	--
MARYLAND	76	62	87	76	83	80	100	--	--
MASSACHUSETTS	84	93	52	--	45	83	75	--	136
MICHIGAN	73	88	84	75	89	85	94	31	98
MINNESOTA	84	102	84	86	95	61	94	116	82
MISSISSIPPI	21	30	15	18	19	18	42	26	34
MISSOURI	6	7	5	11	8	27	71	140	98
MONTANA	85	--	--	86	--	71	--	--	--
NEBRASKA	28	28	13	39	--	71	--	--	--
NEVADA	29	--	--	--	--	76	95	--	--

Table B-3 (continued)

	1967	1969	1971	1973	1975	1977	1979	1981	1982
NEW HAMPSHIRE	88	--	--	--	--	85	--	--	--
NEW JERSEY	79	80	77	88	101	94	97	122	103
NEW MEXICO	66	--	65	96	--	99	--	--	--
NEW YORK	78	75	82	98	93	92	83	106	183
NORTH CAROLINA	88	82	94	96	99	98	65	93	109
NORTH DAKOTA	82	--	--	96	--	101	96	--	--
OHIO	57	69	75	84	96	101	62	118	113
OKLAHOMA	72	102	58	102	--	85	101	94	152
OREGON	72	61	82	100	71	84	92	--	--
PENNSYLVANIA	77	98	98	94	99	92	98	77	102
RHODE ISLAND	62	118	18	95	--	90	--	--	--
SOUTH CAROLINA	47	48	43	50	53	51	37	82	--
SOUTH DAKOTA	50	--	--	82	--	78	--	--	--
TENNESSEE	24	19	26	38	33	81	15	96	127
TEXAS	30	83	90	109	97	124	86	48	--
UTAH	90	--	94	114	86	74	--	--	--
VERMONT	75	--	--	--	--	85	--	--	--
VIRGINIA	92	62	84	98	91	82	59	89	--
WASHINGTON	93	92	81	105	87	71	77	108	109
WEST VIRGINIA	90	52	51	87	92	94	88	--	--
WISCONSIN	81	77	77	101	92	76	61	45	95
WYOMING	49	--	--	--	--	39	--	--	--
MEAN	60	62	61	79	76	82	82	86	99

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