

RESEARCH REPORT



Analysis of Provincial Headship Rate Data
1971-1986

CMHC—HOME TO CANADIANS

Canada Mortgage and Housing Corporation (CMHC) has been Canada's national housing agency for more than 65 years.

Together with other housing stakeholders, we help ensure that the Canadian housing system remains one of the best in the world. We are committed to helping Canadians access a wide choice of quality, environmentally sustainable and affordable housing solutions that will continue to create vibrant and healthy communities and cities across the country.

For more information, visit our website at www.cmhc.ca

You can also reach us by phone at 1-800-668-2642 or by fax at 1-800-245-9274.

Outside Canada call 613-748-2003 or fax to 613-748-2016.

Canada Mortgage and Housing Corporation supports the Government of Canada policy on access to information for people with disabilities. If you wish to obtain this publication in alternative formats, call 1-800-668-2642.

**ANALYSIS OF PROVINCIAL
HEADSHIP RATE DATA 1971-1986**

by

**Andrejs Skaburskis
Thomas Burch**

Working Paper #4B

December 1, 1992

for

**Research Division
National Office
Canada Mortgage and Housing Corporation
Ottawa, Ontario
K1A 0P7**

TABLE OF CONTENTS

INTRODUCTION	1
THE RESEARCH QUESTION	1
THE MODEL	3
THE DATA	6
THE VARIABLES	6
THE REGRESSION RESULTS	10
THE ADJUSTED MODEL	16
THE FIRST DIFFERENCE MODEL	25
CONCLUSIONS	30

LIST OF TABLES

TABLE 1 FAMILY HEADSHIP RATE REGRESSIONS WITH LAGGED HEADSHIP RATE CURRENT FAMILY INCOME AND RENT	12
TABLE 2 NON-FAMILY HEADSHIP RATE REGRESSIONS WITH LAGGED HEADSHIP RATE CURRENT FAMILY INCOME AND RENT	13
TABLE 3 FAMILY HEADSHIP RATE REGRESSIONS WITH LAGGED HEADSHIP RATE, FAMILY INCOME AND INCOME CHANGE	17
TABLE 4 NON-FAMILY HEADSHIP RATE REGRESSIONS WITH LAGGED HEADSHIP RATES, FAMILY INCOME AND INCOME CHANGES	18
TABLE 5 FAMILY HEADSHIP RATE REGRESSIONS WITH LAGGED HEADSHIP RATES, LAGGED FAMILY INCOME AND CHANGES IN HEADSHIP RATES AND INCOME	20
TABLE 6 NON-FAMILY HEADSHIP RATE REGRESSIONS WITH LAGGED FAMILY FAMILY INCOME AND CHANGES IN HEADSHIP RATES AND INCOME	21
TABLE 7 FAMILY HEADSHIP RATE REGRESSIONS AND LAGGED CHANGES IN HEADSHIP RATES	23
TABLE 8 NON-FAMILY HEADSHIP RATE REGRESSIONS AND LAGGED CHANGES IN HEADSHIP RATES	24
TABLE 9 FAMILY HEADSHIP RATE CHANGE WITH FIRST DIFFERENCES IN INCOME AND HOUSING PRICES	27
TABLE 10 NON-FAMILY HEADSHIP RATE CHANGE WITH FIRST DIFFERENCES IN INCOME AND HOUSING PRICES	28
	28



National Office

Bureau national

700 Montreal Road
Ottawa ON K1A 0P7
Telephone: (613) 748-2000

700 chemin de Montréal
Ottawa ON K1A 0P7
Téléphone : (613) 748-2000

Puisqu'on prévoit une demande restreinte pour ce document de recherche, seul le résumé a été traduit.

La SCHL fera traduire le document si la demande le justifie.

Pour nous aider à déterminer si la demande justifie que ce rapport soit traduit en français, veuillez remplir la partie ci-dessous et la retourner à l'adresse suivante :

Centre canadien de documentation sur l'habitation
Société canadienne d'hypothèques et de logement
700, chemin Montréal, bureau C1-200
Ottawa (Ontario)
K1A 0P7

Titre du rapport: _____

Je préférerais que ce rapport soit disponible en français.

NOM _____

ADRESSE _____

rue

App.

ville

province

Code postal

No de téléphone () _____

INTRODUCTION

This report presents the analysis of the provincial headship rate data used in the CMHC Potential Housing Demand Projection Model. The analysis aims to develop parameter estimates that will base headship rate projections on beliefs regarding future economic and social conditions. The analysis starts with the conceptual model developed by Joseph C. Hu¹ of the United States Federal National Mortgage Association. The model is then adjusted to include variables describing past changes in headship rates and current changes in income levels. This report develops the following conclusions:

1. After considering past headship rates and past changes in headship rates, some, but not much, information is gained by considering income levels and changes in income levels.
2. The effects of future changes in economic conditions should be considered and judgement based adjustments to the last period's headship rates can be made to reflect beliefs regarding future changes in income.
3. Crude projections of headship rate changes based on projected changes in income are possible for the under-55 family and for under-35, non-family groups.

THE RESEARCH QUESTION

Headship rates are the reflection of the way people form families or other groups. Headship rates change when people decide to leave their parents' home earlier than in the past, when

¹ Joseph C. Hu, "An Econometric Model of Household Headship". Paper presented at the 1980 annual meeting of the Southern Region Demographic Group, Tallahassee, Florida.

marriage decisions are postponed, when divorce rates change and when older people have greater or lesser opportunities to maintain their own household. Headship rates can, therefore, be expressed by an identity relating household sizes to rates of marriage, divorce, group formation, leaving home decisions, and eventually the rate at which older people return to their children's home. The construction of the identity would not be particularly helpful to housing forecasters as it would simply shift the forecasting burden to the marriage, divorce and other rates.

Econometric studies referenced in the first working paper of this series showed that family formation rates were affected by economic conditions. Working Paper 4A in this series clearly identified the relationships among housing prices and income prospects and the various types of decisions people make regarding their household. Increases in income levels increase the ease with which people can form independent households and increase both family and non-family headship rates. Rent changes also affect household formation decisions; rent increases lead to more non-family households being formed and a reduction in family households.

The parameters estimated with the cross-sectional data appear large when used to trace or backcast past changes in aggregate headship rates. This finding is attributed to the belief that the effect of changes in income or housing prices over time does not have as great an effect as do the prevailing spatial differences. The geographic differences in economic conditions have remained

relatively constant over time and the populations of Canada's varied regions would have had time to adjust to these changes. The coefficients estimated for the economic variables with cross-sectional data embody the effects of social and cultural adaptation to differences in income prospects and housing costs.

A temporal change within a particular region will not have as great an impact as measured with cross-sectional data because people do not continually adjust their household in response to economic indicators and it takes time before the effects of price and income changes become manifest. A much smaller change is, therefore, expected as a result of a change in economic conditions and housing prices. The main research question guiding the work behind this report asks about the rate at which a population adjusts toward an equilibrium after a change occurs in economic conditions. What proportion of the eventual equilibrium headship rate changes induced by changes in economic circumstances will have taken place over a five-year inter-census period?

THE MODEL

The Joseph C. Hu model is based on the view that marriage and divorce decisions vary positively with economic conditions. Work presented in Working Paper 4A extended the influence to leaving home decisions, decisions to form groups, and decisions by families to double-up. Since these decisions affect headship rates directly, a linear model is postulated. In our application of the Hu model, the underlying equation expresses the equilibrium headship rate HR_i^*

at time, t , as a linear function of economic conditions and housing prices. These are described by an income variable, Y_t , and a housing price index, P_t .

$$HR_t^* = \delta + \beta_1 Y_t + \beta_2 P_t \quad (1)$$

Improvements in income are expected to increase headship rates while increases in housing prices will decrease headship rates.

A problem is created by our inability to observe HR_t^* , the equilibrium headship rate. The observed headship rate HR_t reflects the current condition of society as it changes and moves toward an equilibrium rate HR_t^* . Changes in economic conditions change the equilibrium rate; they deflect the target toward which observed rates move. The deflection can be described by a linear relationship between the current and last period observed headship rates and the current equilibrium headship rate:

$$HR_t - HR_{t-1} = \delta(HR_t^* - HR_{t-1}) \quad (2)$$

Equation 2 expresses the change in observed headship rates between this and the last period to be proportional to the difference between the current equilibrium rate and the previous periods observed rate. The parameter δ describes the adjustment rate, the proportion of the difference between the last headship rate and the current equilibrium rate that is overcome during the last period. Equation 2 presents a standard stock adjustment model.

Substituting the economic variables in equation 1 into equation 2 and rearranging terms gets rid of the hypothetical equilibrium rate and yields the following estimable equation:

$$HR_t = a + b HR_{t-1} + c_1 Y_t + c_2 P_t \quad (3)$$

The lagged headship rate variable on the right side of the equation is for the same age cohort and is included to account for adjustment rates. This model differs conceptually from models that try to include the history of the birth cohort by including the rate for the same birth cohort during the preceding period.

The coefficients in equation 3 can be related to the coefficients in equation 1. The parameters C_1 and C_2 would reflect the short-run impact of change in economic conditions. The estimable coefficient, b , is simply $(1 - \delta)$ and:

$$\delta = 1 - b \quad (4)$$

Subtracting the estimated coefficient b from 1 yields the rate at which the household formation behaviour of a population adjusts toward a new equilibrium formed by changes in economic conditions. The parameter β_1 in equation 1 is composed of the estimable parameters C_1 and b as follows:

$$\beta_1 = c_1 / (1-b) \quad (5)$$

THE DATA

The model specified in equation 3 will be estimated separately for the family and non-family headship rates.² Since economic conditions and housing prices affect cohorts differently, the model will be estimated for each five-year birth cohort. The main departure of this analysis is in its use of cross-sectional data as well as time series. Joseph C. Hu was able to obtain annual data for the United States and could work with the 29 data points between 1950 and 1979. In Canada, data for only four points in time are available for this analysis. To increase the size of the database, observations from the ten provinces are entered separately. The model, therefore, represents changes over time as measured across ten provinces. Conceptually this does not create a problem provided the adjustment rate, δ , is the same for all provinces. Equation 1 describes the equilibrium headship rate as a function of economic conditions. Spatial variation in these conditions will yield different equilibrium headship rates. Should data be available on the hypothetical headship rate HR^* , then we could estimate the parameters for the economic variables by taking observations from different regions facing different conditions.

THE VARIABLES

The headship rate data is taken from the CMHC Potential Housing Demand Model. The housing price data presents some

² Analysis of the joint headship rate yielded poorer estimates than with the separate family and non-family rates

difficulty. The 1986 Public Use Micro-data File (PUMF) data was used to construct the rent index used in the cross-sectional analysis of Working Paper #4A. The analysis presented below uses the provincial averages estimated with the PUMF database. The housing price variable entered in the equation 3 regression reflects the average price of rental accommodation occupied by people without children who have moved within the last five years. The price of a standardized four-room dwelling unit is estimated for each province using the public use micro-data file. The regressions used to construct the rent variable for 1986 are presented in Working Paper 4A. This variable reflects the price of the type of unit that would be available and would most likely be considered by people thinking about forming an independent household. Data for the earlier census years was constructed by applying the housing price indexes for metropolitan areas to the rent index estimated with the 1986 PUMF data. The available price indexes are standardized for each metropolitan area and reflect temporal not spatial differences in housing costs. The indexes were adjusted using the Canadian CPI for all items to reflect 1986 dollars. The combination of the 1986 PUMF spatial index and the metropolitan area time series yields a crude measure of the current price of a four-room rental unit measured in 1986 dollars.

The income variable used in the regressions should reflect the general economic conditions within which household formation decisions are made. The interpretation of the coefficient of equation 3 differs from the interpretation of coefficients in

Working Paper #4A by representing the general over-all effect of changes in the economy on a host of decisions. The selection of the income variable is, therefore, based on our beliefs regarding the variable that best reflects the general economic conditions within which household decisions are made.

Joseph C. Hu used the industrial production index after experimenting with the per capita disposable income, the unemployment rate and the level of employment. These other variables appear to have yielded inconsistent parameter estimates, some with the wrong sign. This range of experimentation was not possible in this analysis. Furthermore, this study's intention is to build on the cross-sectional work presented in Working Paper #4A, and will, therefore, use income as the indicator of economic conditions. Three income variables are assessed. The first uses the 1986 PUMF data and the provincial averages of the instrumental variable constructed for use in the cross-sectional analysis (Working Paper 4A, p. 10). Separate estimates were prepared for the 15-20, 20-30, 30-45, 45-65, 65+ cohorts. The income data for the earlier time frames was estimated by using the 1986 instrumental variable to show geographic variation and the CANSIM time series on disposable per capita income for each province to account for the pattern of historical change. The CPI was used to standardize the series in 1985 dollars.³

The second income variable was constructed by standardizing,

³ The income variables reflect the 1970, 1975, 1980, 1985 conditions because the census reports income from the previous year.

1985 dollars, the provincial average disposable per capita income time series available in CANSIM. The third used the income for all families as reported in the 1971, 1981, 1986 censuses. Family income for 1975 was estimated by taking a weighted average of the 1970 and 1980 data. The weights were constructed with the provincial disposable per capita income series.

THE ESTIMATION METHOD

This report presents the results obtained by using ordinary least squares. This is the simplest, most direct and easily understood estimation method and it is used to illustrate the nature of the relationships among variables and demonstrates the problems inherent in automating the headship rate forecasting module. However, several other estimation methods were used in the preliminary analysis.

The provinces are of unequal size. The OLS methods counts the PEI observations to have a weight equal to those of Ontario. If headship decisions show stochastic variation, we expect the Ontario sample to yield the lowest variance estimate of the headship rate. Heteroscedasticity corrections were carried out by weighing the cases by the inverse of the ratio formed by dividing the number of households in a province by the average number of households in Canadian provinces. No substantial gains in estimation quality were gained. Samples in all cases are large and mean squared errors due to sampling are low. The advantage of size of a province may be countered by its diversity which increases the errors embedded in

the average provincial income and housing price variables.

The results presented later in this report show a high degree of variation in coefficient sizes. Improved estimation can be achieved by recognizing that the same system generated the family headship rates for all cohorts and, therefore, some commonality in errors will exist. The data was transferred to run with SHAZAM and systems of simultaneous equations were estimated to improve efficiency. Zellner (Seemingly Unrelated Regressions) methods were used and t-statistics were substantially improved. The magnitude of the estimated coefficients, however, did not change in relevant ways.⁴ The flexibility offered by keeping the data in SAS was considered to be of greater value in exploratory stages of work than the improved precision gained by using simultaneous estimation methods with SHAZAM. The OLS results are presented in the text to facilitate comparison with the other attempts to explain the variation in inter-provincial headship rates that will be presented later in this report. The coefficients obtained for the specified model with the simultaneous method are in the appendix.

THE REGRESSION RESULTS

The complete regressions that are summarized in this section are presented in the appendix along with the analysis of residuals. Tables 1 and 2 in the text present estimates of the equation 3

⁴ For example, the t-statistic for the lagged headship rate variable for 25-30 year old non-family group increased from 12 with OLS to 19 with the Zellner method while the estimated coefficient dropped from .82 to .81.

parameters using the family income data. The disposable per capita income series yields the poorest results and the variable was dropped from further consideration. The family income and the PUMF based instrumental variables yield almost the same results.

The tables list the estimated coefficients that were different from zero with a probability of .10 using a two-tail test. The first column describes the constant term. The second column lists the estimated parameter b which is subtracted from 1 to yield the adjustment rate. The coefficients for the rent variable are entered in the summary tables to reflect the effect of a \$100 increase. The actual effect of price changes is computed by dividing this coefficient by the adjustment rate. The coefficient for the income variable reflects the effect of a \$1,000 change. The adjusted R² is listed next. The coefficient of variation in the last column describes the mean squared error in the regression as a percent of the mean value of the dependent variable.

The regression results do not provide a good basis for automating CMHC headship projections procedures. The magnitude of the coefficients for the lagged headship rate variable vary considerably and some clearly make no sense; values approaching one or exceeding one have no economic interpretation within the context of the theoretical model discussed earlier. The large number of coefficients that are close to 1 suggest the existence of a unit root in the headship rate series. This finding is consistent with the view of the headship rate process as a random walk in which change in the level of the variable is not governed by a

TABLE 1

**FAMILY HEADSHIP RATE REGRESSIONS WITH LAGGED HEADSHIP RATE
CURRENT FAMILY INCOME AND RENT**

AGE	C	LAGGED HD. RATE	RENT \$100	FAMILY INCOME \$1000	R ² ADJUSTED	C.V.
15-20*	ns	.3763	ns	ns	.3313	27.03
20-25	ns	.9203	ns	-.0020	.3494	13.02
25-30	ns	1.1578	ns	-.0021	.6022	4.21
30-35	.2161	.6134	ns	-.0012	.2485	2.68
35-40	.4588	ns	-.0087	ns	.1557	1.53
40-45	.3097	.4055	-.0070	ns	.6737	1.13
45-50	.3232	.3664	-.0109	.0012	.6778	1.36
50-55	.1264	.7651	ns	.0006	.7295	1.49
55-60	ns	.9106	ns	ns	.7764	1.50
60-65	.1697	.7460	.0091	ns	.9055	1.40
65-70	.2396	.6117	-.0091	-.0010	.8403	1.97
70-75	.2165	.6024	ns	-.0010	.7182	2.88
75+	.1878	.4708	ns	-.0019	.6690	5.26

Number of cases = 30

ns not significant at the .10 probability

* refers to people 15 up to, but not including, 20 years of age
in all tables.

TABLE 2

**NON-FAMILY HEADSHIP RATE REGRESSIONS WITH LAGGED HEADSHIP RATE
CURRENT FAMILY INCOME AND RENT**

AGE	C	LAGGED HD. RATE	RENT \$100	INCOME \$1000	R ² ADJUSTED	C.V.
15-20	ns	.7042	ns	ns	.5869	41.74
20-25	-.1106	.5319	.0215	ns	.7875	19.68
25-30	-.1553	.4140	.0228	.0028	.9563	8.43
30-35	-.0551	.8149	.0076	.0012	.9709	7.43
35-40	ns	1.0924	ns	.0006	.9646	8.12
40-45	ns	1.1267	ns	.0005	.9222	10.22
45-50	ns	1.2350	ns	ns	.9654	5.23
50-55	ns	.9814	ns	ns	.9141	6.50
55-60	ns	.9496	ns	ns	.9292	4.68
60-65	ns	.8324	.0069	ns	.9451	3.69
65-70	ns	.8494	.0087	ns	.9236	3.90
70-75	ns	.7629	.0140	ns	.9258	3.92
75+	ns	.9340	.0099	-.0009	.9748	3.14

Number of cases = 30

ns not significant at the .10 probability

deterministic process. Further attempts to interpret the estimated models and examine variants of the model will be presented in this report before developing further implications of the unit root problem and re-specifying the basic model as a difference equation.

The signs for most of the statistically significant income variables in the family headship rate regressions are wrong. The rent variable yields expected signs but the level of variation in headship rates yields poor estimates in 8 out of 13 cases. The magnitude of some of the estimated coefficients that are different from zero are similar but the effects of price differences appear to change with age in ways that run counter to the findings with the more robust cross-sectional analysis. A one hundred dollar increase in rents, (i.e. a 25% increase) reduces the actual headship rates for the 40-45 cohort by the amount $.007 / (1 - .4055) = .012$. A similar change in prices reduces the family headship rate for the 65-70 cohort by .023.

The estimated regression equations for the 40-45 and 65-70 cohorts yield estimates of adjustment rates. Increases in income or reductions in housing prices increase the equilibrium headship rates for these cohorts. The younger group appears to adjust faster: 63.36 percent of the move to an equilibrium is achieved in a five-year period. The older cohort shows 38.83 percent adjustment in the same time period. The decline in adjustment rates is opposite to the changes found by Joseph C. Hu.

The non-family headship rates in certain age groups are affected by housing prices. The magnitude of the estimated

coefficients are approximately the same as in the family regressions but the signs are reversed. An increase in housing prices increases the formation of non-family households. This finding is consistent with the findings developed with the PUMF data and reported in Working Paper #4A. Increases in housing prices may increase non-family headship rates by postponing marriage and family formation decisions.

Table 2 shows that income increases help 20 to 45 year old people form non-family households. A \$1,000 dollar increase in the income of 25-30 year olds increases non-family headship rates by .0048. The average rate for this group is .0939. A one percent increase in income, raises non-family headship rates by approximately 0.15 percent for 25-30 year olds (i.e., the elasticity is 0.15).

Both tables show that the greatest variation in headship rates are among the youngest cohorts. The average error in the regressions are high for these groups indicating that predication of future rates is difficult or impossible. The root of the mean squared error for the 15-20 year old family heads is 27 percent as large as the average headship rate for this group. The residuals for the first set of regressions are presented in the Appendix. A casual review of the residuals shows a relatively even and random distribution of errors. No systematic deviation in residuals, that would indicated the possible source of errors, is apparent.

THE ADJUSTED MODEL

The model represented by equation 3 was adjusted in a large number of ways in the attempt to gain more consistent parameter estimates. Two of the attempts are described here.

Tables 3 and 4 present a model that drops the price variable to focus on the economic conditions as measured by the average provincial income variable. It adds a variable describing change in income during the consecutive census years. The income change variable can be seen to represent changes in expectations regarding future income. People make household formation decisions based on current economic conditions and their expectations regarding their permanent income. Increases in income over the last five years may stimulate the belief in future increases and thereby promote household formation.

The Table 3 and 4 results show a little better fit than was obtained with the price and income variables.⁵ The results show that increases in income are associated with increases in family headship rates for people under 45 years of age. Non-family headship rates increase with income for people under 30 years of age. The coefficients for the lagged headship rates are close to one. Very little is gained by considering income changes. Given the coefficients for the lagged non-family headship rate variable, the clearest forecast is based on the last observed value which can

⁵ The rent variable could not be introduced into these equations to yield interesting results. The rent or the lagged rent or differences in rent variables did not yield non-zero coefficients.

TABLE 3

**FAMILY HEADSHIP RATE REGRESSIONS WITH LAGGED HEADSHIP RATE,
FAMILY INCOME AND INCOME CHANGE**

AGE	C	LAGGED HD. RATE	FAMILY INCOME \$1000	INCOME CHANGE \$1000	R ² ADJUSTED	C.V.
15-20	ns	.5917	ns	.0005	.5292	22.68
20-25	.0562	.7586	-.0011	.0039	.5731	10.55
25-30	ns	.7508	-.0016	.0028	.6777	3.78
30-35	.2334	.5308	-.0013	.0026	.6250	1.89
35-40	.3117	.3414	ns	.0015	.3304	1.36
40-45	.2024	.6109	-.0005	.0011	.7276	1.03
45-50	.1174	.7695	ns	.0021	.7778	1.13
50-55	ns	.9143	ns	ns	.7278	1.50
55-60	ns	.9548	ns	ns	.7646	1.44
60-65	ns	.9119	-.0006	-.0007	.8951	1.47
65-70	.1104	.8250	-.0011	-.0012	.8463	1.93
70-75	.1653	.6664	-.0013	ns	.7026	2.95
75+	.1367	.6307	-.0013	ns	.6890	5.10

Number of cases = 30

ns not significant at the .10 probability

TABLE 4

**NON-FAMILY HEADSHIP RATE REGRESSIONS WITH LAGGED HEADSHIP RATES,
FAMILY INCOME AND INCOME CHANGES**

AGE	C	LAGGED HD RATE	LAGGED FAMILY INCOME	FAMILY INCOME CHANGE \$1000	R ² ADJUSTED	C.V.
15-20	ns	.8834	ns	.0015	.7986	29.14
20-25	ns	1.0020	ns	.0050	.8771	14.97
25-30	ns	.9180	ns	.0028	.9361	10.20
30-35	ns	1.0229	.0008	ns	.9663	7.99
35-40	-.0142	1.0859	.0007	ns	.9643	8.16
40-45	-.0149	1.0448	.0007	-.0007	.9309	9.63
45-50	-.0081	1.1931	ns	ns	.9681	5.02
50-55	ns	1.0746	ns	ns	.9157	6.45
55-60	ns	.9655	ns	ns	.9291	4.69
60-65	.0168	.9206	ns	ns	.9366	3.96
65-70	.0381	.9471	ns	.0009	.9240	3.89
70-75	.0598	.8537	ns	ns	.9182	4.11
75+	.0567	.9855	ns	ns	.9737	3.21

Number of cases = 30

ns not significant at the .10 probability level

then be adjusted for the younger groups to reflect the effect of changes in the economy. If we believe that the economy will grow 10 percent per capita by 2011, then the headship rates for the under 40 year olds can be adjusted upward by a few percent. More precision cannot be gained by statistical analysis of the available data.

The models developed in this report are based on the general view that the characteristics of an age cohort will be similar to the characteristics of the same age cohort in the past period. Differences in the behaviour of age cohorts are due to differences in the economic environment they face.

The behavioural model expressed by equation 1 contains only a constant term to reflect broad based change in social or cultural factors that continue over the three time periods. The lagged headship rate for the same age cohort is included in the models to help account for the partial adjustment toward a new equilibrium. There should be no other interpretation for the coefficients of this variable.

The best regression fits were obtained by entering not only the lagged headship rate for the same age cohort but also the lagged change in headship rates. The second variable listed in Tables 5 and 6 describes the difference between the preceding periods headship rate for the same cohort and the rate prevailing in the period before that one. For 1986 cases, the lagged headship rate change is the difference between the 1981 and 1976 rates. The change in headship rates can reflect the "mutability" of the

TABLE 5
**FAMILY HEADSHIP RATE REGRESSIONS WITH LAGGED HEADSHIP RATES,
LAGGED FAMILY INCOME AND CHANGES IN HEADSHIP RATES AND INCOME**

AGE	C	LAGGED HD RATE	LAGGED HD RATE CHANGE	LAGGED FAMILY INCOME \$1000	FAMILY INCOME CHANGE \$1000	R ² ADJUSTED	C.V.
15-20	ns	.6061	.5274	.0001	ns	.9236	10.44
20-25	ns	.9163	.4046	.0007	.0013	.9427	4.09
25-30	ns	.9470	.4430	.0008	ns	.9433	1.47
30-35	ns	.8585	.4513	ns	.0006	.9311	.85
35-40	.1662	.5849	.5192	.0006	.0007	.7147	.91
40-45	.1583	.6566	.3495	ns	ns	.7312	.61
45-50	.0710	.8836	.3086	-.0006	.0009	.8910	.61
50-55	ns	.9766	.4466	ns	.0014	.8550	.98
55-60	.0905	.8064	.4064	ns	ns	.8723	1.10
60-65	ns	1.1474	ns	ns	-.0012	.9396	1.19
65-70	ns	1.0409	.4410	ns	-.0014	.9075	1.52
70-75	.1042	.8024	.5406	-.0008	-.0032	.9109	1.63
75 +	.1234	.6684	.4624	ns	-.0032	.6611	3.92

Number of cases = 20

ns not significant at the .10 probability level

TABLE 6
**NON-FAMILY HEADSHIP RATE REGRESSIONS WITH LAGGED FAMILY
 FAMILY INCOME AND CHANGES IN HEADSHIP RATES AND INCOME**

AGE	C	LAGGED HD RATE	LAGGED HD RATE CHANGE	LAGGED FAMILY INCOME \$1000	FAMILY INCOME CHANGE \$1000	R ² ADJUSTED	C.V.
15-20	ns	.7403	.6670	ns	ns	.9908	6.57
20-25	ns	.8194	.6240	ns	ns	.9829	5.46
25-30	ns	.8226	.6684	ns	.0009	.9893	3.65
30-35	ns	.8400	.6851	ns	.0008	.9905	3.51
35-40	ns	.8645	.7580	ns	.0009	.9894	3.82
40-45	ns	.9417	.5545	ns	ns	.9587	6.75
45-50	ns	.9644	.6706	ns	.0004	.9910	2.62
50-55	ns	.8023	.8898	ns	.0008	.9572	4.39
55-60	-.0108	.9644	.7355	ns	.0010	.9828	2.08
60-65	.0169	.9779	.2940	ns	ns	.9702	2.52
65-70	ns	.9345	.4288	ns	ns	.9709	2.25
70-75	ns	.9234	.5167	.0009	.0015	.9703	2.19
75 +	ns	.9379	.5383	ns	ns	.9928	1.49

Number of cases = 20

ns not significant at the .10 probability level

population - the extent to which the people of the province can adapt and change their household formation behaviour in light of changes in economic conditions. Cultural factors may reduce the ability of people to respond. They may reduce the importance and economic conditions in household formation decisions. Provinces with larger past changes may be more adaptable and, therefore, more responsive to future changes in economic conditions.

The entry of this variable into the regression substantially improves the fit of the model at the expense of virtually eliminating the variation that can be associated with the income level variable. Changes in income, however, remain significant for more than half of the cohorts. Increases in income, rather than the level of income, increase headship rates for some cohorts.⁶ This finding is consistent with the belief that the deterministic component of the change in headship rates is in the difference in rates and economic conditions rather than in the level of the variables.

Tables 7 and 8 present the results obtained by regressing current headship rates against the last period rate and the rate of change in the earlier periods of headship rates. Overall, the model fit is not quite as good as the one with the economic variables but the differences are small. The R^2 for the 25-30 family headship regression with the economic variables is .9433 compared to .9244

⁶ The lagged income variable yielded results equivalent to those obtained with the current income level. The entry of either variable improved the estimates of the income change coefficients.

TABLE 7
FAMILY HEADSHIP RATE REGRESSIONS
AND LAGGED CHANGES IN HEADSHIP RATES

AGE	C	LAGGED HD. RATE	LAGGED HD. RATE CHANGE	R ² ADJUSTED	C.V.
15-20	ns	.8459	.0025	.8056	16.56
20-25	ns	.9690	.0674	.9211	4.80
25-30	ns	.8441	.1565	.9244	1.69
30-35	ns	.8848	.1935	.9202	.91
35-40	.1755	.6092	.2038	.6303	1.04
40-45	.1462	.6856	.1569	.7601	.57
45-50	.1047	.7634	.2672	.8231	.78
50-55	.0928	.8003	.1902	.7218	1.36
55-60	.0840	.8135	.2331	.8820	1.06
60-65	ns	1.0539	ns	.9167	1.40
65-70	ns	.8791	.1772	.8395	2.01
70-75	.0854	.7594	.1315	.7104	2.93
75+	.1342	.5233	.1815	.4964	4.78

Number of cases = 20

ns not significant at the .10 probability level

TABLE 8
NON-FAMILY HEADSHIP RATE REGRESSIONS
AND LAGGED CHANGES IN HEADSHIP RATES

AGE	C	LAGGED HD. RATE	LAGGED HD. RATE CHANGE	R ² ADJUSTED	C.V.
15-20	ns	.8646	.0045	.8829	23.47
20-25	1.0162	1.0714	.0226	.9193	11.86
25-30	ns	1.1846	.0188	.8974	11.30
30-35	ns	1.1728	ns	.9360	9.11
35-40	ns	1.1946	ns	.9671	6.74
40-45	ns	1.2496	ns	.9537	7.14
45-50	-.0063	1.1591	.0212	.9832	3.59
50-55	ns	1.0236	.0456	.9308	5.58
55-60	ns	1.0630	.0421	.9472	3.64
60-65	ns	.9704	.0396	.9653	2.72
65-70	ns	1.0455	.0773	.9736	2.14
70-75	ns	1.1046	.1134	.9583	2.60
75+	-.0363	1.1061	.1261	.9898	1.77

Number of cases = 20

ns not significant at the .10 probability level

and the coefficient of variation increases from 1.47 to 1.69 percent. The coefficients for the lagged headship rate variable for all but the 35-45 year olds are close to one indicating the presence of a unit root in the polynominal describing relay structure.

Knowledge of current and future income levels would add information to headship rate forecasts but the comparison of Tables 5 and 6 with Tables 7 and 8 showing that the amount of improvement in forecasts, however, would not be great.

THE FIRST DIFFERENCE MODEL

The preceding tables show the majority of the coefficients for the lagged headship rate variable to be close to 1. This suggests that the first order polynomial of the headship rate series has a root equal to 1. The unit root issue was discussed in the literature review paper and appears present in the provincial headship rate series. Two estimation procedures can be used in such cases. The procedure best suited for long-run projections involves the testing for cointegration of the headship rate and economic time series. Software is not available for these tests and the nature of the data -- the use of cross-sectional data to help assess temporal relationships preclude this analysis -- would require the development of new statistical tests. The other approach involves using differences across consecutive time series to remove the "level" effects of the variables, and examining changes in headship rates as functions of changes in the housing

prices and the income variables. This approach focuses on the short-run impacts of the economic variables.

Tables 9 and 10 present the results of regressing the change in headship rates against changes in the two variables of interest.⁷ The housing price variable shows non-family headship rates to be positively associated with rent increases. While this result is consistent with findings developed with the cross-section PUMF data, the results cannot be used to forecast headship rates. The theoretical explanation for finding a positive association for only this group and for not finding the other expected correlation with the income variables would have to be too intricate to justify the use of the estimates.

The income change variables yield the expected results for the under-55 family and under-35 non-family headship rates. A \$1,000 increase in the income of the 25-30 cohort increases the non-family headship rate by .0033. A one percent increase in income raises the headship rates for this group by about 0.1 percent. The results compare favourably with the estimates gained earlier with the long-run model. The parameters estimated with the difference model are made interesting by the consistency of parameters across the younger age groups.

LAGGED BIRTH COHORT VARIABLES

An entirely different approach was also examined in this work. A birth cohort's headship behaviour can be modelled as a function

⁷ Simultaneous equation estimates yielded virtually the same coefficients.

TABLE 9
**FAMILY HEADSHIP RATE CHANGE WITH FIRST
 DIFFERENCES IN INCOME AND HOUSING PRICES**

FIRST DIFFERENCES

AGE	C	RENT CHANGE (\$100)	INCOME CHANGE (\$1,000)	R ² ADJUSTED	C.V.
15-20	-.0008	ns	.0006	.3737	290.22
20-25	-.0183	ns	.0035	.2345	212.96
25-30	-.0195	ns	.0022	.1039	113.51
30-35	-.0100	ns	.0023	.2264	339.38
35-40	ns	ns	.0022	.1952	336.92
40-45	ns	ns	.0016	.2289	113.64
45-50	ns	ns	.0026	.5940	73.01
50-55	ns	ns	.0009	.1489	119.11
55-60	ns	ns	ns	.032	2692.72
60-65	ns	ns	-.0008	.091	222.47
65-70	ns	ns	-.0015	.1619	586.51
70-75	ns	-.0199	ns	.0997	1684.13
75+	ns	-.0212	-.0036	.3939	96.67

TABLE 10
**NON-FAMILY HEADSHIP RATE CHANGE WITH FIRST
 DIFFERENCES IN INCOME AND HOUSING PRICES**

FIRST DIFFERENCES

AGE	C	RENT CHANGE (\$100)	INCOME CHANGE (\$1,000)	R ² ADJUSTED	C.V.
15-20	-.0029	ns	.0015	.5252	353.63
20-25	ns	ns	.0050	.5184	98.90
25-30	-.1118	ns	.0033	.5102	44.23
30-35	-.0156	.0143	.0008	.2179	35.25
35-40	.0130	.0131	ns	.1809	47.69
40-45	.0098	.0137	-.0007	.2680	66.44
45-50	.0080	.0089	-.0005	.2680	56.88
50-55	.0056	.0085	ns	.0907	71.92
55-60	.0064	.0083	ns	.0784	65.72
60-65	.0055	ns	ns	-.0030!	92.07
65-70	.0068	ns	.0010	.0448	96.09
70-75	.0110	ns	.0015	.0389	87.82
75+	.0263	ns	ns	.0385	35.31

of the economic variables and its own past headship rates. This model loses the interpretation of coefficients as reflecting rates of adjustment to a new equilibrium. It gains potential new interpretation as the current headship rate is seen as a function of the birth cohort's previous rate and an adjustment due to a constant change brought about by the factors that have always been associated with aging and a set of factors that are influenced by economic conditions.

All cohort versions of the models presented in this report were run using the lagged headship rate for the same birth cohort instead of the lagged headship rate of the same age group. Tables 11 and 12 present the results obtained by regressing the headship rate against the lagged rate for the same cohort (i.e., the headship rate the same cohort had five years ago) and the lagged family income and income change variables. The model is identical to that yielding Tables 3 and 4 results except for the lagged headship rate specification.

In general, the change in the lagged headship rate specification reduces the quality of estimates for the under 30 population and improves the fit for the middle age population, the group that changes its headship rate least over time. Because it is important for forecasting to gain good estimates of the most changeable populations, the lagged birth cohort approach was not pursued in this report and the results presented in the rest of this report focus attention on age cohort differences. We recognize that the extent of the influence of economic conditions will be

affected by a cohort's previous history⁸, and that further work in this area is warranted. The inclusion of birth cohort histories, however, reduces the number of observations that can be used in the regression. Further work with models that include birth cohort histories may yield more interesting results when the 1991 census data become available.

CONCLUSIONS

Regression analysis of the headship rate data yields coefficients that are not usable in automated headship rate projection modules. The income and housing price variables add little to explain inter-provincial and inter-temporal variation in aggregate headship rates. At the present time, headship rate projections must be based on observed past rates and on judgement regarding the magnitude of changes introduced by changing economic conditions. Improvements in income will increase headship rates for the under 40 cohorts. The cross-sectional studies show a strong positive correlation between income and headship status for older Canadians. If real income is expected to increase over the next forecast period, headship rates for the two groups can be adjusted upwards: for each 10 percent increase in real income, headship rates can be assumed to increase by 1 or 2 percent over current levels (i.e., the elasticity is in the 0.1 to 0.2 range).

The pooled time series analysis did not show housing prices to affect headship rates. Since the real price of rental accommodation

⁸ The possibility of rebound effects, for example, cannot be modelled without considering the cohort's past history.

changed so little in real terms since 1971, it is as well to ignore the possible effects of future price changes when projecting headship rates. The effect of housing prices and housing availability, however, should be considered when assessing policy relating to seniors' housing and transfer payments. The long-run impacts of policies affecting the elderly can be assessed by using the cross-sectional results.

More consistent regression coefficients may be obtained after the 1991 data become available and the number of cases is increased. The longer series will provide a better basis for examining the lag structures in the headship rate series. Future work may usefully experiment with other indicators of economic conditions and with measures of housing availability rather than price. Qualitative analysis limited to the more changeable cohorts, the under 30 and over 65 can show the relative importance of economic conditions. Such analysis may show how people differ across Canada's regions in their household formation aspirations, decisions and actions.

TABLE 11

FAMILY HEADSHIP RATES WITH LAGGED BIRTH COHORT HEADSHIP RATES,
FAMILY INCOME AND INCOME CHANGE

AGE	C	LAGGED HD. RATE BIRTH C.	LAGGED FAMILY \$1000	INCOME CHANGE \$1000	R ² ADJUST.	C.V.
15-20	-	-	-	-	-	-
20-25	.1525	4.1859	-.0018	.0042	.4881	11.55
25-30	.3364	.5189	-.0027	ns	.6580	3.90
30-35	.2211	.6340	-.0007	ns	.8009	1.38
35-40	.2220	.5686	ns	.0007	.6663	.96
40-45	.1406	.7435	ns	.0007	.7883	.91
45-50	.1137	.8129	-.0007	.0006	.8482	.93
50-55	ns	1.1552	-.0017	ns	.8730	1.02
55-60	ns	1.0644	-.0013	ns	.9212	.89
60-65	ns	1.1211	-.0013	-.0012	.9570	.94
65-70	ns	.8324	-.0010	-.0014	.8718	1.76
70-75	ns	.9141	-.0007	-.0013	.8373	2.18
75+	.2030	.3975	-.0027	ns	.5995	5.78

TABLE 12

**NON-FAMILY HEADSHIP RATES WITH LAGGED BIRTH COHORT HEADSHIP RATES,
FAMILY INCOME AND INCOME CHANGE**

AGE	C	LAGGED HD. RATE BIRTH C.	LAGGED FAMILY \$1000	INCOME CHANGE \$1000	R ² ADJUST.	C.V.
15-20	-	-	-	-	-	-
20-25	ns	3.0383	.0017	.0043	.8719	15.28
25-30	-.0549	.5773	.0028	.0026	.9315	10.56
30-35	ns	.7249	ns	.0010	.9539	9.35
35-40	ns	.9188	ns	.0008	.9690	7.60
40-45	ns	1.0903	ns	ns	.9536	7.89
45-50	ns	1.1450	ns	ns	.9348	7.19
50-55	ns	1.3127	ns	ns	.9500	4.96
55-60	.0187	1.2593	ns	.0006	.9542	3.77
60-65	.0229	1.3222	ns	.0009	.9762	2.43
65-70	.0467	1.2312	ns	.0002	.9433	3.36
70-75	.0433	1.2852	-.0010	ns	.9694	2.52
75+	ns	1.3490	ns	ns	.9440	4.69

APPENDIX A1

FAMILY HEADSHIP RATES

**Ordinary Least Squares Regression Results
with right side variables:**

AGE1L: lagged one period headship rate for the 15-20 cohort
RENT4: average rent for 4-room apartment
FAMINC: average all family income

08:59 Wednesday, November 18, 1992

Model: MODELL

Dependent Variable: AGE1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00011	0.00004	5.788	0.0036
Error	26	0.00016593	6.3819223E-6		
C Total	29	0.00028			
Root MSE		0.00253	R-square	0.4004	
Dep Mean		0.00935	Adj R-sq	0.3313	
C.V.		27.03005			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.002757	0.00569416	-0.484	0.6323
AGE1L	1	0.376346	0.19323296	1.948	0.0623
RENT4	1	0.000009706	0.00001262	0.769	0.4488
FAMINC	1	0.000000105	0.00000014	0.731	0.4711

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 2

Obs	PROV	DATE	Dep Var AGE1	Predict Value	Std Err Predict	Residual1	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.00542	0.00585	0.001	-0.00043	0.002	-0.186				0.002
2	NF	81	0.00413	0.00712	0.001	-0.00300	0.002	-1.268	**			0.057
3	NF	86	0.00421	0.00650	0.001	-0.00230	0.002	-0.980	*			0.038
4	PE	76	0.00856	0.00685	0.001	0.00171	0.002	0.725	*			0.019
5	PE	81	0.00658	0.00850	0.001	-0.00192	0.002	-0.795	*			0.015
6	PE	86	0.00462	0.00783	0.001	-0.00322	0.002	-1.319	**			0.032
7	NS	76	0.00877	0.00743	0.001	0.00133	0.002	0.565	*			0.012
8	NS	81	0.00840	0.00949	0.001	-0.00109	0.002	-0.454				0.005
9	NS	86	0.00626	0.00944	0.001	-0.00318	0.002	-1.288	**			0.021
10	NB	76	0.0107	0.00663	0.001	0.00408	0.002	1.727	***			0.108
11	NB	81	0.00936	0.00916	0.001	0.0002	0.002	0.088				0.000
12	NB	86	0.00671	0.00854	0.001	-0.00183	0.002	-0.803	*			0.037
13	QU	76	0.00687	0.00721	0.001	-0.00034	0.002	-0.152				0.002
14	QU	81	0.00912	0.00931	0.001	-0.00019	0.002	-0.079				0.000
15	QU	86	0.00909	0.00988	0.001	-0.00079	0.002	-0.321				0.001
16	ON	76	0.00990	0.00892	0.001	0.000984	0.002	0.409				0.004
17	ON	81	0.00948	0.0109	0.001	-0.00141	0.002	-0.591	*			0.010
18	ON	86	0.00744	0.0107	0.001	-0.00328	0.002	-1.441	**			0.120
19	MA	76	0.0109	0.00876	0.001	0.00210	0.002	0.888	*			0.028
20	MA	81	0.0122	0.0110	0.001	0.00121	0.002	0.510	*			0.009
21	MA	86	0.0102	0.0115	0.001	-0.00130	0.002	-0.551	*			0.011
22	SA	76	0.0118	0.00813	0.001	0.00363	0.002	1.508	***			0.056
23	SA	81	0.0141	0.0111	0.001	0.00292	0.002	1.196	**			0.026
24	SA	86	0.0121	0.0118	0.001	0.000361	0.002	0.158				0.001
25	AL	76	0.0128	0.00959	0.001	0.00324	0.002	1.348	**			0.047
26	AL	81	0.0178	0.0119	0.001	0.00594	0.002	2.791	*****			0.794
27	AL	86	0.0126	0.0139	0.001	-0.00132	0.002	-0.636	*			0.048
28	BC	76	0.0103	0.00934	0.001	0.000913	0.002	0.371				0.002
29	BC	81	0.0113	0.0113	0.001	9.684E-6	0.002	0.004				0.000
30	BC	86	0.00868	0.0117	0.001	-0.00302	0.002	-1.307	**			0.082

Sum of Residuals 0
 Sum of Squared Residuals 0.0002
 Predicted Resid SS (Press) 0.0002

08:59 Wednesday, November 18, 1992

Model: MODEL2

Dependent Variable: AGE2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00669	0.00223	6.192	0.0026
Error	26	0.00936	0.00036		
C Total	29	0.01605			
Root MSE		0.01898	R-square	0.4167	
Dep Mean		0.14575	Adj R-sq	0.3494	
C.V.		13.01939			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.012569	0.04614167	0.272	0.7875
AGE2L	1	0.920305	0.22521467	4.086	0.0004
RENT4	1	0.000107	0.00009478	1.131	0.2685
FAMINC	1	-0.000002034	0.00000094	-2.156	0.0405

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 4

Obs	PROV	DATE	Dep Var AGE2	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.1481	0.1292	0.008	0.0190	0.017	1.101		**		0.066
2	NF	81	0.1207	0.1398	0.006	-0.0191	0.018	-1.069		**		0.036
3	NF	86	0.0901	0.1169	0.008	-0.0269	0.017	-1.579	***			0.153
4	PE	76	0.1493	0.1371	0.007	0.0122	0.018	0.691		*		0.019
5	PE	81	0.1446	0.1444	0.005	0.000103	0.018	0.006				0.000
6	PE	86	0.1136	0.1381	0.005	-0.0245	0.018	-1.341	**			0.033
7	NS	76	0.1578	0.1529	0.007	0.00489	0.018	0.276				0.003
8	NS	81	0.1513	0.1569	0.006	-0.00558	0.018	-0.308				0.002
9	NS	86	0.1170	0.1465	0.004	-0.0295	0.019	-1.593	***			0.032
10	NB	76	0.1705	0.1434	0.007	0.0270	0.018	1.525	***			0.084
11	NB	81	0.1583	0.1600	0.008	-0.00168	0.017	-0.098				0.001
12	NB	86	0.1208	0.1468	0.008	-0.0260	0.017	-1.503	***			0.115
13	QU	76	0.1430	0.1157	0.010	0.0273	0.016	1.662	***			0.233
14	QU	81	0.1448	0.1343	0.006	0.0105	0.018	0.580	*			0.008
15	QU	86	0.1219	0.1372	0.005	-0.0153	0.018	-0.833	*			0.011
16	ON	76	0.1535	0.1416	0.004	0.0119	0.019	0.639	*			0.005
17	ON	81	0.1397	0.1356	0.006	0.00416	0.018	0.232				0.002
18	ON	86	0.1068	0.1177	0.009	-0.0109	0.016	-0.660	*			0.036
19	MA	76	0.1694	0.1616	0.007	0.00779	0.018	0.442				0.008
20	MA	81	0.1583	0.1637	0.007	-0.00546	0.018	-0.309				0.004
21	MA	86	0.1342	0.1516	0.006	-0.0174	0.018	-0.961	*			0.023
22	SA	76	0.1895	0.1641	0.007	0.0255	0.018	1.433	**			0.072
23	SA	81	0.1841	0.1756	0.008	0.00853	0.017	0.496				0.013
24	SA	86	0.1552	0.1736	0.007	-0.0185	0.017	-1.056	**			0.050
25	AL	76	0.1752	0.1616	0.007	0.0136	0.018	0.764	*			0.021
26	AL	81	0.1746	0.1436	0.010	0.0310	0.016	1.948	***			0.399
27	AL	86	0.1476	0.1534	0.007	-0.00579	0.018	-0.325				0.004
28	BC	76	0.1565	0.1473	0.004	0.00922	0.019	0.495				0.002
29	BC	81	0.1528	0.1367	0.007	0.0161	0.018	0.913	*			0.034
30	BC	86	0.1235	0.1456	0.008	-0.0220	0.017	-1.277	**			0.085

Sum of Residuals 0
 Sum of Squared Residuals 0.0094
 Predicted Resid SS (Press) 0.0134

08:59 Wednesday, November 18, 1992

Model: MODEL3

Dependent Variable: AGE3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00954	0.00318	15.632	0.0001
Error	26	0.00529	0.00020		
C Total	29	0.01483			
Root MSE		0.01426	R-square	0.6433	
Dep Mean		0.33908	Adj R-sq	0.6022	
C.V.		4.20631			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.054541	0.08271204	-0.659	0.5154
AGE3L	1	1.157789	0.19758077	5.860	0.0001
RENT4	1	0.000101	0.00007261	1.396	0.1746
FAMINC	1	-0.000002119	0.00000067	-3.185	0.0037

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 6

Obs	PROV	DATE	Dep Var AGE3	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.3597	0.3332	0.007	0.0265	0.013	2.101		****		0.303
2	NF	81	0.3404	0.3475	0.005	-0.00709	0.013	-0.528	*			0.009
3	NF	86	0.2951	0.3276	0.006	-0.0325	0.013	-2.495	****			0.304
4	PE	76	0.3566	0.3419	0.005	0.0147	0.013	1.115		**		0.054
5	PE	81	0.3494	0.3473	0.004	0.00206	0.014	0.150				0.000
6	PE	86	0.3163	0.3369	0.004	-0.0206	0.014	-1.500	**			0.045
7	NS	76	0.3585	0.3507	0.005	0.00780	0.013	0.585	*			0.012
8	NS	81	0.3390	0.3535	0.004	-0.0145	0.014	-1.073	**			0.031
9	NS	86	0.3162	0.3265	0.004	-0.0104	0.014	-0.755	*			0.012
10	NB	76	0.3774	0.3518	0.005	0.0256	0.013	1.918	***			0.133
11	NB	81	0.3571	0.3675	0.006	-0.0104	0.013	-0.809	*			0.038
12	NB	86	0.3266	0.3421	0.006	-0.0155	0.013	-1.184	**			0.064
13	QU	76	0.3531	0.3352	0.004	0.0178	0.014	1.295	**			0.030
14	QU	81	0.3421	0.3379	0.003	0.00418	0.014	0.301				0.001
15	QU	86	0.3148	0.3266	0.003	-0.0118	0.014	-0.853	*			0.011
16	ON	76	0.3490	0.3401	0.003	0.00895	0.014	0.643	*			0.005
17	ON	81	0.3288	0.3245	0.004	0.00427	0.014	0.315				0.003
18	ON	86	0.2975	0.2957	0.007	0.00177	0.012	0.144				0.002
19	MA	76	0.3570	0.3673	0.006	-0.0103	0.013	-0.801	*			0.038
20	MA	81	0.3436	0.3475	0.005	-0.00394	0.013	-0.296				0.003
21	MA	86	0.3195	0.3301	0.004	-0.0106	0.014	-0.779	*			0.016
22	SA	76	0.3720	0.3634	0.005	0.00858	0.013	0.642	*			0.015
23	SA	81	0.3677	0.3583	0.005	0.00941	0.013	0.709	*			0.019
24	SA	86	0.3469	0.3565	0.004	-0.00957	0.014	-0.706	*			0.013
25	AL	76	0.3671	0.3615	0.006	0.00560	0.013	0.438				0.012
26	AL	81	0.3419	0.3334	0.008	0.00856	0.012	0.726	*			0.061
27	AL	86	0.3247	0.3146	0.005	0.0101	0.013	0.755	*			0.020
28	BC	76	0.3386	0.3401	0.003	-0.00152	0.014	-0.109				0.000
29	BC	81	0.3212	0.3105	0.006	0.0107	0.013	0.815	*			0.029
30	BC	86	0.2949	0.3028	0.008	-0.00788	0.012	-0.653	*			0.042

Sum of Residuals 0
 Sum of Squared Residuals 0.0053
 Predicted Resid SS (Press) 0.0073

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 8
08:59 Wednesday, November 18, 1992

Model: MODEL4

Dependent Variable: AGE4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00163	0.00054	4.196	0.0151
Error	26	0.00337	0.00013		
C Total	29	0.00501			
Root MSE		0.01139	R-square	0.3262	
Dep Mean		0.42462	Adj R-sq	0.2485	
C.V.		2.68212			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.216121	0.10971571	1.970	0.0596
AGE4L	1	0.613421	0.24615506	2.492	0.0194
RENT4	1	-0.000023363	0.00006121	-0.382	0.7058
FAMINC	1	-0.000001234	0.00000063	-1.965	0.0602

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 8

Obs	PROV	DATE	Dep Var AGE4	Predict Value	Std Err Predict	Residual1	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.4289	0.4312	0.004	-0.00237	0.010	-0.226				0.002
2	NF	81	0.4361	0.4308	0.004	0.00523	0.011	0.487				0.008
3	NF	86	0.4181	0.4368	0.004	-0.0187	0.011	-1.770	***			0.124
4	PE	76	0.4244	0.4160	0.008	0.00844	0.008	1.003		**		0.209
5	PE	81	0.4301	0.4281	0.003	0.00198	0.011	0.181				0.001
6	PE	86	0.4104	0.4305	0.003	-0.0201	0.011	-1.827	***			0.061
7	NS	76	0.4327	0.4247	0.004	0.00800	0.011	0.754	*			0.022
8	NS	81	0.4259	0.4293	0.004	-0.00341	0.011	-0.322				0.004
9	NS	86	0.4100	0.4233	0.002	-0.0133	0.011	-1.194	**			0.018
10	NB	76	0.4436	0.4293	0.004	0.0143	0.011	1.363		**		0.080
11	NB	81	0.4400	0.4395	0.005	0.000454	0.010	0.044				0.000
12	NB	86	0.4210	0.4373	0.005	-0.0163	0.010	-1.582	***			0.140
13	QU	76	0.4313	0.4202	0.003	0.0111	0.011	1.011		**		0.020
14	QU	81	0.4267	0.4226	0.003	0.00414	0.011	0.374				0.002
15	QU	86	0.4089	0.4218	0.002	-0.0129	0.011	-1.157	**			0.014
16	ON	76	0.4342	0.4228	0.002	0.0114	0.011	1.025		**		0.012
17	ON	81	0.4222	0.4192	0.003	0.00299	0.011	0.276				0.002
18	ON	86	0.3980	0.4103	0.006	-0.0123	0.010	-1.263	**			0.143
19	MA	76	0.4340	0.4290	0.005	0.00508	0.010	0.490				0.012
20	MA	81	0.4250	0.4247	0.005	0.000334	0.010	0.032				0.000
21	MA	86	0.4106	0.4188	0.003	-0.00821	0.011	-0.755	*			0.014
22	SA	76	0.4326	0.4284	0.004	0.00422	0.011	0.390				0.004
23	SA	81	0.4399	0.4229	0.003	0.0170	0.011	1.531	***			0.032
24	SA	86	0.4314	0.4297	0.004	0.00176	0.011	0.164				0.001
25	AL	76	0.4440	0.4278	0.004	0.0162	0.011	1.499		**		0.060
26	AL	81	0.4346	0.4222	0.006	0.0124	0.010	1.292		**		0.170
27	AL	86	0.4156	0.4187	0.004	-0.00306	0.011	-0.284				0.002
28	BC	76	0.4267	0.4229	0.002	0.00380	0.011	0.340				0.001
29	BC	81	0.4127	0.4123	0.004	0.000404	0.010	0.039				0.000
30	BC	86	0.3892	0.4078	0.006	-0.0186	0.010	-1.872	***			0.276

Sum of Residuals 0
 Sum of Squared Residuals 0.0034
 Predicted Resid SS (Press) 0.0047

08:59 Wednesday, November 18, 1992

Model: MODEL5

Dependent Variable: AGE5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00042	0.00014	2.783	0.0609
Error	26	0.00129	0.00005		
C Total	29	0.00171			
Root MSE		0.00705	R-square	0.2431	
Dep Mean		0.46162	Adj R-sq	0.1557	
C.V.		1.52743			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.458830	0.06620329	6.931	0.0001
AGE5L	1	0.062960	0.14850600	0.424	0.6751
RENT4	1	-0.000087418	0.00003785	-2.310	0.0291
FAMINC	1	0.000000672	0.00000047	1.419	0.1678

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 10

Obs	PROV	DATE	Dep Var AGE5	Predict Value	Std Err Predict	Residual1	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.4617	0.4607	0.003	0.00098	0.007	0.150				0.001
2	NF	81	0.4662	0.4657	0.002	0.000507	0.007	0.077				0.000
3	NF	86	0.4632	0.4652	0.003	-0.00206	0.006	-0.321				0.005
4	PE	76	0.4470	0.4588	0.004	-0.118	0.006	-1.934	***			0.324
5	PE	81	0.4714	0.4623	0.002	0.00910	0.007	1.348		**		0.042
6	PE	86	0.4540	0.4646	0.003	-0.105	0.006	-1.646	***			0.144
7	NS	76	0.4569	0.4556	0.003	0.00131	0.006	0.204				0.002
8	NS	81	0.4626	0.4575	0.002	0.00507	0.007	0.759	*			0.017
9	NS	86	0.4536	0.4597	0.002	-0.00610	0.007	-0.898		*		0.016
10	NB	76	0.4620	0.4614	0.004	0.000611	0.006	0.101				0.001
11	NB	81	0.4731	0.4657	0.002	0.00741	0.007	1.120	**			0.042
12	NB	86	0.4657	0.4679	0.003	-0.00217	0.006	-0.353				0.010
13	QU	76	0.4574	0.4575	0.003	-0.0001	0.007	-0.015				0.000
14	QU	81	0.4639	0.4602	0.002	0.00374	0.007	0.546	*			0.004
15	QU	86	0.4530	0.4609	0.002	-0.00791	0.007	-1.152	**			0.018
16	ON	76	0.4678	0.4630	0.002	0.00483	0.007	0.704	*			0.007
17	ON	81	0.4687	0.4636	0.002	0.00514	0.007	0.766	*			0.015
18	ON	86	0.4511	0.4664	0.003	-0.0153	0.006	-2.373	****			0.284
19	MA	76	0.4600	0.4559	0.003	0.00408	0.007	0.625	*			0.016
20	MA	81	0.4669	0.4571	0.002	0.00985	0.007	1.491	**			0.078
21	MA	86	0.4548	0.4586	0.003	-0.00378	0.007	-0.574	*			0.012
22	SA	76	0.4527	0.4569	0.002	-0.00418	0.007	-0.625	*			0.011
23	SA	81	0.4658	0.4607	0.002	0.00505	0.007	0.750	*			0.014
24	SA	86	0.4674	0.4607	0.002	0.00666	0.007	0.977	*			0.017
25	AL	76	0.4725	0.4651	0.002	0.00739	0.007	1.090	**			0.024
26	AL	81	0.4726	0.4703	0.004	0.00227	0.006	0.394				0.019
27	AL	86	0.4632	0.4646	0.002	-0.00136	0.007	-0.204				0.001
28	BC	76	0.4669	0.4618	0.002	0.00510	0.007	0.742	*			0.007
29	BC	81	0.4624	0.4633	0.003	-0.00094	0.007	-0.143				0.001
30	BC	86	0.4440	0.4569	0.003	-0.0130	0.006	-2.009	****			0.196

Sum of Residuals 0
 Sum of Squared Residuals 0.0013
 Predicted Resid SS (Press) 0.0018

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 12
08:59 Wednesday, November 18, 1992

Model: MODEL6

Dependent Variable: AGE6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00181	0.00060	20.954	0.0001
Error	26	0.00075	0.00003		
C Total	29	0.00255			
Root MSE		0.00536	R-square	0.7074	
Dep Mean		0.47410	Adj R-sq	0.6737	
C.V.		1.13096			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.309729	0.04259924	7.271	0.0001
AGE6L	1	0.405546	0.09616595	4.217	0.0003
RENT4	1	-0.000069557	0.00002893	-2.404	0.0236
FAMINC	1	0.000000422	0.00000039	1.086	0.2875

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 12

Obs	PROV	DATE	Dep Var AGE6	Predict Value	Std Err Predict	Residual 1	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.4733	0.4713	0.002	0.00197	0.005	0.406				0.009
2	NF	81	0.4841	0.4806	0.002	0.00352	0.005	0.710	*			0.021
3	NF	86	0.4809	0.4846	0.003	-0.00364	0.004	-0.815		*		0.073
4	PE	76	0.4473	0.4583	0.003	-0.110	0.005	-2.386	****			0.486
5	PE	81	0.4699	0.4681	0.002	0.00173	0.005	0.343				0.004
6	PE	86	0.4744	0.4778	0.002	-0.00344	0.005	-0.671	*			0.011
7	NS	76	0.4636	0.4578	0.002	0.00581	0.005	1.198		**		0.080
8	NS	81	0.4735	0.4703	0.002	0.00322	0.005	0.634	*			0.012
9	NS	86	0.4745	0.4756	0.002	-0.00103	0.005	-0.202				0.001
10	NB	76	0.4591	0.4644	0.002	-0.00524	0.005	-1.093	**			0.074
11	NB	81	0.4809	0.4748	0.002	0.00604	0.005	1.198	**			0.047
12	NB	86	0.4840	0.4848	0.003	-0.00084	0.005	-0.177				0.002
13	QU	76	0.4624	0.4638	0.002	-0.00133	0.005	-0.264				0.002
14	QU	81	0.4715	0.4714	0.001	0.000153	0.005	0.030				0.000
15	QU	86	0.4710	0.4755	0.001	-0.00451	0.005	-0.862	*			0.009
16	ON	76	0.4800	0.4754	0.001	0.00454	0.005	0.871	*			0.011
17	ON	81	0.4822	0.4802	0.002	0.00199	0.005	0.390				0.004
18	ON	86	0.4758	0.4831	0.002	-0.00729	0.005	-1.487	**			0.109
19	MA	76	0.4677	0.4644	0.002	0.00324	0.005	0.647	*			0.015
20	MA	81	0.4747	0.4710	0.002	0.00374	0.005	0.745	*			0.019
21	MA	86	0.4716	0.4747	0.002	-0.00306	0.005	-0.607	*			0.012
22	SA	76	0.4607	0.4638	0.002	-0.00307	0.005	-0.603	*			0.010
23	SA	81	0.4725	0.4713	0.002	0.00122	0.005	0.238				0.001
24	SA	86	0.4751	0.4756	0.001	-0.00055	0.005	-0.105				0.000
25	AL	76	0.4880	0.4793	0.001	0.00870	0.005	1.684	***			0.055
26	AL	81	0.4876	0.4882	0.003	-0.00056	0.004	-0.128				0.002
27	AL	86	0.4819	0.4838	0.002	-0.00181	0.005	-0.358				0.004
28	BC	76	0.4882	0.4750	0.001	0.0131	0.005	2.494	****			0.061
29	BC	81	0.4794	0.4832	0.002	-0.00379	0.005	-0.756	*			0.021
30	BC	86	0.4675	0.4752	0.002	-0.00777	0.005	-1.618	***			0.160

Sum of Residuals 0
 Sum of Squared Residuals 0.0007
 Predicted Resid SS (Press) 0.0010

Model: MODEL7

Dependent Variable: AGE7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00264	0.00088	21.339	0.0001
Error	26	0.00107	0.00004		
C Total	29	0.00371			
Root MSE		0.00642	R-square	0.7112	
Dep Mean		0.47143	Adj R-sq	0.6778	
C.V.		1.36186			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.323209	0.04663195	6.931	0.0001
AGE7L	1	0.366369	0.10048866	3.646	0.0012
RENT4	1	-0.000109	0.00003429	-3.165	0.0039
FAMINC	1	0.000001168	0.00000040	2.933	0.0069

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 14

Obs	PROV	DATE	Dep Var AGE7	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.4715	0.4684	0.003	0.00301	0.006	0.526	*			0.018
2	NF	81	0.4916	0.4784	0.002	0.0132	0.006	2.208	****			0.188
3	NF	86	0.4909	0.4844	0.004	0.00649	0.005	1.275	**			0.239
4	PE	76	0.4492	0.4553	0.003	-0.00612	0.006	-1.070	**			0.075
5	PE	81	0.4660	0.4670	0.002	-0.00103	0.006	-0.168				0.001
6	PE	86	0.4717	0.4744	0.002	-0.00269	0.006	-0.435				0.004
7	NS	76	0.4502	0.4550	0.002	-0.00479	0.006	-0.803	*			0.026
8	NS	81	0.4704	0.4612	0.002	0.00916	0.006	1.493	**			0.053
9	NS	86	0.4747	0.4715	0.002	0.00322	0.006	0.523	*			0.006
10	NB	76	0.4564	0.4653	0.002	-0.00891	0.006	-1.490	**			0.085
11	NB	81	0.4685	0.4730	0.002	-0.00448	0.006	-0.743	*			0.018
12	NB	86	0.4782	0.4793	0.003	-0.00111	0.006	-0.189				0.002
13	QU	76	0.4611	0.4621	0.002	-0.00105	0.006	-0.170				0.001
14	QU	81	0.4674	0.4701	0.002	-0.00272	0.006	-0.435				0.003
15	QU	86	0.4653	0.4723	0.001	-0.00703	0.006	-1.120	**			0.015
16	ON	76	0.4781	0.4723	0.002	0.00586	0.006	0.946	*			0.017
17	ON	81	0.4853	0.4811	0.002	0.00420	0.006	0.687	*			0.012
18	ON	86	0.4790	0.4876	0.002	-0.00867	0.006	-1.465	**			0.095
19	MA	76	0.4579	0.4560	0.002	0.00188	0.006	0.315				0.004
20	MA	81	0.4745	0.4645	0.002	0.0100	0.006	1.656	***			0.089
21	MA	86	0.4710	0.4721	0.002	-0.00105	0.006	-0.175				0.001
22	SA	76	0.4539	0.4575	0.002	-0.00361	0.006	-0.595	*			0.011
23	SA	81	0.4682	0.4686	0.002	-0.00037	0.006	-0.060				0.000
24	SA	86	0.4666	0.4723	0.001	-0.00567	0.006	-0.907	*			0.011
25	AL	76	0.4791	0.4746	0.002	0.00453	0.006	0.751	*			0.019
26	AL	81	0.4893	0.4905	0.004	-0.00127	0.005	-0.240				0.007
27	AL	86	0.4790	0.4862	0.002	-0.00719	0.006	-1.208	**			0.059
28	BC	76	0.4755	0.4664	0.002	0.00909	0.006	1.493	**			0.063
29	BC	81	0.4856	0.4804	0.002	0.00517	0.006	0.860	*			0.026
30	BC	86	0.4671	0.4752	0.003	-0.00805	0.005	-1.486	**			0.224

Sum of Residuals 0
 Sum of Squared Residuals 0.0011
 Predicted Resid SS (Press) 0.0015

08:59 Wednesday, November 18, 1992

Model: MODEL8

Dependent Variable: AGE8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00384	0.00128	27.066	0.0001
Error	26	0.00123	0.00005		
C Total	29	0.00507			
Root MSE		0.00688	R-square	0.7575	
Dep Mean		0.46063	Adj R-sq	0.7295	
C.V.		1.49344			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.126378	0.05690117	2.221	0.0353
AGE8L	1	0.765123	0.10988052	6.963	0.0001
RENT4	1	-0.000062888	0.00003836	-1.639	0.1132
FAMINC	1	0.000000628	0.00000035	1.797	0.0839

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 16

Obs	PROV	DATE	Dep Var AGE8	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0 1 2	Cook's D
1	NF	76	0.4778	0.4753	0.004	0.00246	0.006	0.417		0.016
2	NF	81	0.4880	0.4803	0.003	0.00771	0.006	1.235	**	0.082
3	NF	86	0.4993	0.4874	0.004	0.0120	0.006	2.087	****	0.478
4	PE	76	0.4405	0.4392	0.004	0.00133	0.006	0.225		0.005
5	PE	81	0.4545	0.4499	0.003	0.00456	0.006	0.714	*	0.020
6	PE	86	0.4602	0.4613	0.002	-0.00103	0.007	-0.155		0.000
7	NS	76	0.4479	0.4462	0.003	0.00172	0.006	0.268		0.003
8	NS	81	0.4522	0.4519	0.002	0.000329	0.007	0.050		0.000
9	NS	86	0.4681	0.4568	0.002	0.0113	0.007	1.680	***	0.036
10	NB	76	0.4537	0.4602	0.002	-0.00651	0.006	-1.013	**	0.038
11	NB	81	0.4607	0.4619	0.002	-0.00127	0.006	-0.198		0.001
12	NB	86	0.4593	0.4683	0.003	-0.00903	0.006	-1.430	**	0.095
13	QU	76	0.4548	0.4554	0.002	-0.00064	0.007	-0.097		0.000
14	QU	81	0.4559	0.4598	0.002	-0.00387	0.007	-0.578	*	0.005
15	QU	86	0.4531	0.4607	0.001	-0.00756	0.007	-1.122	**	0.014
16	ON	76	0.4595	0.4650	0.001	-0.00545	0.007	-0.811	*	0.008
17	ON	81	0.4724	0.4660	0.002	0.00639	0.007	0.975	*	0.024
18	ON	86	0.4724	0.4780	0.003	-0.00558	0.006	-0.891	*	0.041
19	MA	76	0.4387	0.4504	0.002	-0.0117	0.006	-1.818	***	0.119
20	MA	81	0.4565	0.4450	0.002	0.0115	0.006	1.793	***	0.122
21	MA	86	0.4620	0.4594	0.002	0.00259	0.007	0.398		0.005
22	SA	76	0.4434	0.4477	0.002	-0.00426	0.007	-0.652	*	0.012
23	SA	81	0.4577	0.4517	0.002	0.00597	0.007	0.904	*	0.017
24	SA	86	0.4599	0.4619	0.002	-0.00194	0.007	-0.290		0.001
25	AL	76	0.4564	0.4672	0.002	-0.0109	0.007	-1.636	***	0.048
26	AL	81	0.4745	0.4687	0.004	0.00579	0.006	1.031	**	0.133
27	AL	86	0.4715	0.4780	0.003	-0.00650	0.006	-1.034	**	0.053
28	BC	76	0.4456	0.4475	0.002	-0.00192	0.006	-0.295		0.003
29	BC	81	0.4614	0.4554	0.003	0.00596	0.006	0.946	*	0.043
30	BC	86	0.4611	0.4625	0.003	-0.00142	0.006	-0.233		0.004

Sum of Residuals 0
 Sum of Squared Residuals 0.0012
 Predicted Resid SS (Press) 0.0017

08:59 Wednesday, November 18, 1992

Model: MODEL9

Dependent Variable: AGE9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00462	0.00154	34.575	0.0001
Error	26	0.00116	0.00004		
C Total	29	0.00578			
Root MSE		0.00668	R-square	0.7996	
Dep Mean		0.44468	Adj R-sq	0.7764	
C.V.		1.50112			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.045091	0.07300132	0.618	0.5422
AGE9L	1	0.910593	0.12885803	7.067	0.0001
RENT4	1	-0.000020088	0.00004259	-0.472	0.6411
FAMINC	1	0.000000180	0.00000031	0.580	0.5672

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 18

Obs	PROV	DATE	Dep Var	Predict	Std Err	Std Err	Student	-2-1-0	1	2	Cook's
			AGE9	Value	Predict	Residual	Residual	Residual		D	
1	NF	76	0.4822	0.4697	0.003	0.0125	0.006	2.130		****	0.332
2	NF	81	0.4809	0.4799	0.004	0.00101	0.006	0.183			0.004
3	NF	86	0.4774	0.4785	0.004	-0.00105	0.006	-0.187			0.004
4	PE	76	0.4335	0.4467	0.003	-0.0132	0.006	-2.143	****		0.197
5	PE	81	0.4444	0.4349	0.003	0.00955	0.006	1.613	***		0.177
6	PE	86	0.4472	0.4451	0.002	0.00214	0.006	0.337			0.003
7	NS	76	0.4383	0.4422	0.002	-0.00390	0.006	-0.625	*		0.014
8	NS	81	0.4427	0.4381	0.002	0.00460	0.006	0.720	*		0.012
9	NS	86	0.4427	0.4426	0.001	0.00004	0.007	0.006			0.000
10	NB	76	0.4506	0.4502	0.003	0.000362	0.006	0.059			0.000
11	NB	81	0.4483	0.4511	0.002	-0.00274	0.006	-0.441			0.007
12	NB	86	0.4491	0.4493	0.003	-0.00026	0.006	-0.045			0.000
13	QU	76	0.4485	0.4416	0.002	0.00685	0.006	1.060	**		0.019
14	QU	81	0.4390	0.4481	0.002	-0.00908	0.006	-1.430	**		0.054
15	QU	86	0.4345	0.4395	0.001	-0.00499	0.007	-0.763	*		0.006
16	ON	76	0.4495	0.4493	0.002	0.000237	0.006	0.037			0.000
17	ON	81	0.4431	0.4498	0.003	-0.00674	0.006	-1.089	**		0.049
18	ON	86	0.4540	0.4446	0.003	0.00939	0.006	1.524	***		0.101
19	MA	76	0.4361	0.4384	0.002	-0.00230	0.006	-0.369			0.005
20	MA	81	0.4287	0.4361	0.002	-0.00736	0.006	-1.178	**		0.049
21	MA	86	0.4386	0.4296	0.002	0.00906	0.006	1.427	**		0.054
22	SA	76	0.4331	0.4374	0.002	-0.00429	0.006	-0.677	*		0.013
23	SA	81	0.4359	0.4343	0.002	0.00159	0.006	0.245			0.001
24	SA	86	0.4389	0.4366	0.001	0.00226	0.007	0.347			0.002
25	AL	76	0.4456	0.4466	0.002	-0.00097	0.006	-0.151			0.000
26	AL	81	0.4415	0.4478	0.004	-0.00633	0.006	-1.127	**		0.131
27	AL	86	0.4505	0.4426	0.002	0.00784	0.006	1.245	**		0.048
28	BC	76	0.4259	0.4346	0.002	-0.00873	0.006	-1.350	**		0.030
29	BC	81	0.4260	0.4283	0.003	-0.00225	0.006	-0.366			0.006
30	BC	86	0.4337	0.4269	0.003	0.00679	0.006	1.109	**		0.058

Sum of Residuals 0
 Sum of Squared Residuals 0.0012
 Predicted Resid SS (Press) 0.0016

08:59 Wednesday, November 18, 1992

Model: MODEL10

Dependent Variable: AGE10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00989	0.00330	93.597	0.0001
Error	26	0.00092	0.00004		
C Total	29	0.01081			
Root MSE		0.00594	R-square	0.9153	
Dep Mean		0.42495	Adj R-sq	0.9055	
C.V.		1.39665			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.169743	0.05487071	3.094	0.0047
AGE10L	1	0.745983	0.09181820	8.125	0.0001
RENT4	1	-0.000091319	0.00003613	-2.528	0.0179
FAMINC	1	-0.000000397	0.00000029	-1.384	0.1781

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 20

Obs	PROV	DATE	Dep Var AGE10	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1 2	Cook's D
1	NF	76	0.4704	0.4733	0.003	-0.00292	0.005	-0.608	*		0.049
2	NF	81	0.4730	0.4645	0.003	0.00851	0.005	1.653	***		0.225
3	NF	86	0.4755	0.4670	0.003	0.00854	0.005	1.675	***		0.250
4	PE	76	0.4378	0.4269	0.003	0.0109	0.005	2.197	****		0.531
5	PE	81	0.4236	0.4380	0.002	-0.0144	0.006	-2.516	*****		0.117
6	PE	86	0.4308	0.4273	0.002	0.00349	0.006	0.634	*		0.016
7	NS	76	0.4291	0.4319	0.002	-0.00279	0.006	-0.503	*		0.009
8	NS	81	0.4251	0.4240	0.002	0.00115	0.006	0.204			0.001
9	NS	86	0.4244	0.4212	0.001	0.00319	0.006	0.551	*		0.004
10	NB	76	0.4385	0.4425	0.002	-0.00406	0.005	-0.747	*		0.026
11	NB	81	0.4345	0.4404	0.002	-0.00590	0.006	-1.061	**		0.039
12	NB	86	0.4351	0.4386	0.003	-0.00358	0.005	-0.675	*		0.029
13	QU	76	0.4252	0.4178	0.002	0.00736	0.006	1.282	**		0.028
14	QU	81	0.4142	0.4188	0.002	-0.00460	0.006	-0.801	*		0.011
15	QU	86	0.4112	0.4124	0.001	-0.00123	0.006	-0.213			0.001
16	ON	76	0.4262	0.4186	0.001	0.00763	0.006	1.317	**		0.022
17	ON	81	0.4172	0.4179	0.002	-0.0007	0.006	-0.126			0.001
18	ON	86	0.4171	0.4122	0.002	0.00490	0.005	0.894	*		0.035
19	MA	76	0.4195	0.4216	0.002	-0.00207	0.006	-0.373			0.005
20	MA	81	0.4122	0.4122	0.002	-6.24E-6	0.006	-0.001			0.000
21	MA	86	0.4033	0.4072	0.002	-0.00398	0.006	-0.703	*		0.012
22	SA	76	0.4225	0.4277	0.002	-0.00519	0.006	-0.917	*		0.021
23	SA	81	0.4140	0.4171	0.001	-0.00309	0.006	-0.535	*		0.004
24	SA	86	0.4160	0.4119	0.001	0.00409	0.006	0.709	*		0.007
25	AL	76	0.4196	0.4240	0.002	-0.00442	0.006	-0.772	*		0.012
26	AL	81	0.4167	0.4158	0.003	0.000804	0.005	0.161			0.003
27	AL	86	0.4100	0.4107	0.002	-0.00065	0.006	-0.116			0.000
28	BC	76	0.4087	0.4115	0.001	-0.00279	0.006	-0.486			0.004
29	BC	81	0.3975	0.4028	0.002	-0.00531	0.006	-0.956	*		0.032
30	BC	86	0.3997	0.3925	0.002	0.00716	0.005	1.324	**		0.090

Sum of Residuals 0
 Sum of Squared Residuals 0.0009
 Predicted Resid SS (Press) 0.0013

08:59 Wednesday, November 18, 1992

Model: MODEL11

Dependent Variable: AGE11

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00961	0.00320	51.877	0.0001
Error	26	0.00161	0.00006		
C Total	29	0.01122			
Root MSE		0.00786	R-square	0.8569	
Dep Mean		0.39985	Adj R-sq	0.8403	
C.V.		1.96562			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.239557	0.06564901	3.649	0.0012
AGE11L	1	0.611669	0.11570971	5.286	0.0001
RENT4	1	-0.000091462	0.00004704	-1.944	0.0627
FAMINC	1	-0.000001030	0.00000037	-2.756	0.0106

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 22

Obs	PROV	DATE	Dep Var AGE11	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.4503	0.4395	0.004	0.0109	0.007	1.566		***		0.171
2	NF	81	0.4341	0.4398	0.004	-0.00569	0.006	-0.877	*			0.090
3	NF	86	0.4534	0.4312	0.003	0.0222	0.007	3.070	*****			0.418
4	PE	76	0.4107	0.4137	0.003	-0.00303	0.007	-0.427				0.011
5	PE	81	0.4095	0.4137	0.002	-0.00414	0.008	-0.546	*			0.005
6	PE	86	0.4045	0.4122	0.002	-0.00773	0.008	-1.021	**			0.020
7	NS	76	0.4060	0.4001	0.003	0.00593	0.007	0.826	*			0.034
8	NS	81	0.4002	0.4022	0.003	-0.00200	0.007	-0.270				0.002
9	NS	86	0.4037	0.3977	0.002	0.00595	0.008	0.777	*			0.008
10	NB	76	0.4172	0.4134	0.004	0.00384	0.007	0.557	*			0.023
11	NB	81	0.4132	0.4191	0.003	-0.00589	0.007	-0.794	*			0.019
12	NB	86	0.4098	0.4177	0.003	-0.00785	0.007	-1.096	**			0.062
13	QU	76	0.3909	0.3890	0.002	0.00191	0.007	0.256				0.002
14	QU	81	0.3754	0.3877	0.002	-0.0124	0.008	-1.614	***			0.036
15	QU	86	0.3774	0.3809	0.003	-0.00343	0.007	-0.469				0.008
16	ON	76	0.3848	0.3851	0.003	-0.00024	0.007	-0.032				0.000
17	ON	81	0.3879	0.3797	0.002	0.00821	0.007	1.099	**			0.032
18	ON	86	0.3918	0.3816	0.003	0.0102	0.007	1.413	**			0.089
19	MA	76	0.3935	0.3996	0.003	-0.00611	0.007	-0.835	*			0.027
20	MA	81	0.3842	0.3875	0.003	-0.00332	0.007	-0.452				0.007
21	MA	86	0.3836	0.3820	0.002	0.00161	0.007	0.215				0.001
22	SA	76	0.4101	0.4153	0.003	-0.00520	0.007	-0.719	*			0.023
23	SA	81	0.3958	0.3995	0.003	-0.00365	0.007	-0.493				0.008
24	SA	86	0.3873	0.3929	0.002	-0.00564	0.008	-0.734	*			0.006
25	AL	76	0.4003	0.4019	0.003	-0.00163	0.007	-0.220				0.001
26	AL	81	0.3806	0.3899	0.004	-0.00925	0.007	-1.398	**			0.201
27	AL	86	0.3870	0.3767	0.003	0.0103	0.007	1.398	**			0.068
28	BC	76	0.3898	0.3911	0.002	-0.00130	0.008	-0.168				0.000
29	BC	81	0.3821	0.3797	0.003	0.00245	0.007	0.334				0.004
30	BC	86	0.3805	0.3756	0.003	0.00491	0.007	0.682	*			0.022

Sum of Residuals 0
 Sum of Squared Residuals 0.0016
 Predicted Resid SS (Press) 0.0022

08:59 Wednesday, November 18, 1992

Model: MODEL12

Dependent Variable: AGE12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00844	0.00281	25.637	0.0001
Error	26	0.00285	0.00011		
C Total	29	0.01129			
Root MSE		0.01047	R-square	0.7474	
Dep Mean		0.36420	Adj R-sq	0.7182	
C.V.		2.87561			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.216536	0.06261445	3.458	0.0019
AGE12L	1	0.602395	0.12096581	4.980	0.0001
RENT4	1	-0.000068703	0.00005593	-1.228	0.2303
FAMINC	1	-0.000001017	0.00000050	-2.048	0.0508

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 24

Obs	PROV	DATE	Dep Var AGE12	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.4068	0.3985	0.004	0.00829	0.009	0.874	*			0.042
2	NF	81	0.4027	0.3977	0.005	0.00495	0.009	0.533	*			0.019
3	NF	86	0.4041	0.3966	0.004	0.00752	0.009	0.792	*			0.034
4	PE	76	0.3731	0.3822	0.004	-0.00914	0.010	-0.935	*			0.032
5	PE	81	0.3615	0.3762	0.003	-0.0147	0.010	-1.452	**			0.038
6	PE	86	0.3682	0.3684	0.003	-0.00025	0.010	-0.025				0.000
7	NS	76	0.3601	0.3690	0.004	-0.00882	0.010	-0.904	*			0.031
8	NS	81	0.3718	0.3615	0.003	0.0104	0.010	1.033	**			0.025
9	NS	86	0.3693	0.3675	0.003	0.00183	0.010	0.181				0.001
10	NB	76	0.3742	0.3765	0.004	-0.00234	0.010	-0.245				0.003
11	NB	81	0.3700	0.3777	0.003	-0.00771	0.010	-0.781	*			0.019
12	NB	86	0.3760	0.3760	0.004	0.000015	0.010	0.002				0.000
13	QU	76	0.3536	0.3545	0.003	-0.00092	0.010	-0.091				0.000
14	QU	81	0.3303	0.3525	0.002	-0.0222	0.010	-2.179	****			0.067
15	QU	86	0.3320	0.3408	0.004	-0.00874	0.010	-0.912	*			0.040
16	ON	76	0.3445	0.3445	0.004	-0.00006	0.010	-0.006				0.000
17	ON	81	0.3385	0.3427	0.003	-0.00426	0.010	-0.429				0.005
18	ON	86	0.3520	0.3387	0.005	0.0132	0.009	1.400	**			0.114
19	MA	76	0.3656	0.3676	0.004	-0.00200	0.010	-0.205				0.002
20	MA	81	0.3491	0.3586	0.004	-0.00947	0.010	-0.972	*			0.037
21	MA	86	0.3485	0.3487	0.003	-0.00024	0.010	-0.024				0.000
22	SA	76	0.3960	0.3769	0.003	0.0190	0.010	1.923	***			0.112
23	SA	81	0.3683	0.3779	0.005	-0.00957	0.009	-1.050	**			0.088
24	SA	86	0.3660	0.3633	0.002	0.00271	0.010	0.266				0.001
25	AL	76	0.3771	0.3593	0.003	0.0178	0.010	1.765	***			0.057
26	AL	81	0.3511	0.3621	0.006	-0.0110	0.009	-1.289	**			0.207
27	AL	86	0.3489	0.3462	0.003	0.00268	0.010	0.270				0.002
28	BC	76	0.3648	0.3459	0.003	0.0189	0.010	1.901	***			0.104
29	BC	81	0.3512	0.3523	0.004	-0.00109	0.010	-0.113				0.001
30	BC	86	0.3508	0.3456	0.004	0.00524	0.010	0.547	*			0.014

Sum of Residuals 0
 Sum of Squared Residuals 0.0029
 Predicted Resid SS (Press) 0.0037

08:59 Wednesday, November 18, 1992

Model: MODEL13

Dependent Variable: AGE13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.01158	0.00386	20.537	0.0001
Error	26	0.00489	0.00019		
C Total	29	0.01646			
Root MSE		0.01371	R-square	0.7032	
Dep Mean		0.26075	Adj R-sq	0.6690	
C.V.		5.25705			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.187835	0.05375369	3.494	0.0017
AGE13L	1	0.470790	0.11900569	3.956	0.0005
RENT4	1	0.000015351	0.00006839	0.224	0.8242
FAMINC	1	-0.000001941	0.00000075	-2.579	0.0159

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12:57 Monday, November 23, 1992 26

Obs	PROV	DATE	Dep Var AGE13	Predict Value	Std Err Predict	Residual1	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.3082	0.2990	0.006	0.00922	0.012	0.738		*		0.028
2	NF	81	0.2744	0.2822	0.005	-0.00776	0.013	-0.615		*		0.017
3	NF	86	0.2849	0.2686	0.005	0.0163	0.013	1.273		**		0.058
4	PE	76	0.2902	0.2791	0.005	0.0110	0.013	0.876		*		0.035
5	PE	81	0.2468	0.2749	0.004	-0.0281	0.013	-2.120	****			0.080
6	PE	86	0.2426	0.2527	0.006	-0.0102	0.012	-0.815		*		0.034
7	NS	76	0.2870	0.2851	0.005	0.00187	0.013	0.146				0.001
8	NS	81	0.2555	0.2712	0.004	-0.0157	0.013	-1.194	**			0.034
9	NS	86	0.2619	0.2531	0.004	0.00881	0.013	0.670		*		0.010
10	NB	76	0.2878	0.2912	0.005	-0.00346	0.013	-0.273				0.003
11	NB	81	0.2568	0.2720	0.005	-0.0153	0.013	-1.183	**			0.043
12	NB	86	0.2608	0.2567	0.006	0.00403	0.012	0.330				0.007
13	QU	76	0.2806	0.2668	0.003	0.0137	0.013	1.033	**			0.017
14	QU	81	0.2314	0.2593	0.004	-0.0278	0.013	-2.101	****			0.077
15	QU	86	0.2254	0.2385	0.005	-0.0131	0.013	-1.042	**			0.051
16	ON	76	0.2461	0.2470	0.003	-0.00094	0.013	-0.070				0.000
17	ON	81	0.2212	0.2350	0.004	-0.0138	0.013	-1.056	**			0.029
18	ON	86	0.2263	0.2199	0.006	0.00645	0.012	0.526	*			0.017
19	MA	76	0.2849	0.2800	0.005	0.00488	0.013	0.384				0.006
20	MA	81	0.2459	0.2636	0.005	-0.0177	0.013	-1.384	**			0.071
21	MA	86	0.2436	0.2441	0.005	-0.00055	0.013	-0.043				0.000
22	SA	76	0.3124	0.2927	0.006	0.0198	0.012	1.585	***			0.130
23	SA	81	0.2697	0.2733	0.006	-0.00358	0.012	-0.295				0.006
24	SA	86	0.2658	0.2564	0.003	0.00938	0.013	0.700	*			0.006
25	AL	76	0.2755	0.2555	0.004	0.0199	0.013	1.529	***			0.060
26	AL	81	0.2455	0.2415	0.008	0.00406	0.011	0.376				0.022
27	AL	86	0.2455	0.2334	0.005	0.0121	0.013	0.932	*			0.026
28	BC	76	0.2571	0.2543	0.003	0.00283	0.013	0.211				0.000
29	BC	81	0.2411	0.2373	0.005	0.00382	0.013	0.298				0.003
30	BC	86	0.2478	0.2382	0.006	0.00968	0.012	0.786	*			0.037

Sum of Residuals 0
 Sum of Squared Residuals 0.0049
 Predicted Resid SS (Press) 0.0062

APPENDIX A2

NON-FAMILY HEADSHIP RATES

**Ordinary Least Squares Regression Results
with right side variables:**

AGE1L: lagged one period headship rate for the 15-20 cohort
RENT4: average rent for 4-room apartment
FAMINC: average all family income

NON-FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 28
08:59 Wednesday, November 18, 1992

Model: MODELL

Dependent Variable: AGE1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00183	0.00061	14.731	0.0001
Error	26	0.00108	0.00004		
C Total	29	0.00291			
Root MSE		0.00644	R-square	0.6296	
Dep Mean		0.01542	Adj R-sq	0.5869	
C.V.		41.73502			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.008566	0.01766668	-0.485	0.6318
AGE1L	1	0.704231	0.18365448	3.835	0.0007
RENT4	1	0.000025914	0.00003455	0.750	0.4600
FAMINC	1	-1.081511E-8	0.00000035	-0.031	0.9758

12:57 Monday, November 23, 1992

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

Obs	PROV	DATE	Dep Var AGE1	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.00415	0.00515	0.002	-0.00100	0.006	-0.169				0.001
2	NF	81	0.00341	0.00659	0.002	-0.00318	0.006	-0.525	*			0.009
3	NF	86	0.00197	0.00607	0.002	-0.00409	0.006	-0.675	*			0.014
4	PE	76	0.00778	0.00598	0.002	0.00181	0.006	0.300				0.003
5	PE	81	0.00736	0.00981	0.002	-0.00245	0.006	-0.394				0.003
6	PE	86	0.00508	0.00945	0.002	-0.00437	0.006	-0.704	*			0.009
7	NS	76	0.00905	0.00840	0.002	0.000652	0.006	0.109				0.000
8	NS	81	0.00787	0.0126	0.002	-0.00476	0.006	-0.782	*			0.018
9	NS	86	0.00563	0.0115	0.002	-0.00591	0.006	-0.963	*			0.023
10	NB	76	0.00739	0.00601	0.002	0.00137	0.006	0.229				0.002
11	NB	81	0.00700	0.00892	0.002	-0.00192	0.006	-0.316				0.003
12	NB	86	0.00580	0.00827	0.003	-0.00247	0.006	-0.418				0.008
13	QU	76	0.0120	0.0112	0.002	0.000768	0.006	0.126				0.000
14	QU	81	0.0158	0.0148	0.002	0.00107	0.006	0.175				0.001
15	QU	86	0.0135	0.0171	0.001	-0.00363	0.006	-0.576	*			0.004
16	ON	76	0.0134	0.0101	0.002	0.00335	0.006	0.558	*			0.011
17	ON	81	0.0131	0.0158	0.003	-0.00272	0.006	-0.464				0.011
18	ON	86	0.00858	0.0150	0.003	-0.00642	0.006	-1.145	**			0.104
19	MA	76	0.0243	0.0162	0.002	0.00809	0.006	1.343	**			0.065
20	MA	81	0.0280	0.0242	0.002	0.00375	0.006	0.623	*			0.014
21	MA	86	0.0183	0.0266	0.002	-0.00829	0.006	-1.387	**			0.077
22	SA	76	0.0289	0.0164	0.002	0.0126	0.006	2.071	****			0.136
23	SA	81	0.0341	0.0266	0.002	0.00751	0.006	1.248	**			0.056
24	SA	86	0.0215	0.0301	0.003	-0.00859	0.005	-1.569	***			0.236
25	AL	76	0.0311	0.0172	0.002	0.0139	0.006	2.242	****			0.094
26	AL	81	0.0360	0.0270	0.004	0.00898	0.005	1.713	***			0.371
27	AL	86	0.0246	0.0316	0.003	-0.00693	0.006	-1.223	**			0.109
28	BC	76	0.0239	0.0154	0.001	0.00841	0.006	1.338	**			0.022
29	BC	81	0.0247	0.0235	0.002	0.00124	0.006	0.207				0.002
30	BC	86	0.0184	0.0251	0.003	-0.00674	0.006	-1.142	**			0.062

Sum of Residuals 0
 Sum of Squared Residuals 0.0011
 Predicted Resid SS (Press) 0.0015

NON-FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 30
08:59 Wednesday, November 18, 1992

Model: MODEL2

Dependent Variable: AGE2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.03704	0.01235	36.823	0.0001
Error	26	0.00872	0.00034		
C Total	29	0.04575			
Root MSE		0.01831	R-square	0.8095	
Dep Mean		0.09302	Adj R-sq	0.7875	
C.V.		19.68363			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.110576	0.05920100	-1.868	0.0731
AGE2L	1	0.531930	0.16765686	3.173	0.0039
RENT4	1	0.000215	0.00010710	2.005	0.0555
FAMINC	1	0.000001268	0.00000115	1.099	0.2817

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

30

12:57 Monday, November 23, 1992

Obs	PROV	DATE	Dep Var AGE2	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.0256	0.0321	0.007	-0.00649	0.017	-0.384				0.006
2	NF	81	0.0351	0.0452	0.007	-0.0100	0.017	-0.586	*			0.013
3	NF	86	0.0326	0.0485	0.006	-0.0160	0.017	-0.926	*			0.027
4	PE	76	0.0464	0.0404	0.006	0.00603	0.017	0.352				0.004
5	PE	81	0.0592	0.0611	0.005	-0.00186	0.018	-0.105				0.000
6	PE	86	0.0568	0.0686	0.005	-0.0118	0.018	-0.672	*			0.009
7	NS	76	0.0668	0.0620	0.007	0.00480	0.017	0.284				0.003
8	NS	81	0.0807	0.0903	0.006	-0.00954	0.017	-0.548	*			0.008
9	NS	86	0.0700	0.0978	0.004	-0.0278	0.018	-1.558	***			0.031
10	NB	76	0.0491	0.0393	0.007	0.00986	0.017	0.576	*			0.012
11	NB	81	0.0604	0.0584	0.006	0.00200	0.017	0.116				0.000
12	NB	86	0.0563	0.0616	0.008	-0.00532	0.016	-0.324				0.006
13	QU	76	0.0726	0.0846	0.006	-0.0120	0.017	-0.690	*			0.013
14	QU	81	0.0927	0.1003	0.006	-0.00754	0.017	-0.440				0.007
15	QU	86	0.0921	0.1063	0.004	-0.0141	0.018	-0.788	*			0.007
16	ON	76	0.0889	0.0829	0.007	0.00599	0.017	0.357				0.006
17	ON	81	0.1026	0.1143	0.008	-0.0117	0.017	-0.707	*			0.027
18	ON	86	0.0861	0.1197	0.008	-0.0336	0.017	-2.029	****			0.228
19	MA	76	0.1118	0.0906	0.007	0.0212	0.017	1.239	**			0.058
20	MA	81	0.1399	0.1264	0.006	0.0134	0.017	0.779	*			0.020
21	MA	86	0.1214	0.1402	0.008	-0.0188	0.017	-1.132	**			0.069
22	SA	76	0.1080	0.0847	0.006	0.0233	0.017	1.344	**			0.051
23	SA	81	0.1500	0.1185	0.004	0.0314	0.018	1.763	***			0.042
24	SA	86	0.1360	0.1377	0.010	-0.00167	0.015	-0.111				0.001
25	AL	76	0.1351	0.0998	0.005	0.0353	0.017	2.017	****			0.098
26	AL	81	0.1556	0.1331	0.010	0.0225	0.015	1.471	**			0.237
27	AL	86	0.1463	0.1501	0.008	-0.00382	0.016	-0.232				0.003
28	BC	76	0.1293	0.1012	0.004	0.0281	0.018	1.566	***			0.027
29	BC	81	0.1472	0.1411	0.006	0.00610	0.017	0.356				0.005
30	BC	86	0.1361	0.1537	0.008	-0.0177	0.016	-1.073	**			0.067

Sum of Residuals 0
 Sum of Squared Residuals 0.0087
 Predicted Resid SS (Press) 0.0114

NON-FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 32
08:59 Wednesday, November 18, 1992

Model: MODEL3

Dependent Variable: AGE3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.03999	0.01333	212.743	0.0001
Error	26	0.00163	0.00006		
C Total	29	0.04162			
Root MSE		0.00792	R-square	0.9609	
Dep Mean		0.09387	Adj R-sq	0.9563	
C.V.		8.43322			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.155337	0.02557568	-6.074	0.0001
AGE3L	1	0.413955	0.07914235	5.231	0.0001
RENT4	1	0.000228	0.00004593	4.968	0.0001
FAMINC	1	0.000002769	0.00000051	5.468	0.0001

NON-FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

32

12:57 Monday, November 23, 1992

Obs	PROV	DATE	Dep Var AGE3	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.0221	0.0281	0.003	-0.00604	0.007	-0.825	*			0.029
2	NF	81	0.0387	0.0475	0.003	-0.00876	0.007	-1.189	**			0.054
3	NF	86	0.0435	0.0509	0.003	-0.00736	0.007	-0.990	*			0.032
4	PE	76	0.0431	0.0364	0.003	0.00675	0.007	0.912			*	0.030
5	PE	81	0.0629	0.0607	0.002	0.00218	0.008	0.285				0.001
6	PE	86	0.0705	0.0709	0.002	-0.0004	0.008	-0.053				0.000
7	NS	76	0.0581	0.0599	0.003	-0.00185	0.007	-0.253				0.003
8	NS	81	0.0863	0.0889	0.003	-0.00251	0.007	-0.335				0.003
9	NS	86	0.0897	0.1030	0.002	-0.0134	0.008	-1.739	***			0.046
10	NB	76	0.0431	0.0365	0.003	0.00655	0.007	0.886			*	0.029
11	NB	81	0.0639	0.0573	0.003	0.00656	0.007	0.879			*	0.024
12	NB	86	0.0671	0.0633	0.004	0.00379	0.007	0.549			*	0.024
13	QU	76	0.0788	0.0893	0.002	-0.0105	0.008	-1.378	**			0.039
14	QU	81	0.1104	0.1113	0.002	-0.00089	0.008	-0.117				0.000
15	QU	86	0.1195	0.1175	0.003	0.00193	0.007	0.259				0.002
16	ON	76	0.0919	0.0943	0.003	-0.00234	0.007	-0.315				0.003
17	ON	81	0.1231	0.1284	0.003	-0.00534	0.007	-0.724	*			0.020
18	ON	86	0.1219	0.1415	0.003	-0.0197	0.007	-2.709	*****			0.342
19	MA	76	0.0915	0.0845	0.003	0.00701	0.007	0.964			*	0.043
20	MA	81	0.1277	0.1210	0.003	0.00676	0.007	0.909			*	0.028
21	MA	86	0.1325	0.1354	0.003	-0.00290	0.007	-0.403				0.009
22	SA	76	0.0701	0.0715	0.002	-0.00138	0.008	-0.184				0.001
23	SA	81	0.1131	0.1078	0.003	0.00532	0.007	0.710			*	0.015
24	SA	86	0.1268	0.1198	0.003	0.00701	0.007	0.945			*	0.031
25	AL	76	0.0972	0.1008	0.003	-0.00361	0.007	-0.494				0.010
26	AL	81	0.1405	0.1293	0.004	0.0112	0.007	1.708	***			0.334
27	AL	86	0.1518	0.1498	0.003	0.00204	0.007	0.284				0.004
28	BC	76	0.1192	0.1038	0.002	0.0154	0.008	1.992	***			0.044
29	BC	81	0.1524	0.1476	0.003	0.00479	0.007	0.647	*			0.015
30	BC	86	0.1585	0.1589	0.004	-0.00039	0.007	-0.059				0.000

Sum of Residuals 0
 Sum of Squared Residuals 0.0016
 Predicted Resid SS (Press) 0.0022

08:59 Wednesday, November 18, 1992

Model: MODEL4

Dependent Variable: AGE4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.02486	0.00829	323.341	0.0001
Error	26	0.00067	0.00003		
C Total	29	0.02552			
Root MSE		0.00506	R-square	0.9739	
Dep Mean		0.06814	Adj R-sq	0.9709	
C.V.		7.42869			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.055069	0.01535422	-3.587	0.0014
AGE4L	1	0.814905	0.06587683	12.370	0.0001
RENT4	1	0.000075818	0.00002901	2.614	0.0147
FAMINC	1	0.000001212	0.00000030	4.078	0.0004

12:57 Monday, November 23, 1992

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

Obs	PROV	DATE	Dep Var AGE4	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.0154	0.0191	0.002	-0.00368	0.005	-0.786	*			0.026
2	NF	81	0.0245	0.0306	0.002	-0.00615	0.005	-1.300	**			0.062
3	NF	86	0.0335	0.0365	0.002	-0.00302	0.005	-0.633	*			0.013
4	PE	76	0.0283	0.0248	0.002	0.00354	0.005	0.748	*			0.020
5	PE	81	0.0473	0.0425	0.001	0.00480	0.005	0.980	*			0.017
6	PE	86	0.0628	0.0589	0.002	0.00388	0.005	0.812	*			0.020
7	NS	76	0.0375	0.0377	0.002	-0.00018	0.005	-0.039				0.000
8	NS	81	0.0599	0.0578	0.002	0.00211	0.005	0.442				0.006
9	NS	86	0.0719	0.0773	0.001	-0.00549	0.005	-1.116	**			0.018
10	NB	76	0.0287	0.0282	0.002	0.000506	0.005	0.107				0.000
11	NB	81	0.0460	0.0419	0.002	0.00412	0.005	0.862	*			0.023
12	NB	86	0.0578	0.0552	0.002	0.00257	0.004	0.581	*			0.026
13	QU	76	0.0599	0.0665	0.001	-0.00658	0.005	-1.342	**			0.029
14	QU	81	0.0873	0.0820	0.001	0.00528	0.005	1.072	**			0.017
15	QU	86	0.1080	0.1016	0.002	0.00638	0.005	1.400	**			0.116
16	ON	76	0.0638	0.0640	0.001	-0.00014	0.005	-0.029				0.000
17	ON	81	0.0878	0.0903	0.002	-0.00245	0.005	-0.516	*			0.009
18	ON	86	0.0985	0.1104	0.002	-0.0119	0.005	-2.575	*****			0.342
19	MA	76	0.0577	0.0560	0.002	0.00168	0.005	0.361				0.006
20	MA	81	0.0855	0.0814	0.002	0.00413	0.005	0.877	*			0.030
21	MA	86	0.0998	0.1040	0.002	-0.00425	0.005	-0.907	*			0.034
22	SA	76	0.0397	0.0472	0.002	-0.00746	0.005	-1.555	***			0.068
23	SA	81	0.0694	0.0657	0.002	0.00369	0.005	0.792	*			0.028
24	SA	86	0.0881	0.0875	0.001	0.000615	0.005	0.125				0.000
25	AL	76	0.0597	0.0660	0.002	-0.00629	0.005	-1.335	**			0.069
26	AL	81	0.0907	0.0875	0.003	0.00317	0.004	0.764	*			0.071
27	AL	86	0.1130	0.1128	0.002	0.000239	0.005	0.051				0.000
28	BC	76	0.0797	0.0734	0.001	0.00637	0.005	1.286	**			0.018
29	BC	81	0.1125	0.1064	0.002	0.00612	0.005	1.294	**			0.060
30	BC	86	0.1294	0.1311	0.003	-0.00163	0.004	-0.394				0.019

Sum of Residuals 0
 Sum of Squared Residuals 0.0007
 Predicted Resid SS (Press) 0.0009

NON-FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 36
08:59 Wednesday, November 18, 1992

Model: MODEL5

Dependent Variable: AGE5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.01455	0.00485	264.334	0.0001
Error	26	0.00048	0.00002		
C Total	29	0.01502			
Root MSE		0.00428	R-square	0.9683	
Dep Mean		0.05275	Adj R-sq	0.9646	
C.V.		8.11896			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.021683	0.01273203	-1.703	0.1005
AGE5L	1	1.092390	0.08125312	13.444	0.0001
RENT4	1	0.000019837	0.00002521	0.787	0.4384
FAMINC	1	0.000000573	0.00000024	2.377	0.0251

12:57 Monday, November 23, 1992

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

Obs	PROV	DATE	Dep Var AGE5	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.0136	0.0152	0.002	-0.00161	0.004	-0.407				0.007
2	NF	81	0.0200	0.0200	0.002	0.000015	0.004	0.004				0.000
3	NF	86	0.0252	0.0262	0.001	-0.00105	0.004	-0.260				0.002
4	PE	76	0.0234	0.0254	0.002	-0.00200	0.004	-0.501	*			0.009
5	PE	81	0.0377	0.0309	0.001	0.00681	0.004	1.649		***		0.051
6	PE	86	0.0468	0.0471	0.001	-0.0003	0.004	-0.074				0.000
7	NS	76	0.0293	0.0290	0.002	0.000265	0.004	0.067				0.000
8	NS	81	0.0442	0.0398	0.002	0.00435	0.004	1.095	**			0.049
9	NS	86	0.0572	0.0569	0.001	0.000277	0.004	0.066				0.000
10	NB	76	0.0257	0.0241	0.002	0.00161	0.004	0.403				0.006
11	NB	81	0.0361	0.0334	0.001	0.00260	0.004	0.644	*			0.013
12	NB	86	0.0467	0.0446	0.002	0.00217	0.004	0.576	*			0.024
13	QU	76	0.0527	0.0570	0.001	-0.00426	0.004	-1.029	**			0.018
14	QU	81	0.0721	0.0682	0.001	0.00388	0.004	0.931	*			0.012
15	QU	86	0.0928	0.0883	0.002	0.00452	0.004	1.250	**			0.158
16	ON	76	0.0470	0.0484	0.001	-0.00135	0.004	-0.327				0.002
17	ON	81	0.0654	0.0644	0.002	0.00103	0.004	0.258				0.002
18	ON	86	0.0775	0.0850	0.002	-0.00751	0.004	-1.928	***			0.195
19	MA	76	0.0433	0.0445	0.002	-0.00119	0.004	-0.300				0.004
20	MA	81	0.0602	0.0580	0.002	0.00217	0.004	0.552	*			0.014
21	MA	86	0.0770	0.0766	0.001	0.00043	0.004	0.106				0.000
22	SA	76	0.0342	0.0431	0.001	-0.00884	0.004	-2.162	****			0.115
23	SA	81	0.0474	0.0482	0.002	-0.00074	0.004	-0.186				0.001
24	SA	86	0.0665	0.0615	0.001	0.00492	0.004	1.176	**			0.016
25	AL	76	0.0454	0.0556	0.001	-0.0102	0.004	-2.493	****			0.138
26	AL	81	0.0672	0.0636	0.002	0.00362	0.004	1.029	**			0.128
27	AL	86	0.0827	0.0868	0.002	-0.00405	0.004	-1.018	**			0.041
28	BC	76	0.0580	0.0599	0.001	-0.00184	0.004	-0.438				0.002
29	BC	81	0.0830	0.0776	0.002	0.00540	0.004	1.353	**			0.069
30	BC	86	0.1043	0.1034	0.002	0.000885	0.004	0.250				0.007

Sum of Residuals 0
 Sum of Squared Residuals 0.0005
 Predicted Resid SS (Press) 0.0006

NON-FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 38
08:59 Wednesday, November 18, 1992

Model: MODEL6

Dependent Variable: AGE6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00928	0.00309	115.554	0.0001
Error	26	0.00070	0.00003		
C Total	29	0.00998			
Root MSE		0.00517	R-square	0.9302	
Dep Mean		0.05062	Adj R-sq	0.9222	
C.V.		10.22122			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.018436	0.01444951	-1.276	0.2133
AGE6L	1	1.126686	0.11922610	9.450	0.0001
RENT4	1	0.000009733	0.00003125	0.311	0.7580
FAMINC	1	0.000000480	0.00000027	1.755	0.0911

12:57 Monday, November 23, 1992

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

Obs	PROV	DATE	Dep Var AGE6	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.0168	0.0162	0.002	0.000581	0.005	0.123				0.001
2	NF	81	0.0208	0.0196	0.002	0.00125	0.005	0.268				0.004
3	NF	86	0.0246	0.0236	0.002	0.000997	0.005	0.206				0.002
4	PE	76	0.0255	0.0354	0.002	-0.00996	0.005	-2.093	****			0.201
5	PE	81	0.0446	0.0294	0.002	0.0152	0.005	3.064	*****			0.216
6	PE	86	0.0506	0.0514	0.002	-0.00076	0.005	-0.159				0.001
7	NS	76	0.0333	0.0347	0.002	-0.00142	0.005	-0.296				0.004
8	NS	81	0.0430	0.0398	0.002	0.00316	0.005	0.663	*			0.019
9	NS	86	0.0514	0.0514	0.001	-9.62E-6	0.005	-0.002				0.000
10	NB	76	0.0306	0.0278	0.002	0.00281	0.005	0.582	*			0.012
11	NB	81	0.0376	0.0353	0.002	0.00232	0.005	0.475				0.007
12	NB	86	0.0448	0.0432	0.002	0.00154	0.005	0.337				0.008
13	QU	76	0.0538	0.0560	0.001	-0.00218	0.005	-0.437				0.003
14	QU	81	0.0697	0.0652	0.001	0.00448	0.005	0.892	*			0.012
15	QU	86	0.0874	0.0822	0.003	0.00513	0.004	1.205	**			0.173
16	ON	76	0.0445	0.0471	0.001	-0.00258	0.005	-0.518	*			0.005
17	ON	81	0.0568	0.0567	0.002	0.000153	0.005	0.032				0.000
18	ON	86	0.0697	0.0711	0.002	-0.00147	0.005	-0.309				0.004
19	MA	76	0.0438	0.0476	0.002	-0.00386	0.005	-0.800	*			0.024
20	MA	81	0.0558	0.0537	0.002	0.00207	0.005	0.438				0.010
21	MA	86	0.0686	0.0674	0.002	0.00124	0.005	0.251				0.002
22	SA	76	0.0412	0.0476	0.002	-0.00648	0.005	-1.316	**			0.046
23	SA	81	0.0457	0.0511	0.002	-0.00540	0.005	-1.093	**			0.029
24	SA	86	0.0575	0.0553	0.001	0.00223	0.005	0.441				0.002
25	AL	76	0.0480	0.0566	0.001	-0.00853	0.005	-1.708	***			0.053
26	AL	81	0.0595	0.0618	0.003	-0.00238	0.004	-0.549	*			0.032
27	AL	86	0.0727	0.0738	0.002	-0.00116	0.005	-0.238				0.002
28	BC	76	0.0543	0.0612	0.001	-0.00686	0.005	-1.360	**			0.024
29	BC	81	0.0725	0.0687	0.002	0.00379	0.005	0.786	*			0.024
30	BC	86	0.0937	0.0875	0.003	0.00614	0.005	1.363	**			0.149

Sum of Residuals 0
 Sum of Squared Residuals 0.0007
 Predicted Resid SS (Press) 0.0009

NON-FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 40
08:59 Wednesday, November 18, 1992

Model: MODEL7

Dependent Variable: AGE7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00791	0.00264	271.040	0.0001
Error	26	0.0002530638	9.7332225E-6		
C Total	29	0.00817			
Root MSE		0.00312	R-square	0.9690	
Dep Mean		0.05963	Adj R-sq	0.9654	
C.V.		5.23236			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.008656	0.00825378	-1.049	0.3040
AGE7L	1	1.235025	0.07748587	15.939	0.0001
RENT4	1	-3.429572E-8	0.00001927	-0.002	0.9986
FAMINC	1	9.1659132E-8	0.00000016	0.562	0.5791

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

40

12:57 Monday, November 23, 1992

Obs	PROV	DATE	Dep Var AGE7	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.0262	0.0245	0.001	0.00167	0.003	0.597		*		0.022
2	NF	81	0.0287	0.0264	0.001	0.00224	0.003	0.812		*		0.046
3	NF	86	0.0295	0.0294	0.001	0.000148	0.003	0.052				0.000
4	PE	76	0.0441	0.0471	0.001	-0.00301	0.003	-1.048	**			0.049
5	PE	81	0.0513	0.0485	0.001	0.00283	0.003	0.939		*		0.016
6	PE	86	0.0583	0.0575	0.001	0.00088	0.003	0.299				0.003
7	NS	76	0.0473	0.0464	0.001	0.000857	0.003	0.296				0.004
8	NS	81	0.0526	0.0526	0.001	0.000053	0.003	0.018				0.000
9	NS	86	0.0571	0.0593	0.001	-0.00225	0.003	-0.739	*			0.008
10	NB	76	0.0434	0.0412	0.001	0.00223	0.003	0.766		*		0.022
11	NB	81	0.0502	0.0477	0.001	0.00250	0.003	0.853		*		0.024
12	NB	86	0.0543	0.0561	0.002	-0.00188	0.003	-0.696	*			0.040
13	QU	76	0.0629	0.0634	0.001	-0.00048	0.003	-0.160				0.000
14	QU	81	0.0786	0.0723	0.001	0.00630	0.003	2.079	****			0.064
15	QU	86	0.0937	0.0916	0.002	0.00207	0.003	0.810	*			0.081
16	ON	76	0.0526	0.0526	0.001	-0.00007	0.003	-0.022				0.000
17	ON	81	0.0614	0.0599	0.001	0.00149	0.003	0.527	*			0.015
18	ON	86	0.0697	0.0710	0.001	-0.00130	0.003	-0.453				0.009
19	MA	76	0.0579	0.0593	0.001	-0.00137	0.003	-0.471				0.008
20	MA	81	0.0633	0.0660	0.001	-0.00271	0.003	-0.933	*			0.034
21	MA	86	0.0727	0.0728	0.001	-0.00011	0.003	-0.037				0.000
22	SA	76	0.0534	0.0585	0.001	-0.00511	0.003	-1.721	***			0.078
23	SA	81	0.0617	0.0606	0.001	0.00104	0.003	0.347				0.002
24	SA	86	0.0687	0.0707	0.001	-0.00204	0.003	-0.672	*			0.006
25	AL	76	0.0591	0.0669	0.001	-0.00776	0.003	-2.577	*****			0.123
26	AL	81	0.0691	0.0683	0.002	0.000841	0.003	0.320				0.011
27	AL	86	0.0789	0.0804	0.001	-0.00154	0.003	-0.525	*			0.009
28	BC	76	0.0667	0.0693	0.001	-0.00266	0.003	-0.874	*			0.009
29	BC	81	0.0777	0.0775	0.001	0.000227	0.003	0.078				0.000
30	BC	86	0.0977	0.0908	0.001	0.00691	0.003	2.471	****			0.375

Sum of Residuals 0
 Sum of Squared Residuals 0.0003
 Predicted Resid SS (Press) 0.0003

NON-FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 42
08:59 Wednesday, November 18, 1992

Model: MODEL8

Dependent Variable: AGE8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00798	0.00266	103.882	0.0001
Error	26	0.00067	0.00003		
C Total	29	0.00865			
Root MSE		0.00506	R-square	0.9230	
Dep Mean		0.07780	Adj R-sq	0.9141	
C.V.		6.50474			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.011621	0.01275526	-0.911	0.3706
AGE8L	1	0.981409	0.10643746	9.221	0.0001
RENT4	1	0.000025300	0.00003102	0.816	0.4221
FAMINC	1	0.000000168	0.00000026	0.635	0.5311

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

42

12:57 Monday, November 23, 1992

Obs	PROV	DATE	Dep Var AGE8	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.0389	0.0403	0.002	-0.00145	0.004	-0.325				0.008
2	NF	81	0.0439	0.0438	0.002	0.000133	0.004	0.030				0.000
3	NF	86	0.0425	0.0486	0.002	-0.00605	0.005	-1.299	**			0.076
4	PE	76	0.0581	0.0620	0.002	-0.00391	0.005	-0.832	*			0.028
5	PE	81	0.0787	0.0633	0.001	0.0155	0.005	3.165	*****			0.178
6	PE	86	0.0751	0.0836	0.002	-0.00856	0.004	-1.924	***			0.272
7	NS	76	0.0640	0.0653	0.002	-0.00123	0.005	-0.261				0.003
8	NS	81	0.0735	0.0713	0.002	0.00222	0.005	0.468				0.008
9	NS	86	0.0745	0.0806	0.001	-0.00606	0.005	-1.228	**			0.019
10	NB	76	0.0606	0.0570	0.002	0.00356	0.005	0.754	*			0.021
11	NB	81	0.0691	0.0652	0.002	0.00387	0.005	0.814	*			0.022
12	NB	86	0.0743	0.0733	0.003	0.00101	0.004	0.232				0.005
13	QU	76	0.0783	0.0767	0.001	0.00162	0.005	0.332				0.002
14	QU	81	0.0960	0.0862	0.001	0.00978	0.005	1.986	***			0.055
15	QU	86	0.1091	0.1029	0.002	0.00621	0.004	1.388	**			0.134
16	ON	76	0.0708	0.0729	0.001	-0.00209	0.005	-0.430				0.004
17	ON	81	0.0788	0.0795	0.002	-0.00065	0.005	-0.141				0.001
18	ON	86	0.0830	0.0872	0.002	-0.00428	0.005	-0.921	*			0.039
19	MA	76	0.0801	0.0782	0.002	0.00184	0.005	0.389				0.006
20	MA	81	0.0870	0.0885	0.002	-0.00156	0.005	-0.328				0.004
21	MA	86	0.0903	0.0952	0.002	-0.00490	0.005	-1.018	**			0.027
22	SA	76	0.0753	0.0797	0.002	-0.00437	0.005	-0.914	*			0.026
23	SA	81	0.0837	0.0832	0.001	0.000558	0.005	0.113				0.000
24	SA	86	0.0895	0.0911	0.001	-0.00151	0.005	-0.309				0.002
25	AL	76	0.0803	0.0823	0.001	-0.00206	0.005	-0.421				0.003
26	AL	81	0.0886	0.0882	0.003	0.000362	0.004	0.085				0.001
27	AL	86	0.0954	0.0970	0.002	-0.00161	0.005	-0.337				0.004
28	BC	76	0.0869	0.0873	0.001	-0.00039	0.005	-0.080				0.000
29	BC	81	0.0985	0.0960	0.002	0.00251	0.005	0.530	*			0.010
30	BC	86	0.1092	0.1076	0.002	0.00153	0.005	0.335				0.006

Sum of Residuals 0
 Sum of Squared Residuals 0.0007
 Predicted Resid SS (Press) 0.0008

08:59 Wednesday, November 18, 1992

Model: MODEL9

Dependent Variable: AGE9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00961	0.00320	127.802	0.0001
Error	26	0.00065	0.00003		
C Total	29	0.01026			
Root MSE		0.00501	R-square	0.9365	
Dep Mean		0.10691	Adj R-sq	0.9292	
C.V.		4.68254			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.006293	0.01243536	0.506	0.6171
AGE9L	1	0.949565	0.09067061	10.473	0.0001
RENT4	1	0.000007374	0.00003195	0.231	0.8193
FAMINC	1	4.8654998E-8	0.00000026	0.186	0.8542

12:57 Monday, November 23, 1992

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

Obs	PROV	DATE	Dep Var AGE9	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.0540	0.0607	0.003	-0.00667	0.004	-1.580	***	***		0.253
2	NF	81	0.0697	0.0626	0.003	0.00711	0.004	1.737		***		0.375
3	NF	86	0.0719	0.0775	0.002	-0.00562	0.005	-1.205	**			0.056
4	PE	76	0.0855	0.0863	0.002	-0.00079	0.005	-0.169				0.001
5	PE	81	0.0979	0.0927	0.001	0.00520	0.005	1.075	**			0.020
6	PE	86	0.1123	0.1045	0.002	0.00777	0.005	1.651	***			0.090
7	NS	76	0.0946	0.0959	0.002	-0.00135	0.005	-0.289				0.003
8	NS	81	0.1050	0.1019	0.002	0.00304	0.005	0.644	*			0.013
9	NS	86	0.1089	0.1118	0.001	-0.00294	0.005	-0.602	*			0.005
10	NB	76	0.0886	0.0892	0.002	-0.00059	0.005	-0.127				0.001
11	NB	81	0.0975	0.0955	0.002	0.00193	0.005	0.412				0.006
12	NB	86	0.1045	0.1038	0.003	0.000746	0.004	0.176				0.003
13	QU	76	0.1042	0.1028	0.001	0.00132	0.005	0.274				0.002
14	QU	81	0.1221	0.1113	0.001	0.0108	0.005	2.227	****			0.088
15	QU	86	0.1358	0.1281	0.002	0.00762	0.005	1.627	***			0.094
16	ON	76	0.1019	0.1043	0.001	-0.00243	0.005	-0.501	*			0.004
17	ON	81	0.1081	0.1093	0.002	-0.00127	0.005	-0.277				0.004
18	ON	86	0.1083	0.1152	0.002	-0.00688	0.005	-1.500	***			0.108
19	MA	76	0.1118	0.1138	0.002	-0.00206	0.005	-0.440				0.007
20	MA	81	0.1209	0.1187	0.002	0.00218	0.005	0.464				0.007
21	MA	86	0.1198	0.1273	0.002	-0.00748	0.005	-1.574	***			0.069
22	SA	76	0.1095	0.1127	0.002	-0.00323	0.005	-0.692	*			0.018
23	SA	81	0.1168	0.1164	0.001	0.000489	0.005	0.100				0.000
24	SA	86	0.1221	0.1232	0.001	-0.00110	0.005	-0.229				0.001
25	AL	76	0.1119	0.1193	0.001	-0.00745	0.005	-1.555	***			0.056
26	AL	81	0.1195	0.1187	0.003	0.000835	0.004	0.198				0.004
27	AL	86	0.1240	0.1261	0.002	-0.00210	0.005	-0.445				0.006
28	BC	76	0.1163	0.1205	0.001	-0.00425	0.005	-0.877	*			0.013
29	BC	81	0.1273	0.1232	0.002	0.00413	0.005	0.886	*			0.030
30	BC	86	0.1369	0.1338	0.002	0.00309	0.005	0.673	*			0.022

Sum of Residuals 0
 Sum of Squared Residuals 0.0007
 Predicted Resid SS (Press) 0.0009

Model: MODEL10

Dependent Variable: AGE10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.01501	0.00500	167.465	0.0001
Error	26	0.00078	0.00003		
C Total	29	0.01579			
Root MSE		0.00547	R-square	0.9508	
Dep Mean		0.14825	Adj R-sq	0.9451	
C.V.		3.68700			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.004965	0.01286773	-0.386	0.7028
AGE10L	1	0.832395	0.07123437	11.685	0.0001
RENT4	1	0.000068756	0.00003341	2.058	0.0498
FAMINC	1	-8.994883E-8	0.00000029	-0.315	0.7551

12:57 Monday, November 23, 1992

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

Obs	PROV	DATE	Dep Var AGE10	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.0828	0.0892	0.003	-0.00637	0.005	-1.409	**			0.229
2	NF	81	0.0916	0.0946	0.003	-0.00301	0.005	-0.661	*			0.048
3	NF	86	0.1015	0.1020	0.002	-0.00042	0.005	-0.086				0.000
4	PE	76	0.1224	0.1386	0.002	-0.0162	0.005	-3.317	*****			0.709
5	PE	81	0.1364	0.1293	0.001	0.00706	0.005	1.337	**			0.032
6	PE	86	0.1442	0.1408	0.002	0.00347	0.005	0.667	*			0.012
7	NS	76	0.1361	0.1389	0.002	-0.00278	0.005	-0.544	*			0.011
8	NS	81	0.1487	0.1457	0.002	0.00296	0.005	0.571	*			0.009
9	NS	86	0.1534	0.1554	0.001	-0.00207	0.005	-0.389				0.002
10	NB	76	0.1302	0.1220	0.002	0.00821	0.005	1.614	***			0.100
11	NB	81	0.1378	0.1342	0.002	0.00362	0.005	0.712	*			0.020
12	NB	86	0.1406	0.1394	0.003	0.00114	0.005	0.241				0.005
13	QU	76	0.1439	0.1394	0.002	0.00446	0.005	0.862	*			0.021
14	QU	81	0.1616	0.1521	0.002	0.00949	0.005	1.805	***			0.066
15	QU	86	0.1715	0.1660	0.001	0.00541	0.005	1.023	**			0.018
16	ON	76	0.1499	0.1473	0.001	0.00254	0.005	0.478				0.003
17	ON	81	0.1552	0.1568	0.002	-0.00154	0.005	-0.300				0.003
18	ON	86	0.1521	0.1598	0.002	-0.00777	0.005	-1.546	***			0.109
19	MA	76	0.1616	0.1592	0.002	0.00240	0.005	0.471				0.008
20	MA	81	0.1674	0.1690	0.002	-0.00160	0.005	-0.311				0.003
21	MA	86	0.1713	0.1733	0.002	-0.00200	0.005	-0.385				0.004
22	SA	76	0.1572	0.1591	0.002	-0.00188	0.005	-0.373				0.006
23	SA	81	0.1660	0.1628	0.001	0.00316	0.005	0.594	*			0.005
24	SA	86	0.1663	0.1700	0.002	-0.00365	0.005	-0.698	*			0.011
25	AL	76	0.1650	0.1632	0.002	0.00184	0.005	0.352				0.003
26	AL	81	0.1622	0.1659	0.003	-0.00371	0.005	-0.812	*			0.071
27	AL	86	0.1659	0.1668	0.002	-0.00088	0.005	-0.170				0.001
28	BC	76	0.1643	0.1607	0.001	0.00367	0.005	0.688	*			0.006
29	BC	81	0.1687	0.1697	0.002	-0.00099	0.005	-0.194				0.001
30	BC	86	0.1718	0.1764	0.002	-0.00458	0.005	-0.915	*			0.041

Sum of Residuals 0
 Sum of Squared Residuals 0.0008
 Predicted Resid SS (Press) 0.0011

NON-FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 48
08:59 Wednesday, November 18, 1992

Model: MODEL11

Dependent Variable: AGE11

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.02276	0.00759	117.849	0.0001
Error	26	0.00167	0.00006		
C Total	29	0.02443			
Root MSE		0.00802	R-square	0.9315	
Dep Mean		0.20546	Adj R-sq	0.9236	
C.V.		3.90481			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.013960	0.01834612	0.761	0.4535
AGE11L	1	0.849385	0.07905841	10.744	0.0001
RENT4	1	0.000087062	0.00004759	1.829	0.0788
FAMINC	1	-0.000000696	0.00000043	-1.633	0.1145

12:57 Monday, November 23, 1992

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

Obs	PROV	DATE	Dep Var AGE11	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.1182	0.1296	0.005	-0.0114	0.007	-1.747	***			0.384
2	NF	81	0.1396	0.1357	0.005	0.00394	0.007	0.594	*			0.041
3	NF	86	0.1397	0.1546	0.003	-0.0150	0.007	-2.025	****			0.186
4	PE	76	0.1905	0.1790	0.003	0.0116	0.007	1.546	***			0.089
5	PE	81	0.1903	0.1996	0.003	-0.00932	0.008	-1.226	**			0.043
6	PE	86	0.1920	0.1986	0.002	-0.00658	0.008	-0.863	*			0.020
7	NS	76	0.2008	0.1937	0.003	0.00712	0.007	0.949	*			0.033
8	NS	81	0.2104	0.2137	0.002	-0.00324	0.008	-0.422				0.004
9	NS	86	0.2110	0.2199	0.002	-0.00891	0.008	-1.143	**			0.019
10	NB	76	0.1834	0.1808	0.003	0.00258	0.007	0.348				0.005
11	NB	81	0.1902	0.1910	0.003	-0.00078	0.007	-0.104				0.000
12	NB	86	0.1999	0.1954	0.004	0.00456	0.007	0.649	*			0.032
13	QU	76	0.1915	0.1838	0.003	0.00773	0.007	1.052	**			0.053
14	QU	81	0.2165	0.2030	0.003	0.0135	0.008	1.777	***			0.087
15	QU	86	0.2266	0.2239	0.002	0.00268	0.008	0.343				0.002
16	ON	76	0.2144	0.2020	0.002	0.0124	0.008	1.587	***			0.035
17	ON	81	0.2202	0.2196	0.003	0.000535	0.008	0.070				0.000
18	ON	86	0.2138	0.2217	0.003	-0.00790	0.007	-1.067	**			0.050
19	MA	76	0.2284	0.2193	0.003	0.00915	0.007	1.222	**			0.055
20	MA	81	0.2358	0.2376	0.003	-0.00185	0.008	-0.246				0.002
21	MA	86	0.2339	0.2428	0.003	-0.00886	0.008	-1.173	**			0.044
22	SA	76	0.2208	0.2177	0.003	0.00315	0.007	0.421				0.006
23	SA	81	0.2270	0.2271	0.002	-0.00002	0.008	-0.002				0.000
24	SA	86	0.2335	0.2332	0.002	0.000331	0.008	0.043				0.000
25	AL	76	0.2218	0.2182	0.002	0.00361	0.008	0.468				0.004
26	AL	81	0.2266	0.2194	0.004	0.00718	0.007	1.062	**			0.116
27	AL	86	0.2262	0.2293	0.003	-0.00310	0.008	-0.409				0.005
28	BC	76	0.2169	0.2187	0.002	-0.00187	0.008	-0.238				0.001
29	BC	81	0.2229	0.2219	0.003	0.00103	0.007	0.139				0.001
30	BC	86	0.2209	0.2331	0.003	-0.0123	0.007	-1.683	***			0.151

Sum of Residuals 0
 Sum of Squared Residuals 0.0017
 Predicted Resid SS (Press) 0.0024

NON-FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 50
08:59 Wednesday, November 18, 1992

Model: MODEL12

Dependent Variable: AGE12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.03956	0.01319	121.588	0.0001
Error	26	0.00282	0.00011		
C Total	29	0.04238			
Root MSE		0.01041	R-square	0.9335	
Dep Mean		0.26571	Adj R-sq	0.9258	
C.V.		3.91916			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.017297	0.02341282	0.739	0.4666
AGE12L	1	0.762884	0.06618151	11.527	0.0001
RENT4	1	0.000140	0.00005781	2.416	0.0230
FAMINC	1	-0.000000603	0.00000055	-1.104	0.2798

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

50

12:57 Monday, November 23, 1992

Obs	PROV	DATE	Dep Var AGE12	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.1495	0.1669	0.006	-0.0174	0.009	-2.009	****			0.455
2	NF	81	0.1790	0.1810	0.005	-0.00194	0.009	-0.216	**			0.004
3	NF	86	0.1897	0.2041	0.004	-0.0144	0.010	-1.491	**			0.089
4	PE	76	0.2322	0.2211	0.004	0.0111	0.010	1.143	**			0.047
5	PE	81	0.2691	0.2478	0.003	0.0213	0.010	2.127	****			0.090
6	PE	86	0.2567	0.2752	0.004	-0.0185	0.010	-1.940	***			0.181
7	NS	76	0.2572	0.2526	0.004	0.00461	0.010	0.474				0.008
8	NS	81	0.2740	0.2764	0.003	-0.00239	0.010	-0.240				0.001
9	NS	86	0.2802	0.2869	0.003	-0.00663	0.010	-0.656	*			0.007
10	NB	76	0.2365	0.2299	0.004	0.00663	0.010	0.685	*			0.019
11	NB	81	0.2534	0.2474	0.004	0.00595	0.010	0.614	*			0.014
12	NB	86	0.2550	0.2581	0.005	-0.00307	0.009	-0.338				0.009
13	QU	76	0.2282	0.2263	0.005	0.00193	0.009	0.207				0.003
14	QU	81	0.2626	0.2521	0.004	0.0105	0.010	1.084	**			0.045
15	QU	86	0.2813	0.2772	0.002	0.00405	0.010	0.397				0.002
16	ON	76	0.2787	0.2663	0.002	0.0124	0.010	1.223	**			0.018
17	ON	81	0.2909	0.2882	0.003	0.00273	0.010	0.275				0.002
18	ON	86	0.2851	0.2940	0.004	-0.00892	0.010	-0.928	*			0.037
19	MA	76	0.2914	0.2772	0.004	0.0142	0.010	1.459	**			0.076
20	MA	81	0.3057	0.3051	0.004	0.000611	0.010	0.063				0.000
21	MA	86	0.3104	0.3146	0.004	-0.00413	0.010	-0.422				0.006
22	SA	76	0.2815	0.2853	0.004	-0.00381	0.010	-0.395				0.006
23	SA	81	0.3033	0.2917	0.002	0.0116	0.010	1.143	**			0.018
24	SA	86	0.3040	0.3088	0.003	-0.00482	0.010	-0.489				0.007
25	AL	76	0.2766	0.2799	0.003	-0.00336	0.010	-0.334				0.002
26	AL	81	0.2904	0.2780	0.006	0.0124	0.009	1.413	**			0.206
27	AL	86	0.2942	0.2963	0.003	-0.00212	0.010	-0.215				0.001
28	BC	76	0.2808	0.2905	0.002	-0.00967	0.010	-0.954	*			0.012
29	BC	81	0.2847	0.2909	0.004	-0.00630	0.010	-0.652	*			0.017
30	BC	86	0.2891	0.3017	0.004	-0.0126	0.009	-1.330	**			0.090

Sum of Residuals 0
 Sum of Squared Residuals 0.0028
 Predicted Resid SS (Press) 0.0040

NON-FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 52
08:59 Wednesday, November 18, 1992

Model: MODEL13

Dependent Variable: AGE13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.09938	0.03313	374.843	0.0001
Error	26	0.00230	0.00009		
C Total	29	0.10168			
Root MSE		0.00940	R-square	0.9774	
Dep Mean		0.29898	Adj R-sq	0.9748	
C.V.		3.14426			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.023573	0.02218831	1.062	0.2978
AGE13L	1	0.934047	0.04205853	22.208	0.0001
RENT4	1	0.000099102	0.00005240	1.891	0.0698
FAMINC	1	-0.000000936	0.00000048	-1.930	0.0646

12:57 Monday, November 23, 1992

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

Obs	PROV	DATE	Dep Var AGE13	Predict Value	Std Err Predict	Residual	Std Err Residual	Student Residual	-2-1-0	1	2	Cook's D
1	NF	76	0.1435	0.1641	0.004	-0.0206	0.008	-2.498	****			0.459
2	NF	81	0.1735	0.1776	0.004	-0.00406	0.008	-0.486	*			0.016
3	NF	86	0.2013	0.2067	0.003	-0.00539	0.009	-0.616				0.014
4	PE	76	0.2383	0.2423	0.003	-0.00394	0.009	-0.448				0.007
5	PE	81	0.2740	0.2691	0.002	0.00490	0.009	0.540		*		0.005
6	PE	86	0.3021	0.3013	0.003	0.000791	0.009	0.089				0.000
7	NS	76	0.2735	0.2693	0.003	0.00420	0.009	0.478				0.008
8	NS	81	0.3198	0.3078	0.003	0.0120	0.009	1.339	**			0.041
9	NS	86	0.3337	0.3486	0.003	-0.0148	0.009	-1.646	***			0.060
10	NB	76	0.2515	0.2412	0.003	0.0103	0.009	1.173	**			0.052
11	NB	81	0.2869	0.2784	0.003	0.00850	0.009	0.973	*			0.037
12	NB	86	0.3078	0.3098	0.005	-0.00203	0.008	-0.253				0.006
13	QU	76	0.2170	0.2164	0.005	0.000671	0.008	0.082				0.001
14	QU	81	0.2589	0.2511	0.004	0.00773	0.008	0.915	*			0.050
15	QU	86	0.2908	0.2901	0.002	0.000642	0.009	0.070				0.000
16	ON	76	0.3183	0.3067	0.002	0.0116	0.009	1.267	**			0.018
17	ON	81	0.3445	0.3419	0.003	0.00258	0.009	0.288				0.002
18	ON	86	0.3535	0.3630	0.004	-0.00954	0.009	-1.108	**			0.058
19	MA	76	0.3204	0.3127	0.003	0.00772	0.009	0.878	*			0.028
20	MA	81	0.3660	0.3516	0.003	0.0144	0.009	1.627	***			0.086
21	MA	86	0.3891	0.3929	0.004	-0.00376	0.009	-0.433				0.008
22	SA	76	0.3166	0.3178	0.003	-0.00123	0.009	-0.139				0.001
23	SA	81	0.3502	0.3431	0.002	0.00712	0.009	0.778	*			0.009
24	SA	86	0.3721	0.3758	0.003	-0.00361	0.009	-0.409				0.006
25	AL	76	0.2866	0.2880	0.003	-0.00140	0.009	-0.155				0.001
26	AL	81	0.3112	0.3045	0.005	0.00669	0.008	0.853	*			0.079
27	AL	86	0.3383	0.3344	0.003	0.00391	0.009	0.441				0.006
28	BC	76	0.3327	0.3350	0.002	-0.00230	0.009	-0.250				0.001
29	BC	81	0.3436	0.3553	0.003	-0.0117	0.009	-1.328	**			0.062
30	BC	86	0.3537	0.3731	0.004	-0.0194	0.009	-2.254	****			0.241

Sum of Residuals 0
 Sum of Squared Residuals 0.0023
 Predicted Resid SS (Press) 0.0032

APPENDIX B1

FAMILY HEADSHIP RATES

**Simultaneous Estimation of Basic Regression Equation
with right side variables:**

ALL: lagged one period headship rate
RENT: average rent for 4-room apartment
INC: average all family income

FAMILY SIMMULTANEOUS EQUASION ESTIMATION
 SYSTEM R-SQUARE = 0.9888 ... CHI-SQUARE = 134.84 WITH 39 D.F.

VARIABLE	COEFFICIENT	ST.ERROR	T-RATIO
A1L 15-20	0.33550	0.83446E-01	4.0205
RENT	0.98732E-05	0.12602E-04	0.78349
INC	0.12164E-06	0.12278E-06	0.99071
A2L 20-25	0.50339	0.11287	4.4601
RENT	0.11722E-03	0.94659E-04	1.2384
INC	-0.14246E-05	0.89923E-06	-1.5842
A3L 25-30	-0.53030E-01	0.20051	-0.26448
RENT	0.10722E-04	0.10797E-03	0.99304E-01
INC	-0.18525E-05	0.10306E-05	-1.7976
A4L 30-35	0.30826	0.11250	2.7402
RENT	-0.51680E-04	0.57741E-04	-0.89502
INC	-0.81746E-06	0.55229E-06	-1.4801
A5L 35-40	0.54534E-01	0.74076E-01	0.73619
RENT	-0.88213E-04	0.35847E-04	-2.4609
INC	0.69143E-06	0.36995E-06	1.8690
A6L 40-45	0.38185	0.56148E-01	6.8007
RENT	-0.72279E-04	0.27504E-04	-2.6280
INC	0.49513E-06	0.30425E-06	1.6274
A7L 45-50	0.35217	0.58579E-01	6.0118
RENT	-0.11025E-03	0.32805E-04	-3.3607
INC	0.12049E-05	0.33606E-06	3.5853
A8L 50-55	0.64547	0.83655E-01	7.7158
RENT	-0.81582E-04	0.36708E-04	-2.2224
INC	0.77844E-06	0.33738E-06	2.3073
A9L 55-60	0.89418	0.93397E-01	9.5739
RENT	-0.23473E-04	0.38453E-04	-0.61042
INC	0.18223E-06	0.31114E-06	0.58568
A10L 60-65	0.72343	0.57491E-01	12.583
RENT	-0.96408E-04	0.32313E-04	-2.9836
INC	-0.41558E-06	0.28055E-06	-1.4813
A11L 65-70	0.51055	0.74827E-01	6.8230
RENT	-0.11420E-03	0.42649E-04	-2.6776
INC	-0.10949E-05	0.36931E-06	-2.9648
A12L 70-75	0.57386	0.67537E-01	8.4970
RENT	-0.73424E-04	0.53405E-04	-1.3749
INC	-0.10384E-05	0.49057E-06	-2.1166
A13L 75+	0.46390	0.69938E-01	6.6331
RENT	0.15483E-04	0.68366E-04	0.22647

FAMILY SIMULTANEOUS EQUATION ESTIMATION
DEPENDENT VARIABLE = A1 30 OBSERVATIONS

R-SQUARE = 0.3994
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.63929E-05
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.25284E-02
SUM OF SQUARED ERRORS-SSE= 0.16622E-03
MEAN OF DEPENDENT VARIABLE = 0.93461E-02
LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A1L	0.33550	0.83446E-01	4.0205	0.6192	0.36106	0.30707
RENT	0.98732E-05	0.12602E-04	0.78349	0.1519	0.15256	0.58654
INC	0.12164E-06	0.12278E-06	0.99071	0.1907	0.20120	0.43530

DEPENDENT VARIABLE = A2 30 OBSERVATIONS
R-SQUARE = 0.3399
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.40752E-03
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.20187E-01
SUM OF SQUARED ERRORS-SSE= 0.10596E-01
MEAN OF DEPENDENT VARIABLE = 0.14575
LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A2L	0.50339	0.11287	4.4601	0.6584	0.37835	0.53181
RENT	0.11722E-03	0.94659E-04	1.2384	0.2360	0.23785	0.44656
INC	-0.14246E-05	0.89923E-06	-1.5842	-0.2967	-0.30940	-0.32690

FAMILY SIMULTANEOUS EQUATION ESTIMATION

DEPENDENT VARIABLE = A3 30 OBSERVATIONS
R-SQUARE = 0.1649
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.47631E-03
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.21825E-01
SUM OF SQUARED ERRORS-SSE= 0.12384E-01
MEAN OF DEPENDENT VARIABLE = 0.33908
LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A3L	-0.53030E-01	0.20051	-0.26448	-0.0518	-0.23843E-01	-0.66984E-01
RENT	0.10722E-04	0.10797E-03	0.99304E-01	0.0195	0.22634E-01	0.17556E-01
INC	-0.18525E-05	0.10306E-05	-1.7976	-0.3325	-0.41858	-0.18272
CONSTANT	0.41780	0.98650E-01	4.2352	0.6389	0.00000E+00	1.2321

EQUATION 4 OF 13 EQUATIONS
DEPENDENT VARIABLE = A4

R-SQUARE = 0.2864
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.13737E-03
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.11721E-01
SUM OF SQUARED ERRORS-SSE= 0.35717E-02
MEAN OF DEPENDENT VARIABLE = 0.42462
LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A4L	0.30826	0.11250	2.7402	0.4734	0.23856	0.31093
RENT	-0.51680E-04	0.57741E-04	-0.89502	-0.1729	-0.18778	-0.67575E-01
INC	-0.81746E-06	0.55229E-06	-1.4801	-0.2788	-0.31793	-0.64386E-01
CONSTANT	0.34863	0.54769E-01	6.3654	0.7805	0.00000E+00	0.821

FAMILY SIMULTANEOUS EQUATION ESTIMATION
EQUATION 5 OF 13 EQUATIONS
DEPENDENT VARIABLE = A5 30 OBSERVATIONS

R-SQUARE = 0.2430
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.49720E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.70513E-02
SUM OF SQUARED ERRORS-SSE= 0.12927E-02
MEAN OF DEPENDENT VARIABLE = 0.46162
LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A5L	0.54534E-01	0.74076E-01	0.73619	0.1429	0.92582E-01	0.54124E-01
RENT	-0.88213E-04	0.35847E-04	-2.4609	-0.4346	-0.54874	-0.10610
INC	0.69143E-06	0.36995E-06	1.8690	0.3441	0.46039	0.50096E-01
CONSTANT	0.46248	0.35596E-01	12.992	0.9309	0.00000E+00	1.0019

EQUATION 6 OF 13 EQUATIONS
DEPENDENT VARIABLE = A6 30 OBSERVATIONS

R-SQUARE = 0.7067
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.28817E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.53682E-02
SUM OF SQUARED ERRORS-SSE= 0.74925E-03
MEAN OF DEPENDENT VARIABLE = 0.47410
LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A6L	0.38185	0.56148E-01	6.8007	0.8001	0.67916	0.37512
RENT	-0.72279E-04	0.27504E-04	-2.6280	-0.4581	-0.36759	-0.84646E-01
INC	0.49513E-06	0.30425E-06	1.6274	0.3040	0.26954	0.34928E-01
CONSTANT	0.31983	0.26613E-01	12.018	0.9206	0.00000E+00	0.67459

FAMILY SIMMULTANEOUS EQUASION ESTIMATION
EQUATION 7 OF 13 EQUATIONS
DEPENDENT VARIABLE = A7

30 OBSERVATIONS

R-SQUARE = 0.7109
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.41251E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.64227E-02
SUM OF SQUARED ERRORS-SSE= 0.10725E-02
MEAN OF DEPENDENT VARIABLE = 0.47143
LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A7L	0.35217	0.58579E-01	6.0118	0.7626	0.49804	0.34543
RENT	-0.11025E-03	0.32805E-04	-3.3607	-0.5503	-0.46525	-0.12984
INC	0.12049E-05	0.33606E-06	3.5853	0.5752	0.54427	0.85478E-01
CONSTANT	0.32950	0.29456E-01	11.186	0.9099	0.00000E+00	0.69893

EQUATION 8 OF 13 EQUATIONS
DEPENDENT VARIABLE = A8

30 OBSERVATIONS

R-SQUARE = 0.7464
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.49482E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.70343E-02
SUM OF SQUARED ERRORS-SSE= 0.12865E-02
MEAN OF DEPENDENT VARIABLE = 0.46063
LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A8L	0.64547	0.83655E-01	7.7158	0.8343	0.64035	0.63767
RENT	-0.81582E-04	0.36708E-04	-2.2224	-0.3996	-0.29444	-0.98336E-01
INC	0.77844E-06	0.33738E-06	2.3073	0.4123	0.30073	0.56521E-01
CONSTANT	0.18616	0.44394E-01	4.1934	0.6352	0.00000E+00	0.40415

FAMILY SIMMULTANEOUS EQUATION ESTIMATION
 EQUATION 9 OF 13 EQUATIONS
 DEPENDENT VARIABLE = A9 30 OBSERVATIONS

R-SQUARE = 0.7994
 VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.44586E-04
 STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.66773E-02
 SUM OF SQUARED ERRORS-SSE= 0.11592E-02
 MEAN OF DEPENDENT VARIABLE = 0.44468
 LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A9L	0.89418	0.93397E-01	9.5739	0.8826	0.85619	0.89370
RENT	-0.23473E-04	0.38453E-04	-0.61042	-0.1189	-0.79364E-01	-0.29308E-01
INC	0.18223E-06	0.31114E-06	0.58568	0.1141	0.65951E-01	0.13706E-01
CONSTANT	0.54206E-01	0.53849E-01	1.0066	0.1937	0.00000E+00	0.12190

EQUATION 10 OF 13 EQUATIONS
 DEPENDENT VARIABLE = A10 30 OBSERVATIONS

R-SQUARE = 0.9151
 VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.35306E-04
 STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.59419E-02
 SUM OF SQUARED ERRORS-SSE= 0.91797E-03
 MEAN OF DEPENDENT VARIABLE = 0.42495
 LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A10L	0.72343	0.57491E-01	12.583	0.9268	0.68593	0.72840
RENT	-0.96408E-04	0.32313E-04	-2.9836	-0.5050	-0.23840	-0.12596
INC	-0.41558E-06	0.28055E-06	-1.4813	-0.2790	-0.11000	-0.32708E-01
CONSTANT	0.18284	0.35800E-01	5.1073	0.7077	0.00000E+00	0.43028

FAMILY SIMULTANEOUS EQUATION ESTIMATION
 EQUATION 11 OF 13 EQUATIONS
 DEPENDENT VARIABLE = A11 30 OBSERVATIONS

R-SQUARE = 0.8526
 VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.63587E-04
 STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.79742E-02
 SUM OF SQUARED ERRORS-SSE= 0.16533E-02
 MEAN OF DEPENDENT VARIABLE = 0.39985
 LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A11L	0.51055	0.74827E-01	6.8230	0.8010	0.47111	0.51250
RENT	-0.11420E-03	0.42649E-04	-2.6776	-0.4649	-0.27714	-0.15857
INC	-0.10949E-05	0.36931E-06	-2.9648	-0.5027	-0.28443	-0.91584E-01
CONSTANT	0.29495	0.44411E-01	6.6414	0.7932	0.00000E+00	0.73765

EQUATION 12 OF 13 EQUATIONS
 DEPENDENT VARIABLE = A12 30 OBSERVATIONS

R-SQUARE = 0.7468
 VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.10992E-03
 STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.10484E-01
 SUM OF SQUARED ERRORS-SSE= 0.28578E-02
 MEAN OF DEPENDENT VARIABLE = 0.36420
 LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A12L	0.57386	0.67537E-01	8.4970	0.8575	0.56273	0.57496
RENT	-0.73424E-04	0.53405E-04	-1.3749	-0.2603	-0.17766	-0.11194
INC	-0.10384E-05	0.49057E-06	-2.1166	-0.3834	-0.26893	-0.95355E-01
CONSTANT	0.23029	0.39738E-01	5.7953	0.7508	0.00000E+00	0.63233

FAMILY SIMMULTANEOUS EQUASION ESTIMATION
EQUATION 13 OF 13 EQUATIONS
DEPENDENT VARIABLE = A13 30 OBSERVATIONS

R-SQUARE = 0.7032
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.18793E-03
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.13709E-01
SUM OF SQUARED ERRORS-SSE= 0.48861E-02
MEAN OF DEPENDENT VARIABLE = 0.26075
LOG OF THE LIKELIHOOD FUNCTION = 1540.73

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A13L	0.46390	0.69938E-01	6.6331	0.7928	0.52636	0.48860
RENT	0.15483E-04	0.68366E-04	0.22647	0.0444	0.31021E-01	0.32969E-01
INC	-0.19636E-05	0.68006E-06	-2.8874	-0.4927	-0.42111	-0.25186
CONSTANT	0.19042	0.39744E-01	4.7913	0.6848	0.00000E+00	0.73029

APPENDIX B2

NON-FAMILY HEADSHIP RATES

**Simultaneous Estimation of Basic Regression Equation
with right side variables:**

ALL: lagged one period headship rate
RENT: average rent for 4-room apartment
INC: average all family income

NON-FAMILY SIMMULTANEOUS EQUASION ESTIMATION
 SYSTEM R-SQUARE = 0.9997 ... CHI-SQUARE = 241.28 WITH 39 D.F.

VARIABLE	COEFFICIENT	ST.ERROR	T-RATIO
A1L 15-20	0.60544	0.90295E-01	6.7051
RENT	0.32809E-04	0.32701E-04	1.0033
INC	0.89938E-07	0.31361E-06	0.28679
A2L 20-25	0.49085	0.74794E-01	6.5628
RENT	0.22843E-03	0.94656E-04	2.4133
INC	0.14579E-05	0.92057E-06	1.5837
A3L 25-30	0.51826	0.69844E-01	7.4202
RENT	0.23849E-03	0.47452E-04	5.0260
INC	0.31605E-05	0.46178E-06	6.8443
A4L 30-35	0.80523	0.41395E-01	19.452
RENT	0.77917E-04	0.26793E-04	2.9082
INC	0.12384E-05	0.26177E-06	4.7311
A5L 35-40	0.97875	0.49311E-01	19.848
RENT	0.38569E-04	0.22851E-04	1.6879
INC	0.76313E-06	0.21582E-06	3.5359
A6L 40-45	1.0313	0.55110E-01	18.713
RENT	0.23846E-04	0.27058E-04	0.88130
INC	0.58278E-06	0.24829E-06	2.3472
A7L 45-50	1.1388	0.53724E-01	21.198
RENT	0.14080E-04	0.17440E-04	0.80734
INC	0.18378E-06	0.15417E-06	1.1920
A8L 50-55	0.89702	0.59715E-01	15.022
RENT	0.39597E-04	0.27188E-04	1.4564
INC	0.26269E-06	0.24513E-06	1.0716
A9L 55-60	0.89291	0.59819E-01	14.927
RENT	0.19837E-04	0.28219E-04	0.70296
INC	0.12335E-06	0.24619E-06	0.50104
A10L 60-65	0.83555	0.49271E-01	16.958
RENT	0.67900E-04	0.30356E-04	2.2368
INC	-0.95643E-07	0.26975E-06	-0.35456
A11L 65-70	0.80955	0.48229E-01	16.786
RENT	0.10005E-03	0.42985E-04	2.3276
INC	-0.59281E-06	0.39412E-06	-1.5042
A12L 70-75	0.76271	0.43306E-01	17.612
RENT	0.13971E-03	0.54524E-04	2.5624
INC	-0.60251E-06	0.51227E-06	-1.1762
A13L 75+	0.92803	0.29679E-01	31.269
RENT	0.10245E-03	0.49705E-04	2.0612
INC	-0.90586E-06	0.46186E-06	-1.9613

EQUATION 1 OF 13 EQUATIONS
DEPENDENT VARIABLE = A1

30 OBSERVATIONS

R-SQUARE = 0.6255
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.41871E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.64708E-02
SUM OF SQUARED ERRORS-SSE= 0.10887E-02
MEAN OF DEPENDENT VARIABLE = 0.15419E-01
LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
ALL	0.60544	0.90295E-01	6.7051	0.7960	0.61169	0.55530
RENT	0.32809E-04	0.32701E-04	1.0033	0.1931	0.15643	1.1814
INC	0.89938E-07	0.31361E-06	0.28679	0.0562	0.45901E-01	0.19508
CONSTANT	-0.14367E-01	0.14965E-01	-0.96008	-0.1850	0.00000E+00	-0.93180

EQUATION 2 OF 13 EQUATIONS
DEPENDENT VARIABLE = A2

30 OBSERVATIONS

R-SQUARE = 0.8090
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.33603E-03
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.18331E-01
SUM OF SQUARED ERRORS-SSE= 0.87368E-02
MEAN OF DEPENDENT VARIABLE = 0.93021E-01
LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A2L	0.49085	0.74794E-01	6.5628	0.7897	0.50904	0.41647
RENT	0.22843E-03	0.94656E-04	2.4133	0.4278	0.27453	1.3635
INC	0.14579E-05	0.92057E-06	1.5837	0.2966	0.18755	0.52418
CONSTANT	-0.12131	0.44355E-01	-2.7350	-0.4727	0.00000E+00	-1.3041

EQUATION 3 OF 13 EQUATIONS
DEPENDENT VARIABLE = A3

30 OBSERVATIONS

R-SQUARE = 0.9487
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.82192E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.90660E-02
SUM OF SQUARED ERRORS-SSE= 0.21370E-02
MEAN OF DEPENDENT VARIABLE = 0.93866E-01
LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A3L	0.51826	0.69844E-01	7.4202	0.8242	0.35919	0.27497
RENT	0.23849E-03	0.47452E-04	5.0260	0.7020	0.30051	1.4107
INC	0.31605E-05	0.46178E-06	6.8443	0.8019	0.42627	1.1261
CONSTANT	-0.17006	0.22657E-01	-7.5059	-0.8272	0.00000E+00	-1.8118

EQUATION 4 OF 13 EQUATIONS
DEPENDENT VARIABLE = A4

30 OBSERVATIONS

R-SQUARE = 0.9739
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.25646E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.50642E-02
SUM OF SQUARED ERRORS-SSE= 0.66680E-03
MEAN OF DEPENDENT VARIABLE = 0.68142E-01
LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A4L	0.80523	0.41395E-01	19.452	0.9673	0.71269	0.58851
RENT	0.77917E-04	0.26793E-04	2.9082	0.4954	0.12537	0.63487
INC	0.12384E-05	0.26177E-06	4.7311	0.6802	0.21330	0.60784
CONSTANT	-0.56641E-01	0.12900E-01	-4.3907	-0.6525	0.00000E+00	-0.83122

EQUATION 5 OF 13 EQUATIONS

DEPENDENT VARIABLE = A5

30 OBSERVATIONS

R-SQUARE = 0.9659

VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.19722E-04

STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.44410E-02

SUM OF SQUARED ERRORS-SSE= 0.51277E-03

MEAN OF DEPENDENT VARIABLE = 0.52750E-01

LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A5L	0.97875	0.49311E-01	19.848	0.9686	0.76252	0.75142
RENT	0.38569E-04	0.22851E-04	1.6879	0.3143	0.80893E-01	0.40596
INC	0.76313E-06	0.21582E-06	3.5359	0.5698	0.17132	0.48384
CONSTANT	-0.33825E-01	0.10702E-01	-3.1605	-0.5268	0.00000E+00	-0.64122

EQUATION 6 OF 13 EQUATIONS

DEPENDENT VARIABLE = A6

30 OBSERVATIONS

R-SQUARE = 0.9285

VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.27430E-04

STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.52374E-02

SUM OF SQUARED ERRORS-SSE= 0.71319E-03

MEAN OF DEPENDENT VARIABLE = 0.50621E-01

LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A6L	1.0313	0.55110E-01	18.713	0.9648	0.77473	0.86091
RENT	0.23846E-04	0.27058E-04	0.88130	0.1703	0.61371E-01	0.26155
INC	0.58278E-06	0.24829E-06	2.3472	0.4181	0.16054	0.38504
CONSTANT	-0.25690E-01	0.12007E-01	-2.1395	-0.3869	0.00000E+00	-0.50749

EQUATION 7 OF 13 EQUATIONS
DEPENDENT VARIABLE = A7

30 OBSERVATIONS

R-SQUARE = 0.9672
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.10310E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.32110E-02
SUM OF SQUARED ERRORS-SSE= 0.26807E-03
MEAN OF DEPENDENT VARIABLE = 0.59625E-01
LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A7L	1.1388	0.53724E-01	21.198	0.9723	0.88939	1.0089
RENT	0.14080E-04	0.17440E-04	0.80734	0.1564	0.40049E-01	0.13111
INC	0.18378E-06	0.15417E-06	1.1920	0.2276	0.55954E-01	0.10308
CONSTANT	-0.14492E-01	0.75278E-02	-1.9251	-0.3532	0.00000E+00	-0.24305

EQUATION 8 OF 13 EQUATIONS
DEPENDENT VARIABLE = A8

30 OBSERVATIONS

R-SQUARE = 0.9211
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.26230E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.51215E-02
SUM OF SQUARED ERRORS-SSE= 0.68198E-03
MEAN OF DEPENDENT VARIABLE = 0.77801E-01
LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A8L	0.89702	0.59715E-01	15.022	0.9469	0.79548	0.81958
RENT	0.39597E-04	0.27188E-04	1.4564	0.2746	0.10946	0.28258
INC	0.26269E-06	0.24513E-06	1.0716	0.2057	0.77729E-01	0.11293
CONSTANT	-0.16734E-01	0.11585E-01	-1.4444	-0.2725	0.00000E+00	-0.21509

EQUATION 9 OF 13 EQUATIONS
DEPENDENT VARIABLE = A9

30 OBSERVATIONS

R-SQUARE = 0.9355
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.25438E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.50436E-02
SUM OF SQUARED ERRORS-SSE= 0.66140E-03
MEAN OF DEPENDENT VARIABLE = 0.10691
LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A9L	0.89291	0.59819E-01	14.927	0.9463	0.88716	0.83466
RENT	0.19837E-04	0.28219E-04	0.70296	0.1366	0.50342E-01	0.10302
INC	0.12335E-06	0.24619E-06	0.50104	0.0978	0.33507E-01	0.38588E-0
CONSTANT	0.25376E-02	0.11587E-01	0.21901	0.0429	0.00000E+00	0.23735E-0

EQUATION 10 OF 13 EQUATIONS
DEPENDENT VARIABLE = A10

30 OBSERVATIONS

R-SQUARE = 0.9508
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.29881E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.54663E-02
SUM OF SQUARED ERRORS-SSE= 0.77690E-03
MEAN OF DEPENDENT VARIABLE = 0.14825
LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A10L	0.83555	0.49271E-01	16.958	0.9576	0.88113	0.79930
RENT	0.67900E-04	0.30356E-04	2.2368	0.4017	0.13892	0.25429
INC	-0.95643E-07	0.26975E-06	-0.35456	-0.0694	-0.20945E-01	-0.21576E-0
CONSTANT	-0.47464E-02	0.12366E-01	-0.38384	-0.0751	0.00000E+00	-0.32015E-0

EQUATION 11 OF 13 EQUATIONS
DEPENDENT VARIABLE = A11

30 OBSERVATIONS

R-SQUARE = 0.9308
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.64994E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.80619E-02
SUM OF SQUARED ERRORS-SSE= 0.16898E-02
MEAN OF DEPENDENT VARIABLE = 0.20546
LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A11L	0.80955	0.48229E-01	16.786	0.9568	0.89556	0.77211
RENT	0.10005E-03	0.42985E-04	2.3276	0.4153	0.16455	0.27037
INC	-0.59281E-06	0.39412E-06	-1.5042	-0.2829	-0.10436	-0.96499E-0
CONSTANT	0.11100E-01	0.17787E-01	0.62405	0.1215	0.00000E+00	0.54025E-0

EQUATION 12 OF 13 EQUATIONS
DEPENDENT VARIABLE = A12

30 OBSERVATIONS

R-SQUARE = 0.9335
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.10844E-03
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.10414E-01
SUM OF SQUARED ERRORS-SSE= 0.28195E-02
MEAN OF DEPENDENT VARIABLE = 0.26571
LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A12L	0.76271	0.43306E-01	17.612	0.9606	0.89500	0.71885
RENT	0.13971E-03	0.54524E-04	2.5624	0.4490	0.17447	0.29195
INC	-0.60251E-06	0.51227E-06	-1.1762	-0.2248	-0.80536E-01	-0.75839E-0
CONSTANT	0.17282E-01	0.22977E-01	0.75215	0.1459	0.00000E+00	0.65041E-0

NON-FAMILY SIMMULTANEOUS EQUATION ESTIMATION
EQUATION 13 OF 13 EQUATIONS
DEPENDENT VARIABLE = A13 30 OBSERVATIONS

R-SQUARE = 0.9774
VARIANCE OF THE ESTIMATE-SIGMA**2 = 0.88443E-04
STANDARD ERROR OF THE ESTIMATE-SIGMA = 0.94044E-02
SUM OF SQUARED ERRORS-SSE= 0.22995E-02
MEAN OF DEPENDENT VARIABLE = 0.29898
LOG OF THE LIKELIHOOD FUNCTION = 1655.74

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 26 DF	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
A13L	0.92803	0.29679E-01	31.269	0.9870	0.97977	0.83636
RENT	0.10245E-03	0.49705E-04	2.0612	0.3748	0.82593E-01	0.19026
INC	-0.90586E-06	0.46186E-06	-1.9613	-0.3590	-0.78169E-01	-0.10133
CONSTANT	0.22340E-01	0.21330E-01	1.0474	0.2012	0.00000E+00	0.74721E-0

APPENDIX C1

FAMILY HEADSHIP RATES

**Ordinary Least Squares Regression Results
with left side variables:**

AGE1L: lagged one period headship rate for the 15-20 cohort
FAMINC: average rent for 4-room apartment
FAMINCD: change in income e.g. FAMINC 1986 - FAMINC 1981

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

1

14:17 Wednesday, November 18, 1992

OBS	PROV	DATE	FAMINC	FAMINCD
1	NF	76	24480.40	3779.90
2	NF	81	30009.00	5528.60
3	NF	86	28800.00	-1209.00
4	PE	76	25135.63	3492.52
5	PE	81	29572.00	4436.37
6	PE	86	30451.00	879.00
7	NS	76	27080.15	2736.10
8	NS	81	31295.00	4214.85
9	NS	86	32938.00	1643.00
10	NB	76	26222.78	3034.04
11	NB	81	30272.00	4049.22
12	NB	86	30527.00	255.00
13	QU	76	31895.46	3161.19
14	QU	81	35925.00	4029.54
15	QU	86	34582.00	-1343.00
16	ON	76	35802.61	2734.94
17	ON	81	40071.00	4268.39
18	ON	86	41692.00	1621.00
19	MA	76	30190.19	3313.89
20	MA	81	34996.00	4805.81
21	MA	86	35486.00	490.00
22	SA	76	28832.33	6088.50
23	SA	81	36401.00	7568.67
24	SA	86	34666.00	-1735.00
25	AL	76	37451.47	7994.40
26	AL	81	43488.00	6036.53
27	AL	86	40740.00	-2748.00
28	BC	76	35005.85	3910.14
29	BC	81	41688.00	6682.15
30	BC	86	37655.00	-4033.00

14:17 Wednesday, November 18, 1992

Model: MODELL

Dependent Variable: AGE1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00016	0.00005	11.868	0.0001
Error	26	0.0001168058	4.4925312E-6		
C Total	29	0.00028			
Root MSE		0.00212	R-square	0.5779	
Dep Mean		0.00935	Adj R-sq	0.5292	
C.V.		22.67862			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.000700	0.00279644	0.250	0.8043
AGE1L	1	0.591731	0.17258889	3.429	0.0020
FAMINC	1	6.6085281E-8	0.00000011	0.609	0.5480
FAMINCD	1	0.000000481	0.00000014	3.431	0.0020

14:17 Wednesday, November 18, 1992

Model: MODEL2

Dependent Variable: AGE2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00991	0.00330	13.975	0.0001
Error	26	0.00614	0.00024		
C Total	29	0.01605			
Root MSE		0.01537	R-square	0.6172	
Dep Mean		0.14575	Adj R-sq	0.5731	
C.V.		10.54698			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.056191	0.02634337	2.133	0.0425
AGE2L	1	0.758561	0.18754951	4.045	0.0004
FAMINC	1	-0.000001145	0.00000063	-1.805	0.0826
FAMINCD	1	0.000003873	0.00000098	3.945	0.0005

14:17 Wednesday, November 18, 1992

Model: MODEL3

Dependent Variable: AGE3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.01054	0.00351	21.327	0.0001
Error	26	0.00428	0.00016		
C Total	29	0.01483			
Root MSE		0.01284	R-square	0.7111	
Dep Mean		0.33908	Adj R-sq	0.6777	
C.V.		3.78596			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.120873	0.07665484	1.577	0.1269
AGE3L	1	0.750839	0.21183118	3.545	0.0015
FAMINC	1	-0.000001632	0.00000047	-3.474	0.0018
FAMINCD	1	0.000002823	0.00000097	2.915	0.0072

14:17 Wednesday, November 18, 1992

Model: MODEL4

Dependent Variable: AGE4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00332	0.00111	17.108	0.0001
Error	26	0.00168	0.00006		
C Total	29	0.00501			
Root MSE		0.00805	R-square	0.6637	
Dep Mean		0.42462	Adj R-sq	0.6250	
C.V.		1.89476			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.233391	0.06587508	3.543	0.0015
AGE4L	1	0.530750	0.16295358	3.257	0.0031
FAMINC	1	-0.000001300	0.00000032	-4.043	0.0004
FAMINCD	1	0.000002589	0.00000050	5.137	0.0001

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 6
14:17 Wednesday, November 18, 1992

Model: MODEL5

Dependent Variable: AGE5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00068	0.00023	5.770	0.0037
Error	26	0.00103	0.00004		
C Total	29	0.00171			
Root MSE		0.00628	R-square	0.3997	
Dep Mean		0.46162	Adj R-sq	0.3304	
C.V.		1.36027			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.311706	0.05275767	5.908	0.0001
AGE5L	1	0.341453	0.12958954	2.635	0.0140
FAMINC	1	-0.000000324	0.00000032	-1.008	0.3225
FAMINCD	1	0.000001510	0.00000041	3.675	0.0011

14:17 Wednesday, November 18, 1992

Model: MODEL6

Dependent Variable: AGE6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00193	0.00064	26.824	0.0001
Error	26	0.00062	0.00002		
C Total	29	0.00255			
Root MSE		0.00490	R-square	0.7558	
Dep Mean		0.47410	Adj R-sq	0.7276	
C.V.		1.03322			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.202397	0.03472329	5.829	0.0001
AGE6L	1	0.610916	0.08791063	6.949	0.0001
FAMINC	1	-0.000000481	0.00000028	-1.735	0.0947
FAMINCD	1	0.000001143	0.00000033	3.475	0.0018

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 8
14:17 Wednesday, November 18, 1992

Model: MODEL7

Dependent Variable: AGE7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00297	0.00099	34.833	0.0001
Error	26	0.00074	0.00003		
C Total	29	0.00371			
Root MSE		0.00533	R-square	0.8008	
Dep Mean		0.47143	Adj R-sq	0.7778	
C.V.		1.13108			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.117351	0.03963780	2.961	0.0065
AGE7L	1	0.769548	0.09625880	7.995	0.0001
FAMINC	1	-0.000000232	0.000000027	-0.869	0.3926
FAMINCD	1	0.000002091	0.00000041	5.120	0.0001

14:17 Wednesday, November 18, 1992

Model: MODEL8

Dependent Variable: AGE8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00383	0.00128	26.842	0.0001
Error	26	0.00124	0.00005		
C Total	29	0.00507			
Root MSE		0.00690	R-square	0.7559	
Dep Mean		0.46063	Adj R-sq	0.7278	
C.V.		1.49815			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.035458	0.04903954	0.723	0.4761
AGE8L	1	0.914331	0.10766762	8.492	0.0001
FAMINC	1	0.000000209	0.00000025	0.823	0.4180
FAMINCD	1	0.000000740	0.00000047	1.584	0.1254

14:17 Wednesday, November 18, 1992

Model: MODEL9

Dependent Variable: AGE9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00472	0.00157	38.400	0.0001
Error	26	0.00106	0.00004		
C Total	29	0.00578			
Root MSE		0.00640	R-square	0.8159	
Dep Mean		0.44468	Adj R-sq	0.7946	
C.V.		1.43883			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.018448	0.04710497	0.392	0.6985
AGE9L	1	0.954750	0.09661444	9.882	0.0001
FAMINC	1	0.000000111	0.00000026	0.434	0.6680
FAMINCD	1	-0.000000633	0.00000040	-1.594	0.1229

14:17 Wednesday, November 18, 1992

Model: MODEL10

Dependent Variable: AGE10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00979	0.00326	83.496	0.0001
Error	26	0.00102	0.00004		
C Total	29	0.01081			
Root MSE		0.00625	R-square	0.9060	
Dep Mean		0.42495	Adj R-sq	0.8951	
C.V.		1.47120			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.056039	0.04112162	1.363	0.1846
AGE10L	1	0.911896	0.08133585	11.211	0.0001
FAMINC	1	-0.000000575	0.00000029	-2.007	0.0553
FAMINCD	1	-0.000000711	0.00000040	-1.786	0.0857

14:17 Wednesday, November 18, 1992

Model: MODEL11

Dependent Variable: AGE11

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00967	0.00322	54.240	0.0001
Error	26	0.00155	0.00006		
C Total	29	0.01122			
Root MSE		0.00771	R-square	0.8622	
Dep Mean		0.39985	Adj R-sq	0.8463	
C.V.		1.92835			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.110377	0.04831922	2.284	0.0308
AGE11L	1	0.824993	0.10268158	8.034	0.0001
FAMINC	1	-0.000001147	0.00000034	-3.326	0.0026
FAMINCD	1	-0.000001154	0.00000052	-2.223	0.0351

14:17 Wednesday, November 18, 1992

Model: MODEL12

Dependent Variable: AGE12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00828	0.00276	23.832	0.0001
Error	26	0.00301	0.00012		
C Total	29	0.01129			
Root MSE		0.01076	R-square	0.7333	
Dep Mean		0.36420	Adj R-sq	0.7026	
C.V.		2.95437			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.165278	0.05335711	3.098	0.0046
AGE12L	1	0.666404	0.12393026	5.377	0.0001
FAMINC	1	-0.000001308	0.00000045	-2.935	0.0069
FAMINCD	1	-0.000000177	0.00000071	-0.249	0.8055

14:17 Wednesday, November 18, 1992

Model: MODEL13

Dependent Variable: AGE13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.01187	0.00396	22.411	0.0001
Error	26	0.00459	0.00018		
C Total	29	0.01646			
Root MSE		0.01329	R-square	0.7211	
Dep Mean		0.26075	Adj R-sq	0.6890	
C.V.		5.09603			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.136676	0.06369429	2.146	0.0414
AGE13L	1	0.630701	0.16725355	3.771	0.0008
FAMINC	1	-0.000001335	0.00000072	-1.843	0.0767
FAMINCD	1	-0.000001569	0.00000120	-1.312	0.2008

APPENDIX C2

NON-FAMILY HEADSHIP RATES

**Ordinary Least Squares Regression Results
with left side variables:**

AGE1L: lagged one period headship rate for the 15-20 cohort
FAMINC: average rent for 4-room apartment
FAMINCD: change in income: e.g., FAMINC 1986 - FAMINC 1981

NON- L FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 15
14:17 Wednesday, November 18, 1992

Model: MODELL

Dependent Variable: AGE1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00238	0.00079	39.340	0.0001
Error	26	0.00052	0.00002		
C Total	29	0.00291			
Root MSE		0.00449	R-square	0.8195	
Dep Mean		0.01542	Adj R-sq	0.7986	
C.V.		29.13649			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.002403	0.00681955	0.352	0.7274
AGE1L	1	0.883382	0.12145863	7.273	0.0001
FAMINC	1	-0.000000114	0.00000024	-0.478	0.6363
FAMINCD	1	0.000001517	0.00000028	5.339	0.0001

NON-L FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 16
14:17 Wednesday, November 18, 1992

Model: MODEL2

Dependent Variable: AGE2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.04071	0.01357	69.989	0.0001
Error	26	0.00504	0.00019		
C Total	29	0.04575			
Root MSE		0.01392	R-square	0.8898	
Dep Mean		0.09302	Adj R-sq	0.8771	
C.V.		14.96912			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.018680	0.02360031	0.792	0.4358
AGE2L	1	1.002001	0.12312124	8.138	0.0001
FAMINC	1	-0.000000567	0.00000096	-0.594	0.5579
FAMINCD	1	0.000004979	0.00000098	5.090	0.0001

14:17 Wednesday, November 18, 1992

Model: MODEL3

Dependent Variable: AGE3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.03924	0.01308	142.544	0.0001
Error	26	0.00239	0.00009		
C Total	29	0.04162			
Root MSE		0.00958	R-square	0.9427	
Dep Mean		0.09387	Adj R-sq	0.9361	
C.V.		10.20469			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.014654	0.01939637	-0.756	0.4567
AGE3L	1	0.917896	0.13203677	6.952	0.0001
FAMINC	1	0.000001022	0.00000088	1.162	0.2557
FAMINCD	1	0.000002796	0.00000095	2.934	0.0069

NON-L FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 18
14:17 Wednesday, November 18, 1992

Model: MODEL4

Dependent Variable: AGE4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.02475	0.00825	278.370	0.0001
Error	26	0.00077	0.00003		
C Total	29	0.02552			
Root MSE		0.00544	R-square	0.9698	
Dep Mean		0.06814	Adj R-sq	0.9663	
C.V.		7.98946			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.012688	0.00991590	-1.280	0.2120
AGE4L	1	1.022939	0.10082593	10.146	0.0001
FAMINC	1	0.000000821	0.00000045	1.823	0.0798
FAMINCD	1	0.000000853	0.00000055	1.544	0.1347

NON- L FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 19
14:17 Wednesday, November 18, 1992

Model: MODEL5

Dependent Variable: AGE5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.01454	0.00485	261.862	0.0001
Error	26	0.00048	0.00002		
C Total	29	0.01502			
Root MSE		0.00430	R-square	0.9680	
Dep Mean		0.05275	Adj R-sq	0.9643	
C.V.		8.15597			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.014201	0.00656003	-2.165	0.0398
AGE5L	1	1.085933	0.09541277	11.381	0.0001
FAMINC	1	0.000000706	0.000000030	2.388	0.0245
FAMINCD	1	-0.000000226	0.00000037	-0.615	0.5439

NON- L FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 20
14:17 Wednesday, November 18, 1992

Model: MODEL6

Dependent Variable: AGE6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00936	0.00312	131.219	0.0001
Error	26	0.00062	0.00002		
C Total	29	0.00998			
Root MSE		0.00488	R-square	0.9380	
Dep Mean		0.05062	Adj R-sq	0.9309	
C.V.		9.63192			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.014930	0.00636095	-2.347	0.0268
AGE6L	1	1.044814	0.10827389	9.650	0.0001
FAMINC	1	0.000000695	0.00000028	2.527	0.0179
FAMINCD	1	-0.000000650	0.00000035	-1.841	0.0771

14:17 Wednesday, November 18, 1992

Model: MODEL7

Dependent Variable: AGE7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00793	0.00264	294.777	0.0001
Error	26	0.0002332677	8.971835E-6		
C Total	29	0.00817			
Root MSE		0.00300	R-square	0.9714	
Dep Mean		0.05963	Adj R-sq	0.9681	
C.V.		5.02354			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.008120	0.00373027	-2.177	0.0388
AGE7L	1	1.193140	0.06633009	17.988	0.0001
FAMINC	1	0.000000167	0.000000016	1.031	0.3122
FAMINCD	1	-0.000000305	0.00000021	-1.485	0.1495

14:17 Wednesday, November 18, 1992

Model: MODEL8

Dependent Variable: AGE8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00799	0.00266	105.952	0.0001
Error	26	0.00065	0.00003		
C Total	29	0.00865			
Root MSE		0.00501	R-square	0.9244	
Dep Mean		0.07780	Adj R-sq	0.9157	
C.V.		6.44574			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.003615	0.00624488	-0.579	0.5676
AGE8L	1	1.074596	0.09456116	11.364	0.0001
FAMINC	1	0.000000119	0.00000027	0.440	0.6638
FAMINCD	1	0.000000368	0.00000034	1.075	0.2922

NON- L FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 23
14:17 Wednesday, November 18, 1992

Model: MODEL9

Dependent Variable: AGE9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00961	0.00320	127.608	0.0001
Error	26	0.00065	0.00003		
C Total	29	0.01026			
Root MSE		0.00501	R-square	0.9364	
Dep Mean		0.10691	Adj R-sq	0.9291	
C.V.		4.68587			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.008622	0.00634468	1.359	0.1858
AGE9L	1	0.965494	0.07437651	12.981	0.0001
FAMINC	1	5.0309001E-8	0.00000027	0.189	0.8513
FAMINCD	1	4.1504862E-8	0.00000033	0.127	0.8997

NON- L FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 24
14:17 Wednesday, November 18, 1992

Model: MODEL10

Dependent Variable: AGE10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.01489	0.00496	143.826	0.0001
Error	26	0.00090	0.00003		
C Total	29	0.01579			
Root MSE		0.00587	R-square	0.9432	
Dep Mean		0.14825	Adj R-sq	0.9366	
C.V.		3.96247			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.016819	0.00754644	2.229	0.0347
AGE10L	1	0.920634	0.06299488	14.614	0.0001
FAMINC	1	1.2741029E-8	0.000000030	0.042	0.9667
FAMINCD	1	0.000000155	0.00000037	0.421	0.6771

NON-L FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 25
14:17 Wednesday, November 18, 1992

Model: MODEL11

Dependent Variable: AGE11

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.02277	0.00759	118.557	0.0001
Error	26	0.00166	0.00006		
C Total	29	0.02443			

Root MSE 0.00800 R-square 0.9319
Dep Mean 0.20546 Adj R-sq 0.9240
C.V. 3.89393

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.038124	0.01046251	3.644	0.0012
AGE11L	1	0.947066	0.06707269	14.120	0.0001
FAMINC	1	-0.000000626	0.00000042	-1.494	0.1472
FAMINCD	1	0.000000941	0.00000050	1.874	0.0722

NON-L FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 26
14:17 Wednesday, November 18, 1992

Model: MODEL12

Dependent Variable: AGE12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.03927	0.01309	109.515	0.0001
Error	26	0.00311	0.00012		
C Total	29	0.04238			
Root MSE	0.01093		R-square	0.9267	
Dep Mean	0.26571		Adj R-sq	0.9182	
C.V.	4.11448				

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.059769	0.01400971	4.266	0.0002
AGE12L	1	0.853721	0.06357001	13.430	0.0001
FAMINC	1	-0.000000335	0.00000055	-0.606	0.5496
FAMINCD	1	0.000001173	0.00000069	1.698	0.1014

NON- L FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 27
14:17 Wednesday, November 18, 1992

Model: MODEL13

Dependent Variable: AGE13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.09928	0.03309	359.061	0.0001
Error	26	0.00240	0.00009		
C Total	29	0.10168			
Root MSE		0.00960	R-square	0.9764	
Dep Mean		0.29898	Adj R-sq	0.9737	
C.V.		3.21103			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.056740	0.01192725	4.757	0.0001
AGE13L	1	0.985509	0.03979278	24.766	0.0001
FAMINC	1	-0.000000778	0.00000048	-1.628	0.1156
FAMINCD	1	0.000000947	0.00000062	1.536	0.1366

APPENDIX D1
FAMILY HEADSHIP RATES

**Ordinary Least Squares Regression Results
with left side variables:**

AGE1L: lagged one period headship rate for the 15-20 cohort
AGE1LD: lagged change in headship rate: e.g., AGE1LD 1986 = AGE1
1981 - AGE1 1976
FAMINC: average rent for 4-room apartment
FAMINCD: change in income: e.g., FAMINC 1986 - FAMINC 1981

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

1

15:57 Thursday, November 19, 1992

Model: MODELL

Dependent Variable: AGE1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00022	0.00005	58.423	0.0001
Error	15	0.0000139143	9.2761914E-7		
C Total	19	0.00023			
Root MSE		0.00096	R-square	0.9397	
Dep Mean		0.00922	Adj R-sq	0.9236	
C.V.		10.44389			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.002049	0.00186391	-1.099	0.2890
AGE1L	1	0.606086	0.09772228	6.202	0.0001
A1	1	0.527382	0.08962765	5.884	0.0001
FAMINCL	1	0.000000130	0.00000006	2.084	0.0547
FAMINCD	1	8.3926667E-8	0.00000012	0.726	0.4788

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 2
15:57 Thursday, November 19, 1992

Model: MODEL2

Dependent Variable: AGE2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.01007	0.00252	79.128	0.0001
Error	15	0.00048	0.00003		
C Total	19	0.01055			
Root MSE		0.00564	R-square	0.9548	
Dep Mean		0.13799	Adj R-sq	0.9427	
C.V.		4.08831			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.024792	0.01505741	-1.647	0.1204
AGE2L	1	0.916284	0.08974808	10.210	0.0001
A2	1	0.404601	0.07845255	5.157	0.0001
FAMINCL	1	0.000000690	0.00000030	2.314	0.0353
FAMINCD	1	0.000001274	0.00000061	2.099	0.0531

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 3
15:57 Thursday, November 19, 1992

Model: MODEL3

Dependent Variable: AGE3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00746	0.00186	80.014	0.0001
Error	15	0.00035	0.00002		
C Total	19	0.00781			
Root MSE		0.00483	R-square	0.9552	
Dep Mean		0.32918	Adj R-sq	0.9433	
C.V.		1.46664			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.017354	0.04207053	-0.413	0.6858
AGE3L	1	0.947018	0.10846724	8.731	0.0001
A3	1	0.442968	0.08046374	5.505	0.0001
FAMINCL	1	0.000000768	0.00000027	2.819	0.0130
FAMINCD	1	0.000000625	0.00000045	1.403	0.1811

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 4
15:57 Thursday, November 19, 1992

Model: MODEL4

Dependent Variable: AGE4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.000333	0.000083	65.218	0.0001
Error	15	0.00019	0.00001		
C Total	19	0.00352			
Root MSE		0.00357	R-square	0.9456	
Dep Mean		0.42031	Adj R-sq	0.9311	
C.V.		0.84997			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.043830	0.04977129	0.881	0.3924
AGE4L	1	0.858538	0.11512216	7.458	0.0001
A4	1	0.455131	0.07439446	6.118	0.0001
FAMINCL	1	0.000000253	0.00000024	1.038	0.3157
FAMINCD	1	0.000000582	0.00000032	1.842	0.0854

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 5
15:57 Thursday, November 19, 1992

Model: MODEL5

Dependent Variable: AGE5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00092	0.00023	12.897	0.0001
Error	15	0.00027	0.00002		
C Total	19	0.00118			
Root MSE		0.00421	R-square	0.7747	
Dep Mean		0.46218	Adj R-sq	0.7147	
C.V.		0.91196			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.166190	0.08769424	1.895	0.0775
AGE5L	1	0.584933	0.18824822	3.107	0.0072
A5	1	0.519196	0.10101028	5.140	0.0001
FAMINCL	1	0.000000565	0.000000030	1.871	0.0811
FAMINCD	1	0.000000713	0.000000036	2.003	0.0635

15:57 Thursday, November 19, 1992

Model: MODEL6

Dependent Variable: AGE6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00046	0.00012	13.919	0.0001
Error	15	0.0001252284	8.3485592E-6		
C Total	19	0.00059			
Root MSE		0.00289	R-square	0.7878	
Dep Mean		0.47664	Adj R-sq	0.7312	
C.V.		0.60619			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.158288	0.04446126	3.560	0.0028
AGE6L	1	0.656629	0.09249209	7.099	0.0001
A6	1	0.349508	0.09893215	3.533	0.0030
FAMINCL	1	4.844973E-8	0.00000026	0.189	0.8529
FAMINCD	1	3.9174801E-8	0.00000026	0.151	0.8817

15:57 Thursday, November 19, 1992

Model: MODEL7

Dependent Variable: AGE7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00136	0.00034	39.811	0.0001
Error	15	0.0001281576	8.5438389E-6		
C Total	19	0.00149			
Root MSE		0.00292	R-square	0.9139	
Dep Mean		0.47551	Adj R-sq	0.8910	
C.V.		0.61471			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.070998	0.03371990	2.106	0.0525
AGE7L	1	0.883595	0.07897997	11.188	0.0001
A7	1	0.308555	0.11135809	2.771	0.0143
FAMINCL	1	-0.000000579	0.00000022	-2.679	0.0172
FAMINCD	1	0.000000877	0.00000036	2.405	0.0295

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 8
15:57 Thursday, November 19, 1992

Model: MODEL8

Dependent Variable: AGE8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00241	0.00060	29.019	0.0001
Error	15	0.00031	0.00002		
C Total	19	0.00272			
Root MSE		0.00455	R-square	0.8856	
Dep Mean		0.46503	Adj R-sq	0.8550	
C.V.		0.97938			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.010718	0.04450631	0.241	0.8130
AGE8L	1	0.976643	0.09516013	10.263	0.0001
A8	1	0.446635	0.14826762	3.012	0.0087
FAMINCL	1	-6.311907E-8	0.00000023	-0.277	0.7853
FAMINCD	1	0.000001397	0.00000041	3.431	0.0037

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 9
15:57 Thursday, November 19, 1992

Model: MODEL9

Dependent Variable: AGE9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.000321	0.000080	33.438	0.0001
Error	15	0.000036	0.000002		
C Total	19	0.00357			
Root MSE		0.00490	R-square	0.8992	
Dep Mean		0.44485	Adj R-sq	0.8723	
C.V.		1.10126			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.090553	0.04182652	2.165	0.0469
AGE9L	1	0.806398	0.08336854	9.673	0.0001
A9	1	0.479232	0.17572488	2.727	0.0156
FAMINCL	1	-7.860613E-8	0.00000027	-0.289	0.7764
FAMINCD	1	-0.000000343	0.00000043	-0.799	0.4369

15:57 Thursday, November 19, 1992

Model: MODEL10

Dependent Variable: AGE10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00755	0.00189	74.950	0.0001
Error	15	0.00038	0.00003		
C Total	19	0.00793			
Root MSE		0.00502	R-square	0.9524	
Dep Mean		0.42254	Adj R-sq	0.9396	
C.V.		1.18764			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.061627	0.05151806	-1.196	0.2502
AGE10L	1	1.147387	0.10319592	11.119	0.0001
A10	1	-0.291275	0.28239997	-1.031	0.3187
FAMINCL	1	-0.000000136	0.000000034	-0.395	0.6984
FAMINCD	1	-0.000001214	0.00000046	-2.612	0.0196

15:57 Thursday, November 19, 1992

Model: MODEL11

Dependent Variable: AGE11

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00696	0.00174	47.587	0.0001
Error	15	0.00055	0.00004		
C Total	19	0.00751			
Root MSE		0.00605	R-square	0.9270	
Dep Mean		0.39710	Adj R-sq	0.9075	
C.V.		1.52310			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.026064	0.05918078	-0.440	0.6659
AGE11L	1	1.040890	0.11611729	8.964	0.0001
A11	1	0.440959	0.12949402	3.405	0.0039
FAMINCL	1	0.000000370	0.00000048	0.769	0.4540
FAMINCD	1	-0.000001393	0.00000052	-2.697	0.0166

15:57 Thursday, November 19, 1992

Model: MODEL12

Dependent Variable: AGE12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00681	0.00170	49.549	0.0001
Error	15	0.00052	0.00003		
C Total	19	0.00733			
Root MSE		0.00586	R-square	0.9296	
Dep Mean		0.36051	Adj R-sq	0.9109	
C.V.		1.62650			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.104171	0.03853848	2.703	0.0164
AGE12L	1	0.802433	0.08538854	9.397	0.0001
A12	1	0.540555	0.11465698	4.715	0.0003
FAMINCL	1	-0.000000791	0.00000035	-2.252	0.0398
FAMINCD	1	-0.000003159	0.00000049	-6.385	0.0001

15:57 Thursday, November 19, 1992

Model: MODEL13

Dependent Variable: AGE13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00393	0.00098	10.265	0.0003
Error	15	0.00144	0.00010		
C Total	19	0.00536			
Root MSE		0.00978	R-square	0.7324	
Dep Mean		0.24964	Adj R-sq	0.6611	
C.V.		3.91858			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.123387	0.05350515	2.306	0.0358
AGE13L	1	0.668437	0.14810396	4.513	0.0004
A13	1	0.462425	0.19689466	2.349	0.0330
FAMINCL	1	-0.000000816	0.00000063	-1.292	0.2161
FAMINCD	1	-0.000003173	0.00000087	-3.633	0.0025

APPENDIX D2
NON-FAMILY HEADSHIP RATES

**Ordinary Least Squares Regression Results
with left side variables:**

AGE1L: lagged one period headship rate for the 15-20 cohort
AGE1LD: lagged change in headship rate: e.g., AGE1LD 1986 = AGE1
1981 - AGE1 1976
FAMINC: average rent for 4-room apartment
FAMINCD: change in income: e.g., FAMINC 1986 - FAMINC 1981

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 14
15:57 Thursday, November 19, 1992

Model: MODELL

Dependent Variable: AGE1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00200	0.00050	514.230	0.0001
Error	15	0.000014613	9.7420055E-7		
C Total	19	0.00202			
Root MSE		0.00099	R-square	0.9928	
Dep Mean		0.01503	Adj R-sq	0.9908	
C.V.		6.56682			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.001742	0.00212088	-0.821	0.4243
AGE1L	1	0.740359	0.03144334	23.546	0.0001
A1	1	0.666983	0.05530676	12.060	0.0001
FAMINCL	1	9.0238636E-8	0.00000007	1.301	0.2128
FAMINCD	1	-0.000000233	0.00000015	-1.589	0.1329

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 15
15:57 Thursday, November 19, 1992

Model: MODEL2

Dependent Variable: AGE2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.03143	0.00786	274.839	0.0001
Error	15	0.00043	0.00003		
C Total	19	0.03186			
Root MSE		0.00535	R-square	0.9865	
Dep Mean		0.09785	Adj R-sq	0.9829	
C.V.		5.46433			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.011054	0.01267866	-0.872	0.3970
AGE2L	1	0.819438	0.06763744	12.115	0.0001
A2	1	0.624033	0.09832737	6.346	0.0001
FAMINCL	1	0.000000410	0.00000049	0.829	0.4200
FAMINCD	1	0.000000109	0.00000074	0.148	0.8845

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 16
15:57 Thursday, November 19, 1992

Model: MODEL3

Dependent Variable: AGE3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.02586	0.00646	439.731	0.0001
Error	15	0.00022	0.00001		
C Total	19	0.02608			
Root MSE		0.00383	R-square	0.9915	
Dep Mean		0.10504	Adj R-sq	0.9893	
C.V.		3.65021			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.012674	0.01020477	-1.242	0.2333
AGE3L	1	0.822636	0.06634802	12.399	0.0001
A3	1	0.668381	0.07978751	8.377	0.0001
FAMINCL	1	0.000000383	0.00000044	0.869	0.3986
FAMINCD	1	0.000000895	0.00000048	1.848	0.0845

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 17
15:57 Thursday, November 19, 1992

Model: MODEL4

Dependent Variable: AGE4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.01512	0.00378	495.556	0.0001
Error	15	0.0001144403	7.6293536E-6		
C Total	19	0.01524			
Root MSE		0.00276	R-square	0.9925	
Dep Mean		0.07868	Adj R-sq	0.9905	
C.V.		3.51045			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.006758	0.00665548	-1.015	0.3260
AGE4L	1	0.840029	0.06871663	12.225	0.0001
A4	1	0.685140	0.10051328	6.816	0.0001
FAMINCL	1	0.000000208	0.00000028	0.740	0.4708
FAMINCD	1	0.000000840	0.00000027	3.073	0.0077

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 18
15:57 Thursday, November 19, 1992

Model: MODEL5

Dependent Variable: AGE5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00951	0.00238	443.357	0.0001
Error	15	0.0000804662	5.3644129E-6		
C Total	19	0.00959			
Root MSE		0.00232	R-square	0.9916	
Dep Mean		0.06050	Adj R-sq	0.9894	
C.V.		3.82855			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.003723	0.00521066	-0.714	0.4859
AGE5L	1	0.864546	0.10882139	7.945	0.0001
A5	1	0.757977	0.17383624	4.360	0.0006
FAMINCL	1	9.0061994E-8	0.00000021	0.421	0.6796
FAMINCD	1	0.000000919	0.00000019	4.832	0.0002

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 19
15:57 Thursday, November 19, 1992

Model: MODEL6

Dependent Variable: AGE6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00643	0.00161	111.167	0.0001
Error	15	0.00022	0.00001		
C Total	19	0.00664			
Root MSE		0.00380	R-square	0.9674	
Dep Mean		0.05634	Adj R-sq	0.9587	
C.V.		6.74737			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.003312	0.00776660	-0.426	0.6759
AGE6L	1	0.941711	0.19218534	4.900	0.0002
A6	1	0.554533	0.27577623	2.011	0.0627
FAMINCL	1	0.000000177	0.000000033	0.539	0.5977
FAMINCD	1	0.000000639	0.000000040	1.591	0.1324

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 20
15:57 Thursday, November 19, 1992

Model: MODEL7

Dependent Variable: AGE7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00586	0.00146	523.467	0.0001
Error	15	0.00004195	2.7966642E-6		
C Total	19	0.00590			
Root MSE		0.00167	R-square	0.9929	
Dep Mean		0.06376	Adj R-sq	0.9910	
C.V.		2.62279			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.003298	0.00304371	-1.084	0.2957
AGE7L	1	0.964434	0.07860705	12.269	0.0001
A7	1	0.670638	0.12686949	5.286	0.0001
FAMINCL	1	9.2654937E-8	0.00000013	0.729	0.4772
FAMINCD	1	0.000000445	0.00000015	2.900	0.0110

15:57 Thursday, November 19, 1992

Model: MODEL8

Dependent Variable: AGE8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00555	0.00139	107.164	0.0001
Error	15	0.00019	0.00001		
C Total	19	0.00575			
Root MSE		0.00360	R-square	0.9662	
Dep Mean		0.08204	Adj R-sq	0.9572	
C.V.		4.38734			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.007427	0.00650224	-1.142	0.2713
AGE8L	1	0.802262	0.10569978	7.590	0.0001
A8	1	0.889801	0.17573829	5.063	0.0001
FAMINCL	1	0.000000435	0.00000028	1.552	0.1415
FAMINCD	1	0.000000775	0.00000030	2.628	0.0190

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 22
15:57 Thursday, November 19, 1992

Model: MODEL9

Dependent Variable: AGE9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00585	0.00146	272.599	0.0001
Error	15	0.0000804812	5.3654105E-6		
C Total	19	0.00593			
Root MSE		0.00232	R-square	0.9864	
Dep Mean		0.11146	Adj R-sq	0.9828	
C.V.		2.07825			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.010839	0.00555647	-1.951	0.0700
AGE9L	1	0.964415	0.04520495	21.334	0.0001
A9	1	0.735493	0.09615730	7.649	0.0001
FAMINCL	1	0.000000269	0.00000019	1.425	0.1746
FAMINCD	1	0.000001045	0.00000022	4.711	0.0003

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 23
15:57 Thursday, November 19, 1992

Model: MODEL10

Dependent Variable: AGE10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.00909	0.00227	155.610	0.0001
Error	15	0.00022	0.00001		
C Total	19	0.00931			
Root MSE		0.00382	R-square	0.9765	
Dep Mean		0.15171	Adj R-sq	0.9702	
C.V.		2.51851			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.016949	0.00829580	2.043	0.0590
AGE10L	1	0.977863	0.05450089	17.942	0.0001
A10	1	0.293962	0.11573546	2.540	0.0226
FAMINCL	1	-0.000000347	0.00000031	-1.133	0.2749
FAMINCD	1	-5.728744E-8	0.00000034	-0.169	0.8682

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 24
15:57 Thursday, November 19, 1992

Model: MODEL11

Dependent Variable: AGE11

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.01408	0.00352	159.321	0.0001
Error	15	0.00033	0.00002		
C Total	19	0.01442			
Root MSE		0.00470	R-square	0.9770	
Dep Mean		0.20885	Adj R-sq	0.9709	
C.V.		2.25091			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.000511	0.01027774	-0.050	0.9610
AGE11L	1	0.934543	0.04971720	18.797	0.0001
A11	1	0.428770	0.09725267	4.409	0.0005
FAMINCL	1	0.000000316	0.000000033	0.966	0.3492
FAMINCD	1	0.000000389	0.000000041	0.945	0.3594

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 25
15:57 Thursday, November 19, 1992

Model: MODEL12

Dependent Variable: AGE12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.02242	0.00560	156.334	0.0001
Error	15	0.00054	0.00004		
C Total	19	0.02296			
Root MSE		0.00599	R-square	0.9766	
Dep Mean		0.27293	Adj R-sq	0.9703	
C.V.		2.19375			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.017359	0.01600693	-1.084	0.2953
AGE12L	1	0.923412	0.04684142	19.714	0.0001
A12	1	0.516704	0.09200228	5.616	0.0001
FAMINCL	1	0.000000871	0.00000042	2.088	0.0543
FAMINCD	1	0.000001509	0.00000050	3.021	0.0086

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 26
15:57 Thursday, November 19, 1992

Model: MODEL13

Dependent Variable: AGE13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	4	0.05721	0.01430	651.571	0.0001
Error	15	0.00033	0.00002		
C Total	19	0.05754			
Root MSE		0.00469	R-square	0.9943	
Dep Mean		0.31355	Adj R-sq	0.9928	
C.V.		1.49424			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.001300	0.01220607	-0.107	0.9166
AGE13L	1	0.937901	0.02370987	39.557	0.0001
A13	1	0.538270	0.07500535	7.176	0.0001
FAMINCL	1	0.000000383	0.00000034	1.126	0.2778
FAMINCD	1	0.000000435	0.00000039	1.118	0.2813

APPENDIX E1
FAMILY HEADSHIP RATES

**Ordinary Least Squares Regression Results
with left side variables:**

AGE1L: lagged one period headship rate for the 15-20 cohort
A1: lagged change in headship rate: e.g., AGE1LD 1986 = AGE1
1981 - AGE1 1976

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 1
12:18 Thursday, November 19, 1992

Model: MODELL

Dependent Variable: AGE1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00019	0.00010	40.373	0.0001
Error	17	0.0000401217	2.3600987E-6		
C Total	19	0.00023			
Root MSE		0.00154	R-square	0.8261	
Dep Mean		0.00922	Adj R-sq	0.8056	
C.V.		16.65875			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.000003552	0.00119004	-0.003	0.9977
AGE1L	1	0.845921	0.11409586	7.414	0.0001
A1	1	0.002506	0.00051992	4.820	0.0002

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 2
12:18 Thursday, November 19, 1992

Model: MODEL2

Dependent Variable: AGE2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00981	0.00490	111.842	0.0001
Error	17	0.00075	0.00004		
C Total	19	0.01055			
Root MSE		0.00662	R-square	0.9294	
Dep Mean		0.13799	Adj R-sq	0.9211	
C.V.		4.79812			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.007573	0.01619494	-0.468	0.6460
AGE2L	1	0.969035	0.10019807	9.671	0.0001
A2	1	0.067408	0.00973556	6.924	0.0001

12:18 Thursday, November 19, 1992

Model: MODEL3

Dependent Variable: AGE3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00728	0.00364	117.127	0.0001
Error	17	0.00053	0.00003		
C Total	19	0.00781			
Root MSE		0.00558	R-square	0.9323	
Dep Mean		0.32918	Adj R-sq	0.9244	
C.V.		1.69365			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.045136	0.04456131	1.013	0.3253
AGE3L	1	0.844127	0.12220793	6.907	0.0001
A3	1	0.156535	0.03010533	5.200	0.0001

12:18 Thursday, November 19, 1992

Model: MODEL4

Dependent Variable: AGE4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00327	0.00163	110.552	0.0001
Error	17	0.00025	0.00001		
C Total	19	0.00352			
Root MSE		0.00385	R-square	0.9286	
Dep Mean		0.42031	Adj R-sq	0.9202	
C.V.		0.91490			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.041923	0.05323436	0.788	0.4418
AGE4L	1	0.884826	0.12314874	7.185	0.0001
A4	1	0.193453	0.01993360	9.705	0.0001

12:18 Thursday, November 19, 1992

Model: MODEL5

Dependent Variable: AGE5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00079	0.00040	17.197	0.0001
Error	17	0.00039	0.00002		
C Total	19	0.00118			
Root MSE		0.00480	R-square	0.6692	
Dep Mean		0.46218	Adj R-sq	0.6303	
C.V.		1.03804			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.175467	0.10065317	1.743	0.0993
AGE5L	1	0.609183	0.21591979	2.821	0.0118
A5	1	0.203763	0.03563876	5.717	0.0001

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 6
12:18 Thursday, November 19, 1992

Model: MODEL6

Dependent Variable: AGE6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00046	0.00023	31.106	0.0001
Error	17	0.0001266323	7.4489603E-6		
C Total	19	0.00059			
Root MSE		0.00273	R-square	0.7854	
Dep Mean		0.47664	Adj R-sq	0.7601	
C.V.		0.57260			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.146188	0.04193834	3.486	0.0028
AGE6L	1	0.685601	0.08706603	7.874	0.0001
A6	1	0.156943	0.02518665	6.231	0.0001

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES
12:18 Thursday, November 19, 1992 7

Model: MODEL7

Dependent Variable: AGE7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00125	0.00063	45.194	0.0001
Error	17	0.00024	0.00001		
C Total	19	0.00149			
Root MSE		0.00372	R-square	0.8417	
Dep Mean		0.47551	Adj R-sq	0.8231	
C.V.		0.78302			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.104716	0.04004541	2.615	0.0181
AGE7L	1	0.763366	0.08311242	9.185	0.0001
A7	1	0.267226	0.03637115	7.347	0.0001

12:18 Thursday, November 19, 1992

Model: MODEL8

Dependent Variable: AGE8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00204	0.00102	25.650	0.0001
Error	17	0.00068	0.00004		
C Total	19	0.00272			
Root MSE		0.00631	R-square	0.7511	
Dep Mean		0.46503	Adj R-sq	0.7218	
C.V.		1.35677			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.092832	0.05291403	1.754	0.0974
AGE8L	1	0.800306	0.11507497	6.955	0.0001
A8	1	0.190204	0.09032037	2.106	0.0504

12:18 Thursday, November 19, 1992

Model: MODEL9

Dependent Variable: AGE9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00319	0.00160	71.981	0.0001
Error	17	0.00038	0.00002		
C Total	19	0.00357			
Root MSE		0.00471	R-square	0.8944	
Dep Mean		0.44485	Adj R-sq	0.8820	
C.V.		1.05866			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.084022	0.03220668	2.609	0.0183
AGE9L	1	0.813544	0.07254066	11.215	0.0001
A9	1	0.233112	0.07044928	3.309	0.0041

12:18 Thursday, November 19, 1992

Model: MODEL10

Dependent Variable: AGE10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.000734	0.000367	105.564	0.0001
Error	17	0.000059	0.000003		
C Total	19	0.000793			
Root MSE		0.00589	R-square	0.9255	
Dep Mean		0.42254	Adj R-sq	0.9167	
C.V.		1.39512			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.026157	0.04349103	-0.601	0.5555
AGE10L	1	1.053943	0.09818623	10.734	0.0001
A10	1	0.030813	0.12915545	0.239	0.8143

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 11
12:18 Thursday, November 19, 1992

Model: MODEL11

Dependent Variable: AGE11

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00643	0.00322	50.674	0.0001
Error	17	0.00108	0.00006		
C Total	19	0.00751			
Root MSE		0.00797	R-square	0.8564	
Dep Mean		0.39710	Adj R-sq	0.8395	
C.V.		2.00629			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.047694	0.04055915	1.176	0.2558
AGE11L	1	0.879097	0.10042001	8.754	0.0001
All	1	0.177163	0.06439575	2.751	0.0136

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES

12

12:18 Thursday, November 19, 1992

Model: MODEL12

Dependent Variable: AGE12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00543	0.00272	24.309	0.0001
Error	17	0.00190	0.00011		
C Total	19	0.00733			
Root MSE		0.01057	R-square	0.7409	
Dep Mean		0.36051	Adj R-sq	0.7104	
C.V.		2.93179			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.085421	0.04577042	1.866	0.0793
AGE12L	1	0.759415	0.12419704	6.115	0.0001
A12	1	0.131500	0.06970990	1.886	0.0764

12:18 Thursday, November 19, 1992

Model: MODEL13

Dependent Variable: AGE13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00295	0.00147	10.364	0.0011
Error	17	0.00242	0.00014		
C Total	19	0.00536			
Root MSE		0.01192	R-square	0.5494	
Dep Mean		0.24964	Adj R-sq	0.4964	
C.V.		4.77667			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.134156	0.02935154	4.571	0.0003
AGE13L	1	0.523285	0.11798910	4.435	0.0004
A13	1	0.181531	0.06959772	2.608	0.0184

APPENDIX E2
NON-FAMILY HEADSHIP RATES

**Ordinary Least Squares Regression Results
with left side variables:**

AGE1L: lagged one period headship rate for the 15-20 cohort
A1: lagged change in headship rate: e.g., AGE1LD 1986 = AGE1
1981 - AGE1 1976

12:18 Thursday, November 19, 1992

Model: MODEL1

Dependent Variable: AGE1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00181	0.00090	72.604	0.0001
Error	17	0.00021	0.00001		
C Total	19	0.00202			
Root MSE		0.00353	R-square	0.8952	
Dep Mean		0.01503	Adj R-sq	0.8829	
C.V.		23.46956			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.001513	0.00158386	-0.955	0.3530
AGE1L	1	0.864642	0.07535838	11.474	0.0001
A1	1	0.004466	0.00109343	4.084	0.0008

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 15
12:18 Thursday, November 19, 1992

Model: MODEL2

Dependent Variable: AGE2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.02956	0.01478	109.260	0.0001
Error	17	0.00230	0.00014		
C Total	19	0.03186			
Root MSE		0.01163	R-square	0.9278	
Dep Mean		0.09785	Adj R-sq	0.9193	
C.V.		11.88598			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.016212	0.00919885	-1.762	0.0960
AGE2L	1	1.071354	0.07349382	14.577	0.0001
A2	1	0.022575	0.00510887	4.419	0.0004

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 16
12:18 Thursday, November 19, 1992

Model: MODEL3

Dependent Variable: AGE3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.02369	0.01184	84.123	0.0001
Error	17	0.00239	0.00014		
C Total	19	0.02608			
Root MSE		0.01187	R-square	0.9082	
Dep Mean		0.10504	Adj R-sq	0.8974	
C.V.		11.29567			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.017818	0.01498739	-1.189	0.2508
AGE3L	1	1.184560	0.10819726	10.948	0.0001
A3	1	0.018799	0.00603320	3.116	0.0063

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 17
12:18 Thursday, November 19, 1992

Model: MODEL4

Dependent Variable: AGE4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.01436	0.00718	139.888	0.0001
Error	17	0.00087	0.00005		
C Total	19	0.01524			
Root MSE		0.00717	R-square	0.9427	
Dep Mean		0.07868	Adj R-sq	0.9360	
C.V.		9.10672			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.001920	0.01179837	-0.163	0.8726
AGE4L	1	1.172831	0.09616063	12.197	0.0001
A4	1	0.009689	0.00581865	1.665	0.1142

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 18
12:18 Thursday, November 19, 1992

Model: MODEL5

Dependent Variable: AGE5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00931	0.00466	279.827	0.0001
Error	17	0.00028	0.00002		
C Total	19	0.00959			
Root MSE		0.00408	R-square	0.9705	
Dep Mean		0.06050	Adj R-sq	0.9671	
C.V.		6.74237			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.007663	0.00581027	1.319	0.2047
AGE5L	1	1.194625	0.05069837	23.563	0.0001
A5	1	-0.001614	0.00643321	-0.251	0.8049

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 19
12:18 Thursday, November 19, 1992

Model: MODEL6

Dependent Variable: AGE6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00637	0.00318	196.645	0.0001
Error	17	0.00028	0.00002		
C Total	19	0.00664			
Root MSE		0.00402	R-square	0.9586	
Dep Mean		0.05634	Adj R-sq	0.9537	
C.V.		7.14187			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.001678	0.00323576	0.519	0.6107
AGE6L	1	1.249553	0.06914400	18.072	0.0001
A6	1	-0.003012	0.00571463	-0.527	0.6050

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 20
12:18 Thursday, November 19, 1992

Model: MODEL7

Dependent Variable: AGE7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00581	0.00290	555.419	0.0001
Error	17	0.000088898	5.229292E-6		
C Total	19	0.00590			
Root MSE		0.00229	R-square	0.9849	
Dep Mean		0.06376	Adj R-sq	0.9832	
C.V.		3.58645			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.006303	0.00220916	-2.853	0.0110
AGE7L	1	1.159097	0.06007367	19.295	0.0001
A7	1	0.021242	0.00827900	2.566	0.0200

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 21
12:18 Thursday, November 19, 1992

Model: MODEL8

Dependent Variable: AGE8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00539	0.00270	128.768	0.0001
Error	17	0.00036	0.00002		
C Total	19	0.00575			
Root MSE		0.00458	R-square	0.9381	
Dep Mean		0.08204	Adj R-sq	0.9308	
C.V.		5.57731			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.004696	0.00559521	-0.839	0.4130
AGE8L	1	1.023648	0.06851343	14.941	0.0001
A8	1	0.045553	0.01294273	3.520	0.0026

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 22
12:18 Thursday, November 19, 1992

Model: MODEL9

Dependent Variable: AGE9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00565	0.00283	171.464	0.0001
Error	17	0.00028	0.00002		
C Total	19	0.00593			
Root MSE		0.00406	R-square	0.9528	
Dep Mean		0.11146	Adj R-sq	0.9472	
C.V.		3.64208			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.005656	0.00832945	-0.679	0.5062
AGE9L	1	1.062962	0.06479046	16.406	0.0001
A9	1	0.042101	0.01285681	3.275	0.0045

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 23
12:18 Thursday, November 19, 1992

Model: MODEL10

Dependent Variable: AGE10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00902	0.00451	265.652	0.0001
Error	17	0.00029	0.00002		
C Total	19	0.00931			

Root MSE 0.00412 R-square 0.9690
Dep Mean 0.15171 Adj R-sq 0.9653
C.V. 2.71552

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.006223	0.00813902	0.765	0.4550
AGE10L	1	0.970411	0.04820329	20.132	0.0001
A10	1	0.039554	0.01507066	2.625	0.0178

12:18 Thursday, November 19, 1992

Model: MODEL11

Dependent Variable: AGE11

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.01407	0.00704	351.007	0.0001
Error	17	0.00034	0.00002		
C Total	19	0.01442			
Root MSE		0.00448	R-square	0.9764	
Dep Mean		0.20885	Adj R-sq	0.9736	
C.V.		2.14392			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.012304	0.01038069	-1.185	0.2522
AGE11L	1	1.045506	0.04518304	23.139	0.0001
All	1	0.077254	0.01480888	5.217	0.0001

NON- FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGGED RATES 25
12:18 Thursday, November 19, 1992

Model: MODEL12

Dependent Variable: AGE12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.02210	0.01105	219.278	0.0001
Error	17	0.00086	0.00005		
C Total	19	0.02296			
Root MSE		0.00710	R-square	0.9627	
Dep Mean		0.27293	Adj R-sq	0.9583	
C.V.		2.60088			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.033456	0.02076683	-1.611	0.1256
AGE12L	1	1.104606	0.06809621	16.221	0.0001
A12	1	0.113418	0.02235729	5.073	0.0001

12:18 Thursday, November 19, 1992

Model: MODEL13

Dependent Variable: AGE13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.05701	0.02851	924.631	0.0001
Error	17	0.00052	0.00003		
C Total	19	0.05754			
Root MSE		0.00555	R-square	0.9909	
Dep Mean		0.31355	Adj R-sq	0.9898	
C.V.		1.77089			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.036277	0.01502364	-2.415	0.0273
AGE13L	1	1.106098	0.03667865	30.156	0.0001
A13	1	0.126107	0.01958894	6.438	0.0001

APPENDIX F1

Family regressions with change in headship rate on left and change in family income and change in housing price index in right. Changes measures as:

$$\text{FAMINCD} = \text{FAMINC}_t - \text{FAMINC}_{t-1}$$

07:46 Thursday, November 26, 1992

Model: MODEL1

Dependent Variable: A1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00010	0.00005	9.651	0.0007
Error	27	0.000142601	5.2815195E-6		
C Total	29	0.00024			
Root MSE		0.00230	R-square	0.4169	
Dep Mean		0.00079	Adj R-sq	0.3737	
C.V.		290.22003			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.000797	0.00059109	-1.348	0.1890
RENTD	1	-0.000026323	0.00001979	-1.330	0.1947
FAMINCD	1	0.000000584	0.00000014	4.092	0.0003

07:46 Thursday, November 26, 1992

Model: MODEL2

Dependent Variable: A2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00334	0.00167	5.441	0.0103
Error	27	0.00829	0.00031		
C Total	29	0.01164			
Root MSE		0.01753	R-square	0.2873	
Dep Mean		-0.00823	Adj R-sq	0.2345	
C.V.		-212.96468			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.018275	0.00450794	-4.054	0.0004
RENTD	1	-0.000037804	0.00015097	-0.250	0.8042
FAMINCD	1	0.000003558	0.00000109	3.266	0.0030

07:46 Thursday, November 26, 1992

Model: MODEL3

Dependent Variable: A3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00126	0.00063	2.680	0.0867
Error	27	0.00634	0.00023		
C Total	29	0.00760			

Root MSE	0.01533	R-square	0.1657
Dep Mean	-0.01351	Adj R-sq	0.1039
C.V.	-113.51016		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.019531	0.00394276	-4.954	0.0001
RENTD	1	-0.000044161	0.00013204	-0.334	0.7406
FAMINCD	1	0.000002157	0.00000095	2.264	0.0318

07:46 Thursday, November 26, 1992

Model: MODEL4

Dependent Variable: A4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00164	0.00082	5.245	0.0119
Error	27	0.00422	0.00016		
C Total	29	0.00586			
Root MSE		0.01250	R-square	0.2798	
Dep Mean		-0.00368	Adj R-sq	0.2264	
C.V.		-339.38438			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.010033	0.00321430	-3.121	0.0043
RENTD	1	-0.000107	0.00010764	-0.995	0.3285
FAMINCD	1	0.000002339	0.00000078	3.011	0.0056

07:46 Thursday, November 26, 1992

Model: MODEL5

Dependent Variable: A5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00123	0.00062	4.516	0.0203
Error	27	0.00369	0.00014		
C Total	29	0.00492			
Root MSE		0.01169	R-square	0.2507	
Dep Mean		0.00347	Adj R-sq	0.1952	
C.V.		336.91587			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.002713	0.00300548	-0.903	0.3747
RENTD	1	-0.000008461	0.00010065	-0.084	0.9336
FAMINCD	1	0.000002173	0.00000073	2.992	0.0059

07:46 Thursday, November 26, 1992

Model: MODEL6

Dependent Variable: A6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00095	0.00048	5.305	0.0114
Error	27	0.00243	0.00009		
C Total	29	0.00338			
Root MSE		0.00948	R-square	0.2821	
Dep Mean		0.00835	Adj R-sq	0.2289	
C.V.		113.63677			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.004014	0.00243932	1.646	0.1114
RENTD	1	-0.000122	0.00008169	-1.488	0.1483
FAMINCD	1	0.000001647	0.00000059	2.795	0.0094

07:46 Thursday, November 26, 1992

Model: MODEL7

Dependent Variable: A7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00192	0.00096	22.218	0.0001
Error	27	0.00117	0.00004		
C Total	29	0.00309			
Root MSE		0.00658	R-square	0.6220	
Dep Mean		0.00901	Adj R-sq	0.5940	
C.V.		73.01014			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.001717	0.00169185	1.015	0.3191
RENTD	1	-0.000073760	0.00005666	-1.302	0.2040
FAMINCD	1	0.000002632	0.00000041	6.439	0.0001

07:46 Thursday, November 26, 1992

Model: MODEL8

Dependent Variable: A8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00031	0.00016	3.537	0.0432
Error	27	0.00119	0.00004		
C Total	29	0.00150			
Root MSE		0.00663	R-square	0.2076	
Dep Mean		0.00557	Adj R-sq	0.1489	
C.V.		119.11331			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.002637	0.00170550	1.546	0.1338
RENTD	1	0.000088420	0.00005712	1.548	0.1332
FAMINCD	1	0.000000931	0.00000041	2.259	0.0322

07:46 Thursday, November 26, 1992

Model: MODEL9

Dependent Variable: A9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00012	0.00006	1.480	0.2455
Error	27	0.00108	0.00004		
C Total	29	0.00120			
Root MSE		0.00633	R-square	0.0988	
Dep Mean		0.00024	Adj R-sq	0.0320	
C.V.		2692.71563			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.001936	0.00162753	1.190	0.2445
RENTD	1	0.000029424	0.00005450	0.540	0.5937
FAMINCD	1	-0.000000627	0.00000039	-1.595	0.1223

07:46 Thursday, November 26, 1992

Model: MODEL10

Dependent Variable: A10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00021	0.00010	2.442	0.1060
Error	27	0.00114	0.00004		
C Total	29	0.00134			
Root MSE		0.00649	R-square	0.1532	
Dep Mean		-0.00292	Adj R-sq	0.0905	
C.V.		-222.47459			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.000383	0.00167008	-0.230	0.8202
RENTD	1	-0.000051994	0.00005593	-0.930	0.3608
FAMINCD	1	-0.000000832	0.00000040	-2.061	0.0490

07:46 Thursday, November 26, 1992

Model: MODEL11

Dependent Variable: All

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00061	0.00031	3.801	0.0351
Error	27	0.00218	0.00008		
C Total	29	0.00279			
Root MSE		0.00898	R-square	0.2197	
Dep Mean		-0.00153	Adj R-sq	0.1619	
C.V.		-586.50936			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.002954	0.00231002	1.279	0.2118
RENTD	1	-0.000047606	0.00007736	-0.615	0.5435
FAMINCD	1	-0.000001519	0.00000056	-2.722	0.0112

07:46 Thursday, November 26, 1992

Model: MODEL12

Dependent Variable: A12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00072	0.00036	2.605	0.0924
Error	27	0.00372	0.00014		
C Total	29	0.00444			
Root MSE		0.01174	R-square	0.1618	
Dep Mean		-0.00070	Adj R-sq	0.0997	
C.V.		-1684.13165			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.002603	0.00302056	0.862	0.3965
RENTD	1	-0.000199	0.00010116	-1.963	0.0601
FAMINCD	1	-0.000000942	0.00000073	-1.291	0.2078

07:46 Thursday, November 26, 1992

Model: MODEL13

Dependent Variable: A13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00375	0.00188	10.424	0.0004
Error	27	0.00486	0.00018		
C Total	29	0.00862			
Root MSE		0.01342	R-square	0.4357	
Dep Mean		-0.01388	Adj R-sq	0.3939	
C.V.		-96.67256			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.003006	0.00345165	-0.871	0.3914
RENTD	1	-0.000212	0.00011559	-1.832	0.0780
FAMINCD	1	-0.000003580	0.00000083	-4.292	0.0002

APPENDIX F2

Non -family regressions with change in headship rate on left and
change in family income and change in housing price index in right.
Changes measures as:

$$\text{FAMINCD} = \text{FAMINC}_t - \text{FAMINC}_{t-1}$$

07:46 Thursday, November 26, 1992

Model: MODELL

Dependent Variable: A1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00069	0.00035	17.039	0.0001
Error	27	0.00055	0.00002		
C Total	29	0.00125			
Root MSE		0.00452	R-square	0.5579	
Dep Mean		0.00128	Adj R-sq	0.5252	
C.V.		353.62641			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.002938	0.00116135	-2.530	0.0176
RENTD	1	-0.000062357	0.00003889	-1.603	0.1205
FAMINCD	1	0.000001543	0.00000028	5.497	0.0001

NON-FAMILY HEADSHIP RATES 1976 -- 1986 FIRST DIFERRENCESES 15
07:46 Thursday, November 26, 1992

Model: MODEL2

Dependent Variable: A2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00645	0.00323	16.606	0.0001
Error	27	0.00525	0.00019		
C Total	29	0.01170			
Root MSE		0.01394	R-square	0.5516	
Dep Mean		0.01410	Adj R-sq	0.5184	
C.V.		98.90117			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.000086341	0.00358566	0.024	0.9810
RENTD	1	-0.000043805	0.00012008	-0.365	0.7181
FAMINCD	1	0.000004952	0.00000087	5.716	0.0001

07:46 Thursday, November 26, 1992

Model: MODEL3

Dependent Variable: A3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00293	0.00146	16.103	0.0001
Error	27	0.00246	0.00009		
C Total	29	0.00539			
Root MSE		0.00954	R-square	0.5440	
Dep Mean		0.02156	Adj R-sq	0.5102	
C.V.		44.23109			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.011763	0.00245317	4.795	0.0001
RENTD	1	0.000112	0.00008215	1.364	0.1838
FAMINCD	1	0.000003311	0.00000059	5.586	0.0001

NON-FAMILY HEADSHIP RATES 1976 -- 1986 FIRST DIFERRENCESES 17
07:46 Thursday, November 26, 1992

Model: MODEL4

Dependent Variable: A4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00042	0.00021	5.040	0.0138
Error	27	0.00113	0.00004		
C Total	29	0.00155			
Root MSE		0.00646	R-square	0.2718	
Dep Mean		0.01834	Adj R-sq	0.2179	
C.V.		35.24872			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.015565	0.00166270	9.362	0.0001
RENTD	1	0.000143	0.00005568	2.563	0.0163
FAMINCD	1	0.000000818	0.00000040	2.036	0.0517

NON-FAMILY HEADSHIP RATES 1976 -- 1986 FIRST DIFERRENCESES 18
07:46 Thursday, November 26, 1992

Model: MODELS

Dependent Variable: A5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00029	0.00014	4.203	0.0258
Error	27	0.00092	0.00003		
C Total	29	0.00121			
Root MSE		0.00584	R-square	0.2374	
Dep Mean		0.01225	Adj R-sq	0.1809	
C.V.		47.68545			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.012978	0.00150271	8.637	0.0001
RENTD	1	0.000131	0.00005032	2.610	0.0146
FAMINCD	1	-0.000000395	0.00000036	-1.089	0.2857

07:46 Thursday, November 26, 1992

Model: MODEL6

Dependent Variable: A6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00039	0.00019	6.307	0.0057
Error	27	0.00083	0.00003		
C Total	29	0.00122			
Root MSE		0.00556	R-square	0.3184	
Dep Mean		0.00836	Adj R-sq	0.2680	
C.V.		66.44076			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.009836	0.00142913	6.883	0.0001
RENTD	1	0.000137	0.00004786	2.857	0.0081
FAMINCD	1	-0.000000663	0.00000035	-1.919	0.0656

07:46 Thursday, November 26, 1992

Model: MODEL7

Dependent Variable: A7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00019	0.00009	6.307	0.0057
Error	27	0.00040	0.00001		
C Total	29	0.00059			
Root MSE		0.00387	R-square	0.3184	
Dep Mean		0.00681	Adj R-sq	0.2680	
C.V.		56.88055			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.008009	0.00099555	8.044	0.0001
RENTD	1	0.000089370	0.00003334	2.681	0.0124
FAMINCD	1	-0.000000517	0.00000024	-2.151	0.0406

NON-FAMILY HEADSHIP RATES 1976 -- 1986 FIRST DIFERRENCESES 21
07:46 Thursday, November 26, 1992

Model: MODEL8
Dependent Variable: A8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00011	0.00006	2.446	0.1056
Error	27	0.00063	0.00002		
C Total	29	0.00074			
Root MSE		0.00483	R-square	0.1534	
Dep Mean		0.00672	Adj R-sq	0.0907	
C.V.		71.91540			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.005617	0.00124248	4.520	0.0001
RENTD	1	0.000084980	0.00004161	2.042	0.0510
FAMINCD	1	0.000000294	0.00000030	0.979	0.3361

07:46 Thursday, November 26, 1992

Model: MODEL9

Dependent Variable: A9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00009	0.00005	2.234	0.1265
Error	27	0.00057	0.00002		
C Total	29	0.00066			
Root MSE		0.00458	R-square	0.1420	
Dep Mean		0.00697	Adj R-sq	0.0784	
C.V.		65.71698			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.006361	0.00117889	5.396	0.0001
RENTD	1	0.000082565	0.00003948	2.091	0.0460
FAMINCD	1	0.000000126	0.00000028	0.443	0.6616

07:46 Thursday, November 26, 1992

Model: MODEL10

Dependent Variable: A10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.000007	0.000003	0.956	0.3970
Error	27	0.00095	0.00004		
C Total	29	0.00101			
Root MSE		0.00592	R-square	0.0661	
Dep Mean		0.00643	Adj R-sq	-0.0030	
C.V.		92.07349			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.005534	0.00152310	3.633	0.0012
RENTD	1	0.000063856	0.00005101	1.252	0.2213
FAMINCD	1	0.000000246	0.00000037	0.668	0.5101

07:46 Thursday, November 26, 1992

Model: MODEL11

Dependent Variable: All

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00028	0.00014	1.680	0.2053
Error	27	0.00225	0.00008		
C Total	29	0.00253			
Root MSE		0.00913	R-square	0.1107	
Dep Mean		0.00950	Adj R-sq	0.0448	
C.V.		96.08760			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.006797	0.00234855	2.894	0.0074
RENTD	1	-0.000036635	0.00007865	-0.466	0.6451
FAMINCD	1	0.000000987	0.00000057	1.739	0.0935

NON-FAMILY HEADSHIP RATES 1976 -- 1986 FIRST DIFERRENCESES 25
07:46 Thursday, November 26, 1992

Model: MODEL12

Dependent Variable: A12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00057	0.00029	1.587	0.2229
Error	27	0.00486	0.00018		
C Total	29	0.00543			
Root MSE	0.01342		R-square	0.1052	
Dep Mean	0.01528		Adj R-sq	0.0389	
C.V.	87.82372				

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.010987	0.00345141	3.183	0.0036
RENTD	1	0.000015961	0.00011558	0.138	0.8912
FAMINCD	1	0.000001486	0.00000083	1.782	0.0861

NON-FAMILY HEADSHIP RATES 1976 -- 1986 FIRST DIFERRENCES 26
07:46 Thursday, November 26, 1992

Model: MODEL13

Dependent Variable: A13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00034	0.00017	1.581	0.2243
Error	27	0.00294	0.00011		
C Total	29	0.00328			
Root MSE		0.01043	R-square	0.1048	
Dep Mean		0.02954	Adj R-sq	0.0385	
C.V.		35.31158			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.026318	0.00268247	9.811	0.0001
RENTD	1	0.000076983	0.00008983	0.857	0.3990
FAMINCD	1	0.000001044	0.00000065	1.610	0.1190

FAMILY HEADSHIP RATES 1976 -- 1986 FIRST DIFFERENCES

1

BIRTH COHORT change in rate

16:35 Tuesday, December 15, 1992

Model: MODELL

Dependent Variable: A1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00003	0.00002	1.844	0.1776
Error	27	0.0002435028	9.018624E-6		
C Total	29	0.00028			
Root MSE		0.00300	R-square	0.1201	
Dep Mean		0.00935	Adj R-sq	0.0550	
C.V.		32.13226			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.008346	0.00077240	10.805	0.0001
FAMINCD	1	0.000000324	0.00000019	1.738	0.0936
RENTD	1	0.000023999	0.00002587	0.928	0.3617

Model: MODEL2

Dependent Variable: A2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00410	0.00205	3.902	0.0325
Error	27	0.01418	0.00053		
C Total	29	0.01828			
Root MSE		0.02292	R-square	0.2242	
Dep Mean		0.18511	Adj R-sq	0.1667	
C.V.		12.38016			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.176112	0.00589409	29.879	0.0001
FAMINCD	1	0.000003418	0.00000142	2.400	0.0235
RENTD	1	-0.000251	0.00019739	-1.270	0.2148

Model: MODEL3

Dependent Variable: A3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.0000126368	6.3184066E-6	0.103	0.9026
Error	27	0.00166	0.00006		
C Total	29	0.00167			
Root MSE		0.00784	R-square	0.0076	
Dep Mean		0.07203	Adj R-sq	-0.0660	
C.V.		10.88121			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.071409	0.00201601	35.421	0.0001
FAMINCD	1	0.000000220	0.00000049	0.452	0.6552
RENTD	1	-0.000000831	0.00006751	-0.012	0.9903

Model: MODEL4

Dependent Variable: A4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00014	0.00007	1.581	0.2242
Error	27	0.00119	0.00004		
C Total	29	0.00133			
Root MSE		0.00665	R-square	0.1049	
Dep Mean		0.03331	Adj R-sq	0.0385	
C.V.		19.95423			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.031249	0.00170961	18.278	0.0001
FAMINCD	1	0.000000729	0.00000041	1.764	0.0890
RENTD	1	-0.000006190	0.00005725	-0.108	0.9147

Model: MODEL5

Dependent Variable: A5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00044	0.00022	5.669	0.0088
Error	27	0.00105	0.00004		
C Total	29	0.00149			
Root MSE		0.00623	R-square	0.2957	
Dep Mean		0.01596	Adj R-sq	0.2436	
C.V.		39.03212			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.012458	0.00160177	7.777	0.0001
FAMINCD	1	0.000001261	0.00000039	3.259	0.0030
RENTD	1	-0.000034044	0.00005364	-0.635	0.5310

Model: MODEL6

Dependent Variable: A6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00073	0.00036	6.018	0.0069
Error	27	0.00163	0.00006		
C Total	29	0.00236			
Root MSE		0.00778	R-square	0.3083	
Dep Mean		0.00568	Adj R-sq	0.2571	
C.V.		137.01341			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.001354	0.00200057	0.677	0.5042
FAMINCD	1	0.000001581	0.00000048	3.271	0.0029
RENTD	1	-0.000063041	0.00006700	-0.941	0.3551

Model: MODEL7

Dependent Variable: A7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00088	0.00044	6.267	0.0058
Error	27	0.00190	0.00007		
C Total	29	0.00278			
Root MSE		0.00838	R-square	0.3170	
Dep Mean		-0.00180	Adj R-sq	0.2664	
C.V.		-466.50921			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.005960	0.00215655	-2.764	0.0102
FAMINCD	1	0.000001583	0.00000052	3.038	0.0052
RENTD	1	-0.000117	0.00007222	-1.617	0.1176

Model: MODEL8

Dependent Variable: A8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00057	0.00028	5.023	0.0140
Error	27	0.00152	0.00006		
C Total	29	0.00209			
Root MSE		0.00751	R-square	0.2712	
Dep Mean		-0.01038	Adj R-sq	0.2172	
C.V.		-72.36248			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.013565	0.00193152	-7.023	0.0001
FAMINCD	1	0.000001227	0.00000047	2.629	0.0140
RENTD	1	-0.000103	0.00006468	-1.596	0.1221

Model: MODEL9

Dependent Variable: A9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00026	0.00013	2.004	0.1544
Error	27	0.00179	0.00007		
C Total	29	0.00205			
Root MSE		0.00813	R-square	0.1292	
Dep Mean		-0.01950	Adj R-sq	0.0647	
C.V.		-41.70060			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.019269	0.00209156	-9.213	0.0001
FAMINCD	1	6.833449E-8	0.00000051	0.135	0.8934
RENTD	1	-0.000139	0.00007004	-1.984	0.0575

Model: MODEL10

Dependent Variable: A10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00014	0.00007	1.116	0.3422
Error	27	0.00171	0.00006		
C Total	29	0.00185			
Root MSE		0.00795	R-square	0.0764	
Dep Mean		-0.02801	Adj R-sq	0.0079	
C.V.		-28.37809			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.025974	0.00204468	-12.703	0.0001
FAMINCD	1	-0.000000658	0.00000049	-1.332	0.1941
RENTD	1	-0.000052197	0.00006847	-0.762	0.4525

Model: MODEL11

Dependent Variable: All

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00022	0.00011	1.593	0.2218
Error	27	0.00183	0.00007		
C Total	29	0.00204			
Root MSE		0.00823	R-square	0.1055	
Dep Mean		-0.03719	Adj R-sq	0.0393	
C.V.		-22.12529			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.034634	0.00211608	-16.367	0.0001
FAMINCD	1	-0.000000828	0.00000051	-1.620	0.1168
RENTD	1	-0.000060436	0.00007087	-0.853	0.4013

Model: MODEL12

Dependent Variable: A12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00057	0.00028	0.752	0.4810
Error	27	0.01016	0.00038		
C Total	29	0.01073			
Root MSE		0.01940	R-square	0.0528	
Dep Mean		-0.10414	Adj R-sq	-0.0174	
C.V.		-18.62602			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.102353	0.00498912	-20.515	0.0001
FAMINCD	1	-0.000000412	0.00000121	-0.341	0.7354
RENTD	1	-0.000200	0.00016708	-1.198	0.2414

Model: MODELL

Dependent Variable: A1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00045	0.00023	2.479	0.1027
Error	27	0.00246	0.00009		
C Total	29	0.00291			
Root MSE		0.00954	R-square	0.1552	
Dep Mean		0.01542	Adj R-sq	0.0926	
C.V.		61.85217			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.011821	0.00245291	4.819	0.0001
FAMINCD	1	0.000001153	0.00000059	1.945	0.0622
RENTD	1	0.000099236	0.00008215	1.208	0.2375

Model: MODEL2

Dependent Variable: A2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00050	0.00025	1.397	0.2646
Error	27	0.00482	0.00018		
C Total	29	0.00532			
Root MSE		0.01336	R-square	0.0938	
Dep Mean		0.01494	Adj R-sq	0.0267	
C.V.		89.41882			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.010895	0.00343613	3.171	0.0038
FAMINCD	1	0.0000001369	0.000000083	1.649	0.1108
RENTD	1	0.000044130	0.00011507	0.383	0.7044

Model: MODEL3

Dependent Variable: A3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00121	0.00061	6.754	0.0042
Error	27	0.00242	0.00009		
C Total	29	0.00364			
Root MSE		0.00947	R-square	0.3335	
Dep Mean		-0.00416	Adj R-sq	0.2841	
C.V.		-227.76192			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.009675	0.00243675	-3.970	0.0005
FAMINCD	1	0.000002025	0.00000059	3.439	0.0019
RENTD	1	-0.000087355	0.00008160	-1.070	0.2939

NON-FAMILY HEADSHIP RATES 1976 -- 1986 FIRST DIFFERENCES 16
 BIRTH COHORT change in rate
 16:35 Tuesday, December 15, 1992

Model: MODEL4
 Dependent Variable: A4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00039	0.00020	9.169	0.0009
Error	27	0.00058	0.00002		
C Total	29	0.00098			
Root MSE		0.00464	R-square	0.4045	
Dep Mean		0.00295	Adj R-sq	0.3604	
C.V.		157.39113			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.000438	0.00119338	-0.367	0.7164
FAMINCD	1	0.000001210	0.00000029	4.197	0.0003
RENTD	1	-0.000023021	0.00003997	-0.576	0.5694

NON-FAMILY HEADSHIP RATES 1976 -- 1986 FIRST DIFFERENCES 17
BIRTH COHORT change in rate
16:35 Tuesday, December 15, 1992

Model: MODEL5
Dependent Variable: A5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00006	0.00003	2.008	0.1538
Error	27	0.00040	0.00001		
C Total	29	0.00045			
Root MSE		0.00383	R-square	0.1295	
Dep Mean		0.01012	Adj R-sq	0.0650	
C.V.		37.82851			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.009158	0.00098492	9.298	0.0001
FAMINCD	1	0.000000278	0.00000024	1.166	0.2537
RENTD	1	0.000056138	0.00003298	1.702	0.1002

Model: MODEL6

Dependent Variable: A6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00014	0.00007	3.600	0.0411
Error	27	0.00051	0.00002		
C Total	29	0.00064			
Root MSE		0.00434	R-square	0.2105	
Dep Mean		0.01737	Adj R-sq	0.1521	
C.V.		24.96559			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.017481	0.00111519	15.676	0.0001
FAMINCD	1	-0.000000144	0.00000027	-0.534	0.5979
RENTD	1	0.000096710	0.00003735	2.590	0.0153

NON-FAMILY HEADSHIP RATES 1976 -- 1986 FIRST DIFERRENCESES
 BIRTH COHORT change in rate
 16:35 Tuesday, December 15, 1992

Model: MODEL7
 Dependent Variable: A7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00017	0.00008	3.341	0.0505
Error	27	0.00067	0.00002		
C Total	29	0.00084			
Root MSE		0.00499	R-square	0.1984	
Dep Mean		0.02498	Adj R-sq	0.1390	
C.V.		19.97256			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.024368	0.00128323	18.990	0.0001
FAMINCD	1	9.5142949E-8	0.00000031	0.307	0.7613
RENTD	1	0.000111	0.00004297	2.581	0.0156

Model: MODEL8

Dependent Variable: A8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00021	0.00010	4.791	0.0166
Error	27	0.00058	0.00002		
C Total	29	0.00078			
Root MSE		0.00463	R-square	0.2619	
Dep Mean		0.03583	Adj R-sq	0.2072	
C.V.		12.92882			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.034506	0.00119141	28.963	0.0001
FAMINCD	1	0.000000337	0.00000029	1.171	0.2519
RENTD	1	0.000117	0.00003990	2.935	0.0067

Model: MODEL9

Dependent Variable: A9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00034	0.00017	5.361	0.0109
Error	27	0.00084	0.00003		
C Total	29	0.00118			
Root MSE		0.00559	R-square	0.2842	
Dep Mean		0.04832	Adj R-sq	0.2312	
C.V.		11.57294			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.045584	0.00143817	31.696	0.0001
FAMINCD	1	0.000000833	0.00000035	2.398	0.0237
RENTD	1	0.000115	0.00004816	2.381	0.0246

Model: MODEL10

Dependent Variable: A10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00023	0.00012	1.920	0.1660
Error	27	0.00162	0.00006		
C Total	29	0.00185			
Root MSE		0.00774	R-square	0.1245	
Dep Mean		0.06364	Adj R-sq	0.0597	
C.V.		12.16368			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.061457	0.00199089	30.869	0.0001
FAMINCD	1	0.000000657	0.00000048	1.365	0.1836
RENTD	1	0.000099487	0.00006667	1.492	0.1472

Model: MODEL11

Dependent Variable: All

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00024	0.00012	1.422	0.2587
Error	27	0.00224	0.00008		
C Total	29	0.00248			
Root MSE		0.00912	R-square	0.0953	
Dep Mean		0.06975	Adj R-sq	0.0283	
C.V.		13.07012			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.067684	0.00234481	28.866	0.0001
FAMINCD	1	0.000000609	0.00000057	1.074	0.2923
RENTD	1	0.000107	0.00007853	1.367	0.1829

Model: MODEL12

Dependent Variable: A12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00106	0.00053	1.583	0.2237
Error	27	0.00908	0.00034		
C Total	29	0.01014			
Root MSE		0.01834	R-square	0.1050	
Dep Mean		0.04855	Adj R-sq	0.0387	
C.V.		37.76502			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.050206	0.00471584	10.646	0.0001
FAMINCD	1	-0.000000845	0.00000114	-0.742	0.4646
RENTD	1	0.000247	0.00015793	1.566	0.1290

Model: MODEL13

Dependent Variable: AGE1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	2	0.00045	0.00023	2.479	0.1027
Error	27	0.00246	0.00009		
C Total	29	0.00291			
Root MSE		0.00954	R-square	0.1552	
Dep Mean		0.01542	Adj R-sq	0.0926	
C.V.		61.85217			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.011821	0.00245291	4.819	0.0001
FAMINCD	1	0.000001153	0.00000059	1.945	0.0622
RENTD	1	0.000099236	0.00008215	1.208	0.2375

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 3
09:27 Wednesday, December 16, 1992

Model: MODELL

Dependent Variable: AGE1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00016	0.00005	11.868	0.0001
Error	26	0.0001168058	4.4925312E-6		
C Total	29	0.00028			
Root MSE		0.00212	R-square	0.5779	
Dep Mean		0.00935	Adj R-sq	0.5292	
C.V.		22.67862			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.000700	0.00279644	0.250	0.8043
A1	1	0.591731	0.17258889	3.429	0.0020
FAMINCL	1	6.6085281E-8	0.000000011	0.609	0.5480
FAMINCD	1	0.000000547	0.000000015	3.532	0.0016

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 4
09:27 Wednesday, December 16, 1992

Model: MODEL2

Dependent Variable: AGE2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00868	0.00289	10.217	0.0001
Error	26	0.00737	0.00028		
C Total	29	0.01605			
Root MSE		0.01683	R-square	0.5410	
Dep Mean		0.14575	Adj R-sq	0.4881	
C.V.		11.54901			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.152475	0.02220773	6.866	0.0001
AC2	1	4.185885	1.37060339	3.054	0.0052
FAMINCL	1	-0.000001784	0.00000086	-2.070	0.0486
FAMINCD	1	0.000004218	0.00000123	3.428	0.0020

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 5
09:27 Wednesday, December 16, 1992

Model: MODEL3

Dependent Variable: AGE3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.01028	0.00343	19.599	0.0001
Error	26	0.00455	0.00017		
C Total	29	0.01483			
Root MSE		0.01322	R-square	0.6934	
Dep Mean		0.33908	Adj R-sq	0.6580	
C.V.		3.89996			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.336420	0.02266256	14.845	0.0001
AC3	1	0.518865	0.16134430	3.216	0.0035
FAMINCL	1	-0.000002662	0.00000055	-4.876	0.0001
FAMINCD	1	0.000001466	0.00000106	1.388	0.1769

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 6
09:27 Wednesday, December 16, 1992

Model: MODEL4

Dependent Variable: AGE4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00411	0.00137	39.891	0.0001
Error	26	0.00089	0.00003		
C Total	29	0.00501			
Root MSE		0.00586	R-square	0.8215	
Dep Mean		0.42462	Adj R-sq	0.8009	
C.V.		1.38045			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.221052	0.03500125	6.316	0.0001
AC4	1	0.634026	0.09672390	6.555	0.0001
FAMINCL	1	-0.000000697	0.00000021	-3.250	0.0032
FAMINCD	1	.0.000000473	0.00000048	0.990	0.3315

09:27 Wednesday, December 16, 1992

Model: MODEL5

Dependent Variable: AGE5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00120	0.00040	20.303	0.0001
Error	26	0.00051	0.00002		
C Total	29	0.00171			
Root MSE		0.00443	R-square	0.7008	
Dep Mean		0.46162	Adj R-sq	0.6663	
C.V.		0.96026			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.222006	0.03629383	6.117	0.0001
AC5	1	0.568557	0.08977916	6.333	0.0001
FAMINCL	1	-0.000000195	0.00000018	-1.102	0.2807
FAMINCD	1	0.000000723	0.00000034	2.138	0.0421

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 8
09:27 Wednesday, December 16, 1992

Model: MODEL6

Dependent Variable: AGE6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00207	0.00069	37.002	0.0001
Error	26	0.00048	0.00002		
C Total	29	0.00255			
Root MSE		0.00432	R-square	0.8102	
Dep Mean		0.47410	Adj R-sq	0.7883	
C.V.		0.91084			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.140605	0.03628206	3.875	0.0006
AC6	1	0.743493	0.08912024	8.343	0.0001
FAMINCL	1	-0.000000300	0.00000022	-1.358	0.1862
FAMINCD	1	0.000000717	0.00000032	2.258	0.0326

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 9
09:27 Wednesday, December 16, 1992

Model: MODEL7

Dependent Variable: AGE7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00321	0.00107	55.033	0.0001
Error	26	0.00050	0.00002		
C Total	29	0.00371			
Root MSE		0.00441	R-square	0.8639	
Dep Mean		0.47143	Adj R-sq	0.8482	
C.V.		0.93469			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.113671	0.03123503	3.639	0.0012
AC7	1	0.812892	0.07907924	10.279	0.0001
FAMINCL	1	-0.000000738	0.00000025	-2.956	0.0066
FAMINCD	1	0.000000602	0.00000033	1.844	0.0766

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 10
09:27 Wednesday, December 16, 1992

Model: MODEL8

Dependent Variable: AGE8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00450	0.00150	67.443	0.0001
Error	26	0.00058	0.00002		
C Total	29	0.00507			
Root MSE		0.00471	R-square	0.8861	
Dep Mean		0.46063	Adj R-sq	0.8730	
C.V.		1.02330			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.023494	0.03503847	-0.671	0.5084
AC8	1	1.155171	0.08508950	13.576	0.0001
FAMINCL	1	-0.000001669	0.00000024	-7.087	0.0001
FAMINCD	1	0.000000352	0.00000034	1.027	0.3140

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 11
09:27 Wednesday, December 16, 1992

Model: MODEL9

Dependent Variable: AGE9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00537	0.00179	114.054	0.0001
Error	26	0.00041	0.00002		
C Total	29	0.00578			
Root MSE		0.00396	R-square	0.9294	
Dep Mean		0.44468	Adj R-sq	0.9212	
C.V.		0.89106			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.000050885	0.02815767	-0.002	0.9986
AC9	1	1.064355	0.06182093	17.217	0.0001
FAMINCL	1	-0.000001303	0.00000015	-8.948	0.0001
FAMINCD	1	8.2079938E-8	0.00000030	0.276	0.7850

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 12
09:27 Wednesday, December 16, 1992

Model: MODEL10

Dependent Variable: AGE10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.01039	0.00346	216.189	0.0001
Error	26	0.00042	0.00002		
C Total	29	0.01081			
Root MSE	0.00400		R-square	0.9615	
Dep Mean	0.42495		Adj R-sq	0.9570	
C.V.	0.94189				

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.030007	0.02946735	-1.018	0.3179
AC10	1	1.121145	0.06043888	18.550	0.0001
FAMINCL	1	-0.000001305	0.00000016	-8.168	0.0001
FAMINCD	1	-0.000001195	0.00000029	-4.075	0.0004

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 13
09:27 Wednesday, December 16, 1992

Model: MODEL11

Dependent Variable: AGE11

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00993	0.00331	66.737	0.0001
Error	26	0.00129	0.00005		
C Total	29	0.01122			
Root MSE		0.00704	R-square	0.8851	
Dep Mean		0.39985	Adj R-sq	0.8718	
C.V.		1.76132			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.077607	0.04632358	1.675	0.1059
AC11	1	0.832433	0.09162500	9.085	0.0001
FAMINCL	1	-0.000000976	0.00000032	-3.024	0.0056
FAMINCD	1	-0.000001426	0.00000052	-2.766	0.0103

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 14
09:27 Wednesday, December 16, 1992

Model: MODEL12

Dependent Variable: AGE12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00964	0.00321	50.754	0.0001
Error	26	0.00165	0.00006		
C Total	29	0.01129			
Root MSE	0.00796		R-square	0.8541	
Dep Mean	0.36420		Adj R-sq	0.8373	
C.V.	2.18490				

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.021445	0.04986593	0.430	0.6707
AC12	1	0.914068	0.10596843	8.626	0.0001
FAMINCL	1	-0.000000668	0.00000036	-1.876	0.0719
FAMINCD	1	-0.000001300	0.00000057	-2.271	0.0317

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 15
09:27 Wednesday, December 16, 1992

Model: MODEL13

Dependent Variable: AGE13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.01055	0.00352	15.472	0.0001
Error	26	0.00591	0.00023		
C Total	29	0.01646			
Root MSE		0.01508	R-square	0.6410	
Dep Mean		0.26075	Adj R-sq	0.5995	
C.V.		5.78231			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.202972	0.07476841	2.715	0.0116
AC13	1	0.397504	0.17366135	2.289	0.0305
FAMINCL	1	-0.000002686	0.00000062	-4.301	0.0002
FAMINCD	1	-0.000001791	0.00000109	-1.650	0.1110

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES

16

09:27 Wednesday, December 16, 1992

OBS	DATE	PROV	AGE1	AGE2	AGE3	AGE4	AGE5	AGE6	AGE7
1	76	NF	0.004146	0.02558	0.02209	0.01542	0.01356	0.016781	0.026191
2	81	NF	0.003412	0.03514	0.03872	0.02447	0.01997	0.020837	0.028668
3	86	NF	0.001974	0.03256	0.04349	0.03345	0.02520	0.024562	0.029521
4	76	PE	0.007782	0.04643	0.04311	0.02834	0.02335	0.025483	0.044061
5	81	PE	0.007359	0.05924	0.06290	0.04732	0.03771	0.044591	0.051282
6	86	PE	0.005078	0.05678	0.07051	0.06279	0.04675	0.050597	0.058333
7	76	NS	0.009053	0.06679	0.05809	0.03753	0.02925	0.033325	0.047275
8	81	NS	0.007871	0.08072	0.08634	0.05991	0.04417	0.042980	0.052632
9	86	NS	0.005634	0.06996	0.08965	0.07185	0.05716	0.051384	0.057100
10	76	NB	0.007387	0.04914	0.04309	0.02873	0.02574	0.030630	0.043408
11	81	NB	0.007002	0.06042	0.06389	0.04604	0.03605	0.037646	0.050213
12	86	NB	0.005795	0.05629	0.06711	0.05780	0.04674	0.044760	0.054257
13	76	QU	0.011962	0.07262	0.07878	0.05991	0.05271	0.053829	0.062909
14	81	QU	0.015829	0.09272	0.11044	0.08729	0.07208	0.069661	0.078615
15	86	QU	0.013502	0.09212	0.11947	0.10802	0.09283	0.087372	0.093656
16	76	ON	0.013447	0.08892	0.09194	0.06382	0.04704	0.044484	0.052584
17	81	ON	0.013055	0.10260	0.12306	0.08782	0.06543	0.056804	0.061432
18	86	ON	0.008576	0.08606	0.12185	0.09852	0.07754	0.069659	0.069712
19	76	MA	0.024259	0.11179	0.09149	0.05767	0.04334	0.043787	0.057898
20	81	MA	0.027960	0.13986	0.12771	0.08550	0.06021	0.055794	0.063330
21	86	MA	0.018313	0.12141	0.13251	0.09976	0.07701	0.068640	0.072680
22	76	SA	0.028940	0.10803	0.07008	0.03974	0.03423	0.041165	0.053431
23	81	SA	0.034072	0.14996	0.11310	0.06943	0.04744	0.045689	0.061692
24	86	SA	0.021497	0.13600	0.12680	0.08811	0.06645	0.057544	0.068654
25	76	AL	0.031130	0.13510	0.09722	0.05970	0.04536	0.048036	0.059097
26	81	AL	0.035955	0.15560	0.14054	0.09067	0.06721	0.059451	0.069139
27	86	AL	0.024620	0.14627	0.15183	0.11301	0.08271	0.072652	0.078908
28	76	BC	0.023856	0.12930	0.11923	0.07975	0.05801	0.054343	0.066682
29	81	BC	0.024720	0.14718	0.15240	0.11248	0.08301	0.072467	0.077726
30	86	BC	0.018383	0.13605	0.15854	0.12942	0.10425	0.093677	0.097674

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES

17

09:27 Wednesday, December 16, 1992

OBS	DATE	PROV	AGE8	AGE9	AGE10	AGE11	AGE12	AGE13
1	76	NF	0.03885	0.05401	0.08281	0.11820	0.14952	0.14350
2	81	NF	0.04394	0.06972	0.09158	0.13961	0.17902	0.17351
3	86	NF	0.04253	0.07185	0.10153	0.13968	0.18967	0.20127
4	76	PE	0.05811	0.08555	0.12243	0.19053	0.23220	0.23834
5	81	PE	0.07875	0.09793	0.13641	0.19028	0.26913	0.27396
6	86	PE	0.07507	0.11228	0.14424	0.19203	0.25668	0.30211
7	76	NS	0.06404	0.09457	0.13609	0.20081	0.25721	0.27353
8	81	NS	0.07350	0.10497	0.14869	0.21044	0.27396	0.31982
9	86	NS	0.07455	0.10888	0.15337	0.21101	0.28024	0.33374
10	76	NB	0.06059	0.08864	0.13022	0.18335	0.23649	0.25152
11	81	NB	0.06910	0.09745	0.13778	0.19021	0.25336	0.28691
12	86	NB	0.07427	0.10454	0.14057	0.19992	0.25501	0.30775
13	76	QU	0.07830	0.10415	0.14386	0.19149	0.22823	0.21704
14	81	QU	0.09596	0.12206	0.16160	0.21649	0.26263	0.25888
15	86	QU	0.10914	0.13575	0.17145	0.22660	0.28128	0.29075
16	76	ON	0.07077	0.10189	0.14986	0.21443	0.27870	0.31830
17	81	ON	0.07885	0.10808	0.15524	0.22015	0.29094	0.34450
18	86	ON	0.08295	0.10829	0.15206	0.21383	0.28506	0.35349
19	76	MA	0.08007	0.11177	0.16157	0.22840	0.29136	0.32042
20	81	MA	0.08697	0.12088	0.16743	0.23575	0.30570	0.36598
21	86	MA	0.09027	0.11984	0.17129	0.23392	0.31044	0.38911
22	76	SA	0.07531	0.10950	0.15724	0.22082	0.28152	0.31656
23	81	SA	0.08374	0.11684	0.16599	0.22704	0.30331	0.35023
24	86	SA	0.08954	0.12210	0.16631	0.23350	0.30395	0.37214
25	76	AL	0.08029	0.11189	0.16504	0.22184	0.27656	0.28661
26	81	AL	0.08859	0.11950	0.16217	0.22662	0.29035	0.31116
27	86	AL	0.09543	0.12398	0.16591	0.22618	0.29422	0.33828
28	76	BC	0.08689	0.11627	0.16434	0.21687	0.28081	0.33266
29	81	BC	0.09848	0.12732	0.16873	0.22290	0.28465	0.34362
30	86	BC	0.10917	0.13686	0.17180	0.22088	0.28905	0.35370

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 18
09:27 Wednesday, December 16, 1992

Model: MODEL1

Dependent Variable: AGE1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00238	0.00079	39.340	0.0001
Error	26	0.00052	0.00002		
C Total	29	0.00291			
Root MSE		0.00449	R-square	0.8195	
Dep Mean		0.01542	Adj R-sq	0.7986	
C.V.		29.13649			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.002403	0.00681955	0.352	0.7274
A1	1	0.883382	0.12145863	7.273	0.0001
FAMINCL	1	-0.000000114	0.00000024	-0.478	0.6363
FAMINCD	1	0.000001403	0.00000034	4.083	0.0004

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 19
09:27 Wednesday, December 16, 1992

Model: MODEL2

Dependent Variable: AGE2

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.04050	0.01350	66.810	0.0001
Error	26	0.00525	0.00020		
C Total	29	0.04575			
Root MSE		0.01421	R-square	0.8852	
Dep Mean		0.09302	Adj R-sq	0.8719	
C.V.		15.28114			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.013935	0.02157750	-0.646	0.5241
AC2	1	3.038292	0.38430320	7.906	0.0001
FAMINCL	1	0.000001687	0.00000075	2.239	0.0339
FAMINCD	1	0.000004331	0.00000109	3.982	0.0005

09:27 Wednesday, December 16, 1992

Model: MODEL3

Dependent Variable: AGE3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.03906	0.01302	132.385	0.0001
Error	26	0.00256	0.00010		
C Total	29	0.04162			
Root MSE		0.00992	R-square	0.9386	
Dep Mean		0.09387	Adj R-sq	0.9315	
C.V.		10.56581			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.045860	0.01680931	-2.728	0.0113
AC3	1	0.577270	0.08769303	6.583	0.0001
FAMINCL	1	0.000002835	0.00000068	4.168	0.0003
FAMINCD	1	0.000002606	0.00000076	3.448	0.0019

09:27 Wednesday, December 16, 1992

Model: MODEL4

Dependent Variable: AGE4

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.02447	0.00816	200.841	0.0001
Error	26	0.00106	0.00004		
C Total	29	0.02552			
Root MSE		0.00637	R-square	0.9586	
Dep Mean		0.06814	Adj R-sq	0.9539	
C.V.		9.35160			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.002165	0.01290373	-0.168	0.8681
AC4	1	0.724919	0.08783949	8.253	0.0001
FAMINCL	1	0.000000491	0.00000058	0.840	0.4084
FAMINCD	1	0.000001002	0.00000046	2.178	0.0387

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 22
09:27 Wednesday, December 16, 1992

Model: MODEL5

Dependent Variable: AGE5

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.01460	0.00487	303.024	0.0001
Error	26	0.00042	0.00002		
C Total	29	0.01502			
Root MSE		0.00401	R-square	0.9722	
Dep Mean		0.05275	Adj R-sq	0.9690	
C.V.		7.59837			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.008582	0.00730034	1.176	0.2504
AC5	1	0.918789	0.07423070	12.377	0.0001
FAMINCL	1	-0.000000122	0.00000033	-0.367	0.7165
FAMINCD	1	0.000000746	0.00000029	2.580	0.0159

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 23
09:27 Wednesday, December 16, 1992

Model: MODEL6

Dependent Variable: AGE6

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00956	0.00319	199.800	0.0001
Error	26	0.00041	0.00002		
C Total	29	0.00998			
Root MSE	0.00399		R-square	0.9584	
Dep Mean	0.05062		Adj R-sq	0.9536	
C.V.	7.89008				

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.009774	0.00609000	1.605	0.1206
AC6	1	1.090302	0.08857635	12.309	0.0001
FAMINCL	1	-0.000000141	0.000000027	-0.513	0.6121
FAMINCD	1	0.000000351	0.000000029	1.221	0.2332

09:27 Wednesday, December 16, 1992

Model: MODEL7

Dependent Variable: AGE7

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00769	0.00256	139.565	0.0001
Error	26	0.00048	0.00002		
C Total	29	0.00817			
Root MSE		0.00429	R-square	0.9415	
Dep Mean		0.05963	Adj R-sq	0.9348	
C.V.		7.18751			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.007563	0.00559098	1.353	0.1878
AC7	1	1.145029	0.09516771	12.032	0.0001
FAMINCL	1	0.000000105	0.00000024	0.435	0.6673
FAMINCD	1	0.000000161	0.00000031	0.520	0.6074

09:27 Wednesday, December 16, 1992

Model: MODEL8

Dependent Variable: AGE8

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00826	0.00275	184.771	0.0001
Error	26	0.00039	0.00001		
C Total	29	0.00865			
Root MSE		0.00386	R-square	0.9552	
Dep Mean		0.07780	Adj R-sq	0.9500	
C.V.		4.96170			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.006878	0.00480744	1.431	0.1644
AC8	1	1.312741	0.08548371	15.357	0.0001
FAMINCL	1	8.4954722E-9	0.00000021	0.041	0.9679
FAMINCD	1	0.000000463	0.00000028	1.649	0.1111

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 26
09:27 Wednesday, December 16, 1992

Model: MODEL9

Dependent Variable: AGE9

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.00984	0.00328	202.206	0.0001
Error	26	0.00042	0.00002		
C Total	29	0.01026			
Root MSE		0.00403	R-square	0.9589	
Dep Mean		0.10691	Adj R-sq	0.9542	
C.V.		3.76693			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.018731	0.00501512	3.735	0.0009
AC9	1	1.259295	0.07593992	16.583	0.0001
FAMINCL	1	-9.777995E-8	0.00000022	-0.450	0.6563
FAMINCD	1	0.000000580	0.00000029	1.980	0.0584

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 27
09:27 Wednesday, December 16, 1992

Model: MODEL10

Dependent Variable: AGE10

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.01545	0.00515	398.073	0.0001
Error	26	0.00034	0.00001		
C Total	29	0.01579			
Root MSE		0.00360	R-square	0.9787	
Dep Mean		0.14825	Adj R-sq	0.9762	
C.V.		2.42623			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.022932	0.00455545	5.034	0.0001
AC10	1	1.322200	0.05340194	24.759	0.0001
FAMINCL	1	-0.000000307	0.00000019	-1.609	0.1198
FAMINCD	1	0.000000901	0.00000027	3.369	0.0024

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 28
09:27 Wednesday, December 16, 1992

Model: MODEL11

Dependent Variable: AGE11

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.02319	0.00773	161.885	0.0001
Error	26	0.00124	0.00005		
C Total	29	0.02443			
Root MSE		0.00691	R-square	0.9492	
Dep Mean		0.20546	Adj R-sq	0.9433	
C.V.		3.36314			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.046706	0.00887648	5.262	0.0001
AC11	1	1.231288	0.07409759	16.617	0.0001
FAMINCL	1	-0.000000542	0.00000036	-1.525	0.1394
FAMINCD	1	0.000000245	0.00000053	0.459	0.6503

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 29
09:27 Wednesday, December 16, 1992

Model: MODEL12

Dependent Variable: AGE12

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.04121	0.01374	307.533	0.0001
Error	26	0.00116	0.00004		
C Total	29	0.04238			
Root MSE		0.00668	R-square	0.9726	
Dep Mean		0.26571	Adj R-sq	0.9694	
C.V.		2.51542			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	0.043335	0.00874051	4.958	0.0001
AC12	1	1.285240	0.05603335	22.937	0.0001
FAMINCL	1	-0.000000957	0.00000035	-2.735	0.0111
FAMINCD	1	-6.945819E-8	0.00000052	-0.135	0.8940

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 30
09:27 Wednesday, December 16, 1992

Model: MODEL13

Dependent Variable: AGE13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	0.09657	0.03219	164.019	0.0001
Error	26	0.00510	0.00020		
C Total	29	0.10168			
Root MSE		0.01401	R-square	0.9498	
Dep Mean		0.29898	Adj R-sq	0.9440	
C.V.		4.68576			

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob > T
INTERCEP	1	-0.009671	0.01795273	-0.539	0.5947
AC13	1	1.349028	0.08146174	16.560	0.0001
FAMINCL	1	-0.000000852	0.00000071	-1.204	0.2396
FAMINCD	1	-0.000001089	0.00000106	-1.029	0.3132

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES

1

09:27 Wednesday, December 16, 1992

OBS	DATE	PROV	AGE1	AGE2	AGE3	AGE4	AGE5	AGE6	AGE7
1	76	NF	0.005422	0.14813	0.35973	0.42885	0.46171	0.47331	0.47145
2	81	NF	0.004126	0.12068	0.34040	0.43607	0.46620	0.48414	0.49157
3	86	NF	0.004205	0.09006	0.29505	0.41805	0.46317	0.48091	0.49091
4	76	PE	0.008560	0.14928	0.35657	0.42442	0.44704	0.44728	0.44923
5	81	PE	0.006584	0.14455	0.34937	0.43006	0.47137	0.46986	0.46596
6	86	PE	0.004617	0.11356	0.31634	0.41041	0.45403	0.47435	0.47167
7	76	NS	0.008765	0.15784	0.35850	0.43272	0.45692	0.46363	0.45019
8	81	NS	0.008396	0.15130	0.33898	0.42587	0.46255	0.47347	0.47036
9	86	NS	0.006260	0.11705	0.31615	0.41000	0.45364	0.47454	0.47471
10	76	NB	0.010708	0.17046	0.37736	0.44359	0.46204	0.45913	0.45643
11	81	NB	0.009359	0.15834	0.35713	0.43997	0.47314	0.48089	0.46850
12	86	NB	0.006706	0.12078	0.32656	0.42103	0.46570	0.48396	0.47817
13	76	QU	0.006874	0.14297	0.35308	0.43129	0.45738	0.46243	0.46109
14	81	QU	0.009120	0.14481	0.34209	0.42672	0.46394	0.47154	0.46736
15	86	QU	0.009085	0.12188	0.31481	0.40886	0.45302	0.47097	0.46529
16	76	ON	0.009901	0.15345	0.34903	0.43421	0.46783	0.47996	0.47813
17	81	ON	0.009476	0.13973	0.32878	0.42224	0.46873	0.48219	0.48529
18	86	ON	0.007437	0.10680	0.29751	0.39799	0.45110	0.47579	0.47895
19	76	MA	0.010859	0.16936	0.35701	0.43404	0.45998	0.46765	0.45788
20	81	MA	0.012213	0.15826	0.34357	0.42504	0.46693	0.47474	0.47452
21	86	MA	0.010187	0.13422	0.31950	0.41057	0.45480	0.47160	0.47104
22	76	SA	0.011762	0.18952	0.37201	0.43259	0.45269	0.46070	0.45385
23	81	SA	0.014061	0.18410	0.36767	0.43990	0.46576	0.47249	0.46821
24	86	SA	0.012148	0.15518	0.34690	0.43141	0.46741	0.47508	0.46662
25	76	AL	0.012835	0.17516	0.36706	0.44403	0.47245	0.48797	0.47914
26	81	AL	0.017838	0.17459	0.34194	0.43455	0.47255	0.48759	0.48927
27	86	AL	0.012598	0.14760	0.32470	0.41563	0.46320	0.48194	0.47904
28	76	BC	0.010257	0.15648	0.33855	0.42669	0.46685	0.48816	0.47550
29	81	BC	0.011347	0.15275	0.32119	0.41269	0.46236	0.47937	0.48555
30	86	BC	0.008676	0.12352	0.29493	0.38918	0.44399	0.46745	0.46714

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES 2
 09:27 Wednesday, December 16, 1992

OBS	DATE	PROV	AGE8	AGE9	AGE10	AGE11	AGE12	AGE13
1	76	NF	0.47775	0.48224	0.47043	0.45033	0.40675	0.30824
2	81	NF	0.48797	0.48090	0.47301	0.43409	0.40270	0.27440
3	86	NF	0.49934	0.47742	0.47551	0.45339	0.40411	0.28488
4	76	PE	0.44049	0.43346	0.43781	0.41065	0.37307	0.29016
5	81	PE	0.45446	0.44444	0.42363	0.40951	0.36148	0.24681
6	86	PE	0.46023	0.44722	0.43078	0.40449	0.36818	0.24256
7	76	NS	0.44789	0.43834	0.42907	0.40600	0.36014	0.28698
8	81	NS	0.45224	0.44273	0.42512	0.40015	0.37182	0.25554
9	86	NS	0.46812	0.44265	0.42439	0.40367	0.36929	0.26187
10	76	NB	0.45374	0.45056	0.43848	0.41721	0.37420	0.28778
11	81	NB	0.46067	0.44831	0.43449	0.41319	0.37003	0.25675
12	86	NB	0.45929	0.44908	0.43507	0.40984	0.37599	0.26075
13	76	QU	0.45476	0.44845	0.42518	0.39090	0.35363	0.28057
14	81	QU	0.45590	0.43900	0.41419	0.37536	0.33030	0.23142
15	86	QU	0.45312	0.43452	0.41117	0.37743	0.33203	0.22543
16	76	ON	0.45954	0.44954	0.42624	0.38484	0.34445	0.24611
17	81	ON	0.47238	0.44307	0.41718	0.38789	0.33846	0.22124
18	86	ON	0.47242	0.45397	0.41707	0.39180	0.35195	0.22632
19	76	MA	0.43867	0.43612	0.41954	0.39348	0.36559	0.28489
20	81	MA	0.45646	0.42871	0.41217	0.38415	0.34910	0.24587
21	86	MA	0.46200	0.43864	0.40326	0.38363	0.34847	0.24357
22	76	SA	0.44342	0.43314	0.42249	0.41011	0.39596	0.31243
23	81	SA	0.45771	0.43592	0.41401	0.39583	0.36833	0.26968
24	86	SA	0.45992	0.43890	0.41595	0.38729	0.36603	0.26581
25	76	AL	0.45637	0.44563	0.41959	0.40027	0.37711	0.27545
26	81	AL	0.47445	0.44147	0.41665	0.38064	0.35111	0.24553
27	86	AL	0.47148	0.45047	0.41004	0.38695	0.34890	0.24546
28	76	BC	0.44559	0.42589	0.40872	0.38980	0.36475	0.25710
29	81	BC	0.46135	0.42601	0.39748	0.38212	0.35118	0.24109
30	86	BC	0.46108	0.43366	0.39966	0.38052	0.35080	0.24783

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES

1

11:53 Wednesday, December 16, 1992

OBS	DATE	PROV	AGE1	AGE2	AGE3	AGE4	AGE5	AGE6	AGE7
1	71	NF	0.003523	0.12410	0.33706	0.41843	0.44512	0.45658	0.46263
2	76	NF	0.005422	0.14813	0.35973	0.42885	0.46171	0.47331	0.47145
3	81	NF	0.004126	0.12068	0.34040	0.43607	0.46620	0.48414	0.49157
4	86	NF	0.004205	0.09006	0.29505	0.41805	0.46317	0.48091	0.49091
5	71	PE	0.005625	0.13250	0.34453	0.39545	0.42690	0.42623	0.42898
6	76	PE	0.008560	0.14928	0.35657	0.42442	0.44704	0.44728	0.44923
7	81	PE	0.006584	0.14455	0.34937	0.43006	0.47137	0.46986	0.46596
8	86	PE	0.004617	0.11356	0.31634	0.41041	0.45403	0.47435	0.47167
9	71	NS	0.005174	0.14745	0.35076	0.41576	0.43399	0.43264	0.43851
10	76	NS	0.008765	0.15784	0.35850	0.43272	0.45692	0.46363	0.45019
11	81	NS	0.008396	0.15130	0.33898	0.42587	0.46255	0.47347	0.47036
12	86	NS	0.006260	0.11705	0.31615	0.41000	0.45364	0.47454	0.47471
13	71	NB	0.005231	0.14402	0.35675	0.41855	0.43062	0.43672	0.44712
14	76	NB	0.010708	0.17046	0.37736	0.44359	0.46204	0.45913	0.45643
15	81	NB	0.009359	0.15834	0.35713	0.43997	0.47314	0.48089	0.46850
16	86	NB	0.006706	0.12078	0.32656	0.42103	0.46570	0.48396	0.47817
17	71	QU	0.002752	0.11535	0.34452	0.41883	0.43933	0.44562	0.44846
18	76	QU	0.006874	0.14297	0.35308	0.43129	0.45738	0.46243	0.46109
19	81	QU	0.009120	0.14481	0.34209	0.42672	0.46394	0.47154	0.46736
20	86	QU	0.009085	0.12188	0.31481	0.40886	0.45302	0.47097	0.46529
21	71	ON	0.006694	0.15438	0.35754	0.43017	0.45855	0.46699	0.45795
22	76	ON	0.009901	0.15345	0.34903	0.43421	0.46783	0.47996	0.47813
23	81	ON	0.009476	0.13973	0.32878	0.42224	0.46873	0.48219	0.48529
24	86	ON	0.007437	0.10680	0.29751	0.39799	0.45110	0.47579	0.47895
25	71	MA	0.006955	0.15969	0.36777	0.43023	0.45326	0.45155	0.44160
26	76	MA	0.010859	0.16936	0.35701	0.43404	0.45998	0.46765	0.45788
27	81	MA	0.012213	0.15826	0.34357	0.42504	0.46693	0.47474	0.47452
28	86	MA	0.010187	0.13422	0.31950	0.41057	0.45480	0.47160	0.47104
29	71	SA	0.006422	0.16289	0.36458	0.42539	0.44140	0.44625	0.44100
30	76	SA	0.011762	0.18952	0.37201	0.43259	0.45269	0.46070	0.45385
31	81	SA	0.014061	0.18410	0.36767	0.43990	0.46576	0.47249	0.46821
32	86	SA	0.012148	0.15518	0.34690	0.43141	0.46741	0.47508	0.46662
33	71	AL	0.008080	0.17995	0.37918	0.44157	0.47111	0.47446	0.45855
34	76	AL	0.012835	0.17516	0.36706	0.44403	0.47245	0.48797	0.47914
35	81	AL	0.017838	0.17459	0.34194	0.43455	0.47255	0.48759	0.48927
36	86	AL	0.012598	0.14760	0.32470	0.41563	0.46320	0.48194	0.47904
37	71	BC	0.007707	0.15722	0.35491	0.42922	0.46573	0.46917	0.44845
38	76	BC	0.010257	0.15648	0.33855	0.42669	0.46685	0.48816	0.47550
39	81	BC	0.011347	0.15275	0.32119	0.41269	0.46236	0.47937	0.48555
40	86	BC	0.008676	0.12352	0.29493	0.38918	0.44399	0.46745	0.46714

FAMILY HEADSHIP RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES

2

11:53 Wednesday, December 16, 1992

OBS	DATE	PROV	AGE8	AGE9	AGE10	AGE11	AGE12	AGE13
1	71	NF	0.47597	0.47223	0.47963	0.44084	0.39886	0.32119
2	76	NF	0.47775	0.48224	0.47043	0.45033	0.40675	0.30824
3	81	NF	0.48797	0.48090	0.47301	0.43409	0.40270	0.27440
4	86	NF	0.49934	0.47742	0.47551	0.45339	0.40411	0.28488
5	71	PE	0.42938	0.44709	0.41950	0.40191	0.37460	0.28119
6	76	PE	0.44049	0.43346	0.43781	0.41065	0.37307	0.29016
7	81	PE	0.45446	0.44444	0.42363	0.40951	0.36148	0.24681
8	86	PE	0.46023	0.44722	0.43078	0.40449	0.36818	0.24256
9	71	NS	0.44159	0.44308	0.43404	0.39139	0.36234	0.30007
10	76	NS	0.44789	0.43834	0.42907	0.40600	0.36014	0.28698
11	81	NS	0.45224	0.44273	0.42512	0.40015	0.37182	0.25554
12	86	NS	0.46812	0.44265	0.42439	0.40367	0.36929	0.26187
13	71	NB	0.45447	0.45032	0.43865	0.40038	0.36485	0.31202
14	76	NB	0.45374	0.45056	0.43848	0.41721	0.37420	0.28778
15	81	NB	0.46067	0.44831	0.43449	0.41319	0.37003	0.25675
16	86	NB	0.45929	0.44908	0.43507	0.40984	0.37599	0.26075
17	71	QU	0.45130	0.44185	0.42016	0.38428	0.34875	0.28046
18	76	QU	0.45476	0.44845	0.42518	0.39090	0.35363	0.28057
19	81	QU	0.45590	0.43900	0.41419	0.37536	0.33030	0.23142
20	86	QU	0.45312	0.43452	0.41117	0.37743	0.33203	0.22543
21	71	ON	0.45904	0.44911	0.42094	0.38158	0.33648	0.25516
22	76	ON	0.45954	0.44954	0.42624	0.38484	0.34445	0.24611
23	81	ON	0.47238	0.44307	0.41718	0.38789	0.33846	0.22124
24	86	ON	0.47242	0.45397	0.41707	0.39180	0.35195	0.22632
25	71	MA	0.44734	0.43903	0.42617	0.40099	0.36923	0.30092
26	76	MA	0.43867	0.43612	0.41954	0.39348	0.36559	0.28489
27	81	MA	0.45646	0.42871	0.41217	0.38415	0.34910	0.24587
28	86	MA	0.46200	0.43864	0.40326	0.38363	0.34847	0.24357
29	71	SA	0.44248	0.43755	0.42991	0.41991	0.37905	0.32318
30	76	SA	0.44342	0.43314	0.42249	0.41011	0.39596	0.31243
31	81	SA	0.45771	0.43592	0.41401	0.39583	0.36833	0.26968
32	86	SA	0.45992	0.43890	0.41595	0.38729	0.36603	0.26581
33	71	AL	0.46048	0.44578	0.42883	0.41160	0.36355	0.27997
34	76	AL	0.45637	0.44563	0.41959	0.40027	0.37711	0.27545
35	81	AL	0.47445	0.44147	0.41665	0.38064	0.35111	0.24553
36	86	AL	0.47148	0.45047	0.41004	0.38695	0.34890	0.24546
37	71	BC	0.43794	0.43344	0.41263	0.39207	0.33896	0.26678
38	76	BC	0.44559	0.42589	0.40872	0.38980	0.36475	0.25710
39	81	BC	0.46135	0.42601	0.39748	0.38212	0.35118	0.24109
40	86	BC	0.46108	0.43366	0.39966	0.38052	0.35080	0.24783

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES

3

11:53 Wednesday, December 16, 1992

OBS	DATE	PROV	AGE1	AGE2	AGE3	AGE4	AGE5	AGE6	AGE7
1	71	NF	0.001929	0.01323	0.01102	0.00929	0.01204	0.016112	0.025060
2	76	NF	0.004146	0.02558	0.02209	0.01542	0.01356	0.016781	0.026191
3	81	NF	0.003412	0.03514	0.03872	0.02447	0.01997	0.020837	0.028668
4	86	NF	0.001974	0.03256	0.04349	0.03345	0.02520	0.024562	0.029521
5	71	PE	0.002596	0.02163	0.01875	0.01400	0.02076	0.032787	0.043274
6	76	PE	0.007782	0.04643	0.04311	0.02834	0.02335	0.025483	0.044061
7	81	PE	0.007359	0.05924	0.06290	0.04732	0.03771	0.044591	0.051282
8	86	PE	0.005078	0.05678	0.07051	0.06279	0.04675	0.050597	0.058333
9	71	NS	0.003990	0.03478	0.03158	0.02170	0.02204	0.030858	0.042599
10	76	NS	0.009053	0.06679	0.05809	0.03753	0.02925	0.033325	0.047275
11	81	NS	0.007871	0.08072	0.08634	0.05991	0.04417	0.042980	0.052632
12	86	NS	0.005634	0.06996	0.08965	0.07185	0.05716	0.051384	0.057100
13	71	NB	0.003368	0.02467	0.02247	0.01837	0.01942	0.025727	0.038420
14	76	NB	0.007387	0.04914	0.04309	0.02873	0.02574	0.030630	0.043408
15	81	NB	0.007002	0.06042	0.06389	0.04604	0.03605	0.037646	0.050213
16	86	NB	0.005795	0.05629	0.06711	0.05780	0.04674	0.044760	0.054257
17	71	QU	0.007315	0.05802	0.05951	0.04805	0.04478	0.047513	0.055986
18	76	QU	0.011962	0.07262	0.07878	0.05991	0.05271	0.053829	0.062909
19	81	QU	0.015829	0.09272	0.11044	0.08729	0.07208	0.069661	0.078615
20	86	QU	0.013502	0.09212	0.11947	0.10802	0.09283	0.087372	0.093656
21	71	ON	0.006525	0.05331	0.05614	0.04093	0.03522	0.038079	0.046997
22	76	ON	0.013447	0.08892	0.09194	0.06382	0.04704	0.044484	0.052584
23	81	ON	0.013055	0.10260	0.12306	0.08782	0.06543	0.056804	0.061432
24	86	ON	0.008576	0.08606	0.12185	0.09852	0.07754	0.069659	0.069712
25	71	MA	0.013806	0.06733	0.05109	0.03630	0.03401	0.040685	0.052776
26	76	MA	0.024259	0.11179	0.09149	0.05767	0.04334	0.043787	0.057898
27	81	MA	0.027960	0.13986	0.12771	0.08550	0.06021	0.055794	0.063330
28	86	MA	0.018313	0.12141	0.13251	0.09976	0.07701	0.068640	0.072680
29	71	SA	0.015194	0.07153	0.04527	0.03033	0.03393	0.041519	0.052283
30	76	SA	0.028940	0.10803	0.07008	0.03974	0.03423	0.041165	0.053431
31	81	SA	0.034072	0.14996	0.11310	0.06943	0.04744	0.045689	0.061692
32	86	SA	0.021497	0.13600	0.12680	0.08811	0.06645	0.057544	0.068654
33	71	AL	0.016719	0.08189	0.06191	0.04113	0.04098	0.045823	0.058376
34	76	AL	0.031130	0.13510	0.09722	0.05970	0.04536	0.048036	0.059097
35	81	AL	0.035955	0.15560	0.14054	0.09067	0.06721	0.059451	0.069139
36	86	AL	0.024620	0.14627	0.15183	0.11301	0.08271	0.072652	0.078908
37	71	BC	0.013624	0.08423	0.07710	0.05243	0.04589	0.050851	0.060573
38	76	BC	0.023856	0.12930	0.11923	0.07975	0.05801	0.054343	0.066682
39	81	BC	0.024720	0.14718	0.15240	0.11248	0.08301	0.072467	0.077726
40	86	BC	0.018383	0.13605	0.15854	0.12942	0.10425	0.093677	0.097674

NON FAMILY RATES 1976 -- 1986 WITH LAGED BIRTH COHORT RATES

4

11:53 Wednesday, December 16, 1992

OBS	DATE	PROV	AGE8	AGE9	AGE10	AGE11	AGE12	AGE13
1	71	NF	0.03616	0.05224	0.07552	0.10632	0.12629	0.12334
2	76	NF	0.03885	0.05401	0.08281	0.11820	0.14952	0.14350
3	81	NF	0.04394	0.06972	0.09158	0.13961	0.17902	0.17351
4	86	NF	0.04253	0.07185	0.10153	0.13968	0.18967	0.20127
5	71	PE	0.05782	0.07912	0.13379	0.16349	0.19524	0.20615
6	76	PE	0.05811	0.08555	0.12243	0.19053	0.23220	0.23834
7	81	PE	0.07875	0.09793	0.13641	0.19028	0.26913	0.27396
8	86	PE	0.07507	0.11228	0.14424	0.19203	0.25668	0.30211
9	71	NS	0.05934	0.08867	0.12966	0.17664	0.22777	0.23107
10	76	NS	0.06404	0.09457	0.13609	0.20081	0.25721	0.27353
11	81	NS	0.07350	0.10497	0.14869	0.21044	0.27396	0.31982
12	86	NS	0.07455	0.10888	0.15337	0.21101	0.28024	0.33374
13	71	NB	0.05304	0.08225	0.11556	0.16848	0.21113	0.20816
14	76	NB	0.06059	0.08864	0.13022	0.18335	0.23649	0.25152
15	81	NB	0.06910	0.09745	0.13778	0.19021	0.25336	0.28691
16	86	NB	0.07427	0.10454	0.14057	0.19992	0.25501	0.30775
17	71	QU	0.06964	0.09555	0.12921	0.16690	0.19355	0.17713
18	76	QU	0.07830	0.10415	0.14386	0.19149	0.22823	0.21704
19	81	QU	0.09596	0.12206	0.16160	0.21649	0.26263	0.25888
20	86	QU	0.10914	0.13575	0.17145	0.22660	0.28128	0.29075
21	71	ON	0.06558	0.09707	0.14074	0.19360	0.25256	0.27975
22	76	ON	0.07077	0.10189	0.14986	0.21443	0.27870	0.31830
23	81	ON	0.07885	0.10808	0.15524	0.22015	0.29094	0.34450
24	86	ON	0.08295	0.10829	0.15206	0.21383	0.28506	0.35349
25	71	MA	0.07113	0.10710	0.15154	0.20575	0.25611	0.27696
26	76	MA	0.08007	0.11177	0.16157	0.22840	0.29136	0.32042
27	81	MA	0.08697	0.12088	0.16743	0.23575	0.30570	0.36598
28	86	MA	0.09027	0.11984	0.17129	0.23392	0.31044	0.38911
29	71	SA	0.07361	0.10625	0.15382	0.20585	0.27125	0.28424
30	76	SA	0.07531	0.10950	0.15724	0.22082	0.28152	0.31656
31	81	SA	0.08374	0.11684	0.16599	0.22704	0.30331	0.35023
32	86	SA	0.08954	0.12210	0.16631	0.23350	0.30395	0.37214
33	71	AL	0.07501	0.11281	0.16015	0.21419	0.27208	0.26163
34	76	AL	0.08029	0.11189	0.16504	0.22184	0.27656	0.28661
35	81	AL	0.08859	0.11950	0.16217	0.22662	0.29035	0.31116
36	86	AL	0.09543	0.12398	0.16591	0.22618	0.29422	0.33828
37	71	BC	0.08007	0.11407	0.15559	0.21124	0.28123	0.30784
38	76	BC	0.08689	0.11627	0.16434	0.21687	0.28081	0.33266
39	81	BC	0.09848	0.12732	0.16873	0.22290	0.28465	0.34362
40	86	BC	0.10917	0.13686	0.17180	0.22088	0.28905	0.35370

Visit our website at www.cmhc.ca