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**REGIONAL DIFFERENCES IN
FINANCIAL RESOURCES, ASSETS AND
SAVINGS BEHAVIOR OF
LOW-INCOME FAMILIES**

By Joan Koonce Lewis

ABSTRACT

This study examined differences in financial resources, assets, savings attitudes, methods of saving and demographic characteristics of low-income families from different regions in the United States. Further, the effects of these variables on nominal and real savings for families in each region were analyzed. Chi-square results indicated that families from the South were less likely to have private or employer-sponsored health insurance and VA medical benefits. Families from the South were also less likely to own assets and save; however, more southern families than nonsouthern families said they would increase savings if interest rates increased. Regression results indicated that nonsouthern families who received Medicare and had stocks and/or mutual funds were more likely, and those who had IRAs and/or Keoghs, profit sharing and/or thrift accounts, and were older were less likely to increase savings. None of the variables were statistically significant predictors of increase in savings for southern families.

INTRODUCTION

Consumer educators and practitioners are concerned with the ability of low-income families to make effective financial decisions (Rupured and Payne, 1993). Given the steady growth in the low-income population, this concern is warranted. Low-income families comprise a large segment of the U.S. population. According to the U.S. Census Bureau, the number of persons living below the official poverty level was 36.9 million in 1992, representing 14.5 percent of the American population. By region, the rate was lowest in the North-

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east at 12.3 percent in 1992, followed by 13.1 percent for the Midwest, 14.4 percent for the West, and 16.9 percent for the South (U.S. Department of Commerce, 1993).

There are other reasons research on low-income families' financial decision making is important. Low-income families' use of nontraditional methods of financial management places attention on this population. Nontraditional methods of financial management are often used by low-income families to maximize their limited financial resources. One example is paying unnecessary bills, then seeking financial support from community support groups or others to pay necessary bills (Rupured and Payne, 1993). Consumer educators and practitioners who try desperately to help low-income families improve their financial management skills sometimes feel their behavior is irresponsible and/or irrational. According to Rupured and Payne (1993), however, decisions which seem to be irrational from the consumer educator's and practitioner's perspective are often very rational from the low-income family' perspective.

Families with low incomes live in a constant state of crises and stress because of insufficient financial resources to provide for their basic needs (Rupured & Payne, 1993). This will undoubtedly affect their savings behavior. According to Garman and Forgue (1993), availability of financial resources is one factor that affects families' goal setting behavior. When financial resources are scarce, families do not place a high priority on savings. Thus, saving is not likely to be a financial goal of low-income families. If low-income families cannot or do not save, financial resources during emergencies will be insufficient. Many may have to rely heavily upon public financial resources and/or other means of community support. Thus, it is important from a public policy perspective to gain a better understanding of low-income families' savings behavior.

In order to solve problems in society, multi-disciplinary research is necessary. Multi-disciplinary research provides a complete picture of problems low-income families encounter. As a result, the quality of low-income research is enhanced and specific problems are identified. Policy makers need a complete picture, not a snap shot, to make decisions that affect low-income families. The multi-disciplinary approach is difficult, however, because researchers in

separate disciplines often do not know and/or understand the subject matter in other disciplines.

LITERATURE REVIEW

Research directly examining the savings behavior of families is **scarce; this is especially true for low-income families.** Lack of research on the savings behavior of low-income families may be due, in part, to difficulty in collecting data from low-income persons and the belief that low-income families do not save. According to Davis and Schumm (1987), low-income families may set aside money for emergencies or infrequent purchases which do not seem like savings.

A few studies that examined other aspects of low-income families' financial management practices have included some information on savings attitudes and/or behavior. Using a sample of 199 young to middle-aged, low-income black, white and Mexican-American persons in Arizona, Schnittgrund and Baker (1983) found that a large percentage of each group never saved (36 percent, 25 percent and 38 percent, respectively). A larger percentage of each group was dissatisfied with the amount of money they saved (59 percent, 61 percent and 56 percent, respectively). Davis (1992), using 672 nonmetropolitan households in Kansas, concluded that households with the lowest incomes were far less likely than the other two income groups to save a fixed amount or percentage of their incomes. Only 8 percent of the lowest income group saved a fixed amount or percentage of their incomes compared to 76 percent for the middle income group and 63 percent for the highest income group. Exploring the checking account behavior of 308 low- to moderate- income consumers, Leech, Scott and Fox (1990) found that about one-fourth said they didn't open checking accounts because they can't save.

Davis and Schumm (1987) investigated savings behavior and satisfaction using 1,739 low- and high-income married couples in thirteen rural and urban states. Results indicated that family income was not related to savings among low-income families, but it was related among high-income families. Education and home ownership were less important for low-income families than high-income families. Low- and high-income families had similar behaviors with regard to the relationships between the importance placed on savings and reported level of savings and the importance placed on savings

and satisfaction with savings. Using a convenience sample of 99 low-income rural and urban elderly in Ohio, Roobian-Mohr (1989) concluded that 70 percent had at least one savings account. Reasons given for opening a particular type of savings account or choosing a particular financial institution included convenience, interest rates, services offered, personal service, insurance and safety, and marketing strategies.

In summary, the studies discussed above provide limited, general information on the savings behavior of low-income families. For example, the majority only determined whether or not low-income families saved, if they were satisfied with their savings, and why they chose particular savings accounts or financial institutions. Only one study explored relationships between income, assets, and savings behavior. In addition, these studies did not examine regional differences in savings behavior. Because of the low economic status and educational attainment of individuals, high percentage of minorities, and large number of rural areas in the South, regional differences in savings behavior is expected.

PURPOSE AND METHODOLOGY

The purpose of this study was to examine differences in financial resources, financial and real assets, savings attitudes, methods of saving, and demographic characteristics of low-income families from different regions in the United States. Further, the effects of these variables on the change in nominal and real savings from 1983 to 1986 were analyzed for families in each region.

Data and Sample

Data used in this study were obtained from the 1986 Survey of Consumer Finances (SCF). The nationwide survey was sponsored by the Federal Reserve Board and several other federal agencies and was conducted by the Survey Research Center at the University of Michigan. The unit of observation was the family, which is defined as all individuals living together in the same household who are related by blood, marriage (including partnership) or adoption. A single individual also was considered a family for the purpose of this study. If two or more families lived in a household, only the economically

Table 1. Annual Incomes by Household Size (n = 538)

Size	N	Mean	Standard Deviation	Maximum	Minimum
1	194	5,009.00	1,805.66	8,074.00	300.00
2	130	6,867.56	2,632.48	10,478.00	530.00
3	58	8,539.28	3,089.91	12,034.00	841.00
4	81	9,636.00	4,135.88	16,018.00	936.00
5	36	11,687.75	5,958.81	19,260.00	1.00
6	26	12,657.65	5,603.83	22,000.00	1,935.00
7	7	12,071.43	6,547.45	20,000.00	1,500.00
8	3	15,438.67	10,659.70	27,000.00	6,000.00
9+	3	14,962.67	13,444.90	29,964.00	4,000.00

dominant family was interviewed in the survey. The person interviewed was either the head of household or the financially knowledgeable spouse (Avery, Elliehausen & Kennickell, 1987).

The 1986 SCF sample consisted of 2,822 respondents. A subsample of 538 families was selected for this study. Families included in the subsample had 1985 annual incomes less than or equal to 150 percent of the 1985 poverty level based on specific family sizes. For example, 150 percent of the poverty level for a two person family in 1985 was \$10,497. If the 1985 annual income for a two person family was less than or equal to \$10,497, that family was included in the subsample. The 1985 poverty figures were used because respondents in the 1986 SCF reported annual incomes for 1985. Mean, maximum, and minimum annual incomes for households of different sizes included in the subsample are provided in Table 1.

Of the 538 families, 73.2 percent were white, 50.9 percent were female, 58 percent were unemployed, 60.2 percent were nonmarried, and 59.5 percent were less than 65 years old. The majority (86.1 percent) lived in households with four members or less. A large percentage had incomes less than \$10,000 (73.4 percent) and did not have a high school diploma (58.4 percent). Approximately 55 percent were from regions other than the South (Table 2).

Table 2. Descriptive Statistics

Variables	Total Sample (538)		South (242)		Nonsouth (296)		Chisq
	n	%	n	%	n	%	
Financial Resources							
Income							
Less than \$5,000	155	28.81	84	34.71	71	23.99	10.987
\$5,000-\$7,499	159	29.55	69	28.51	90	30.41	
\$7,500-\$9,999	81	15.06	29	11.98	52	17.57	
\$10,000-\$14,999	98	18.22	37	15.29	61	20.61	
\$15,000-\$19,999	41	7.62	21	8.68	20	6.76	
\$20,000-\$24,999	2	0.37	1	0.41	1	0.34	
\$25,000-\$29,999	2	0.37	1	0.41	1	0.34	
Emergency Funds							
Yes	202	37.55	86	35.54	116	39.19	0.757
No	336	62.45	156	64.46	180	60.81	
Social Insurance/Welfare							
Yes	216	40.15	94	38.84	122	41.22	0.312
No	322	59.85	148	61.16	174	58.78	
Health Insurance							
Yes	221	41.08	82	33.88	139	46.96	9.404*
No	317	58.92	160	66.12	157	53.04	
Medicare							
Yes	189	35.13	86	35.54	103	34.80	0.032
No	349	64.87	156	64.46	193	65.20	
Medicaid							
Yes	80	14.87	37	15.29	43	14.53	0.061
No	458	85.13	205	84.71	253	85.47	
VA Medical							
Yes	25	4.65	6	2.48	19	6.42	4.664*
No	513	95.35	236	97.52	277	93.58	
Financial and Real Assets							
Stocks/Mutual Funds							
Yes	16	2.97	4	1.65	12	4.05	2.660
No	522	97.03	238	98.35	284	95.95	

(Table 2 continued on next page)

Table 2. (continued)

Variables	Total Sample (538)		South (242)		Nonsouth (296)		Chisq
	n	%	n	%	n	%	
Bonds							
Yes	21	3.90	4	1.65	17	5.74	5.939*
No	517	96.10	238	98.35	279	94.26	
Checking/Savings Accounts							
Yes	401	74.54	160	66.12	241	81.42	16.428
No	137	25.46	82	33.88	55	18.58	
IRAs/Keoghs							
Yes	28	5.20	9	3.72	19	6.42	1.967
No	510	94.80	233	96.28	277	93.58	
Money Market Accounts/CDs							
Yes	77	14.31	27	11.16	50	16.89	3.571*
No	461	85.69	215	88.84	246	83.11	
Profit Sharing/Thrift Accounts							
Yes	13	2.42	5	2.07	8	2.70	0.229
No	525	97.58	237	97.93	288	97.30	
Whole Life Insurance							
Yes	145	26.95	59	24.38	86	29.05	1.477
No	393	73.05	183	75.62	210	70.95	
Home Value							
Yes	330	61.34	160	66.12	170	57.43	4.233*
No	208	38.66	82	33.88	126	42.57	
Savings Attitudes							
Interest Effect							
Increase Savings	131	24.35	69	28.51	62	20.95	4.138*
Other	407	75.65	173	71.49	234	79.05	
Prize							
Save	448	83.27	209	86.36	239	80.74	3.019
Won't Save	90	16.73	33	13.64	57	19.26	

(Table 2 continued on next page)

Table 2. (continued)

Variables	Total Sample (538)		South (242)		Nonsouth (296)		Chisq
	n	%	n	%	n	%	
<u>Methods of Saving</u>							
Savings Change							
Put More Money	69	12.83	24	9.92	45	15.20	25.504*
Stayed the Same	102	18.96	28	11.57	74	25.00	
Took More Money	221	41.08	108	44.63	113	38.18	
No Savings	136	25.28	78	32.23	58	19.59	
N.A.	7	1.30	3	1.24	4	1.35	
Don't Know	3	0.56	1	0.41	2	0.68	
Savings Type							
First Save	65	12.08	33	13.84	32	10.81	1.001
Other	473	87.92	209	86.36	264	89.19	
<u>Demographic Characteristics</u>							
Gender							
Female	274	50.93	124	51.24	150	50.68	0.017
Male	264	49.07	118	48.76	146	49.32	
Employment Status							
Employed	226	42.01	100	41.32	126	42.57	0.085
Unemployed	312	57.99	142	58.68	170	57.43	
Marital Status							
Nonmarried	324	60.22	144	59.50	180	60.81	0.095
Married	214	39.78	98	40.50	116	39.19	
Age							
Under 25	11	2.04	2	0.83	9	3.04	8.302
25-34	82	15.24	30	12.40	52	17.57	
35-44	65	12.08	31	12.81	34	11.49	
45-54	65	12.08	30	12.40	35	11.82	
55-64	97	18.03	42	17.36	55	18.58	
65-74	117	21.75	61	25.21	56	18.92	
75 and over	101	18.77	46	19.01	55	18.58	
Household Size							
1-4 Persons	463	86.06	202	83.47	261	88.18	2.456
≥ 5 Persons	75	13.94	40	16.53	35	11.82	

(Table 2 continued on next page)

Table 2. (continued)

Variables	Total Sample (538)		South (242)		Nonsouth (296)		Chisq
	n	%	n	%	n	%	
Education							
0-8 years	201	37.36	114	47.11	87	29.39	21.342*
9-12 years	113	21.00	50	20.66	63	21.28	
H.S. Diploma	158	29.37	58	23.97	100	33.78	
Some College	47	8.74	14	5.79	33	11.15	
College Degree	19	3.53	6	2.48	13	4.39	
Race							
Blacks/Others	144	26.77	94	38.84	50	16.89	32.730*
Whites	394	73.23	148	61.16	246	83.11	

*Significant at $p < .05$

Empirical Model

Based on the limited background information on savings behavior of low-income families discussed above, the following models were examined for southern and nonsouthern families.

$$\text{Nominal} = f(\text{FR}, \text{FRA}, \text{SA}, \text{MS}, \text{DEMO})$$

$$\text{Real} = f(\text{FR}, \text{FRA}, \text{SA}, \text{MS}, \text{DEMO})$$

Nominal was the change in nominal savings from 1983 to 1986, and real was the change in real savings from 1983 to 1986. FR represented available financial resources, and FRA represented financial and real assets owned. SA represented savings attitudes, and MS represented methods of saving. DEMO represented demographic characteristics. A list of variables included in the chi-square and regression analyses are presented in Table 2, and a description of the variables appears in the Appendix.

Data Analysis

The chi-square test of independence was used to determine if differences existed between low-income families from the South and nonsouth regions with regard to financial resources, financial and real

assets, savings attitudes, methods of saving, and demographic characteristics. Multiple regression was used to test the effects of these variables on nominal and real savings. Four different regression equations were performed, one for nominal savings and one for real savings for families in the South and nonsouth regions.

RESULTS

Chi-Square Results

The results of the chi-square analyses are provided in Table 2. There were statistically significant differences between region and two of the financial resources variables. Families from the South were less likely than families from nonsouth regions to have private or employer-sponsored health insurance (33.88 percent and 46.96 percent, respectively) and to have VA medical benefits (2.48 percent and 6.42 percent, respectively).

Statistically significant differences existed between region and four of the financial and real assets variables. Approximately 6 percent of families from nonsouth regions had bonds compared to 1.65 percent of families from the South. A larger proportion of families from nonsouth regions (81.42 percent) than from the South (66.12 percent) had checking and/or savings accounts. Families from nonsouth regions were more likely than those from the South to have money market accounts and/or CDs (16.89 percent and 11.16 percent, respectively). However, more southern families (66.12 percent) than nonsouthern families (57.43 percent) had equity in their homes.

There were statistically significant differences between region and one of the savings attitudes variables and one of the methods of saving variables. A larger proportion of families from the South (28.51 percent) than from nonsouth regions (20.95 percent) indicated that they would increase savings if interest rates increased. A larger number of southern families (32.23 percent) than nonsouthern families (19.59 percent) had not saved over the past three years. Also, more families from the South (44.63 percent) than from nonsouth regions (38.18 percent) took more money out of savings over the past three years.

Statistically significant differences existed between region and two demographic characteristics. These were education and race. A

higher percentage of families from nonsouth regions (33.78 percent) than from the South (23.97 percent) had a high school diploma, but more families from the South (38.84 percent) than from nonsouth regions (16.89 percent) were blacks/others.

Regression Results

As indicated above, two regression equations were performed for families from the South and nonsouth regions. The results for families from the South are reported in Table 3, and the results for nonsouth families are reported in Table 4. Neither of the F-values for the regression equations for families from the South were statistically significant, but both of the F-values for the regression equations for families from nonsouth regions were statistically significant.

None of the individual variables were statistically significant for both the nominal and real savings equation for southern families. Five of the individual variables (Medicare, stocks and/or mutual funds, IRAs and/or Keoghs, profit sharing and/or thrift accounts, and age) were statistically significant for the nominal savings equation for nonsouthern families. All of these variables except stocks and/or mutual funds were statistically significant for the real savings equation for nonsouthern families. Families from nonsouth regions who received Medicare were more likely than those who did not receive Medicare to increase nominal and real savings from 1983 to 1986. Nonsouthern families who had stocks and/or mutual funds were more likely than those who did not have these assets to increase nominal savings over the past three years. Families from nonsouth regions who had IRAs and/or Keoghs and profit sharing and/or thrift accounts were less likely than those who did not have these accounts to increase nominal and real savings over the past three years. Age was negatively related to nominal and real savings from 1983 to 1986 for families from nonsouth regions.

CONCLUSIONS AND IMPLICATIONS

Some of the differences found between families from the South and nonsouth regions provide some interesting information and have important implications for consumer educators, practitioners and policy makers who work with and/or make decisions that affect low-

Table 3. Regression Results for South's Nominal and Real Savings (n=538)

Variables	Nominal Savings		Real Savings	
	Parameter Estimate	T-Value	Parameter Estimate	T-Value
<u>Financial Resources</u>				
Income	-0.309	-0.325	-0.370	-0.345
Emergency Funds	6453.420	0.810	7855.775	0.874
Social Insurance/Welfare	7492.085	0.956	8736.118	0.988
Health Insurance	4083.100	0.515	5759.364	0.643
Medicare	8814.658	0.958	10102	0.973
Medicaid	-5907.512	-0.606	-6041.893	-0.549
VA Medical	10464	0.489	10249	0.424
<u>Financial and Real Assets</u>				
Stocks/Mutual Funds	-16558	-0.602	-32172	-1.036
Bonds	45361	1.698	53174	1.764
Checkings Savings	-8117.568	-0.942	-10256	-1.054
IRAs/Keoghs	-10316	-0.563	-15653	-0.757
Money Market Accounts/CDs	16579	1.500	15635	1.253
Profit Sharing/Thrift Accounts	11000	0.447	14706	0.529
Whole Life Insurance	-1852.023	-0.225	-2144.738	-0.231
Home Value	5528.536	0.757	1615.941	0.196
<u>Savings Attitudes</u>				
Interest Effect	7552.554	0.924	8000.920	0.867
Prize	12084	1.214	14347	1.277
<u>Methods of Saving</u>				
Savings Type	3863.442	0.394	3926.402	0.355
<u>Demographic Characteristics</u>				
Gender	10349.	0.804	11194	0.770
Employment Status	-6709.136	-0.714	-8333.169	-0.786
Marital Status	-8903.578	-0.671	-8562.240	-0.572
Age	-218.340	-0.671	-290.450	-0.790
Household Size	-7487.742	-0.713	-8278.220	-0.699
Education	-1129.055	-1.076	-1480.415	-1.251
Race	-2743.455	-0.347	-4253.308	-0.477
Constant	7992.625	0.280	13492	0.418
R ²	0.0799		0.0866	
F-Value	0.751		0.820	

*Significant at p<.05

Table 4. Regression Results for Nonsouth's Nominal and Real Savings (n=538)

Variables	Nominal Savings		Real Savings	
	Parameter Estimate	T-Value	Parameter Estimate	T-Value
<u>Financial Resources</u>				
Income	-0.408	-0.332	-0.710	-0.513
Emergency Funds	-2055.596	-0.258	-5193.807	-.579
Social Insurance/Welfare	2346.674	0.289	4079.856	0.446
Health Insurance	-9148.101	-1.143	-7468.161	-0.828
Medicare	25095	2.589*	29450	2.695*
Medicaid	3288.434	0.298	3903.804	0.314
VA Medical	7732.491	0.519	10046	0.598
<u>Financial and Real Assets</u>				
Stocks/Mutual Funds	38856	2.090*	35403	1.689
Bonds	8582.133	0.553	10631	0.607
Checkings Savings	-7202.745	-0.711	-7557.516	-0.662
IRAs/Keoghs	-48689	-3.156*	-58326	-3.354*
Money Market Accounts/CDs	4854.594	0.468	2648.500	0.226
Profit Sharing Thrift Accounts	-53773	-2.253*	-61330	-2.280*
Whole Life Insurance	8878.099	1.102	7360.520	-0.811
Home Value	15057	1.809	11465	1.222
<u>Savings Attitudes</u>				
Interest Effect	1319.174	0.145	2279.747	0.222
Prize	-688.334	-0.075	-1488.479	-0.143
<u>Methods of Saving</u>				
Savings Type	5523.327	0.478	6818.433	0.523
<u>Demographic Characteristics</u>				
Gender	17949	1.427	18904	1.333
Employment Status	5201.833	0.574	3959.396	0.388
Marital Status	-24879	-1.842	-27799	-1.827
Age	-618.521	-2.057*	-731.572	-2.158*
Household Size	-1342.543	-0.100	-4398.229	-0.290
Education	1169.660	0.809	993.917	0.610
Race	-5134.683	-0.505	-5089.868	-0.444
Constant	16210	0.509	27370	0.762
R ²	0.1482		0.1506	
F-Value	1.879*		1.915*	

*Significant at p<.05

income families from different regions in the United States. The results show that families from nonsouth regions were more likely than families from the South to have private or employer-sponsored health insurance and VA medical benefits. This finding suggests that more families from nonsouth regions than from the South have jobs that provide health insurance as a fringe benefit. If this is true, families from nonsouth regions may have better jobs and better health care than families from the South. If nonsouthern families have better jobs than families from the South, this could be attributed to higher educational levels of families, less discrimination in employment, and more union jobs in nonsouth regions than in the South. Thus, an increase in the educational attainment of families and the formulation of more unions in the South could make a difference.

Even though families from the South were more likely than families from nonsouth regions to have equity in their homes, southern families had fewer assets overall than families from nonsouth regions. A larger number of families from the South than from nonsouth regions did not save and took more money out of savings over the past three years, but more families from the South than nonsouth regions indicated that they would save if interest rates increased. Southern families were less educated than nonsouthern families, and more southern families than nonsouthern families were blacks/others. This finding provides additional support that low educational attainment and racial discrimination in employment may contribute to the differences found between families in the South and nonsouth with regard to jobs with health insurance benefits. Because more families from the South than nonsouth regions did not save, it is obvious that they had fewer assets than families from nonsouth regions. On the other hand, families from the South may have had fewer assets than families from nonsouth regions because they had larger assets in the form of home equity. Another possible reason for not saving and having fewer assets include racial discrimination of financial institutions. It can be assumed that families from the South were dissatisfied with their level of savings because they said they would increase savings if interest rates increased. Families from nonsouth regions, on the other hand, may have been satisfied with their level of savings given their limited resources.

Families from nonsouth regions who received Medicare and had stocks and/or mutual funds were more likely to increase savings than

those who did not receive Medicare and did not have stocks and/or mutual funds. Nonsouth families who had IRA and/or Keoghs, profit sharing and/or thrift accounts, and were older were less likely to increase savings than those who did not have IRAs and/or Keoghs, profit sharing and/or thrift accounts, and were younger. Families who received Medicare were probably age 65 and older. At this age, perhaps, they had less debt which allowed them to increase savings. Older couples who had children may not have increased savings because of current expenditures. Families who had IRAs and/or Keoghs and profit sharing and/or thrift accounts may not have increased savings because they were already saving with the use of these instruments. It is not clear why families who had stocks and/or mutual funds were more likely to increase savings. Families could have reported the money saved through these investment instruments as part of savings over the past three years.

It is important for consumer educators, practitioners and policy makers to have insight into the financial resources, assets, and savings behavior of low-income families. This insight will enable consumer educators and practitioners to develop creative ways of encouraging and helping low-income families use existing financial resources, accumulate assets and save given their limited resources. Consumer educators and practitioners need to focus their efforts on identifying existing financial resources, teaching low-income families how to get the most from these financial resources, and feasible methods of saving for this population. Further, insight will help policy makers identify specific problems encountered by this population and develop policies that will help low-income families save in the future. Based on the findings of this study, consumer educators, practitioners and policy makers who work with and/or make decisions that affect low-income families may have to take different approaches based on the geographic region of the family.

APPENDIX

Dependent Variables

The dependent variables were change in nominal and real savings from 1983 to 1986. The Consumer Price Index was used to inflate 1983 dollars to 1986 dollars. Both nominal and real savings were continuous variables (Avery and Kennickell, 1988). These variables were used in the regression analyses.

Independent Variables

The *financial resources* variables included income, emergency funds, social insurance and/or public assistance, private or employer-sponsored health insurance, Medicare, Medicaid and Veteran's Administration medical benefits (VA). Income is defined as total 1985 household income. The variable, emergency funds, was measured by response to the question, "In an emergency could you (or your spouse) get financial assistance of \$3,000 or more from any friends or relatives who do not live with you?" The variable, social insurance and/or public assistance, was measured by response to the question, "During the past three years did you (or anyone in your family living in the household) receive workmen's or unemployment compensation, ADC, AFDC, food stamps, SSI or other public assistance?" Respondents also were asked if any household members were covered by an employer-sponsored or privately paid health plan and if any household members were eligible to receive Medicare, Medicaid and VA medical benefits (Avery and Kennickell, 1988). The categorical income variable was used in the chi-square analyses, and the continuous income variable was used in the regression analyses. All other variables were recoded as dummy variables for the chi-square and regression analyses.

The *financial and real assets* variables included stocks and/or mutual funds, bonds, checking and/or savings accounts, IRAs and/or Keoghs, money market funds and/or CDs, profit sharing and/or thrift accounts, cash value of whole life insurance policies, and current value of home. Respondents were asked to report their total

household holdings of these assets (Avery and Kennickell, 1988). All of these variables were recoded as dummy variables for the chi-square and regression analyses.

The *savings attitudes* variables were based on responses to the following two questions regarding what respondents would do with money in specific situations. "If the rate of interest you could earn on all your savings and investments went up by five percentage points, would you decrease the amount you spend so that you could set aside more to save, or would you make no change in your spending habits?" "If you won a cash prize equal to about three months of your usual income, would you save all of it, most of it, some of it, a little of it, or none of it?" (Avery and Kennickell, 1988) These questions were recoded as dummy variables for the chi-square and regression analyses.

The *methods of saving* variables were based on responses to the following two questions regarding types of savers.

"Considering all of your savings and reserve funds, in the past three years, did you put more savings in overall or take more money out?" Responses included 1) put more money in, 2) stayed the same, no savings, 3) took more money out, 4) no savings at all, 5) don't know, and 6) not applicable.

"There seem to be two different methods people use to save. Some people first put aside a certain amount for savings and then use the rest for expenses, while other people first pay all their expenses and then use the rest for savings. Which of these two ways comes closest to your saving habits?" (Avery and Kennickell, 1988)

The former question was used in the chi-square analyses, and the latter question was recoded as a dummy variable for the chi-square and regression analyses.

Demographic characteristics of families included region, gender, employment status, marital status, age, household size, education and race (Avery and Kennickell, 1988). The categorical age and education variables were used in the chi-square analyses, and the continuous age and education variables were used in the regression analyses. All other demographic variables were coded as dummy variables for the chi-square and regression analyses.

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