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ANALYSES OF THE 1985 CONTINUING SURVEY
OF FOOD INTAKES BY INDIVIDUALS

Volume II
Estimating the Effects of the WIC and
Food Stamp Programs on Dietary Intake
by Women and Young Children,
Using FNS's Wave-1 Analysis File

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EXECUTIVE SUMMARY

1. The Problem of Sample Selection Bias

A common problem in evaluations of nonexperimental social welfare programs is that the persons who participate in a program may differ systematically from eligible nonparticipants in unobservable ways that are correlated with measures of the program's effectiveness. For example, a job training program may attract participants who are more motivated to achieve success in the labor market than are eligible nonparticipants. Similarly, a food assistance program may attract participants who are more (or less) aware of nutritional requirements than are eligible nonparticipants. If these differences are not controlled for, an evaluation may fail to disentangle the program's true impact on an outcome measure from the effects of the unobservable differences between participants and eligible nonparticipants and the resultant estimates of the program's impact may be biased. This is referred to as "sample selection bias."

2. Development of Appropriate Econometric Software

Many econometric software packages permit an analyst to control for unobservable differences between program participants and eligible nonparticipants in estimating the impact of a single program on an outcome measure of interest. These packages have been used in a number of evaluations of FNS programs.

Several segments of the low-income population are potentially eligible to participate in more than one FNS program. For example, a lactating mother in a low-income household may be eligible for both WIC and food stamp benefits. The existing econometric software packages are generally not well-suited to evaluations of the impacts of two or more interacting assistance programs. Their use in this context typically entails the assumption that decisions regarding participation in the various assistance programs are made independently of each other (e.g., the lactating mother's food stamp participation decision is made independently of her WIC participation decision).

FNS was concerned that the assumption of independent participation decisions is often inappropriate with respect to food assistance programs. Accordingly, it sponsored an enhancement in the existing LIMDEPtm econometric

software package so that it could be used to obtain selection-bias-free estimates of the impacts of any two food assistance programs without the unrealistic assumption that the participation decisions are made independently. On this project, we used the new software to obtain estimates of the effects of participation in the WIC and food stamp programs on dietary intake by women and young children.

3. The Data Source for this Study

The 1985 Continuing Survey of Food Intakes by Individuals (CSFII) was a six-wave longitudinal survey of women ages 19 to 50 years and their children ages 1 to 5 years. Each wave of the survey obtained complete dietary recall data from the respondents for the previous day. Under a previous contract with MPR, FNS sponsored the merging and reweighting of wave-1 data for the core and low-income samples of the 1985 CSFII. The resultant data file provides more observations on the low-income women and children who are served by FNS' food assistance programs than are available in the separate files for the two samples.

From the CSFII merged data file, we extracted data on 818 WIC-eligible children ages 1 to 4 years and 381 WIC-eligible women ages 19 to 50 years. Most, but not all, of these persons resided in households that were eligible to receive food stamp benefits. We stored the extracted data for women and children in separate files, which were the basis for our empirical analysis of WIC and food stamp impacts on dietary intake.

4. Estimation Results

This study examined the effects of participation in the WIC and food stamp programs on the intake of 16 nutrients, on the intake of cholesterol, and on the proportion of total food energy supplied by each of the three macronutrients: protein, fat, and carbohydrate. This executive summary highlights our findings for the 16 nutrients. These results were generated by ordinary least-squares (OLS) regression and by the new LIMDEP[™] routine for estimating the impacts of two programs while controlling for selection bias. OLS regression entails no control for sample selection bias.

Results for Young Children. For WIC-eligible children, the OLS regression estimates and the selection-bias adjusted estimates of WIC impacts on dietary intake are positive and statistically significant for approximately half of the 16 nutrients. For all but one of the remaining nutrients, both sets of estimates are not significantly different from zero. Thus, our conclusions regarding the qualitative effects of the WIC program on the diets of children are virtually identical for the two sets of estimates. However, many of the bias-corrected estimates are much larger in size than the corresponding OLS estimates. For most nutrients, the bias-corrected estimates are positive and larger than the OLS estimates, but for several nutrients they are negative and larger in absolute value than the OLS estimates.

The estimates of food stamp impacts on dietary intake by children are more ambiguous. The OLS estimates of food stamp impacts are positive and statistically significant for 7 of the 16 nutrients, whereas the bias-corrected estimates are positive and significant for only one of those nutrients and are statistically insignificant for the other 15. The two sets of estimates support very different conclusions regarding the qualitative effects of food stamps on dietary intake by children. However, there is little quantitative difference between them for the 7 nutrients for which the OLS estimates are statistically significant. The critical distinction between the two sets of estimates for those nutrients is that the bias-corrected estimates have larger standard errors (i.e., are less precise). This indicates that a larger sample may be required in order to obtain estimates of food stamp impacts that are both statistically significant and free of selection bias. For several of the 9 nutrients for which the OLS estimates are statistically insignificant, the corresponding selection-bias-corrected estimates are negative in sign, large in absolute value, and close to being statistically significant. With a larger sample, the latter estimates might be significant; if so, they would constitute a clear qualitative distinction between the two sets of estimation results.

Results for Women. For women, both the bias-corrected results and the uncorrected results show very few statistically significant estimates of WIC and food stamp impacts on dietary intake. We believe that the small number of observations in our extract file for women, along with difficulties that we experienced in modeling categorical WIC eligibility for women, contributed to the absence of significant estimates of program impacts. Two patterns in the quantitative estimates of WIC and food stamp impacts are worthy of note. First, the bias-corrected estimates of food stamp impacts on intake of the 16 selected nutrients are generally negative and often are quite large in absolute value, whereas the OLS estimates are generally positive and much smaller in absolute value. Second, both the bias-corrected and the uncorrected estimates of WIC impacts are generally positive in sign and the quantitative differences between them are not as large as those between the two sets of food stamp impact estimates.

These admittedly imprecise estimation results indicate a need for continued research, based on larger samples, on the influence of selection bias on estimates of WIC and, especially, food stamp impacts on the dietary intake of women.

5. Final Observations

Due to the small number of cases in our analysis files and the newness of our econometric software, we recommend that all of the estimation results presented in this report be regarded as exploratory in nature. The lack of statistical precision in most of our program impact estimates--especially the bias-corrected estimates--indicates a need for larger sample sizes, more reliable measures of dietary intake (e.g., the average daily intake of each sample member, computed on the basis of multiple days of intake data), and greater attention to the modeling of program eligibility. The soon-to-be-released data files for the 1987-88 Nationwide Food Consumption Survey and,

to a lesser extent, the existing multiwave files for the 1985 CSFII, should provide opportunities for improvements in some or all of these areas.

PREFACE

This two-volume report presents findings from an analysis of data on women and children from the 1985 panel of the Continuing Survey of Food Intakes by Individuals (CSFII). This research was conducted by Mathematica Policy Research for the Food and Nutrition Service of the U.S. Department of Agriculture under contracts 53-3198-6-41 (TO 7), 53-3198-7-31, and 53-3198-8-95 (TO 4).

The research described in the two volumes of this report was conducted in two distinct phases. In Phase 1, we used data from the first of six waves of interviews conducted with respondents to the 1985 CSFII to estimate the effects of the WIC and Food Stamp programs on dietary intake by women and young children. Each wave of the survey obtained data on dietary intake over a 24-hour period. In Phase 2, we used four days of CSFII data on the same two demographic groups to estimate usual dietary intake, to assess the adequacy of diets, and to estimate the effects of the WIC and Food Stamp programs on dietary intake and household food expenditures.

We used essentially the same models in both phases of our analysis to estimate WIC and Food Stamp effects on dietary intake. Because they are based upon data for four days rather than one day, the Phase-2 estimates supercede the Phase-1 estimates. Volume I of this report presents findings from all components of the Phase-2 analysis, as well as a summary of findings from the Phase-1 analysis and a comparison of those findings with the corresponding findings from the Phase-2 analysis. That summary and comparison should provide sufficient information on the Phase-1 analysis for

most readers; those who require additional information should refer to Volume II of this report, which is devoted exclusively to a detailed presentation of findings from the Phase-1 analysis.

I. OBJECTIVES AND OVERVIEW OF THE STUDY

This report presents findings from an econometric analysis of the effects of participation in the WIC and food stamp programs on the dietary intake of women ages 19 to 50 years and children ages 1 to 4 years. The study's primary objective was to determine whether these food assistance programs improve the quality of the diets of persons in the two target demographic groups who participate in them. Secondary objectives were to assess the importance of the interaction of the two programs on dietary intake and to control for the jointness of WIC and food stamp participation decisions in correcting for potential biases in program impact estimates that arise from the self-selection of eligibles into the programs.

The study is innovative in two respects. First, it is based upon a unique data file that MPR constructed for FNS under a previous contract. This file contains merged and reweighted wave-1 data for the core and low-income samples of the 1985 Continuing Survey of Food Intakes by Individuals (CSFII). The combined samples provide more observations on persons in low-income households than are available in the low-income sample alone and, hence, permit more precise estimates of FNS program impacts to be obtained. Second, in controlling for potential selection bias in estimates of program impacts on dietary intake, the study's estimation procedure allows for jointness in the food stamp and WIC participation decisions. While this is not the first program evaluation to deal with selection bias in this manner, the estimation approach represents the state of the art in selection bias control.

The results of the study can be summarized briefly. For young children, both the bias-corrected results and the uncorrected results show that participation in the WIC program has positive and significant effects on roughly half of the nutrients examined in this study. The food stamp results for children are more ambiguous. The uncorrected results show positive and significant food stamp effects on a number of nutrients, while the bias-corrected results show a significant and positive effect on just one nutrient. Further investigation reveals that the disparity in the two sets of food stamp estimates is not so great as it initially appears. Most of the bias-corrected estimates have positive signs and are roughly equal in magnitude to the uncorrected results. However, the standard errors for the corrected estimates are roughly twice as large as those for the uncorrected estimates, thus resulting in a loss of statistical significance. With a larger sample or with additional days of intake data for the cases in the existing sample, we would expect to obtain more statistically significant bias-corrected estimates of food stamp impacts.

For women, both the bias-corrected results and the uncorrected results show very few statistically significant estimates of WIC and food stamp impacts on dietary intake. We believe that our small sample of women and the difficulties that we experienced in modeling WIC eligibility contributed to the absence of significant estimates of program impacts. Setting aside the question of statistical significance, it is notable that the bias-corrected estimates of food stamp impacts generally are negative and often are quite large in absolute value, whereas the uncorrected estimates are generally positive and much smaller in absolute value. The differences between the bias-corrected and the uncorrected estimates of WIC effects are not so large.

Thus, our admittedly imprecise results suggest that selection bias should not be ignored in estimating food stamp impacts on the dietary intake of women.

We recommend that FNS view these findings as being preliminary in nature. Estimates based upon a single day of dietary intake data, as is the case with the estimates presented in this report, are inherently less precise than estimates based upon multiple days of data. A four-day 1985 CSFII analysis file will shortly be available. Despite providing smaller samples of women and children, we believe that it will permit analysts to obtain more precise estimates of program impacts than is possible with the one-day file that was the basis for this study. Also, the 1987-88 Nationwide Food Consumption Survey may provide larger samples of women and children as well as multiple days of intake data. FNS should also be aware that the econometric software that we used to control for selection bias was newly developed for this study. We need to learn more about its limitations and how it operates before we can have full confidence in the estimates that it generates.

The remainder of this report consists of three chapters. Chapter II presents an econometric model of program impacts on dietary intake and discusses the problem of selection bias. Chapter III describes the wave-1 CSFII analysis file and the subsamples of program-eligible women and children. Chapter IV presents the results that we obtained from estimating the dietary intake model on the CSFII data for women and children.

II. A MODEL OF PROGRAM IMPACTS ON DIETARY INTAKE

If the WIC and food stamp programs were run as classical experiments, with the random assignment of program eligibles to participation or non-participation status, then unbiased estimates of program impacts on dietary intake could be obtained without any econometric modeling. The difference between the mean dietary intake of a random sample of participants in one of the programs and the mean intake of a random sample of eligible nonparticipants would be an unbiased estimate of the program's impact.

Of course, the WIC and food stamp programs are not run as classical experiments and that creates two problems for estimating their impacts on dietary intake, both of which can be addressed through econometric modeling. First, the observable characteristics (e.g., height, education, and household income) of program participants may differ from those of eligible nonparticipants. If those characteristics influence dietary intake, then the difference in mean dietary intake between participants and eligible nonparticipants will reflect that influence as well as the actual program impacts. A multivariate regression model can be used to control for observable differences between participants and eligible nonparticipants, thus eliminating this as a source of bias in program impact estimates.

Second, program participants may differ from eligible nonparticipants in ways that cannot directly be observed. If those differences influence dietary intake, then conventional multivariate regression estimates of program impacts will be biased because they will reflect both the true effect of the program and the effects of the unobservable differences between participants and nonparticipants. For example, if food stamp participants were more

aware of nutritional requirements than eligible nonparticipants, then we would expect conventional multivariate regression estimates of food stamp impacts on dietary intake to be biased. That bias, which is referred to as "sample selection bias," can be controlled for through an extension of the multivariate regression model of dietary intake. The extension entails the estimation of a model of program participation by eligible persons or households.

The next section of this chapter presents an econometric model of WIC and food stamp impacts on dietary intake that controls for both observable and unobservable differences between program participants and eligible non-participants. Our procedure for estimating this model is the topic of the final section of this chapter.

A. THE ECONOMETRIC MODEL

The econometric model of program impacts on dietary intake consists of a dietary intake equation (this equation could be used to explain the intake of any nutrient or other dietary component), two equations that explain participation in the WIC program, and two analogous equations that explain participation in the food stamp program. As specified below, the model is general enough to deal with program participants, eligible non-participants, and ineligibles. The unit of analysis is assumed to be the individual--a woman or child in a low-income household.

The full econometric model is as follows:

$$(1) \quad N_{ki} = X_i a_k + b_{k1} WIC_i + b_{k2} FS_i + b_{k3} (WIC_i * FS_i) + e_{ki}$$

$$(2a) \quad WIC_i = 1 \text{ if eligible for WIC and } Z_{wi} c_w + u_{wi} > 0$$

$$= 0 \text{ if eligible for WIC and } Z_{wi} c_w + u_{wi} \leq 0$$

(2b) $WIC_i = 0$ if ineligible for WIC

(3a) $FS_i = 1$ if eligible for food stamps and $Z_{fi}c_f + u_{fi} > 0$
= 0 if eligible for food stamps and $Z_{fi}c_f + u_{fi} \leq 0$

(3b) $FS_i = 0$ if ineligible for food stamps

where N_{ki} is the intake of nutrient k by individual i ; X is a vector of variables influencing dietary intake; WIC is a binary variable denoting participation in the WIC program (1=participant, 0=nonparticipant); FS is a binary variable denoting participation in the food stamp program (1=participant, 0=nonparticipant); $WIC*FS$ is an interaction term that identifies participants in both programs; Z_w and Z_f are vectors of variables that influence decisions to participate in the WIC and food stamp programs, respectively; and e_k , u_w , and u_f are random disturbance terms. The other terms are individual parameters or vectors of parameters to be estimated.

Equation (1), the dietary intake equation, is to be estimated on all of the selected cases (women or children) from low-income households, regardless of their program participation status. The assumptions regarding the disturbance term in that equation are:

$$e_{ki} \sim N(0, s_k^2)$$

WIC_i and FS_i are defined for all of the selected cases, but the WIC participation equation is to be estimated on the subsample of WIC-eligible cases and the food stamp participation equation is to be estimated on the subsample of food-stamp-eligible cases. For those cases, the assumptions regarding the disturbance terms in equations (2a) and (3a), respectively, are:

$$u_{wi} \sim N(0, 1)$$

$$u_{fi} \sim N(0, 1)$$

For WIC-eligible cases, we make an additional assumption regarding the covariance of the disturbance terms in the dietary intake equation and the WIC participation equation: $\text{cov}(e_{ki}, u_{wi}) = s_{kw}$. If these disturbance terms are correlated, that is, if $s_{kw} \neq 0$, then the procedure used to estimate the dietary intake equation should be one that controls for selection bias arising from the WIC participation decision. Similarly, for food-stamp-eligible cases, we assume that $\text{cov}(e_{ki}, u_{fi}) = s_{kf}$. If this covariance is nonzero, then the procedure used to estimate the dietary intake equation should be one that controls for selection bias arising from the food stamp participation decision.

For cases that are eligible for both WIC and food stamps, we make one final assumption regarding the disturbance terms in the program participation equations: $\text{cov}(u_{wi}, u_{fi}) = s_{wf}$. A positive value of this covariance implies that some of the same unobservable factors that influence the WIC participation decision also influence the food stamp participation decision, and the direction of that influence is the same for both programs. If this covariance is nonzero, then efficient estimation of the participation equations for the cases eligible for both programs requires that the equations be estimated jointly.¹

¹An efficient estimation procedure makes optimal use of the sample information on the behavior in question. It has a smaller variance than inefficient procedures and, therefore, is more likely to produce statistically significant estimates.

B. THE ESTIMATION PROCEDURE

If the disturbance terms in the program participation equations are correlated with the disturbance terms in the dietary intake equation, then selection bias is a factor in the estimation of the dietary intake equation. Under these conditions, ordinary least-squares (OLS) regression estimation of the intake equation would yield inconsistent estimates of the program impact parameters: b_1 , b_2 , and b_3 .²

An extension of a two-stage estimation procedure that was first proposed by Heckman (1979) can be used to control for selection bias and thereby obtain consistent estimates of the program impact parameters in the dietary intake equation. The first stage of this procedure entails the computation of two terms which, in effect, are the components of e_k in the dietary intake equation that are correlated with u_w in the WIC participation equation and u_f in the food stamp participation equation.³ These terms are then inserted in the dietary intake equation as additional explanatory variables to control for selection bias. The disturbance term in the modified intake equation is uncorrelated with those in the participation equations. In the second stage of the procedure, the modified intake equation is estimated using generalized least-squares regression. Generalized least-squares yields standard errors for the parameter estimates that are not biased by the heteroskedasticity that the selection-bias correction procedure introduces into the modified intake equation.

²A consistent estimation procedure is one which produces estimates that approach the true value of the parameter being estimated as the sample size increases.

³Heckman (1979) referred to the selection-bias correction terms as "lambda variables." Following Heckman, we shall refer to the correction terms for selection bias associated with the WIC and food stamp participation decisions, respectively, as "lambda-W" and "lambda-F."

Construction of the selection-bias correction terms, λ -W and λ -F, requires the estimation of the WIC and food stamp participation equations. OLS regression is an inefficient procedure for estimating these equations because the dependent program participation variables are binary. Probit analysis is an efficient estimation procedure under these conditions. Two variants of probit analysis are required: univariate probit to estimate independently the participation equations for the two food assistance programs, and bivariate probit to estimate jointly the participation equations for individuals who are eligible for both programs. Bivariate probit generates an estimate of the correlation, s_{wf} , between the disturbance terms in the two participation equations and uses that estimate to produce efficient estimates of the parameters in the equations. If $s_{wf} \neq 0$, univariate probit is not an efficient estimation procedure when applied to data on persons who are eligible for both programs.

To construct the λ terms, it is first necessary to:

1. use univariate probit to estimate the WIC participation equation on all of the sample individuals who are eligible to participate in WIC
2. use univariate probit to estimate the food stamp participation equation on all of the sample individuals whose households are eligible to receive food stamps
3. use bivariate probit to jointly estimate the WIC and food stamp participation equations on the sample individuals who are eligible to participate in WIC and whose households are eligible to receive food stamps

Having obtained these estimates, the selection-bias correction terms can be constructed as follows:

- o Lambda-W. Assign λ -W a value of zero for sample individuals who are not eligible to participate in WIC. Use the univariate probit coefficients from (1), above, to assign values

to lambda-W for sample individuals who are eligible for WIC only. Use the bivariate probit estimates of the WIC participation equation from (3), above, to assign values to lambda-W for sample individuals who are eligible for both WIC and food stamps.

- o Lambda-F. Assign lambda-F a value of zero for sample individuals whose households are not eligible to receive food stamps. Use the univariate probit coefficients from (2), above, to assign values to lambda-F for sample individuals who are not eligible for WIC, but whose households are eligible to receive food stamps. Use the bivariate probit estimates of the food stamp participation equation from (3), above, to assign values to lambda-F for sample individuals who are eligible for both food stamps and WIC.

With funding provided by the FNS Microsimulation contract, Professor William H. Greene of New York University modified his LIMDEPtm econometrics software package so that it could be used to carry out this estimation process. The key aspect of the modification was the addition of the capacity to assign values to the lambda variables according to the above rules, which vary with a sample case's program eligibility status. In LIMDEPtm, most of Heckman's two-stage estimation procedure is automated; most notably, the creation of the lambda variables and their insertion in the dietary intake equation.

MPR has now used LIMDEP to estimate dual selection models on two different projects. In the course of estimating those models we identified several "bugs" in the program, all of which were subsequently eliminated by Dr. Greene. To the best of our knowledge, the new estimation procedure now works as intended. However, as shown in Chapter IV, the procedure does generate some estimates of program impacts that are larger than intuition would lead us to expect. For most such estimates we have been able to obtain similar results using less sophisticated selection-bias correction procedures within LIMDEPtm (e.g., a control for selection bias that ignores the correla-

tion of the disturbance terms in the two program participation equations). Such confirmation suggests that the unexpected estimates are the result of data inadequacies (e.g., only one day of intake data, small sample sizes, and deficiencies in the WIC eligibility variable for women).⁴

Our understanding of the internal working of the LIMDEPtm dual selection bias estimation procedure might be enhanced if we could examine and manipulate the values of the constructed lambda variables. Unfortunately, the structure of the software does not permit this.

In summary, we believe that the LIMDEPtm dual selection bias estimation procedure works correctly. As we gain experience using the procedure on a variety of data sets, we expect that we will develop an understanding of why anomalous results are occasionally obtained.

⁴The CSFII analysis file that MPR is constructing for FNS under Task Order 7 of the Quick Response Studies contract will address several of these data problems: it will provide four days of intake data and the WIC eligibility variable for women is a more accurate indicator of eligibility than that which is available in the wave-1 file. Unfortunately, the four-day file will provide data on fewer cases than does the wave-1 file. The 1987-88 NFCS may successfully address all of the data problems that we have noted here.

III. DESCRIPTION OF THE DATA AND DEFINITION OF VARIABLES

This chapter briefly describes the source of the data for this study and the procedures that we used to select the samples of women and children that were the basis for our empirical analysis. It also defines the variables that we included in the empirical specification of the Chapter II econometric model of dietary intake and program participation and provides basic descriptive statistics on those variables.

A. DATA SOURCE

The source of the data upon which we estimated our model of dietary intake and program participation is the first wave of the 1985 CSFII. Those data were collected in the spring of 1985. As previously noted, we created extract files from a single file containing data for cases in both the core (i.e., individuals are represented without regard for household income) and the low-income samples of the survey. Those cases had been reweighted to correct for the merging of data from the two samples. The reweighted cases are representative of the population of women ages 19 to 50 and their children ages 1 to 5 in the conterminous 48 states.⁵

Only households containing women ages 19 to 50 were selected into the CSFII sample. For those households, the wave-1 survey obtained basic demographic data on all household members, income by source for the previous month, and data on the household's current participation in the food stamp program. For women ages 19 to 50 and their children ages 1 to 5 who were members of those households, the survey also obtained data on current

⁵Fraker and Post (1987) describe the merging and reweighting of the wave-1 data from the 1985 CSFII's core and low-income samples.

participation in the WIC program and, most importantly, on their intake of food during the day preceeding the survey.

B. SELECTION OF THE ANALYSIS SAMPLES

The merged wave-1 file for the 1985 CSFII provides data on 2,570 women and 1,659 children. From these cases, we selected 458 women and 1,221 children who satisfied crude screens for WIC eligibility. Those screens, which are discussed further in the next chapter, include being a member of a household whose monthly income does not exceed 185 percent of the poverty level. We then excluded cases with missing data on any of the variables included in the empirical model. This left us with analysis samples of 381 women and 818 children.⁶

C. DESCRIPTION OF THE ANALYTIC VARIABLES

1. Variables Used in the Analysis of Women

Tables III.1 provides the names and definitions of the variables included in the WIC participation equation (equation 2a) and the food stamp participation equation (equation 2b) for women. Table III.2 provides descriptive statistics on those variables. Note that all of the women in the analysis sample satisfy our crude screen for WIC eligibility, but some reside in households with incomes in excess of 130 percent of poverty and, hence, are ineligible to receive food stamps. The descriptive statistics for the variables in the food stamp participation equation are based upon the subsample of food-stamp-eligible women.

⁶The variables having the most missing data for women were ethnicity, education, race, and employment status. The variables having the most missing data for children are height, ethnicity, race, and weight.

Table III.3 provides the names and definitions of the variables in the dietary intake equations for women, while Table III.4 provides descriptive statistics on those variables. The statistics are based on the full analysis sample of 381 cases.

Included among the explanatory variables in the dietary intake equations are the variables LOPOV,..., NMLOINC (see Table III.3). These variables control for the design of the original core and low-income samples as well as the design of the merged sample. For each cell defined by these variables, a different multiplicative factor was used to derive the sample weights for the merged data file. Because the sample weights already adjust for differences in dietary intake across these cells, the inclusion of these variables in the dietary intake equations was not essential. We included them to ensure that our results would not be biased by sample design effects. Due to the extreme sensitivity of the bivariate probit procedure that we used to jointly estimate the WIC and food stamp participation equations, we were unable to include the sample design variables in the program participation equations for women.

2. Variables Used in the Analysis of Children

Tables III.5 and III.6, respectively, define the variables in the program participation equations for children and provide descriptive statistics on those variables. Tables III.7 and III.8 provide analogous information for the dietary intake equations. The tables show that we were able to include the seven sample design variables in the participation equations as well as the intake equations.

According to our crude WIC eligibility screen, all of the 818 children in our analysis sample were eligible to receive WIC benefits; however, only

726 resided in food-stamp-eligible households. Therefore, we estimated the WIC participation equation on the full analysis sample and the food stamp participation equation on a 726-case subsample.

TABLE III.1

NAMES AND DEFINITIONS OF THE VARIABLES IN THE WIC AND
FOOD STAMP PARTICIPATION EQUATIONS FOR WOMEN

Variable	Definition
WIC PARTICIPATION EQUATION	
<u>Dependent Variable</u>	
WIC	Binary variable indicating whether woman received WIC benefits last month (1=yes, 0=no). Excluded category is "did not receive WIC benefits."
<u>Explanatory Variables</u>	
ONE	A constant (value equals 1 for all cases).
SUBURB NONMETRO	Binary variables indicating whether woman resides in a suburban area or a nonmetropolitan area (1=yes, 0=no). Excluded category is "central city."
PLT5	Number of persons less than five years old in the woman's household.
NEAST MIDWEST	Binary variables indicating whether woman resides in the Northeast or Midwest region of the U.S. (1=yes, 0=no). Excluded categories are "West" and "South."
HSGRAD COLLEGE	Binary variables indicating whether woman graduated from high school or attended college (1=yes, 0=no). Excluded category is "not high school graduate."
MALEHEAD	Binary variable indicating whether a male head of household is present (1=yes, 0=no)
GOODHLTH	Binary variable indicating whether woman's self-reported health is good/very good/excellent (1=yes, 0=no). Excluded categories are "fair" and "poor."
WTHT	Woman's weight in pounds, divided by her height in inches
OWN NORENT	Binary variables indicating whether woman's household owns its dwelling or occupies it with no cash rent (1=yes, 0=no). Excluded category is "rents dwelling."

TABLE III.2

DESCRIPTIVE STATISTICS ON THE VARIABLES IN THE
WIC AND FOOD STAMP PARTICIPATION EQUATIONS FOR WOMEN
(weighted data)

Variable	Continuous	Binary	Mean	Std. Dev.
WIC PARTICIPATION EQUATION (N=381)				
WIC		x	0.16	0.37
ONE			1.00	0.00
SUBURB		x	0.30	0.46
NONMETRO		x	0.24	0.43
PLT5	x		1.51	0.87
NEAST		x	0.20	0.40
MIDWEST		x	0.23	0.42
HSGRAD		x	0.47	0.50
COLLEGE		x	0.27	0.46
MALEHEAD		x	0.75	0.43
GOODHLTH		x	0.87	0.33
WTHT	x		2.33	0.56
OWN		x	0.33	0.47
NORENT		x	0.03	0.16
EMPLOYED		x	0.24	0.43
SPCINC	x		2.37	1.02
SPCINCSQ		x	0.66	0.47
FOOD STAMP PARTICIPATION EQUATION (N=340)				
FSPART		x	0.47	0.50
ONE			1.00	0.00
INC	x		7.06	3.15
INCSQR	x		0.60	0.56
NONWHITE		x	0.31	0.46
MALEHEAD		x	0.66	0.47
GUARAMT	x		294.33	105.77
EMPLOYED		x	0.21	0.41

SOURCE: Wave 1 of the 1985 CSFII.

TABLE III.3

NAMES AND DEFINITIONS OF THE VARIABLES IN THE
DIETARY INTAKE EQUATIONS FOR WOMEN

Variable	Definition
<u>Dependent Variables</u>	
FDENGPCT	Nutrient adequacy ratio (NAR) for food energy, expressed as a percentage. ¹
PROPCT	NAR for protein, expressed as a percentage.
PROCMPEG	Percent of food energy from protein.
FATCMPEG	Percent of food energy from fat.
CHOCMPEG	Percent of food energy from carbohydrate.
EODTCHOL	Intake of cholesterol in milligrams.
VITAPCT	NAR for vitamin A, expressed as a percentage.
LOGAPCT	Natural log of NAR for vitamin A.
VITB1PCT	NAR for vitamin B1 (thiamin), expressed as a percentage.
VITB2PCT	NAR for vitamin B2 (riboflavin), expressed as a percentage.
VITB6PCT	NAR for vitamin B6, expressed as a percentage.
VITB12PCT	NAR for vitamin B12, expressed as a percentage.
VITCPCT	NAR for vitamin C, expressed as a percentage.
VITEPCT	NAR for vitamin E, expressed as a percentage.
NIAPCT	NAR for niacin, expressed as a percentage.
FOLPCT	NAR for folacin, expressed as a percentage.
CALPCT	NAR for calcium, expressed as a percentage.
PHOSPCT	NAR for phosphorus, expressed as a percentage.
MAGPCT	NAR for magnesium, expressed as a percentage.
IRONPCT	NAR for iron, expressed as a percentage.
ZINCPCT	NAR for zinc, expressed as a percentage.
<u>Explanatory Variables</u>	
ONE	A constant (value equals 1 for all cases).
AGE	Woman's age in years.
AGESQ	Square of woman's age.
AGE19T22	Binary variable indicating whether woman is 19 to 22 years old (1=yes, 0=no). Excluded category is "age 23 to 50."

TABLE III.3 (continued)

Variable	Definition
HHSIZE	Number of persons in woman's household.
SPCINC	Scaled per capita household income last month (= per capita household income/100).
SPCINCSQ	Scaled square of per capita household income last month (= square of per capita household income/100,000).
HEIGHT	Woman's height in inches.
BLACK OTHRACE	Binary variables indicating whether woman is black or some other nonwhite race (1=yes, 0=no). Excluded category is "white."
HISPANIC	Binary variable indicating whether woman is Hispanic (1=yes, 0=no). Excluded category is "other ethnicity."
SOMEHS HSGRAD SOMECOL COLGRAD	Binary variables indicating whether woman has some high school education, is a high school graduate, has some college education, or is a college graduate (1=yes, 0=no). Excluded category is "no high school education."
PREG	Binary variable indicating whether woman is pregnant (1=yes, 0=no). Excluded category is "not pregnant."
LACT	Binary variable indicating whether woman is lactating (1=yes, 0=no). Excluded category is "not lactating."
DIETFLAG	Binary variable indicating whether woman is on a diet (1=yes, 0=no). Excluded category is "not on diet."
WIC	Binary variable indicating whether woman received WIC benefits last month (1=yes, 0=no). Excluded category is "did not receive WIC benefits."
FSPART	Binary variable indicating whether woman's household received food stamps in either the current month or the previous month (1=yes, 0=no). Excluded category is "did not receive food stamps."
WICFS	Binary variable indicating whether woman received WIC benefits <u>and</u> woman's household received food stamps (1=yes, 0=no). This is the interaction of WIC and FSPART. Excluded categories are "received WIC only," "received food stamps only," and "received neither."

TABLE III.3 (continued)

Variable	Definition
LOPOV MEDPOV HIPOV	Binary variables indicating whether woman resides in the low, medium, or high poverty stratum of the low income sample (1=yes, 0=no). Excluded category is "core sample."
SUBCORE NMCORE SUBLOINC NMLOINC	Binary variables indicating whether woman is in the core sample or low-income sample and resides in a suburban area or a nonmetropolitan area (1=yes, 0=no). Excluded categories are "core sample, central city" and "low-income sample, central city."
Lambda-W	The WIC sample selection bias correction term.
Lambda-F	The food stamp sample selection bias correction term.

¹The nutrient adequacy ratio is the daily intake of a nutrient divided by the RDA for that nutrient. We have converted all NARs to percentages.

TABLE III.4

DESCRIPTIVE STATISTICS ON THE VARIABLES IN THE
DIETARY INTAKE EQUATIONS FOR WOMEN
(weighted data, N=381)

Variable	Continuous	Binary	Mean	Std. Dev.
<u>Dependent Variables</u>				
FDENGPCT	x		81.72	38.63
PROPCT	x		134.07	65.60
PROCMEP	x		16.68	5.28
FATCMPEG	x		36.08	9.00
CHOCMEP	x		47.02	11.04
EODTCHOL	x		349.61	269.90
VITAPCT	x		103.00	137.28
LOGAPCT	x		4.13	1.07
VITB1PCT	x		117.89	85.85
VITB2PCT	x		125.36	85.43
VITB6PCT	x		62.79	44.78
VITB12PC	x		150.28	230.14
VITCPCT	x		119.26	119.66
VITEPCT	x		92.65	175.31
NIAPCT	x		126.12	79.76
FOLPCT	x		44.21	38.53
CALPCT	x		85.49	52.13
PHOSPCT	x		125.25	58.55
MAGPCT	x		63.27	28.81
IRONPCT	x		66.09	48.83
ZINCPCT	x		57.22	32.72
<u>Explanatory Variables</u>				
ONE			1.00	0.00
AGE	x		26.79	6.03
AGESQ	x		753.84	361.84
AGE19T22		x	0.29	0.45
HHSIZE	x		4.42	1.68
SPCINC	x		2.37	1.02
SPCINCSQ	x		0.66	0.47
HEIGHT	x		64.16	2.46
BLACK		x	0.15	0.36
OTHRACE		x	0.03	0.16
HISPANIC		x	0.14	0.34
SOMEHS		x	0.20	0.40
HSGRAD		x	0.47	0.50
SOMECOL		x	0.18	0.39
COLGRAD		x	0.09	0.28

TABLE III.4 (continued)

Variable	Continuous	Binary	Mean	Std. Dev.
PREG		x	0.29	0.45
LACT		x	0.14	0.35
DIETFLAG		x	0.07	0.26
WIC		x	0.16	0.37
FSPART		x	0.28	0.45
WICFS		x	0.06	0.25
LOPOV		x	0.06	0.24
MEDPOV		x	0.22	0.42
HIPOV		x	0.25	0.43
SUBCORE		x	0.14	0.35
NMCORE		x	0.11	0.31
SUBLOINC		x	0.16	0.37
NMLOINC		x	0.14	0.34
Lambda-W	x		0.11200	NA
Lambda-F	x		0.00776	NA

SOURCE: Wave 1 of the 1985 CSFII.

TABLE III.5

NAMES AND DEFINITIONS OF THE VARIABLES IN THE WIC AND
FOOD STAMP PARTICIPATION EQUATIONS FOR CHILDREN

Variable	Definition
WIC PARTICIPATION EQUATION	
<u>Dependent Variable</u>	
WIC	Binary variable indicating whether child received WIC benefits last month (1=yes, 0=no). Excluded category is "did not receive WIC benefits."
<u>Explanatory Variables</u>	
ONE	A constant (value equals 1 for all cases).
PLT5	Number of persons less than five years old in the child's household.
NEAST	Binary variable indicating whether child resides in the Northeast region of the U.S. (1=yes, 0=no). Excluded categories are Midwest, "West," and "South."
AGE2 AGE3 AGE4	Binary variables indicating whether child is two, three, or four years old (1=yes, 0=no). Excluded category is "one year old."
MALEHEAD	Binary variable indicating whether a male head of household is present (1=yes, 0=no)
GOODHLTH	Binary variable indicating whether child's health (as reported by mother) is good/very good/excellent (1=yes, 0=no). Excluded categories are "fair" and "poor."
WTHT	Child's weight in pounds, divided by his/her height in inches
OWN NORENT	Binary variables indicating whether child's household owns its dwelling or occupies it with no cash rent (1=yes, 0=no). Excluded category is "rents dwelling."
MOMEMP	Binary variable indicating whether child's mother is currently employed outside the home (1=yes, 0=no). Excluded category is "mother not employed."

TABLE III.5 (continued)

Variable	Definition
SPCINC	Scaled per capita household income last month (= per capita household income/100).
SPCINCSQ	Scaled square of per capita household income last month (= square of per capita household income/100,000).
LOPOV MEDPOV HIPOV	Binary variables indicating whether child resides in the low, medium, or high poverty stratum of the low income sample (1=yes, 0=no). Excluded category is "core sample."
SUBCORE NMCORE SUBLOINC NMLOINC	Binary variables indicating whether child is in the core sample or low-income sample and resides in a suburban area or a nonmetropolitan area (1=yes, 0=no). Excluded categories are "core sample, central city" and "low-income sample, central city."

FOOD STAMP PARTICIPATION EQUATION

Dependent Variable

FSPART	Binary variable indicating whether child's household received food stamps in either the current month or the previous month (1=yes, 0=no). Excluded category is "did not receive food stamps."
--------	--

Explanatory Variables

ONE	A constant (value equals 1 for all cases).
INC	Household income last month/100
INCSQR	Square of household income last month/1,000,000
NONWHITE	Binary variable indicating whether child is nonwhite (1=yes, 0=no). Excluded category is "white."
MALEHEAD	Binary variable indicating whether a male head of household is present (1=yes, 0=no)
GUARAMT	Potential food stamp guarantee amount (food stamp benefit at zero income)

TABLE III.5 (continued)

Variable	Definition
OWN NORENT	Binary variables indicating whether child's household owns its dwelling or occupies it with no cash rent (1=yes, 0=no). Excluded category is "rents dwelling."
MOMEMP	Binary variable indicating whether child's mother is currently employed outside the home (1=yes, 0=no). Excluded category is "mother not employed."
LOPOV MEDPOV HIPOV	Binary variables indicating whether child resides in the low, medium, or high poverty stratum of the low income sample (1=yes, 0=no). Excluded category is "core sample."
SUBCORE NMCORE SUBLOINC NMLOINC	Binary variables indicating whether child is in the core sample or low-income sample and resides in a suburban area or a nonmetropolitan area (1=yes, 0=no). Excluded categories are "core sample, central city" and "low-income sample, central city."

TABLE III.6

DESCRIPTIVE STATISTICS ON THE VARIABLES IN THE
WIC AND FOOD STAMP PARTICIPATION EQUATIONS FOR CHILDREN
(weighted data)

Variable	Continuous	Binary	Mean	Std. Dev.
WIC PARTICIPATION EQUATION (N=818)				
WIC		x	0.23	0.42
ONE			1.00	0.00
PLT5	x		1.70	0.75
NEAST		x	0.24	0.43
AGE2		x	0.22	0.41
AGE3		x	0.27	0.45
AGE4		x	0.26	0.44
MALEHEAD		x	0.78	0.42
GOODHLTH		x	0.97	0.17
WTHT	x		0.92	0.19
OWN		x	0.41	0.49
NORENT		x	0.04	0.19
MOMEMP		x	0.28	0.45
SPCINC	x		2.38	1.07
SPCINCSQ		x	0.68	0.53
LOPOV		x	0.05	0.23
MEDPOV		x	0.26	0.44
HIPOV		x	0.20	0.40
SUBCORE		x	0.26	0.44
NMCORE		x	0.09	0.28
SUBLOINC		x	0.17	0.38
NMLOINC		x	0.15	0.36
FOOD STAMP PARTICIPATION EQUATION (n=726)				
FSPART		x	0.52	0.50
ONE			1.00	0.00
INC	x		7.74	3.98
INCSQR	x		0.76	0.78
NONWHITE		x	0.24	0.43
MALEHEAD		x	0.68	0.47
GUARAMT	x		288.87	85.50
OWN		x	0.25	0.43
NORENT		x	0.03	0.18
MOMEMP		x	0.24	0.43
LOPOV		x	0.08	0.27

TABLE III.6 (continued)

Variable	Continuous	Binary	Mean	Std. Dev.
MEDPOV		x	0.39	0.49
HIPOV		x	0.31	0.46
SUBCORE		x	0.12	0.32
NMCORE		x	0.04	0.28
SUBLOINC		x	0.25	0.43
NMLOINC		x	0.23	0.42

SOURCE: Wave 1 of the 1985 CSFII

TABLE III.7

NAMES AND DEFINITIONS OF THE VARIABLES IN THE
DIETARY INTAKE EQUATIONS FOR CHILDREN

Variable	Definition
<u>Dependent Variables</u>	
FDENGPCT	Nutrient adequacy ratio (NAR) for food energy, expressed as a percentage ¹
PROPCT	NAR for protein, expressed as a percentage.
PROCMPEG	Percent of food energy from protein.
FATCMPEG	Percent of food energy from fat.
CHOCMPEG	Percent of food energy from carbohydrate.
EODTCHOL	Intake of cholesterol in milligrams.
VITAPCT	NAR for vitamin A, expressed as a percentage.
LOGAPCT	Natural log of NAR for vitamin A.
VITB1PCT	NAR for vitamin B1 (thiamin), expressed as a percentage.
VITB2PCT	NAR for vitamin B2 (riboflavin), expressed as a percentage.
VITB6PCT	NAR for vitamin B6, expressed as a percentage.
VITB12PCT	NAR for vitamin B12, expressed as a percentage.
VITCPCT	NAR for vitamin C, expressed as a percentage.
VITEPCT	NAR for vitamin E, expressed as a percentage.
NIAPCT	NAR for niacin, expressed as a percentage.
FOLPCT	NAR for folacin, expressed as a percentage.
CALPCT	NAR for calcium, expressed as a percentage.
PHOSPCT	NAR for phosphorus, expressed as a percentage.
MAGPCT	NAR for magnesium, expressed as a percentage.
IRONPCT	NAR for iron, expressed as a percentage.
ZINCPCT	NAR for zinc, expressed as a percentage.
<u>Explanatory Variables</u>	
ONE	A constant (value equals 1 for all cases).
AGE2	Binary variables indicating whether child is two, three, or four years old (1=yes, 0=no). Excluded category is "one year old."
AGE3	
AGE4	
FEMALE	Binary variable indicating whether the child is female (1=yes, 0=no). Excluded category is "male."
HHSIZE	Number of persons in child's household.

TABLE III.7 (continued)

Variable	Definition
SPCINC	Scaled per capita household income last month (= per capita household income/100).
SPCINC SQ	Scaled square of per capita household income last month (= square of per capita household income/100,000).
HEIGHT	Child's height in inches.
BLACK OTHRACE	Binary variables indicating whether child is black or some other nonwhite race (1=yes, 0=no). Excluded category is "white."
HISPANIC	Binary variable indicating whether child is Hispanic (1=yes, 0=no). Excluded category is "other ethnicity."
MSOMEHS MHSGRAD MSOMECOL MCOLGRAD	Binary variables indicating whether child's mother has some high school education, is a high school graduate, has some college education, or is a college graduate (1=yes, 0=no). Excluded category is "no high school education."
WIC	Binary variable indicating whether child received WIC benefits last month (1=yes, 0=no). Excluded category is "did not receive WIC benefits."
FSPART	Binary variable indicating whether child's household received food stamps in either the current month or the previous month (1=yes, 0=no). Excluded category is "did not receive food stamps."
WICFS	Binary variable indicating whether child received WIC benefits <u>and</u> child's household received food stamps (1=yes, 0=no). This is the interaction of WIC and FSPART. Excluded categories are "received WIC only," "received food stamps only," and "received neither."
LOPOV MEDPOV HIPOV	Binary variables indicating whether child resides in the low, medium, or high poverty stratum of the low income sample (1=yes, 0=no). Excluded category is "core sample."
SUBCORE NMCORE SUBLOINC NMLOINC	Binary variables indicating whether child is in the core sample or low-income sample and resides in a suburban area or a nonmetropolitan area (1=yes, 0=no). Excluded categories are "core sample, central city" and "low-income sample, central city."

TABLE III.7 (continued)

Variable	Definition
Lambda-W	The WIC sample selection bias correction term.
Lambda-F	The food stamp sample selection bias correction term.

¹The nutrient adequacy ratio is the daily intake of a nutrient divided by the RDA for that nutrient. We have converted all NARs to percentages.

TABLE III.8

DESCRIPTIVE STATISTICS ON THE VARIABLES IN THE
DIETARY INTAKE EQUATIONS FOR CHILDREN
(weighted data, N=818)

Variable	Continuous	Binary	Mean	Std. Dev.
<u>Dependent Variables</u>				
FDENGPCT	x		97.51	40.54
PROPCT	x		213.76	88.41
PROCMEG	x		15.59	3.98
FATCMPEG	x		34.05	8.14
CHOCMEG	x		50.36	9.79
EODTCHOL	x		238.96	189.04
VITAPCT	x		180.28	169.38
LOGAPCT	x		4.91	0.81
VITB1PCT	x		155.62	84.95
VITB2PCT	x		199.94	99.09
VITB6PCT	x		121.45	75.00
VITB12PC	x		188.34	172.73
VITCPCT	x		170.54	153.28
VITEPCT	x		111.74	190.26
NIAPCT	x		143.27	79.65
FOLPCT	x		155.57	124.70
CALPCT	x		103.24	51.26
PHOSPCT	x		124.16	49.93
MAGPCT	x		114.44	48.20
IRONPCT	x		79.90	56.47
ZINCPCT	x		72.26	33.91
<u>Explanatory Variables</u>				
ONE			1.00	0.00
AGE2		x	0.22	0.41
AGE3		x	0.27	0.45
AGE4		x	0.26	0.44
FEMALE		x	0.51	0.50
HHSIZE	x		4.69	1.55
SPCINC	x		2.38	1.07
SPCINCSQ	x		0.68	0.52
HEIGHT	x		35.35	6.07
BLACK		x	0.13	0.33
OTHRACE		x	0.03	0.17
HISPANIC		x	0.08	0.27
SOMEHS		x	0.22	0.42
HSGRAD		x	0.46	0.50
SOMECOL		x	0.22	0.41

TABLE III.8 (continued)

Variable	Continuous	Binary	Mean	Std. Dev.
COLGRAD		x	0.06	0.24
WIC		x	0.23	0.42
FSPART		x	0.33	0.47
WICFS		x	0.15	0.36
LOPOV		x	0.05	0.23
MEDPOV		x	0.25	0.44
HIPOV		x	0.20	0.40
SUBCORE		x	0.26	0.44
NMCORE		x	0.09	0.28
SUBLOINC		x	0.17	0.38
NMLOINC		x	0.15	0.36
Lambda-W	x		-0.029305	NA
Lambda-F	x		-0.000002	NA

SOURCE: Wave 1 of the 1985 CSFII.

IV. ESTIMATION RESULTS

This chapter presents findings from our estimation of the bivariate selection model of WIC and food stamp impacts on dietary intake by women and children. It also presents OLS regression estimates of program impacts on dietary intake, as well as estimates generated by a selection bias correction procedure that neglects any correlation between the disturbance terms in the WIC and food stamp participation equations. The alternate estimates provide a frame of reference for evaluating the estimates generated by the bivariate selection model.

The estimation results for women are disappointing because of the small sample size (N=381) and imprecision in the modeling of WIC eligibility. We obtained very few significant estimates of program impacts on women with any of the three estimation procedures. Furthermore, we found that our results are quite sensitive to adjustments in the modeling of WIC eligibility. For these reasons, we have chosen to give more attention to our findings for children than to our findings for women. Accordingly, the first section of this chapter presents our estimation results for children and the second section presents the results for women.

In this chapter we first present qualitative estimates of WIC and food stamp impacts on dietary intake; that is, we indicate whether the estimate of a program's impact is positive and statistically significant, negative and statistically significant, or insignificantly different from zero. After discussing the qualitative results, we present our quantitative estimates of program impacts. Because of the large number of dietary components considered, coefficient estimates for control variables in the dietary intake

equations are not presented. However, all of the estimation results generated by the bivariate selection model are presented in full detail in the appendices to this report.

A. RESULTS FOR CHILDREN

Before turning to the multivariate estimates of program impacts on dietary intake by children ages 1 to 4 years, it is useful to examine the mean values of the dietary intake variables for four different segments of the sample of WIC-eligible children: nonparticipants in both programs, participants in WIC only, participants in food stamps only, and participants in both programs. A comparison of the mean values for program participants to the mean values for nonparticipants provides "first-cut" estimates of the direction and magnitude of a program's impacts on dietary intake. These simple impact estimates do not control for either observable differences between program participants and nonparticipants or for selection bias.

For those nutrients for which recommended dietary allowances (RDA) have been established, our intake measure is the "nutrient adequacy ratio (NAR)." An individual's NAR for a given nutrient is the ratio of his or her daily intake of that nutrient divided by the RDA. We have converted all NARs to percentages. For each of the 16 nutrients in our study for which RDA have been established, a comparison between Columns 1 and 2 in Table IV.1 reveals that WIC participants have a larger mean NAR than nonparticipants in both WIC and food stamps. We have performed no formal statistical tests of those differences, but few appear to be statistically significant. A comparison between Columns 1 and 3 reveals that food stamp participants have a larger NAR than nonparticipants in both programs for 13 of the selected nutrients.

TABLE IV.1
STATISTICS ON DIETARY INTAKE, BY PROGRAM PARTICIPATION STATUS: WIC-ELIGIBLE CHILDREN
(weighted data)

	1. Doesn't Participate in WIC or F.S.		2. Participates in WIC Only		3. Participates in F.S. Only		4. Participates in Both Programs	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Food Energy NAR (%)	94.6	35.0	109.4	70.8	103.7	41.5	95.5	36.7
Protein NAR (%)	208.1	80.3	226.8	121.9	227.1	94.9	213.6	88.9
% Energy from Protein	15.6	3.8	15.0	4.8	15.6	4.3	15.8	3.7
% Energy from Fat	33.8	8.2	32.8	9.6	35.0	7.7	34.7	7.4
% Energy from Carb.	50.6	9.5	52.0	12.9	49.4	9.3	49.5	9.2
Cholesterol (mg)	225.8	178.8	317.0	268.0	246.4	183.5	241.4	176.7
<u>VITAMINS:</u>								
Vitamin A NAR (%)	172.9	113.3	172.8	143.1	163.5	152.3	232.2	313.6
Thiamin NAR (%)	137.1	55.0	167.6	109.1	160.3	75.0	215.8	134.3
Riboflavin NAR (%)	184.0	73.3	208.0	110.6	186.2	88.4	273.5	147.4
Vitamin B6 NAR (%)	112.3	59.8	125.1	87.1	132.0	73.5	143.1	109.7
Vitamin B12 NAR (%)	172.7	96.9	190.2	122.0	189.4	213.8	246.8	308.4
Vitamin C NAR (%)	169.6	152.5	183.2	133.4	149.2	134.0	192.0	181.8
Vitamin E NAR (%)	86.9	53.5	154.1	256.5	124.0	190.6	172.2	379.9
Niacin NAR (%)	130.5	59.6	148.3	93.9	157.7	81.8	173.7	117.7
Folacin NAR (%)	137.7	80.4	180.7	137.5	170.5	138.4	194.9	205.0
<u>MINERALS:</u>								
Calcium NAR (%)	101.2	48.0	106.8	56.6	92.5	47.6	121.5	59.8
Phosphorus NAR (%)	122.6	46.9	128.1	67.2	123.4	51.7	129.2	49.1
Magnesium NAR (%)	111.2	42.5	117.6	62.7	118.5	57.6	120.6	48.3
<u>TRACE ELEMENTS:</u>								
Iron NAR (%)	67.5	36.9	81.2	50.3	82.2	52.7	124.5	92.6
Zinc NAR (%)	70.4	30.1	72.5	35.9	81.6	40.0	68.8	37.7
Unweighted N	355		73		229		161	
Weighted %	59.3%		7.9%		17.5%		15.3%	

SOURCE: Wave 1 of the 1985 CSFII.

NOTE: NAR is the nutrient adequacy ratio = intake/RDA. All NARs have been converted to percentages.

Again, few of the differences appear to be significant.⁷ In summary, the sample mean NAR values are evidence, albeit weak, that WIC and food stamps have positive impacts on the intake of most nutrients, with WIC positively affecting the intake of somewhat more nutrients than food stamps.⁸ The remainder of this section presents econometric estimates of program impacts that are more reliable than differences in sample mean NAR values.

1. Estimates of the Program Participation Equations

As explained in Chapter II, the first step in the estimation of the bivariate selection model of program impacts on dietary intake is to obtain univariate probit estimates of the WIC and food stamp participation equations. We obtained the former using data for WIC-eligible children--the full 818 cases in our analysis file for children--and the latter using data for the 726 food-stamp-eligible children in that file. Because those 726 children were eligible for both WIC and food stamps, they were also the basis for our bivariate probit estimation of the two program participation equations.

Qualitative findings from our probit estimation of the WIC and food stamp participation equations are presented in Table IV.2. Quantitative

⁷We leave it to the reader to search for indications of interaction effects in Table IV.1. An interaction effect would be indicated by a difference between the mean NARs in Columns 4 and 1 that is different from the sum of the differences between Columns 1 and 2 and Columns 1 and 3.

⁸Table IV.1 also provides some evidence that children who participate in WIC only rely more on carbohydrate and less on protein and fat for food energy than do nonparticipants in both food stamps and WIC. WIC participants also appear to have a greater intake of cholesterol than nonparticipants in both programs. The table also suggests that children who participate in food stamps only derive more of their food energy from fat and less from carbohydrate than do nonparticipants in both programs. None of these differences appear to be statistically significant.

TABLE IV.2
 PROBIT ESTIMATES OF WIC AND FOOD STAMP PARTICIPATION: WIC-ELIGIBLE CHILDREN
 (weighted data)

	Univariate Probit	Univariate Probit	Bivariate Probit
<u>WIC PARTICIPATION</u>			
ONE	++		††
PLT5	++		††
NEAST	++		††
AGE2	0		0
AGE3	--		-
AGE4	--		-
MALEHEAD	0	.	0
GOODHLTH	--		-
WHT	--		0
OWN	--		-
NORENT	--		-
MOMEMP	+		0
SPCINC	--		-
SPCINCSQ	++		+
Sample Design Vbls.			
<u>F.S. PARTICIPATION</u>			
ONE		++	+
INC		-	-
INCSOR		++	††
NONWHITE		0	0
MALEHEAD		-	-
GUARAMT		++	††
OWN		-	-
NORENT		-	-
MOMEMP		-	-
Sample Design Vbls.			
Rho	NA	NA	.46(++)
Unweighted N	818	726	726

SOURCE: Wave 1 of the 1985 CSFII.

NOTE 1: See Table III.5 for variable definitions.

NOTE 2: Complete estimation results are provided in Appendix B.

+ (††): Estimate is positive and significant at the .05 (.01) level.

- (--): Estimate is negative and significant at the .05 (.01) level.

0: Estimate is not statistically significant.

findings are presented in Appendix B. Table IV.2 shows little difference between the univariate and the bivariate probit results, despite the fact that the estimated correlation (ρ) between the disturbance terms in the two equations is positive and significant. Because the estimation of models of program participation is not the primary objective of this project, we will not attempt to discuss all of the findings in Table IV.2; rather, we will note several of the more interesting results.

The WIC program is targeted to children who are at "nutritional risk." No simple measure of nutritional risk exists in the CSFII data set, so we were unable to incorporate that concept into our modeling of WIC eligibility. However, we believe that low weight relative to height, and health status (as reported by the child's mother) that is no better than "fair" or "poor" are proxies for nutritional risk. The finding that children with high weight relative to height and who are in good-to-excellent health are significantly less likely to participate in WIC is consistent with this expectation. The negative coefficients on these variables indicate that WIC benefits are more likely to be provided to children who are in greater need of them than to other age and income eligible children.⁹

⁹Mothers may report that their WIC-recipient children are in poor health because they know that nutritional risk is a prerequisite for the receipt of WIC benefits; however, we believe that such reverse causality is much smaller in magnitude than that of causality running from poor health to WIC participation. This belief is based on two factors: (1) the CSFII question on the child's health appears in an entirely different survey instrument (the

The face value of the potential WIC benefit varies little across WIC-eligible children and therefore is not a useful predictor of WIC participation. On the other hand the potential food stamp guarantee amount does vary greatly across food-stamp-eligible households. Specifically, it is a non-linear function of household size. On the belief that the potential guarantee amount is an economic incentive to participate in the food stamp program, we included that variable in the food stamp participation equation.¹⁰ As expected, its coefficient is positive and significant.

2. Estimates of the Dietary Intake Equations

The variables that we used to explain the intake of nutrients and other dietary components are defined in Table III.7, above. Our selection of those variables was influenced by findings from the National WIC Evaluation (Rush et al., 1986). However, we omitted from our analysis several variables which that evaluation found to be weak predictors of dietary intake (e.g., binary variables for occupational categories of the male and female household heads).¹¹ We revised the specifications of other variables (e.g., we used

¹⁰The potential food stamp benefit may be a better measure of the economic incentive to participate in the food stamp program than is the potential guarantee amount; however, the former variable is endogenous. Rather than estimate a structural model of participation in which the predicted value of the potential benefit appears as an explanatory variable (predicted as a function of the guarantee amount and household income), we estimated a reduced-form model in which participation is a function of the guarantee amount and income. The reduced-form estimates tell us less than the structural estimates would about the process by which households decide to receive food stamps; however, the predictive power of the reduced-form estimates is greater than or equal to that of the structural estimates. Since a good predictive model of participation serves our objective of obtaining bias-free estimates of food stamp impacts on nutrient intake, we chose to estimate the reduced-form model of food stamp participation.

¹¹The dietary-intake model that was used in the National WIC Evaluation included 37 explanatory variables. The LIMDEPtm routine for the estimation of bivariate selection models will not accept more than 35 explanatory

separate binary variables for each year of age instead of a continuous age variable and its square). Also, we included in our dietary intake equations some variables that were not included in the equations of the National WIC Evaluation (e.g., a binary interaction variable that indicates participation in both WIC and food stamps).

Briefly summarizing Table III.7, our dietary intake equations include basic demographic measures for the child (age, sex, race, ethnicity), the child's height in inches, per capita household income and its square, the education of the child's mother, WIC and food stamp participation variables, and the interaction of the participation variables. In addition, they include the seven sample design variables and, to correct for selection bias, the WIC and food stamp "lambda" variables. We used the probit estimates of the WIC and food stamp participation equations to construct the latter variables, as described in Chapter II.

Of the 21 measures of dietary intake that we analyzed with our model, 16 are nutrient adequacy ratios that have been converted to percentages. Because the intake of vitamin A is highly skewed to the right (i.e., a small proportion of children has very high intake of vitamin A), we logarithmically transformed that NAR so as to obtain a more nearly normal distribution. We estimated models of the NAR for vitamin A as well as its logarithm. In addition, we analyzed the percent of total food energy supplied by each of the macronutrients: protein, fat, and carbohydrate.¹² Finally, we used the

variables. Thus, our software required that we exclude from our analysis some of the variables that were used in the National WIC Evaluation.

¹²Alcohol (ethanol), a fourth source of food energy, is not a significant component of the diets of young children.

model to analyze the intake of dietary cholesterol, measured in milligrams per day.

We used three different techniques to estimate the dietary intake equations. Our most basic technique was ordinary least-squares (OLS) regression, which neglects the self-selection of eligible children into the WIC and food stamp programs. Our most sophisticated technique was to estimate the dietary intake equations in the context of the bivariate model of program selection that we presented in Chapter II (i.e., to control for selection bias while acknowledging the jointness of the WIC and food stamp participation decisions by children who are eligible for both programs). An intermediate technique was to control for selection bias in estimating the dietary intake equations, but to do so on the assumption that the WIC and food stamp participation decisions are independent for children who are eligible for both programs. We refer to the latter approach as the "ad hoc selection model."¹³

Our estimates of the qualitative impacts of WIC and food stamp participation on dietary intake are presented in Table IV.3. We used the three analytic techniques described in the previous paragraph to produce these estimates. Appendices D and F, respectively, provide complete quantitative estimation results generated by the bivariate selection model and by OLS regression. We believe that the bivariate selection model estimates are the

¹³To estimate the ad hoc selection model, we used univariate probit estimates of the WIC and food stamp participation equations to form lambda variables which we then included in the nutrient intake equation to control for selection bias. The lambda variables may introduce heteroskedasticity into the intake model, so we used a standard procedure to correct for that problem.

TABLE IV.3
ESTIMATES OF PROGRAM IMPACTS ON DIETARY INTAKE: WIC-ELIGIBLE CHILDREN
(weighted data, N = 818)

	Sample Mean	Ordinary Least Squares Regression				Bivariate Selection Model				Ad Hoc Selection Model			
		WIC	FSP	WIC+FSP	R-Sqr	WIC	FSP	WIC+FSP	R-Sqr	WIC	FSP	WIC+FSP	R-Sqr
		Food Energy NAR (%)	97.5%	++	++	--	.21	0	0	--	.21	0	0
Protein NAR (%)	213.8%	0	0	-	.17	0	0	-	.18	0	0	0	.18
% Energy from Protein	15.6%	0	0	0	.12	-	0	0	.14	--	0	0	.14
% Energy from Fat	34.0%	0	0	0	.11	-	0	0	.12	-	0	0	.12
% Energy from Carb.	50.4%	0	0	0	.11	++	0	0	.13	++	0	0	.13
Cholesterol (mg)	239.0	++	0	-	.16	+	0	--	.17	0	0	-	.17
<u>VITAMINS:</u>													
Vitamin A NAR (%)	180.3%	0	0	+	.08	0	0	+	.08	0	0	0	.08
Log[Vitamin A NAR (%)]	4.9	0	0	+	.11	--	0	++	.12	0	0	+	.11
Thiamin NAR (%)	155.6%	++	++	0	.26	++	0	0	.29	++	++	0	.28
Riboflavin NAR (%)	199.9%	+	++	0	.28	++	0	0	.30	+	++	0	.29
Vitamin B6 NAR (%)	121.5%	0	0	0	.15	0	0	0	.16	0	0	0	.16
Vitamin B12 NAR (%)	188.3%	0	0	0	.06	0	0	0	.06	0	0	0	.06
Vitamin C NAR (%)	170.5%	0	0	0	.07	0	0	0	.08	++	--	0	.09
Vitamin E NAR (%)	111.7%	+	0	0	.11	+	0	0	.12	0	-	0	.12
Niacin NAR (%)	143.3%	+	+	0	.16	+	0	0	.16	0	0	0	.16
Folacin NAR (%)	155.6%	++	0	0	.17	+	0	0	.17	++	0	0	.17
<u>MINERALS:</u>													
Calcium NAR (%)	103.2%	0	0	0	.18	0	0	0	.19	0	+	0	.19
Phosphorus NAR (%)	124.2%	0	+	0	.10	0	0	0	.10	0	0	0	.10
Magnesium NAR (%)	114.4%	0	++	0	.19	0	+	0	.19	0	+	0	.19
<u>TRACE ELEMENTS:</u>													
Iron NAR (%)	79.9%	++	++	0	.35	++	0	0	.39	++	++	0	.37
Zinc NAR (%)	72.3%	0	+	-	.12	0	0	-	.12	0	0	-	.12

SOURCE: Wave 1 of the 1985 CSFII.

NOTE 1: NAR is the nutrient adequacy ratio = intake/RDA. All NARs have been converted to percentages.

NOTE 2: Complete estimation results are provided in Appendix D for the bivariate selection model and in Appendix F for the OLS regression model.

+ (++) : Estimate of program impact is positive and significant at the .05 (.01) level.

- (--) : Estimate of program impact is negative and significant at the .05 (.01) level.

0: Estimate of program impact is not statistically significant.

most reliable of the three sets of estimates. We now provide brief discussions of the most notable patterns in the program impact estimates.

Interaction Effects. Regardless of the estimation technique, there are few significant estimates of interaction effects of the WIC and food stamp programs. This means that the impact of participating in both programs is approximately equal to the impact of participating in WIC only plus the impact of participating in food stamps only. There are six exceptions to general pattern of no interaction effects:

- o All three estimation techniques produced significant negative estimates of WIC-food stamp interaction effects on the intake of cholesterol and on the NARs for food energy and zinc.
- o All three estimation techniques produced significant positive estimates of program interaction effects on the log of the NAR for vitamin A. We believe that these results are more reliable than those for the untransformed NAR for vitamin A.
- o Estimates produced by OLS and the bivariate selection model indicate the existence of positive program interaction effects on the NAR for vitamin A. They indicate the existence of negative interaction effects on the NAR for protein.

Sources of Food Energy. The three sets of estimation results are consistent in showing no effects of food stamps and no program interaction effects on the percent of food energy provided by each of the three macronutrients. However, both sets of selection-bias-corrected estimates show that children who receive WIC benefits receive more of their total food energy from carbohydrate and less from protein and fat than nonparticipating WIC-eligible children. We believe that these estimates are more reliable than the OLS estimates, which show no WIC effects on sources of food energy.

Food Stamp Impacts. The most striking pattern in Table IV.3 is the nearly total absence of significant estimates of food stamp impacts on

dietary intake from the bivariate selection model, as compared with OLS estimates of positive food stamp impacts on eight nutrients. It would appear that the positive OLS estimates of food stamp impacts on dietary intake are simply the result of selection bias, and that the best estimates of those effects show that they are zero. However, we believe that this is an incorrect interpretation of these findings.

To permit a more detailed comparison of the OLS and bivariate selection model estimates of food stamp impacts on dietary intake, Table IV.4 shows the quantitative values of those estimates. For six of the eight nutrients with significant OLS estimates of food stamp impacts, the bivariate selection model estimates are larger than the OLS estimates; however, they are insignificantly different from zero because of their very large standard errors. Thus, the bivariate selection model estimates indicate that food stamps have large positive impacts on the intake of these six nutrients, but those estimates are quite imprecise. The bivariate selection model estimates of the food stamp impacts on the other two nutrients (niacin and zinc) are positive but smaller than the OLS estimates.

For every dietary component considered, the standard error of the bivariate selection model estimate is larger than that of the OLS estimate. For many of the dietary components, the size differential in the standard errors is approximately 2 to 1. The large standard errors result in small t-statistics and low levels of statistical significance. We conclude that the bivariate selection model generates estimates that are less precise than those generated by OLS regression, at least in the case of this particular sample. This relative imprecision does not mean that the OLS

TABLE IV.4
COMPARISON OF OLS AND BIVARIATE SELECTION MODEL ESTIMATES OF
FOOD STAMP IMPACTS ON DIETARY INTAKE: WIC-ELIGIBLE CHILDREN
(weighted data, N = 818)

	Ordinary Least Squares Regression		Bivariate Selection Model			
	FSPART		FSPART		LAMBDA-F	
	Coef.	Std. Error	Coef.	Std. Error	Coef.	Std. Error
Food Energy NAR (%)	11.79**	4.31	13.64	7.52	0.04	4.30
Protein NAR (%)	17.86	9.62	12.04	18.41	10.55	10.93
% Energy from Protein	-0.53	0.45	-1.27	1.08	1.10	0.68
% Energy from Fat	-1.48	0.92	-2.01	1.97	1.38	1.21
% Energy from Carb.	2.01	1.10	3.29	2.71	-2.47	1.71
Cholesterol (mg)	-10.82	20.68	-54.70	38.08	30.86	21.96
<u>VITAMINS:</u>						
Vitamin A NAR (%)	-25.28	19.49	-3.33	37.55	2.49	22.16
Log[Vitamin A NAR (%)]	-0.13	0.09	0.18	0.18	-0.13	0.11
Thiamin NAR (%)	36.69**	8.73	38.15	26.59	-21.11	17.33
Riboflavin NAR (%)	28.93**	10.10	43.24	29.39	-29.60	19.08
Vitamin B6 NAR (%)	15.24	8.26	-7.66	15.56	14.50	8.95
Vitamin B12 NAR (%)	5.65	20.08	-3.13	37.23	17.45	21.83
Vitamin C NAR (%)	-8.40	17.67	-60.47	33.83	34.20	19.55
Vitamin E NAR (%)	-6.70	21.47	-61.26	39.65	31.19	22.67
Niacin NAR (%)	21.38*	8.76	6.25	15.93	5.40	9.14
Folacin NAR (%)	16.25	13.64	-10.62	24.67	12.35	14.09
<u>MINERALS:</u>						
Calcium NAR (%)	10.06	5.54	21.12	11.71	-11.81	7.12
Phosphorus NAR (%)	11.06*	5.66	13.58	9.77	-1.02	5.56
Magnesium NAR (%)	17.94**	5.20	20.03*	8.98	-1.45	5.11
<u>TRACE ELEMENTS:</u>						
Iron NAR (%)	25.84**	5.46	32.98	20.22	-20.22	13.43
Zinc NAR (%)	7.56*	3.81	5.55	6.97	3.24	4.06

SOURCE: Wave 1 of the 1985 CSFII.

NOTE 1: NAR is the nutrient adequacy ratio = intake/RDA. All NARs have been converted to percentages.

NOTE 2: Complete estimation results are provided in Appendix D for the bivariate selection model and in Appendix F for the OLS regression model.

* (**): Coefficient estimate is significant at the .05 (.01) level.

estimates are better; they suffer from selection bias, whereas the bivariate selection model estimates do not.

The coefficient on lambda-F, the food stamp selection bias control variable in the bivariate selection model, provides an indication of the importance of selection bias in the estimation of the impact of food stamps on the intake of a nutrient. For a selected nutrient, a positive coefficient on lambda-F indicates that children who participate in the food stamp program have a greater underlying propensity to consume the nutrient (in the absence of the program) than do eligible children who do not participate. The opposite is true for a negative coefficient on lambda-F. OLS regression incorporates these underlying propensities in the food stamp impact estimates. For a number of nutrients, the lambda-F coefficients are large in absolute value, indicating the importance of controlling for selection bias in estimating food stamp impacts on those nutrients.

The evidence presented in Table IV.4 regarding the importance of correcting for selection bias in estimating food stamp impacts on dietary intake and the imprecision of estimates that incorporate such a correction presents us with a quandary. Two potential solutions are on the horizon:

1. A more precise measure of dietary intake would reduce the "noise" in the dependent variables, thus resulting in smaller standard errors for estimates of all of the coefficients in dietary intake models. MPR has just completed the construction of an analysis file that contains four days of intake data for those participants in the 1985 CSFII who responded to at least four waves of the survey. The four-day average intake of a nutrient should be a more precise intake measure than a single day of intake. Unfortunately, a smaller sample size will somewhat offset the potential benefits of the improved intake measures.
2. A larger sample size would also result in smaller standard errors for estimates of coefficients in dietary intake equations. The 1987-88 Nationwide Food Consumption Survey may

not provide more observation on young children than does the 1985 CSFII, but it will provide more observations on all children. For that reason alone, we expect to obtain more precise estimates of food stamp impacts on all children from the NFCS. In addition, the NFCS provides three days of intake data, so an additional improvement in the precision of estimates should be realized for the reason given in item 1, above.

We can briefly summarize the findings from our examination of the qualitative and quantitative estimates of food stamp impacts on the dietary intake of young children:

- o Selection bias is an important factor in the estimation of food stamp impacts on a number of nutrients (e.g., thiamin, riboflavin, vitamin c, vitamin e, and iron).
- o The selection-bias-corrected estimates of food stamp impacts on dietary intake are highly imprecise, that is, they have large standard errors.
- o The large differences between the qualitative estimates of food stamp impacts generated by OLS and by the bivariate selection model are far less striking when one examines the underlying quantitative estimates. Indeed, for every statistically significant OLS estimate of food stamp impacts, the corresponding selection-bias-corrected estimate has the same sign and, in 75 percent of those cases, the corrected estimate is larger in absolute value than the OLS estimate.

WIC Impacts. The qualitative estimates of WIC impacts on dietary intake in Table IV.3 display three patterns that distinguish them from the food stamp impact estimates. First, roughly half of the WIC impact estimates generated by the bivariate selection model are statistically significant. Second, there is a high degree of correspondence in the qualitative WIC impact estimates generated by the three different estimation techniques. Third, and most important, the table provides a broad base of consistent evidence that the WIC program has positive impacts on the intake of a number of different nutrients by young children.

Table IV.5 presents the quantitative estimates of WIC impacts that were generated by OLS regression and the bivariate selection model. The quantitative estimates provide further evidence of a high degree of correspondence in signs of the WIC results generated by the two estimation methodologies. Consider, for example, the five dietary components for which only one of the two estimation procedures generated significant estimates of WIC impacts: the NAR for food energy, the three sources of food energy,¹⁴ and the log of the NAR for vitamin A. In each case the insignificant coefficient has the same sign as the significant coefficient.

Also noteworthy in Table IV.5 are the four significant coefficients on the WIC sample selection control variable, λ -W. The coefficients on this variable are more often negative than is true for the coefficients on the food stamp selection bias control variable. A number of those negative coefficients are large in absolute value, indicating that young children who participate in WIC have an underlying tendency to consume less of those dietary components (in the absence of the program) than WIC-eligible nonparticipants. This is consistent with our earlier finding that an age-and-income-eligible child who is not in good health and/or whose weight is low relative to his or her height is more likely to participate in WIC than another age-and-income-eligible child without those characteristics.

Recapitulation of Our Most Important Findings for Children. With respect to WIC, estimates produced by OLS regression and by the bivariate selection model are quite consistent in showing that participation in the WIC

¹⁴The bivariate selection model estimates show that children who participate in WIC rely significantly more on carbohydrate for food energy and significantly less on protein and fat. Recall that this pattern also is shown, although not so distinctly, in Table IV.1.

TABLE IV.5
COMPARISON OF OLS AND BIVARIATE SELECTION MODEL ESTIMATES OF
WIC IMPACTS ON DIETARY INTAKE: WIC-ELIGIBLE CHILDREN
(weighted data, N = 818)

	Ordinary Least Squares Regression		Bivariate Selection Model			
	WIC		WIC		LAMBDA-W	
	Coef.	Std. Error	Coef.	Std. Error	Coef.	Std. Error
Food Energy NAR (%)	17.13**	5.02	10.33	10.68	4.14	5.79
Protein NAR (%)	20.45	11.21	-5.43	24.89	17.98	14.01
% Energy from Protein	-0.87	0.52	-3.06*	1.31	1.57*	0.80
% Energy from Fat	-1.44	1.07	-5.61*	2.56	2.83	1.53
% Energy from Carb.	2.31	1.29	8.66**	3.32	-4.39*	2.07
Cholesterol (mg)	95.75**	24.12	115.79*	51.27	-5.62	27.66
<u>VITAMINS:</u>						
Vitamin A NAR (%)	-7.39	22.72	-96.61	52.23	54.75	30.55
Log[Vitamin A NAR (%)]	-0.19	0.11	-0.72**	0.25	0.29	0.15
Thiamin NAR (%)	39.90**	10.18	127.97**	32.12	-58.01**	21.87
Riboflavin NAR (%)	27.21*	11.77	106.99**	34.33	-54.77*	22.58
Vitamin B6 NAR (%)	15.84	9.63	33.41	20.65	-7.60	11.27
Vitamin B12 NAR (%)	11.56	23.42	-34.23	51.16	31.54	28.41
Vitamin C NAR (%)	26.01	20.60	60.46	44.19	-13.67	24.08
Vitamin E NAR (%)	58.14*	25.03	114.76*	53.88	-27.78	29.61
Niacin NAR (%)	23.87*	10.22	53.95*	22.41	-17.14	12.58
Folicin NAR (%)	43.25**	15.90	84.43*	34.47	-22.40	19.13
<u>MINERALS:</u>						
Calcium NAR (%)	6.93	6.46	19.69	14.64	-10.27	8.32
Phosphorus NAR (%)	8.99	6.60	4.50	13.91	2.52	7.47
Magnesium NAR (%)	9.80	6.06	8.79	12.77	0.30	6.83
<u>TRACE ELEMENTS:</u>						
Iron NAR (%)	22.78**	6.37	87.64**	22.91	-43.76	16.06
Zinc NAR (%)	4.16	4.44	-3.00	9.61	5.04	5.29

SOURCE: Wave 1 of the 1985 CSFII.

NOTE 1: NAR is the nutrient adequacy ratio = intake/RDA. All NARs have been converted to percentages.

NOTE 2: Complete estimation results are provided in Appendix D for the bivariate selection model and in Appendix F for the OLS regression model.

* (**): Coefficient estimate is significant at the .05 (.01) level.

program results in greater intake by young children of many nutrients for which RDA have been established. Unfortunately, our estimates also show that WIC participation also results in greater intake of cholesterol. Furthermore, the estimates produced by the bivariate selection model indicate that (a) conventional estimates of WIC impacts are understated for many nutrients as a consequence of selection bias, and (b) many of the nutrients for which we have estimated that WIC has a positive impact are those that WIC participants would, in the absence of the program, consume in smaller quantities than age-and-income-eligible nonparticipants.

Our findings with respect to food stamp impacts on the dietary intake of young children are far less clear. Estimates produced by OLS regression show that food stamp reciprocity has positive and significant impacts on the intake of a number of nutrients for which RDA have been established. The bivariate selection model estimates provide very weak confirmation of the OLS findings. The fundamental problem with the selection-bias-adjusted estimates of food stamp impacts is that they are quite imprecise; only one such estimate is significantly different from zero. Data files that will soon be available are likely to permit more reliable estimates of food stamp impacts to be obtained using the bivariate selection model.

B. RESULTS FOR WOMEN

At the beginning of this chapter, we noted that the results of our estimation of program impacts on the dietary intake of women ages 19 to 50 are disappointing because we obtained virtually no statistically significant estimates of WIC and food stamp impacts. We attribute this primarily to the small size (N=381) of our sample of women and to imprecision in the modeling of WIC eligibility. It may also be true that these programs in fact have

little impact on the dietary intake of women; but it would be irresponsible to draw that conclusion on the basis of the results presented here.

We begin our discussion of the findings for women by examining sample mean values of dietary intake disaggregated by the four possible combinations of WIC and food stamp participation status. For 8 of the 21 dietary components included in Table IV.6 for which RDA have been established, the mean NARs for the WIC-eligible women in our sample who were not participating in either WIC or food stamps are less than 100 percent. Although these differences from 100 percent are not statistically significant, they suggest that diet quality may be low for this group of women. Columns 2 and 3 of Table IV.6 show that most of the mean NARs for the women in our sample who were participating in WIC and/or food stamps are higher than the corresponding mean values for nonparticipants in both programs; however, the differences do not appear to be statistically significant. In summary, Table IV.6 provides weak evidence of dietary deficiencies among WIC-eligible women who participate in neither WIC nor food stamps, and equally weak evidence that WIC-eligible women who participate in those programs consume more of the problematic nutrients.

1. Estimates of the Program Participation Equations

As a first step in estimating the bivariate selection model of program impacts on the dietary intake of WIC-eligible women, we obtained univariate probit estimates of the WIC and food stamp participation equations for the women in our sample who were eligible for those programs. We then used bivariate probit to jointly estimate the two participation equations for the women who were eligible for both programs. Table IV.7 provides the qualita-

TABLE IV.6
STATISTICS ON DIETARY INTAKE, BY PROGRAM PARTICIPATION STATUS: WIC-ELIGIBLE WOMEN
(weighted data)

	1. Doesn't Participate in WIC or F.S.		2. Participates in WIC Only		3. Participates in F.S. Only		4. Participates in Both Programs	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Food Energy NAR (%)	83.0	39.1	78.3	34.1	80.0	42.6	80.3	25.2
Protein NAR (%)	126.7	58.0	149.8	59.6	148.6	84.9	132.5	59.3
% Energy from Protein	15.9	4.9	18.7	3.4	18.0	6.7	16.7	4.2
% Energy from Fat	35.9	8.5	33.4	9.1	37.1	10.0	38.5	9.7
% Energy from Carb.	48.1	10.9	47.9	8.5	44.4	11.7	44.1	11.5
Cholesterol (mg)	342.9	245.8	331.1	339.3	377.7	318.6	348.1	193.8
<u>VITAMINS:</u>								
Vitamin A NAR (%)	101.6	84.7	78.4	93.1	117.5	231.4	104.9	173.1
Thiamin NAR (%)	110.6	80.6	130.5	87.9	127.8	85.7	135.7	121.8
Riboflavin NAR (%)	121.9	74.3	117.9	81.2	131.7	100.6	148.2	126.6
Vitamin B6 NAR (%)	57.7	33.8	70.6	46.0	68.1	51.1	82.2	86.9
Vitamin B12 NAR (%)	123.7	77.2	156.6	107.5	202.8	448.2	218.5	231.5
Vitamin C NAR (%)	113.2	101.5	137.5	137.7	128.2	128.8	120.2	198.1
Vitamin E NAR (%)	76.5	78.7	80.5	190.2	117.6	225.0	181.5	429.0
Niacin NAR (%)	116.0	84.6	141.1	78.6	140.8	94.9	151.3	130.0
Folacin NAR (%)	39.6	24.7	47.4	32.8	51.7	50.6	58.4	80.5
<u>MINERALS:</u>								
Calcium NAR (%)	90.8	51.1	74.7	53.8	75.9	53.2	83.3	51.6
Phosphorus NAR (%)	124.5	57.3	128.9	47.5	125.7	66.9	125.3	58.8
Magnesium NAR (%)	61.7	26.7	70.3	29.4	63.2	32.9	67.5	31.8
<u>TRACE ELEMENTS:</u>								
Iron NAR (%)	61.8	36.2	69.2	50.9	69.9	52.7	90.2	102.9
Zinc NAR (%)	53.2	28.9	70.2	35.1	61.3	39.5	61.8	32.7
Unweighted N	168		30		138		45	
Weighted %	62.0%		9.8%		21.7%		6.5%	

SOURCE: Wave 1 of the 1985 CSFII.

NOTE: NAR is the nutrient adequacy ratio = intake/RDA. All NARs have been converted to percentages.

tive results of those analyses.¹⁵ We subsequently used the univariate probit estimates of the WIC participation equation to assign values to the WIC selection-bias control variable in the dietary intake equation for the 41 women in our sample who were eligible for WIC only. We used the bivariate probit estimates to assign values to the WIC and food stamp selection-bias control variables for the remaining 340 women who were eligible for both programs.

There are two notable features of the results presented in Table IV.7: (1) a nearly complete lack of significant bivariate probit coefficients in the WIC participation equation, and (2) the low value of the estimated correlation of the disturbance terms in the two participation equations ($\rho = .17$). These results contrast sharply with those for children (see Table IV.2, above). We believe that both are due to imprecision in the modeling of WIC eligibility.

The CSFII does not identify the mothers of infants who are less than one year old; consequently, it is difficult to determine the WIC categorical eligibility status of a woman in the file who is neither pregnant nor lactating.¹⁶ The WIC eligibility variable that MPR created for FNS' wave-1 CSFII analysis file addresses this problem conservatively. It classifies a woman as being categorically eligible for WIC if she was either: (1) receiving WIC benefits, (2) pregnant, or (3) lactating and living in the same household as an infant. This variable classifies as categorically ineligible

¹⁵Appendix A provides the quantitative estimates of the program participation equations for women.

¹⁶Pregnant women, lactating women who are less than one year post-partum, and non-lactating women who are less than six months post-partum are categorically eligible for WIC.

TABLE IV.7
 PROBIT ESTIMATES OF WIC AND FOOD STAMP PARTICIPATION: WIC-ELIGIBLE WOMEN
 (weighted data)

	Univariate Probit	Univariate Probit	Bivariate Probit
WIC PARTICIPATION			
ONE	0		0
SUBURB	+		0
NONMETRO	+		0
PLT5	--		0
NEAST	0		0
MIDWEST	0		0
HSGRAD	-		0
COLLEGE	0		0
MALEHEAD	-		-
GOODHLTH	0		0
WTHH	0		0
OWN	+		0
NORENT	0		0
EMPLOYED	0		0
SPCINC	0		0
SPCINCSQ	0		0
F.S. PARTICIPATION			
ONE		+	0
INC		--	--
INCSQR		0	0
NONWHITE		0	0
MALEHEAD		--	--
EMPLOYED		0	0
GUARANT		++	++
Rho	NA	NA	.17
Unweighted N	381	340	340

SOURCE: Wave 1 of the 1985 CSFII.

NOTE 1: See Table III.1 for variable definitions.

NOTE 2: Complete estimation results are provided in Appendix A.

+ (++) : Estimate is positive and significant at the .05 (.01) level.

- (--): Estimate is negative and significant at the .05 (.01) level.

0: Estimate is not statistically significant.

for WIC any nonpregnant and nonlactating woman who was not receiving WIC benefits and was living in the same household as an infant.

We rejected the conservative WIC eligibility variable after discovering that 20 of the 75 WIC-participant women in FNS' wave-1 CSFII analysis file were nonpregnant and nonlactating and were living in the same household as an infant. These women would have been classified by this variable as being categorically ineligible for WIC were it not for the fact that they were actually receiving WIC benefits. Unfortunately, our alternatives were limited because FNS' wave-1 analysis file does not contain all of the information that is available in the CSFII wave-1 public use file. We chose to broaden the definition of WIC eligibility to include any woman who was living in the same household as an infant. This solved the problem of the 20 seemingly-ineligible participants, but at the cost of classifying some categorically-ineligible women as being categorically eligible.¹⁷

The broad definition of categorical WIC eligibility, in conjunction with a gross income screen equal to 185 percent of poverty, gave us our sample of 381 WIC-eligible women. With the narrower definition of categorical eligibility, we obtained a sample of 183 WIC-eligible women. It should be noted that only 20 of the additional 198 women in the larger sample were WIC participants. We suspect that many of other 178 women were in fact not eligible for WIC. The misclassification of a relatively large number of WIC-ineligibles as being eligible for WIC would most certainly have adverse effects on estimates of the WIC participation equation. We believe that this is why our bivariate probit analysis obtained only one significant

¹⁷Misclassification may be due either to the infant being more than six months old or due to the fact that some other woman in the household was actually the infant's mother.

coefficient in the WIC participation equation and also why the estimated correlation of the disturbance terms in the WIC and food stamp participation equations is quite low.¹⁸

2. Estimates of the Dietary Intake Equations

For CSFII women satisfying the more inclusive of our two WIC eligibility screens, we used OLS regression, the bivariate selection model, and the "ad hoc selection model" to obtain estimates of WIC and food stamp impacts on dietary intake. The latter two estimation procedures utilized the Table IV.7 probit estimates of program participation to construct the sample selection bias correction terms, λ -W and λ -F. Table IV.8 provides the qualitative estimates of program impacts that we generated using these three estimation techniques.¹⁹ The table clearly shows that we obtained very few statistically significant estimates of program impacts on dietary intake. This outcome is not surprising, given the small analysis sample and the deficiencies in the WIC eligibility variable.

Probably the most important thing that we can say about these results is that they are highly suspect. Certainly, one should not conclude from them that the WIC and food stamp programs have no effects on the dietary intake of women. The underlying quantitative estimates are no less suspect; however, we wish to make several observations regarding them. First, The OLS quantitative estimates of WIC and food stamp impacts on dietary intake are

¹⁸In developing FNS' four-wave 1985 CSFII analysis file, we created a WIC eligibility variable that is much more accurate than either of the eligibility variables that we have described in this chapter.

¹⁹Appendices C and E, respectively, provide the full quantitative estimation results generated by the bivariate selection model and the OLS regression model.

TABLE IV.8
ESTIMATES OF PROGRAM IMPACTS ON DIETARY INTAKE: WIC-ELIGIBLE WOMEN
(weighted data, N = 381)

	Sample Mean	Ordinary Least Squares Regression				Bivariate Selection Model				Ad Hoc Selection Model			
		WIC	FSP	WIC+FSP	R-Sqr	WIC	FSP	WIC+FSP	R-Sqr	WIC	FSP	WIC+FSP	R-Sqr
Food Energy NAR (%)	81.7%	0	0	0	.15	0	0	0	.15	0	0	0	.16
Protein NAR (%)	134.1%	0	0	0	.20	0	0	0	.21	0	0	0	.21
% Energy from Protein	16.7%	0	0	0	.25	0	0	0	.26	0	0	0	.26
% Energy from Fat	36.1%	0	0	0	.11	0	0	0	.11	0	0	0	.11
% Energy from Carb.	47.0%	0	0	0	.14	0	0	0	.14	0	0	0	.15
Cholesterol (mg)	349.6	0	0	0	.21	0	0	0	.22	0	0	0	.22
<u>VTAMINS:</u>													
Vitamin A NAR (%)	103.0%	0	0	0	.10	0	0	0	.11	0	0	0	.11
Log[Vitamin A NAR (%)]	4.1	0	0	0	.14	0	0	0	.14	0	0	0	.14
Thiamin NAR (%)	117.9%	0	0	0	.22	0	0	0	.22	0	0	0	.22
Riboflavin NAR (%)	125.4%	0	0	0	.13	0	0	0	.15	0	0	0	.15
Vitamin B6 NAR (%)	62.8%	+	0	0	.12	0	0	0	.12	0	0	0	.12
Vitamin B12 NAR (%)	150.3%	0	0	0	.10	0	0	0	.11	0	0	0	.11
Vitamin C NAR (%)	119.3%	0	0	0	.13	0	0	0	.13	0	0	0	.13
Vitamin E NAR (%)	92.6%	0	0	0	.08	0	-	0	.10	0	0	0	.10
Niacin NAR (%)	126.1%	0	0	0	.15	0	-	0	.17	0	0	0	.17
Folacin NAR (%)	44.2%	0	0	0	.13	0	0	0	.14	0	0	0	.14
<u>MINERALS:</u>													
Calcium NAR (%)	85.5%	0	0	0	.18	0	0	0	.19	0	-	0	.20
Phosphorus NAR (%)	125.3%	0	0	0	.15	0	0	0	.16	0	0	0	.16
Magnesium NAR (%)	63.3%	0	0	0	.19	0	0	0	.20	0	0	0	.20
<u>TRACE ELEMENTS:</u>													
Iron NAR (%)	66.1%	0	0	0	.11	0	0	0	.12	0	0	0	.12
Zinc NAR (%)	57.2%	0	0	0	.12	0	0	0	.13	+	0	0	.13

SOURCE: Wave 1 of the 1985 CSFII.

NOTE 1: NAR is the nutrient adequacy ratio = intake/RDA. All NARs have been converted to percentages.

NOTE 2: Complete estimation results are provided in Appendix C for the bivariate selection model and in Appendix E for the OLS regression model.

+(++): Estimate of program impact is positive and significant at the .05(.01) level.

-(--): Estimate of program impact is negative and significant at the .05(.01) level.

0: Estimate of program impact is not statistically significant.

positive for most of the nutrients for which RDA have been established, but all but one are statistically insignificant. Second, the bivariate selection model quantitative estimates of food stamp impacts on the intake of those nutrients are all negative and some of the coefficients are quite large in absolute value, but only two are statistically significant. Third, the bivariate selection model quantitative estimates of WIC impacts on the intake of the same set of nutrients are generally positive and smaller in absolute value than the food stamp estimates. Only one of those estimates is statistically significant.

3. Final Observation on the Results for Women

Most of the value in our estimation results for women is in the guidance they provide to future research. The first lesson from these results is that the estimation data base should permit the analyst to model program eligibility with a reasonable degree of accuracy. The second lesson is that the estimation data base should provide more observations on program participants than are available in our CSFII wave-1 extract of WIC-eligible women.²⁰ The remaining lessons are less concrete. One is that additional days of intake data might result in selection-bias adjusted program impact estimates that are not so large in absolute value as some of those that we obtained.²¹

²⁰In our file of 381 WIC-eligible women, there are 30 participants in WIC only, 138 participants in food stamps only, and 45 participants in both programs.

²¹With additional days of intake data, we would compute each individual's average daily intake of nutrients and other dietary components and use those as the dependent variables in our analyses. The individual mean values would be less subject to random daily fluctuations in intake than are measures of single-day dietary intake. The purging of random noise from the dependent variables might result in less extreme estimates from the bivariate selection model.

Another is that, unreliable as our estimates may be, they suggest that it may be important to control for selection bias in estimating WIC and food stamp impacts on the dietary intake of women.

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APPENDIX A

UNIVARIATE AND BIVARIATE PROBIT ESTIMATES OF THE WIC
AND FOOD STAMP PARTICIPATION EQUATIONS FOR WOMEN

MODEL COMMAND: PROBIT ;LHS=WIC ;RHS=WIC1 ;WTS=SCALEDWT ;MATRIX (B=DELTA) \$

Ordinary Least Squares Estimates

Dependent Variable.....	WIC
Number of Observations.....	381.
Mean of Dependent Variable..	.16295
Std. Dev. of Dep. Variable..	.36981
Std. Error of Regression....	.35411
Sum of Squared Residuals....	45.770
R - Squared.....	.11927
Adjusted R - Squared.....	.08307
F-Statistic (15, 365).....	3.29514
Significance of F-Test.....	.00004
Log-Likelihood.....	-136.91
Restricted (Slopes=0) Log-L.	-161.09
Chi-Squared (15).....	48.353
Significance Level.....	.22305E-04

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	.438174	.160051	2.738 (.00619)	1.0000	.00000
SUBURB	.992654E-01	.470445E-01	2.110 (.03486)	.30188	.45968
NONMETRO	.105447	.516139E-01	2.043 (.04105)	.24307	.42950
PLT5	-.613856E-01	.226213E-01	-2.714 (.00666)	1.5091	.87438
NEAST	-.120649E-01	.491962E-01	-.245 (.80627)	.20345	.40309
MIDWEST	.112048	.465766E-01	2.406 (.01614)	.23182	.42255
HSGRAD	-.948033E-01	.477900E-01	-1.984 (.04728)	.46644	.49953
COLLEGE	-.963341E-01	.560090E-01	-1.720 (.08544)	.27239	.44578
MALEHEAD	-.138147	.504997E-01	-2.736 (.00623)	.75240	.43219
GOODHLTH	.102148	.584915E-01	1.746 (.08075)	.87337	.33299
WTHT	-.556649E-01	.364044E-01	-1.529 (.12625)	2.3311	.55570
OWN	.969611E-01	.445068E-01	2.179 (.02936)	.32697	.46972
NORENT	-.151394	.118629	-1.276 (.20189)	.27187E-01	.16284
EMPLOYED	.542496E-01	.450570E-01	1.204 (.22858)	.24472	.43049
SPCINC	-.375622E-01	.934580E-01	-.402 (.68775)	2.3674	1.0150
SPCINC SQ	.197541E-02	.201039	.010 (.99216)	.66321	.46943

Probit Estimates

Log-Likelihood..... -145.26
 Restricted (Slopes=0) Log-L. -188.98
 Chi-Squared (15)..... 87.434
 Significance Level..... .32173E-13

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	.409852E-01	.700322	.059 (.95333)	1.0000	.00000
SUBURB	.456860	.216613	2.109 (.03494)	.30188	.45968
NONMETRO	.492368	.234349	2.101 (.03564)	.24307	.42950
PLT5	-.315903	.109599	-2.882 (.00395)	1.5091	.87438
NEAST	-.462677E-01	.230490	-.201 (.84090)	.20345	.40309
MIDWEST	.392657	.202845	1.936 (.05290)	.23182	.42255
HSGRAD	-.392094	.198638	-1.974 (.04839)	.46644	.49953
COLLEGE	-.486254	.252186	-1.928 (.05384)	.27239	.44578
MALEHEAD	-.552059	.215324	-2.564 (.01035)	.75240	.43219
GOODHLTH	.506702	.293145	1.729 (.08390)	.87337	.33299
WHT	-.233393	.175777	-1.328 (.18425)	2.3311	.55570
OWN	.422003	.211957	1.991 (.04648)	.32697	.46972
NORENT	-.690105	.717306	-.962 (.33601)	.27187E-01	.16284
EMPLOYED	.268688	.202370	1.328 (.18427)	.24472	.43049
SPCINC	-.915326E-01	.400514	-.229 (.81923)	2.3674	1.0150
SPCINC SQ	-.292342	.886232	-.330 (.74150)	.66321	.46943

Frequencies of actual vs. predicted outcomes
 Predicted outcome has the highest probability.

Actual	TOTAL	Predicted	
		0	1
TOTAL	381	365	16
0	306	291	15
1	75	74	1

MODEL COMMAND: PROBIT ;LHS-FSPART ;RHS-FSP1 ;WTS-SCALEDWT ;MATRIX (B-DELTA2) \$

Ordinary Least Squares Estimates

Dependent Variable.....	FSPART
Number of Observations.....	340.
Mean of Dependent Variable..	.48671
Std. Dev. of Dep. Variable..	.50056
Std. Error of Regression....	.43937
Sum of Squared Residuals....	64.285
R - Squared.....	.24317
Adjusted R - Squared.....	.22953
F-Statistic (6, 333).....	17.83214
Significance of F-Test.....	.00000
Log-Likelihood.....	-199.28
Restricted (Slopes=0) Log-L.	-246.63
Chi-Squared (6).....	94.699
Significance Level.....	.32173E-13

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	.784648	.119536	6.564 (.00000)	1.0000	.00000
INC	-.978677E-01	.226016E-01	-4.330 (.00001)	7.0623	3.1453
INCSQR	.240343	.128445	1.871 (.06132)	.59739	.56179
NONWHITE	.105748	.569399E-01	1.857 (.06328)	.30710	.46197
MALEHEAD	-.162048	.549646E-01	-2.948 (.00320)	.66224	.47364
GUARAMT	.118653E-02	.268980E-03	4.411 (.00001)	294.33	105.77
EMPLOYED	-.118996	.604100E-01	-1.970 (.04886)	.20786	.40638

Probit Estimates

Log-Likelihood..... -188.37
 Restricted (Slopes=0) Log-L. -234.67
 Chi-Squared (6)..... 92.616
 Significance Level..... .32173E-13

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	.765202	.389867	1.963 (.04968)	1.0000	.00000
INC	-.292438	.714059E-01	-4.095 (.00004)	7.0623	3.1453
INCSQR	.676394	.403745	1.675 (.09388)	.59739	.56179
NONWHITE	.308719	.177298	1.741 (.08164)	.30710	.46197
MALEHEAD	-.527715	.171884	-3.070 (.00214)	.66224	.47364
GUARAMT	.414371E-02	.967126E-03	4.285 (.00002)	294.33	105.77
EMPLOYED	-.364080	.187320	-1.944 (.05194)	.20786	.40638

Frequencies of actual vs. predicted outcomes
 Predicted outcome has the highest probability.

Actual	TOTAL	Predicted	
		0	1
TOTAL	340	166	174
0	157	120	37
1	183	46	137

MODEL COMMAND: BIVARIATE ;LHS=WIC,FSPART ;RH1=WIC1 ;RH2=FSP1 ;START=DELTA1,
 DELTA2 ;HOLD ;WTS=SCALEDWT \$

FIML ESTIMATES OF BIVARIATE PROBIT MODEL

Log-Likelihood..... -343.32

DESCRIPTIVE STATISTICS FOR REGRESSORS APPEAR
 WITH SINGLE EQUATION ESTIMATES

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	.167099E-01	.667771	.025 (.98004)	.00000	.00000
SUBURB	.212011	.226691	.935 (.34966)	.00000	.00000
NONMETRO	-.177231	.277297	-.639 (.52273)	.00000	.00000
PLT5	-.228041	.123049	-1.853 (.06385)	.00000	.00000
NEAST	-.242895	.217075	-1.119 (.26316)	.00000	.00000
MIDWEST	-.234490	.287407	-.816 (.41457)	.00000	.00000
HSGRAD	-.312057	.212511	-1.468 (.14199)	.00000	.00000
COLLEGE	-.466640E-02	.252888	-.018 (.98528)	.00000	.00000
MALEHEAD	-.477171	.204913	-2.329 (.01988)	.00000	.00000
GOODHLTH	.417327	.261167	1.598 (.11006)	.00000	.00000
WHT	-.165166	.207468	-.796 (.42597)	.00000	.00000
OWN	.580498E-01	.247125	.235 (.81429)	.00000	.00000
NORENT	-.167343	.752529	-.222 (.82402)	.00000	.00000
EMPLOYED	-.435829	.265802	-1.640 (.10107)	.00000	.00000
SPCINC	.737701E-01	.508361	.145 (.88462)	.00000	.00000
SPCINC SQ	-.191157	1.55145	-.123 (.90194)	.00000	.00000
ONE	.703627	.403585	1.743 (.08126)	.00000	.00000
INC	-.287824	.655447E-01	-4.391 (.00001)	.00000	.00000
INCSQR	.659269	.425668	1.549 (.12143)	.00000	.00000
NONWHITE	.326099	.182117	1.791 (.07336)	.00000	.00000
MALEHEAD	-.520737	.187267	-2.781 (.00542)	.00000	.00000
GUARAMT	.422854E-02	.965684E-03	4.379 (.00001)	.00000	.00000
EMPLOYED	-.363174	.189831	-1.913 (.05573)	.00000	.00000
RHO(1,2)	.171159	.118524	1.444 (.14871)		

Joint Frequency Table: Columns=FSPART
 Rows=WIC

(N) - Count of Fitted Values

	0	1	TOTAL
0	133 (165)	138 (171)	271 (336)
1	24 (0)	45 (4)	69 (4)
TOTAL	157 (165)	183 (175)	340 (340)

APPENDIX B

UNIVARIATE AND BIVARIATE PROBIT ESTIMATES OF THE
WIC AND FOOD STAMP PARTICIPATION EQUATIONS FOR CHILDREN

MODEL COMMAND: PROBIT ;LHS=WIC ;RHS=WIC1E ;WTS=SCALEDWT ;MATRIX (B=DELTA1)
\$

Ordinary Least Squares Estimates

Dependent Variable.....	WIC
Number of Observations.....	818.
Mean of Dependent Variable..	.23150
Std. Dev. of Dep. Variable..	.42205
Std. Error of Regression....	.37520
Sum of Squared Residuals....	112.20
R - Squared.....	.22902
Adjusted R - Squared.....	.20968
F-Statistic (20, 797).....	11.83779
Significance of F-Test.....	.00000
Log-Likelihood.....	-348.18
Restricted (Slopes=0) Log-L.	-454.52
Chi-Squared (20).....	212.69
Significance Level.....	.32173E-13

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	.906707	.137121	6.612 (.00000)	1.0000	.00000
PLT5	.659114E-01	.188752E-01	3.492 (.00048)	1.7009	.74860
NEAST	.197222	.321949E-01	6.126 (.00000)	.23665	.42528
AGE2	-.741371E-01	.408409E-01	-1.815 (.06948)	.22025	.41467
AGE3	-.145167	.394561E-01	-3.679 (.00023)	.27373	.44614
AGE4	-.171950	.402461E-01	-4.272 (.00002)	.25720	.43736
MALEHEAD	-.202250E-02	.369031E-01	-.055 (.95629)	.77556	.41747
GOODHLTH	-.262892	.805085E-01	-3.265 (.00109)	.97094	.16807
WTHT	-.224265	.725150E-01	-3.093 (.00198)	.91651	.19445
OWN	-.135741	.321320E-01	-4.224 (.00002)	.41126	.49236
NORENT	-.344564	.764898E-01	-4.505 (.00001)	.35840E-01	.18601
MOMEMP	.532226E-01	.316814E-01	1.680 (.09297)	.28274	.45061
SPCINC	-.293406	.598977E-01	-4.898 (.00000)	2.3836	1.0695
SPCINCSQ	.576652	.123772	4.659 (.00000)	.68239	.52686
LOPOV	.737064E-01	.777463E-01	.948 (.34311)	.54365E-01	.22687
MEDPOV	.785554E-01	.564442E-01	1.392 (.16400)	.25620	.43680
HIPOV	.118673	.567982E-01	2.089 (.03667)	.20483	.40382
SUBCORE	.132927E-01	.453619E-01	.293 (.76949)	.25555	.43644
NMCORE	.178108	.606979E-01	2.934 (.00334)	.87055E-01	.28209
SUBLOINC	.502892E-01	.464349E-01	1.083 (.27881)	.17220	.37778
NMLOINC	.763509E-01	.467188E-01	1.634 (.10220)	.15247	.35970

Probit Estimates

Log-Likelihood..... -341.78
 Restricted (Slopes=0) Log-L. -489.65
 Chi-Squared (20)..... 295.73
 Significance Level..... .32173E-13

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	1.57398	.536918	2.932 (.00337)	1.0000	.00000
PLT5	.235123	.780931E-01	3.011 (.00261)	1.7009	.74860
NEAST	.664630	.124418	5.342 (.00000)	.23665	.42528
AGE2	-.234708	.159307	-1.473 (.14067)	.22025	.41467
AGE3	-.544511	.161062	-3.381 (.00072)	.27373	.44614
AGE4	-.662163	.168928	-3.920 (.00009)	.25720	.43736
MALEHEAD	-.404861E-01	.142683	-.284 (.77660)	.77556	.41747
GOODHLTH	-.822463	.283502	-2.901 (.00372)	.97094	.16807
WHT	-1.00054	.329248	-3.039 (.00237)	.91651	.19445
OWN	-.583086	.135731	-4.296 (.00002)	.41126	.49236
NORENT	-1.81999	.499549	-3.643 (.00027)	.35840E-01	.18601
MOMEMP	.277227	.133076	2.083 (.03723)	.28274	.45061
SPCINC	-1.09812	.233765	-4.698 (.00000)	2.3836	1.0695
SPCINC SQ	2.19209	.487960	4.492 (.00001)	.68239	.52686
LOPOV	.398925	.328083	1.216 (.22401)	.54365E-01	.22687
MEDPOV	.408584	.240075	1.702 (.08877)	.25620	.43680
HIPOV	.573565	.235980	2.431 (.01508)	.20483	.40382
SUBCORE	.465792E-01	.214583	.217 (.82815)	.25555	.43644
NM CORE	.783295	.266903	2.935 (.00334)	.87055E-01	.28209
SUBLOINC	.151083	.177520	.851 (.39473)	.17220	.37778
NMLOINC	.277541	.178081	1.559 (.11911)	.15247	.35970

Frequencies of actual vs. predicted outcomes
 Predicted outcome has the highest probability.

Actual	TOTAL	Predicted	
		0	1
TOTAL	818	680	138
0	584	523	61
1	234	157	77

MODEL COMMAND: PROBIT ;LHS=FSPART ;RHS=FSP1E ;WTS=SCALEDWT ;MATRIX (B=DELTA
2) \$

Ordinary Least Squares Estimates

Dependent Variable..... FSPART
 Number of Observations..... 726.
 Mean of Dependent Variable.. .52545
 Std. Dev. of Dep. Variable.. .49970
 Std. Error of Regression.... .40660
 Sum of Squared Residuals.... 117.38
 R - Squared..... .35158
 Adjusted R - Squared..... .33789
 F-Statistic (15, 710)..... 25.66513
 Significance of F-Test..... .00000
 Log-Likelihood..... -368.72
 Restricted (Slopes=0) Log-L. -525.95
 Chi-Squared (15)..... 314.46
 Significance Level..... .32173E-13

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	.880653	.989175E-01	8.903 (.00000)	1.0000	.00000
INC	-.128526	.151071E-01	-8.508 (.00000)	7.7442	3.9769
INCSQR	.643065	.769421E-01	8.358 (.00000)	.75766	.77532
NONWHITE	.234460E-01	.417767E-01	.561 (.57465)	.23951	.42708
MALEHEAD	-.296733	.396681E-01	-7.480 (.00000)	.68315	.46557
GUARAMT	.930280E-03	.206132E-03	4.513 (.00001)	288.87	85.495
OWN	-.223892	.386608E-01	-5.791 (.00000)	.25155	.43421
NORENT	-.355235	.870322E-01	-4.082 (.00004)	.33169E-01	.17920
MOMEMP	-.133279	.372242E-01	-3.580 (.00034)	.23810	.42622
LOPOV	.712226E-01	.879746E-01	.810 (.41818)	.77841E-01	.26811
MEDPOV	.244492	.708734E-01	3.450 (.00056)	.38916	.48790
HIPOV	.213339	.716681E-01	2.977 (.00291)	.31233	.46376
SUBCORE	.229906	.840810E-01	2.734 (.00625)	.11614	.32062
NMCORE	.416800	.966580E-01	4.312 (.00002)	.43595E-01	.20433
SUBLOINC	-.124486E-01	.443389E-01	-.281 (.77889)	.25350	.43531
NMLOINC	-.121002	.453635E-01	-2.667 (.00764)	.23084	.42166

Probit Estimates

Log-Likelihood..... -350.30
 Restricted (Slopes=0) Log-L. -501.21
 Chi-Squared (15)..... 301.82
 Significance Level..... .32173E-13

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	1.12255	.370230	3.032 (.00243)	1.0000	.00000
INC	-.444065	.570623E-01	-7.782 (.00000)	7.7442	3.9769
INCSQR	2.20605	.298196	7.398 (.00000)	.75766	.77532
NONWHITE	.122853	.147429	.833 (.40467)	.23951	.42708
MALEHEAD	-.963404	.139801	-6.891 (.00000)	.68315	.46557
GUARAMT	.346594E-02	.778178E-03	4.454 (.00001)	288.87	85.495
OWN	-.786561	.141713	-5.550 (.00000)	.25155	.43421
NORENT	-1.40225	.340324	-4.120 (.00004)	.33169E-01	.17920
MOMEMP	-.430749	.133157	-3.235 (.00122)	.23810	.42622
LOPOV	.322595	.332764	.969 (.33233)	.77841E-01	.26811
MEDPOV	.984095	.273779	3.594 (.00033)	.38916	.48790
HIPOV	.832697	.273540	3.044 (.00233)	.31233	.46376
SUBCORE	.872408	.316571	2.756 (.00585)	.11614	.32062
NMPCORE	1.59239	.365909	4.352 (.00001)	.43595E-01	.20433
SUBLOINC	-.117237	.157796	-.743 (.45750)	.25350	.43531
NMLOINC	-.438712	.159877	-2.744 (.00607)	.23084	.42166

Frequencies of actual vs. predicted outcomes
 Predicted outcome has the highest probability.

Actual	TOTAL	Predicted	
		0	1
TOTAL	726	341	385
0	336	252	84
1	390	89	301

MODEL COMMAND: BIVARIATE ;LHS=WIC,FSPART ;RH1=WIC1 ;RH2=FSP1 ;START=DELTA1,
 DELTA2 ;HOLD ;WTS=SCALEDWT \$

FIML ESTIMATES OF BIVARIATE PROBIT MODEL

Log-Likelihood..... -701.72

DESCRIPTIVE STATISTICS FOR REGRESSORS APPEAR
 WITH SINGLE EQUATION ESTIMATES

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	1.54047	.553841	2.781 (.00541)	.00000	.00000
PLT5	.274310	.781005E-01	3.512 (.00044)	.00000	.00000
NEAST	.457511	.123248	3.712 (.00021)	.00000	.00000
AGE2	-.157751	.151210	-1.043 (.29683)	.00000	.00000
AGE3	-.477686	.167634	-2.850 (.00438)	.00000	.00000
AGE4	-.728036	.173246	-4.202 (.00003)	.00000	.00000
MALEHEAD	-.143451	.130127	-1.102 (.27029)	.00000	.00000
GOODHLTH	-.663754	.234485	-2.831 (.00464)	.00000	.00000
WHT	-.570899	.326028	-1.751 (.07993)	.00000	.00000
OWN	-.411940	.148843	-2.768 (.00565)	.00000	.00000
NORENT	-1.27255	.482618	-2.637 (.00837)	.00000	.00000
MOMEMP	.358628E-01	.146964	.244 (.80721)	.00000	.00000
SPCINC	-.938646	.354479	-2.648 (.00810)	.00000	.00000
SPCINCSQ	2.52348	1.06340	2.373 (.01764)	.00000	.00000
LOPOV	-.420741	.328552	-1.281 (.20034)	.00000	.00000
MEDPOV	-.464212	.267824	-1.733 (.08305)	.00000	.00000
HIPOV	-.215320	.256132	-.841 (.40054)	.00000	.00000
SUBCORE	-.575180	.357436	-1.609 (.10758)	.00000	.00000
NMCORE	-.108978	.348729	-.312 (.75466)	.00000	.00000
SUBLOINC	.211211	.151258	1.396 (.16261)	.00000	.00000
NMLOINC	.262868	.154904	1.697 (.08970)	.00000	.00000
ONE	.999232	.396123	2.523 (.01165)	.00000	.00000
INC	-.422154	.466496E-01	-9.049 (.00000)	.00000	.00000
INCSQR	2.07161	.263674	7.857 (.00000)	.00000	.00000
NONWHITE	.947623E-01	.153420	.618 (.53680)	.00000	.00000
MALEHEAD	-.970835	.136029	-7.137 (.00000)	.00000	.00000
GUARAMT	.356951E-02	.758585E-03	4.705 (.00000)	.00000	.00000
OWN	-.812209	.162574	-4.996 (.00000)	.00000	.00000
NORENT	-1.38560	.306327	-4.523 (.00001)	.00000	.00000
MOMEMP	-.445985	.137850	-3.235 (.00122)	.00000	.00000
LOPOV	.323067	.427055	.756 (.44935)	.00000	.00000
MEDPOV	1.00216	.350251	2.861 (.00422)	.00000	.00000
HIPOV	.877678	.347998	2.522 (.01167)	.00000	.00000
SUBCORE	.968965	.390139	2.484 (.01300)	.00000	.00000
NMCORE	1.60327	.417226	3.843 (.00012)	.00000	.00000
SUBLOINC	-.111852	.168149	-.665 (.50592)	.00000	.00000
NMLOINC	-.439549	.165500	-2.656 (.00791)	.00000	.00000
RHO(1,2)	.459421	.702376E-01	6.541 (.00000)		

Joint Frequency Table: Columns=FSPART
 Rows=WIC
 (N) = Count of Fitted Values

	0	1	TOTAL
0	271 (305)	229 (292)	500 (597)
1	65 (32)	161 (97)	226 (129)
TOTAL	336 (337)	390 (389)	726 (726)

APPENDIX C

**BIVARIATE SELECTION MODEL ESTIMATES OF
DIETARY INTAKE EQUATIONS FOR WOMEN**

MODEL COMMAND: SELECT ;LHS=FDENGPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCAL
EDWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELG = 0	FSELIG = 1			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELG = 1	FSELIG = 0			
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0		
WICELG = 1	FSELIG = 1			
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0		

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	FDENGPCT
Number of Observations.....	381.
Mean of Dependent Variable..	81.72322
Std. Dev. of Dep. Variable..	38.63048
Std. Error of Regression....	35.47868
Sum of Squared Residuals....	.44182E+06
R - Squared.....	.15430
Adjusted R - Squared.....	.08443
F-Statistic (29, 351).....	2.20831
Significance of F-Test.....	.00047
Log-Likelihood.....	-1884.8
Restricted (Slopes=0) Log-L.	-1932.3
Chi-Squared (29).....	95.065

Significance Level..... .22122E-09

Estimated disturbance standard deviation = 38.9417

Estimated correlation with selection equation A = -.609514

Estimated correlation with selection equation B = .565827

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-110.127	87.3645	-1.261 (.20747)	.99999	86.352
AGE	14.5060	3.78053	3.837 (.00012)	26.788	3.7461
AGESQ	-.219049	.583790E-01	-3.752 (.00018)	753.83	.57905E-01
AGE19T22	20.9909	7.83734	2.678 (.00740)	.28519	7.8642
HHSIZE	-2.30609	1.59731	-1.444 (.14881)	4.4242	1.5682
SPCINC	-25.7959	18.9454	-1.362 (.17333)	2.3674	17.013
SPCINC SQ	30.2267	33.3672	.906 (.36500)	.66321	29.065
HEIGHT	.315883	.849073	.372 (.70987)	64.159	.86882
BLACK	-10.1596	8.59003	-1.183 (.23692)	.15157	7.8637
OTHRACE	-4.09726	11.9523	-.343 (.73175)	.27698E-01	12.694
HISPANIC	-21.7396	6.40494	-3.394 (.00069)	.13515	6.5248
SOMEHS	12.1711	9.39510	1.295 (.19516)	.19834	9.6074
HSGRAD	13.9386	9.49826	1.467 (.14224)	.46643	9.1807
SOMECOL	13.0955	10.1016	1.296 (.19485)	.18443	10.064
COLGRAD	13.8778	12.4552	1.114 (.26519)	.87956E-01	12.100
PREG	-22.3564	7.33912	-3.046 (.00232)	.28770	6.4027
LACT	-15.9265	8.14106	-1.956 (.05043)	.14267	7.6449
DIETFLAG	-6.27779	8.04335	-.780 (.43510)	.69812E-01	7.8855
WIC	31.3178	26.7948	1.169 (.24248)	.16295	21.487
FSPART	-32.4666	24.8876	-1.305 (.19205)	.28204	23.280
WICFS	-1.60554	12.1235	-.132 (.89464)	.64808E-01	11.762
LOPOV	-4.18988	10.9701	-.382 (.70251)	.59888E-01	10.710
MEDPOV	-5.74506	8.93972	-.643 (.52045)	.22434	8.5565
HIPOV	3.19648	9.07712	.352 (.72473)	.24702	8.6558
SUBCORE	11.8654	8.17889	1.451 (.14685)	.14270	7.7445
NMCORE	-9.67517	9.64602	-1.003 (.31585)	.10703	8.7286
SUBLOINC	3.69593	7.39373	.500 (.61716)	.15918	6.7771
NMLOINC	4.77532	7.91356	.603 (.54622)	.13605	7.2528
Lambda-W	-20.5667	19.3094	-1.065 (.28683)	.11200	14.334
Lambda-F	18.5141	14.9380	1.239 (.21520)	-.77605E-02	13.976

(Elapsed time for model: 0 hours, 2 minutes, 46 seconds.)

MODEL COMMAND: SELECT ;LHS=PROPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *

Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELG = 0	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELG = 1	FSELIG = 1	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.

Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	PROPCT
Number of Observations.....	381.
Mean of Dependent Variable..	134.06518
Std. Dev. of Dep. Variable..	65.59624
Std. Error of Regression....	58.22436
Sum of Squared Residuals....	.11899E+07
R - Squared.....	.21006
Adjusted R - Squared.....	.14480
F-Statistic (29, 351).....	3.21858
Significance of F-Test.....	.00000
Log-Likelihood.....	-2073.5
Restricted (Slopes=0) Log-L.	-2134.0
Chi-Squared (29).....	121.05

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 67.9689
Estimated correlation with selection equation A = -.428708
Estimated correlation with selection equation B = .838515
The column labelled std.dev.of X below is the
uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev. of X
ONE	155.249	138.949	1.117 (.26386)	.99999	141.71
AGE	4.62764	6.10461	.758 (.44842)	26.788	6.1478
AGESQ	-.750923E-01	.937672E-01	-.801 (.42323)	753.83	.95029E-01
AGE19T22	17.4512	12.8001	1.363 (.17277)	.28519	12.906
HHSIZE	-.501254	2.50696	-.200 (.84152)	4.4242	2.5737
SPCINC	-55.8327	30.1866	-1.850 (.06437)	2.3674	27.921
SPCINCSQ	71.5174	53.3852	1.340 (.18036)	.66321	47.699
HEIGHT	.777572E-01	1.34690	.058 (.95396)	64.159	1.4258
BLACK	.491250	15.2804	.032 (.97435)	.15157	12.905
OTHRACE	1.30642	18.9778	.069 (.94512)	.27698E-01	20.833
HISPANIC	-24.4825	10.3950	-2.355 (.01851)	.13515	10.708
SOMEHS	29.2133	14.7385	1.982 (.04747)	.19834	15.767
HSGRAD	28.3441	15.0552	1.883 (.05974)	.46643	15.066
SOMECOL	15.8195	16.0866	.983 (.32541)	.18443	16.516
COLGRAD	19.9385	20.9220	.953 (.34059)	.87956E-01	19.858
PREG	-65.4531	10.7511	-6.088 (.00000)	.28770	10.507
LACT	-34.5682	13.2518	-2.609 (.00909)	.14267	12.546
DIETFLAG	10.5889	13.2233	.801 (.42326)	.69812E-01	12.941
WIC	48.6360	38.0533	1.278 (.20121)	.16295	35.262
FSPART	-77.0291	41.5844	-1.852 (.06397)	.28204	38.205
WICFS	-16.5554	18.6134	-.889 (.37377)	.64808E-01	19.303
LOPOV	16.9448	18.1801	.932 (.35131)	.59888E-01	17.576
MEDPOV	7.66555	15.1159	.507 (.61207)	.22434	14.042
HIPOV	15.2414	15.2231	1.001 (.31673)	.24702	14.205
SUBCORE	24.4804	13.5625	1.805 (.07107)	.14270	12.710
NMCORE	4.33988	15.7115	.276 (.78238)	.10703	14.325
SUBLOINC	1.53574	11.1136	.138 (.89009)	.15918	11.122
NMLOINC	-16.0635	12.3550	-1.300 (.19355)	.13605	11.903
Lambda-W	-19.9690	25.4010	-.786 (.43178)	.11200	23.524
Lambda-F	53.5751	25.1084	2.134 (.03286)	-.77605E-02	22.937

(Elapsed time for model: 0 hours, 2 minutes, 45 seconds.)

MODEL COMMAND: SELECT ;LHS=PROCMEG ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCAL
EDWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *

Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELG = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 1	FSPART miscoded = 0	
WICELG = 1	FSELIG = 1	FSPART miscoded = 0	
WICELG = 1	FSELIG = 1	FSPART miscoded = 0	
	WIC = 0	WIC = 1	
FSPART = 0	0	106	
FSPART = 0	0	0	

Number of incorrectly coded eligibilities:
WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	PROCMEG
Number of Observations.....	381.
Mean of Dependent Variable..	16.67885
Std. Dev. of Dep. Variable..	5.28467
Std. Error of Regression....	4.55044
Sum of Squared Residuals....	7268.0
R - Squared.....	.25661
Adjusted R - Squared.....	.19520
F-Statistic (29, 351).....	4.17808
Significance of F-Test.....	.00000
Log-Likelihood.....	-1102.3
Restricted (Slopes=0) Log-L.	-1174.4
Chi-Squared (29).....	144.19

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 4.89729

Estimated correlation with selection equation A = -.404744E-01

Estimated correlation with selection equation B = .692293

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	65.5941	10.6686	6.148 (.00000)	.99999	11.075
AGE	-2.45453	.464617	-5.283 (.00000)	26.788	.48048
AGESQ	.379681E-01	.712829E-02	5.326 (.00000)	753.83	.74268E-02
AGE19T22	-2.78429	.985244	-2.826 (.00471)	.28519	1.0086
HHSIZE	.385430	.201522	1.913 (.05580)	4.4242	.20114
SPCINC	-2.30174	2.28097	-1.009 (.31292)	2.3674	2.1821
SPCINCSQ	3.69936	3.95575	.935 (.34969)	.66321	3.7278
HEIGHT	-.168115	.105508	-1.593 (.11107)	64.159	.11143
BLACK	2.00912	1.12702	1.783 (.07464)	.15157	1.0086
OTHRACE	1.07428	1.62677	.660 (.50901)	.27698E-01	1.6282
HISPANIC	1.75774	.819888	2.144 (.03204)	.13515	.83687
SOMEHS	1.97815	1.18523	1.669 (.09512)	.19834	1.2322
HSGRAD	1.96754	1.16378	1.691 (.09090)	.46643	1.1775
SOMECOL	-.790997E-01	1.25306	-.063 (.94967)	.18443	1.2908
COLGRAD	-.271014	1.58949	-.171 (.86461)	.87956E-01	1.5520
PREG	1.90309	.864799	2.201 (.02776)	.28770	.82120
LACT	.113256E-01	.993720	.011 (.99091)	.14267	.98053
DIETFLAG	3.04395	.994493	3.061 (.00221)	.69812E-01	1.0114
WIC	1.43102	3.02336	.473 (.63598)	.16295	2.7559
FSPART	-3.97810	3.19449	-1.245 (.21302)	.28204	2.9859
WICFS	-2.00914	1.57475	-1.276 (.20201)	.64808E-01	1.5086
LOPOV	1.95284	1.41665	1.378 (.16805)	.59888E-01	1.3736
MEDPOV	-.245459	1.12365	-.218 (.82708)	.22434	1.0974
HIPOV	-.925221	1.13282	-.817 (.41407)	.24702	1.1102
SUBCORE	-1.39273	1.00251	-1.389 (.16476)	.14270	.99330
NMCORE	.415183	1.14671	.362 (.71730)	.10703	1.1195
SUBLOINC	.916217E-01	.859005	.107 (.91506)	.15918	.86922
NMLOINC	-1.54831	.915770	-1.691 (.09089)	.13605	.93024
Lambda-W	.393606	2.07254	.190 (.84938)	.11200	1.8385
Lambda-F	3.45772	1.95916	1.765 (.07758)	-.77605E-02	1.7926

(Elapsed time for model: 0 hours, 2 minutes, 46 seconds.)

MODEL COMMAND: SELECT ;LHS=FATCMPEG ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCAL
EDWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELG = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELG = 1	FSELIG = 1	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.

Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	FATCMPEG
Number of Observations.....	381.
Mean of Dependent Variable..	36.07599
Std. Dev. of Dep. Variable..	9.00181
Std. Error of Regression....	8.47930
Sum of Squared Residuals....	25236.
R - Squared.....	.11039
Adjusted R - Squared.....	.03688
F-Statistic (29, 351).....	1.50183
Significance of F-Test.....	.04941
Log-Likelihood.....	-1339.4
Restricted (Slopes=0) Log-L.	-1377.3
Chi-Squared (29).....	75.777

Significance Level..... .47216E-05

Estimated disturbance standard deviation = 8.49108
 Estimated correlation with selection equation A = .164243E-01
 Estimated correlation with selection equation B = .105393
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	33.9237	19.8140	1.712 (.08688)	.99999	20.638
AGE	-.167149	.859540	-.194 (.84581)	26.788	.89532
AGESQ	-.453756E-03	.132835E-01	-.034 (.97275)	753.83	.13839E-01
AGE19T22	-3.21393	1.80493	-1.781 (.07497)	.28519	1.8795
HHSIZE	-.974191E-01	.360420	-.270 (.78693)	4.4242	.37480
SPCINC	1.04320	3.91430	.267 (.78985)	2.3674	4.0661
SPCINC SQ	-2.90812	6.68970	-.435 (.66377)	.66321	6.9464
HEIGHT	.126246	.199271	.634 (.52638)	64.159	.20765
BLACK	.788485	1.81162	.435 (.66339)	.15157	1.8794
OTHRACE	-1.28658	2.91773	-.441 (.65925)	.27698E-01	3.0339
HISPANIC	-1.76694	1.49793	-1.180 (.23816)	.13515	1.5594
SOMEHS	.475176	2.20504	.215 (.82938)	.19834	2.2962
HSGRAD	-1.15794	2.10843	-.549 (.58287)	.46643	2.1942
SOMECOL	-.104674	2.30996	-.045 (.96386)	.18443	2.4053
COLGRAD	-1.49934	2.78068	-.539 (.58975)	.87956E-01	2.8919
PREG	.758378E-01	1.47512	.051 (.95900)	.28770	1.5302
LACT	-4.12312	1.75654	-2.347 (.01891)	.14267	1.8271
DIETFLAG	.282942	1.80988	.156 (.87577)	.69812E-01	1.8846
WIC	-2.39858	4.96026	-.484 (.62870)	.16295	5.1353
FSPART	-.701837	5.35890	-.131 (.89580)	.28204	5.5639
WICFS	3.56259	2.70828	1.315 (.18836)	.64808E-01	2.8111
LOPOV	2.43948	2.46243	.991 (.32184)	.59888E-01	2.5596
MEDPOV	2.24092	1.96593	1.140 (.25434)	.22434	2.0450
HIPOV	1.57987	1.98867	.794 (.42694)	.24702	2.0687
SUBCORE	4.50199	1.77874	2.531 (.01137)	.14270	1.8509
NM CORE	-.425693E-01	2.00593	-.021 (.98307)	.10703	2.0861
SUBLOINC	-.418455	1.55714	-.269 (.78814)	.15918	1.6197
NMLOINC	-2.21455	1.66536	-1.330 (.18359)	.13605	1.7334
Lambda-W	.301462	3.31663	.091 (.92758)	.11200	3.4259
Lambda-F	.946501	3.22006	.294 (.76881)	-.77605E-02	3.3403

(Elapsed time for model: 0 hours, 2 minutes, 45 seconds.)

MODEL COMMAND: SELECT ;LHS=CHOCMPEG ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCAL
EDWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *

Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG	= 0	FSELIG	= 0				
WIC	miscoded =	0		FSPART	miscoded =	0	
WICELG	= 0	FSELIG	= 1				
WIC	miscoded =	0		FSPART	miscoded =	0	
WICELG	= 1	FSELIG	= 0				
WIC	miscoded =	0		FSPART	miscoded =	0	
WICELG	= 1	FSELIG	= 1				
WIC	miscoded =	0		FSPART	miscoded =	0	
		WIC	= 0	WIC	= 1		
FSPART	= 0	0		106			
FSPART	= 0	0		0			

Number of incorrectly coded eligibilities:
WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	CHOCMPEG
Number of Observations.....	381.
Mean of Dependent Variable..	47.01879
Std. Dev. of Dep. Variable..	11.03599
Std. Error of Regression....	10.19481
Sum of Squared Residuals....	36481.
R - Squared.....	.14439
Adjusted R - Squared.....	.07370
F-Statistic (29, 351).....	2.04251
Significance of F-Test.....	.00155
Log-Likelihood.....	-1409.6
Restricted (Slopes=0) Log-L.	-1454.9
Chi-Squared (29).....	90.625

Significance Level..... .16843E-08

Estimated disturbance standard deviation = 10.7319
 Estimated correlation with selection equation A = .177972
 Estimated correlation with selection equation B = -.537009
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-5.05348	23.8747	-.212 (.83237)	.99999	24.813
AGE	2.76623	1.04025	2.659 (.00783)	26.788	1.0765
AGESQ	-.397840E-01	.160324E-01	-2.481 (.01308)	753.83	.16639E-01
AGE19T22	6.32490	2.18886	2.890 (.00386)	.28519	2.2598
HHSIZE	-.322642	.435554	-.741 (.45884)	4.4242	.45063
SPCINC	4.05121	4.87183	.832 (.40566)	2.3674	4.8888
SPCINCSQ	-5.26068	8.41565	-.625 (.53190)	.66321	8.3518
HEIGHT	.128502E-01	.237772	.054 (.95690)	64.159	.24966
BLACK	-2.36833	2.35289	-1.007 (.31415)	.15157	2.2596
OTHRACE	.798398	3.48429	.229 (.81876)	.27698E-01	3.6478
HISPANIC	-.184722	1.80843	-.102 (.91864)	.13515	1.8749
SOMEHS	-1.34737	2.62901	-.513 (.60830)	.19834	2.7607
HSGRAD	.195864	2.55839	.077 (.93898)	.46643	2.6381
SOMECOL	1.11076	2.78282	.399 (.68978)	.18443	2.8919
COLGRAD	2.62610	3.44714	.762 (.44617)	.87956E-01	3.4770
PREG	-1.33299	1.80102	-.740 (.45922)	.28770	1.8398
LACT	4.48083	2.16966	2.065 (.03890)	.14267	2.1968
DIETFLAG	-3.74052	2.21205	-1.691 (.09084)	.69812E-01	2.2659
WIC	-1.46761	6.13793	-.239 (.81102)	.16295	6.1743
FSPART	6.71586	6.73227	.998 (.31849)	.28204	6.6895
WICFS	-2.06954	3.27993	-.631 (.52806)	.64808E-01	3.3798
LOPOV	-4.50159	3.03948	-1.481 (.13860)	.59888E-01	3.0775
MEDPOV	-1.95000	2.45064	-.796 (.42620)	.22434	2.4587
HIPOV	-.950233	2.47346	-.384 (.70085)	.24702	2.4873
SUBCORE	-3.38646	2.20469	-1.536 (.12453)	.14270	2.2254
NMCORE	.415489E-01	2.50334	.017 (.98676)	.10703	2.5082
SUBLOINC	.437780	1.88004	.233 (.81587)	.15918	1.9474
NMLOINC	3.27271	2.03310	1.610 (.10746)	.13605	2.0841
Lambda-W	.951443	4.08087	.233 (.81565)	.11200	4.1190
Lambda-F	-5.60030	4.06562	-1.377 (.16836)	-.77605E-02	4.0161

(Elapsed time for model: 0 hours, 2 minutes, 45 seconds.)

MODEL COMMAND: SELECT ;LHS=EODTCHOL ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCAL
EDWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0			
WIC miscoded =	0	FSPART miscoded =		0
WICELG = 0	FSELIG = 1			
WIC miscoded =	0	FSPART miscoded =		0
WICELG = 1	FSELIG = 0			
WIC miscoded =	0	FSPART miscoded =		0
WICELG = 1	FSELIG = 1			
WIC miscoded =	0	FSPART miscoded =		0

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.

Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	EODTCHOL
Number of Observations.....	381.
Mean of Dependent Variable..	349.61295
Std. Dev. of Dep. Variable..	269.89661
Std. Error of Regression....	238.34216
Sum of Squared Residuals....	.19939E+08
R - Squared.....	.21811
Adjusted R - Squared.....	.15350
F-Statistic (29, 351).....	3.37619
Significance of F-Test.....	.00000
Log-Likelihood.....	-2610.5
Restricted (Slopes=0) Log-L.	-2673.0
Chi-Squared (29).....	124.95

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 240.650

Estimated correlation with selection equation A = .415681

Estimated correlation with selection equation B = .348047

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-159.153	579.426	-.275 (.78357)	.99999	580.10
AGE	39.7463	24.7827	1.604 (.10876)	26.788	25.166
AGESQ	-.653396	.380976	-1.715 (.08633)	753.83	.38900
AGE19T22	90.6607	52.2656	1.735 (.08281)	.28519	52.831
HHSIZE	.932044	11.4143	.082 (.93492)	4.4242	10.535
SPCINC	7.08055	128.565	.055 (.95608)	2.3674	114.29
SPCINC SQ	-196.940	222.647	-.885 (.37640)	.66321	195.25
HEIGHT	-.824591	5.70804	-.144 (.88514)	64.159	5.8367
BLACK	24.7797	57.0840	.434 (.66422)	.15157	52.828
OTHRACE	42.7745	91.6419	.467 (.64067)	.27698E-01	85.280
HISPANIC	57.1769	44.1235	1.296 (.19503)	.13515	43.833
SOMEHS	90.9849	65.7572	1.384 (.16647)	.19834	64.542
HSGRAD	50.0940	64.4348	.777 (.43690)	.46643	61.675
SOMECOL	70.5832	68.4093	1.032 (.30218)	.18443	67.610
COLGRAD	-53.7783	83.4419	-.644 (.51925)	.87956E-01	81.288
PREG	116.570	53.6906	2.171 (.02992)	.28770	43.013
LACT	135.095	53.6982	2.516 (.01188)	.14267	51.358
DIETFLAG	-106.530	52.2289	-2.040 (.04138)	.69812E-01	52.974
WIC	-136.816	196.467	-.696 (.48619)	.16295	144.35
FSPART	-116.805	173.058	-.675 (.49971)	.28204	156.39
WICFS	-102.058	93.1950	-1.095 (.27347)	.64808E-01	79.016
LOPOV	-98.2840	76.3554	-1.287 (.19803)	.59888E-01	71.948
MEDPOV	-38.9576	58.0773	-.671 (.50235)	.22434	57.482
HIPOV	-47.5730	59.0694	-.805 (.42060)	.24702	58.149
SUBCORE	233.471	52.6016	4.438 (.00001)	.14270	52.027
NM CORE	-73.1243	61.8608	-1.182 (.23717)	.10703	58.638
SUBLOINC	83.9252	50.5616	1.660 (.09694)	.15918	45.528
NM LOINC	19.1998	51.2560	.375 (.70797)	.13605	48.724
Lambda-W	117.821	145.539	.810 (.41820)	.11200	96.297
Lambda-F	103.923	106.952	.972 (.33121)	-.77605E-02	93.892

(Elapsed time for model: 0 hours, 2 minutes, 45 seconds.)

MODEL COMMAND: SELECT ;LHS=VITAPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCALE
DWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *

Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0			
WIC miscoded =	0	FSPART miscoded =		0
WICELG = 0	FSELIG = 1			
WIC miscoded =	0	FSPART miscoded =		0
WICELG = 1	FSELIG = 0			
WIC miscoded =	0	FSPART miscoded =		0
WICELG = 1	FSELIG = 1			
WIC miscoded =	0	FSPART miscoded =		0

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.

Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITAPCT
Number of Observations.....	381.
Mean of Dependent Variable..	102.99768
Std. Dev. of Dep. Variable..	137.28262
Std. Error of Regression....	129.65014
Sum of Squared Residuals....	.59000E+07
R - Squared.....	.10576
Adjusted R - Squared.....	.03187
F-Statistic (29, 351).....	1.43138
Significance of F-Test.....	.07276
Log-Likelihood.....	-2378.5
Restricted (Slopes=0) Log-L.	-2415.4
Chi-Squared (29).....	73.799

Significance Level..... .90021E-05

Estimated disturbance standard deviation = 133.306

Estimated correlation with selection equation A = .198724

Estimated correlation with selection equation B = .500012

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	175.457	307.857	.570 (.56872)	.99999	315.56
AGE	-.213355	13.2823	-.016 (.98718)	26.788	13.690
AGESQ	.377578E-02	.204082	.019 (.98524)	753.83	.21160
AGE19T22	-5.38178	28.1133	-.191 (.84819)	.28519	28.738
HHSIZE	2.47296	5.93538	.417 (.67694)	4.4242	5.7308
SPCINC	-78.3340	66.2673	-1.182 (.23717)	2.3674	62.172
SPCINCSQ	112.420	114.393	.983 (.32573)	.66321	106.21
HEIGHT	1.74101	3.05278	.570 (.56847)	64.159	3.1749
BLACK	31.9292	30.9514	1.032 (.30226)	.15157	28.737
OTHRACE	9.18572	48.1386	.191 (.84867)	.27698E-01	46.390
HISPANIC	-47.5029	23.6060	-2.012 (.04419)	.13515	23.844
SOMEHS	-97.1358	34.7245	-2.797 (.00515)	.19834	35.109
HSGRAD	-70.1281	33.8107	-2.074 (.03807)	.46643	33.549
SOMECOL	-23.0471	36.2790	-.635 (.52525)	.18443	36.777
COLGRAD	-50.1887	44.8616	-1.119 (.26325)	.87956E-01	44.218
PREG	22.3600	26.5057	.844 (.39890)	.28770	23.397
LACT	-17.8008	28.3765	-.627 (.53046)	.14267	27.937
DIETFLAG	70.3887	28.1474	2.501 (.01239)	.69812E-01	28.816
WIC	-45.0861	94.4754	-.477 (.63320)	.16295	78.520
FSPART	-99.7883	91.1767	-1.094 (.27376)	.28204	85.073
WICFS	-2.25447	47.4258	-.048 (.96209)	.64808E-01	42.982
LOPOV	47.8096	40.5513	1.179 (.23840)	.59888E-01	39.137
MEDPOV	6.11242	31.4084	.195 (.84570)	.22434	31.268
HIPOV	26.1088	31.7981	.821 (.41160)	.24702	31.631
SUBCORE	-4.39059	28.2175	-.156 (.87635)	.14270	28.301
NMCOE	13.5578	32.5597	.416 (.67712)	.10703	31.897
SUBLOINC	-13.2021	25.6704	-.514 (.60705)	.15918	24.766
NMLOINC	-31.0435	26.5970	-1.167 (.24314)	.13605	26.504
Lambda-W	39.0433	67.6427	.577 (.56380)	.11200	52.383
Lambda-F	73.3371	56.1236	1.307 (.19131)	-.77605E-02	51.074

(Elapsed time for model: 0 hours, 2 minutes, 45 seconds.)

MODEL COMMAND: SELECT ;LHS=LOGAPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCALE
DWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELG = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 1	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELG = 1	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.

Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	LOGAPCT
Number of Observations.....	381.
Mean of Dependent Variable..	4.12778
Std. Dev. of Dep. Variable..	1.07140
Std. Error of Regression....	.99096
Sum of Squared Residuals....	344.68
R - Squared.....	.14226
Adjusted R - Squared.....	.07140
F-Statistic (29, 351).....	2.00746
Significance of F-Test.....	.00198
Log-Likelihood.....	-521.53
Restricted (Slopes=0) Log-L.	-566.37
Chi-Squared (29).....	89.680

Significance Level..... .25762E-08

Estimated disturbance standard deviation = 1.00101
 Estimated correlation with selection equation A = .352730
 Estimated correlation with selection equation B = -.128713
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	.137132	2.35957	.058 (.95366)	.99999	2.4119
AGE	.975271E-01	.101927	.957 (.33865)	26.788	.10463
AGESQ	-.181610E-02	.157509E-02	-1.153 (.24891)	753.83	.16174E-02
AGE19T22	.681235E-01	.213285	.319 (.74942)	.28519	.21966
HHSIZE	.228912E-01	.434902E-01	.526 (.59864)	4.4242	.43803E-01
SPCINC	.123442	.482753	.256 (.79818)	2.3674	.47520
SPCINC SQ	-.198752	.831820	-.239 (.81116)	.66321	.81181
HEIGHT	.455709E-01	.235208E-01	1.937 (.05269)	64.159	.24267E-01
BLACK	-.761747E-01	.217143	-.351 (.72574)	.15157	.21964
OTHRACE	.272449E-01	.346027	.079 (.93724)	.27698E-01	.35457
HISPANIC	-.235914	.177018	-1.333 (.18263)	.13515	.18225
SOMEHS	-.754782	.261924	-2.882 (.00396)	.19834	.26835
HSGRAD	-.497480	.253709	-1.961 (.04990)	.46643	.25643
SOMECOL	-.512706E-01	.275020	-.186 (.85211)	.18443	.28110
COLGRAD	-.334390E-01	.330691	-.101 (.91946)	.87956E-01	.33797
PREG	.185498	.188165	.986 (.32422)	.28770	.17883
LACT	-.348550E-01	.211833	-.165 (.86931)	.14267	.21353
DIETFLAG	.423335	.214545	1.973 (.04847)	.69812E-01	.22025
WIC	-.780778	.658445	-1.186 (.23571)	.16295	.60016
FSPART	.189123	.648850	.291 (.77069)	.28204	.65024
WICFS	.131121	.332443	.394 (.69327)	.64808E-01	.32853
LOPOV	.289286	.294405	.983 (.32580)	.59888E-01	.29914
MEDPOV	-.285066	.233777	-1.219 (.22270)	.22434	.23899
HIPOV	-.158423	.237122	-.668 (.50407)	.24702	.24177
SUBCORE	.230136E-01	.212660	.108 (.91382)	.14270	.21631
NM CORE	-.104524	.244089	-.428 (.66849)	.10703	.24380
SUBLOINC	.131202	.192422	.682 (.49533)	.15918	.18929
NMLOINC	.362733E-02	.203325	.018 (.98577)	.13605	.20258
Lambda-W	.341024	.463067	.736 (.46146)	.11200	.40038
Lambda-F	-.704734E-01	.391063	-.180 (.85699)	-.77605E-02	.39038

(Elapsed time for model: 0 hours, 2 minutes, 46 seconds.)

MODEL COMMAND: SELECT ;LHS=VITB1PCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCAL
EDWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELG = 0	FSELIG = 1			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELG = 1	FSELIG = 0			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELG = 1	FSELIG = 1			
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0		

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITB1PCT
Number of Observations.....	381.
Mean of Dependent Variable..	117.88778
Std. Dev. of Dep. Variable..	85.84678
Std. Error of Regression....	75.73517
Sum of Squared Residuals....	.20133E+07
R - Squared.....	.21965
Adjusted R - Squared.....	.15518
F-Statistic (29, 351).....	3.40687
Significance of F-Test.....	.00000
Log-Likelihood.....	-2173.7
Restricted (Slopes=0) Log-L.	-2236.5
Chi-Squared (29).....	125.71

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 77.3148
 Estimated correlation with selection equation A = -.384655
 Estimated correlation with selection equation B = .238471
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-403.969	180.684	-2.236 (.02537)	.99999	184.33
AGE	24.0616	7.81271	3.080 (.00207)	26.788	7.9968
AGESQ	-.356655	.120742	-2.954 (.00314)	753.83	.12361
AGE19T22	11.1269	16.3282	.681 (.49558)	.28519	16.787
HHSIZE	2.04891	3.31404	.618 (.53641)	4.4242	3.3477
SPCINC	-8.39090	37.0439	-.227 (.82080)	2.3674	36.318
SPCINCSQ	16.3140	63.9888	.255 (.79876)	.66321	62.044
HEIGHT	1.45382	1.79729	.809 (.41858)	64.159	1.8546
BLACK	2.65679	16.7317	.159 (.87384)	.15157	16.786
OTHRACE	-3.27514	26.1930	-.125 (.90049)	.27698E-01	27.098
HISPANIC	-15.7637	13.5155	-1.166 (.24348)	.13515	13.928
SOMEHS	59.2852	19.9612	2.970 (.00298)	.19834	20.509
HSGRAD	54.9774	19.4145	2.832 (.00463)	.46643	19.598
SOMECOL	37.0061	21.0274	1.760 (.07842)	.18443	21.484
COLGRAD	9.99279	25.3589	.394 (.69354)	.87956E-01	25.830
PREG	-59.5218	14.3404	-4.151 (.00003)	.28770	13.668
LACT	-14.8232	16.2683	-.911 (.36220)	.14267	16.319
DIETFLAG	37.7872	16.4686	2.294 (.02176)	.69812E-01	16.833
WIC	50.3164	50.2497	1.001 (.31667)	.16295	45.868
FSPART	-11.0145	49.6942	-.222 (.82459)	.28204	49.695
WICFS	6.27995	25.1953	.249 (.80317)	.64808E-01	25.108
LOPOV	-3.62008	22.5074	-.161 (.87222)	.59888E-01	22.862
MEDPOV	5.68461	17.9763	.316 (.75183)	.22434	18.265
HIPOV	16.2669	18.2301	.892 (.37223)	.24702	18.477
SUBCORE	35.5294	16.3610	2.172 (.02989)	.14270	16.532
NMCORE	68.2398	18.8090	3.628 (.00029)	.10703	18.633
SUBLOINC	21.7262	14.7255	1.475 (.14010)	.15918	14.467
NMLOINC	-1.77940	15.6310	-.114 (.90937)	.13605	15.482
Lambda-W	-27.3861	35.2566	-.777 (.43730)	.11200	30.599
Lambda-F	13.7499	29.8915	.460 (.64552)	-.77605E-02	29.835

(Elapsed time for model: 0 hours, 2 minutes, 45 seconds.)

MODEL COMMAND: SELECT ;LHS=VITB2PCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCAL
EDWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELG = 0	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELG = 1	FSELIG = 1	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITB2PCT
Number of Observations.....	381.
Mean of Dependent Variable..	125.35579
Std. Dev. of Dep. Variable..	85.42971
Std. Error of Regression....	78.88377
Sum of Squared Residuals....	.21841E+07
R - Squared.....	.14513
Adjusted R - Squared.....	.07450
F-Statistic (29, 351).....	2.05482
Significance of F-Test.....	.00142
Log-Likelihood.....	-2189.2
Restricted (Slopes=0) Log-L.	-2234.7
Chi-Squared (29).....	90.957

Significance Level..... .14502E-08

Estimated disturbance standard deviation = 89.1431

Estimated correlation with selection equation A = -.237875

Estimated correlation with selection equation B = .810178

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev. of X
ONE	-125.377	185.200	-.677 (.49842)	.99999	192.00
AGE	10.0102	8.12235	1.232 (.21779)	26.788	8.3292
AGESQ	-.162691	.124547	-1.306 (.19147)	753.83	.12875
AGE19T22	1.06814	17.1765	.062 (.95041)	.28519	17.485
HHSIZE	2.21164	3.42047	.647 (.51790)	4.4242	3.4868
SPCINC	-40.2708	39.8760	-1.010 (.31254)	2.3674	37.828
SPCINCSQ	35.9515	69.8263	.515 (.60664)	.66321	64.623
HEIGHT	2.13691	1.81493	1.177 (.23903)	64.159	1.9317
BLACK	8.39745	20.3446	.413 (.67978)	.15157	17.484
OTHRACE	6.46529	26.9760	.240 (.81059)	.27698E-01	28.225
HISPANIC	-21.5987	14.1247	-1.529 (.12623)	.13515	14.507
SOMEHS	41.2256	20.1164	2.049 (.04043)	.19834	21.361
HSGRAD	35.9609	20.1257	1.787 (.07397)	.46643	20.412
SOMECOL	33.5663	21.6214	1.552 (.12055)	.18443	22.377
COLGRAD	51.0379	28.0192	1.822 (.06853)	.87956E-01	26.904
PREG	-14.3810	14.4433	-.996 (.31940)	.28770	14.236
LACT	-1.55528	17.5134	-.089 (.92924)	.14267	16.998
DIETFLAG	70.7549	17.5417	4.034 (.00005)	.69812E-01	17.533
WIC	16.7422	50.3249	.333 (.73937)	.16295	47.774
FSPART	-98.7752	55.9630	-1.765 (.07756)	.28204	51.761
WICFS	18.0561	26.0660	.693 (.48849)	.64808E-01	26.152
LOPOV	35.2412	24.6269	1.431 (.15243)	.59888E-01	23.813
MEDPOV	17.1015	20.0325	.854 (.39328)	.22434	19.025
HIPOV	22.9475	20.1545	1.139 (.25488)	.24702	19.246
SUBCORE	25.9200	17.8531	1.452 (.14654)	.14270	17.219
NMCORE	37.3783	20.4655	1.826 (.06779)	.10703	19.407
SUBLOINC	12.3591	14.6780	.842 (.39978)	.15918	15.068
NMLOINC	-7.19270	16.0800	-.447 (.65465)	.13605	16.126
Lambda-W	-9.11041	33.3960	-.273 (.78501)	.11200	31.871
Lambda-F	70.6624	34.1182	2.071 (.03835)	-.77605E-02	31.075

(Elapsed time for model: 0 hours, 2 minutes, 46 seconds.)

MODEL COMMAND: SELECT ;LHS=VITB6PCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCAL
EDWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *

Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 0	FSELIG = 1		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.

Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITB6PCT
Number of Observations.....	381.
Mean of Dependent Variable..	62.79117
Std. Dev. of Dep. Variable..	44.78147
Std. Error of Regression....	41.92605
Sum of Squared Residuals....	.61699E+06
R - Squared.....	.12115
Adjusted R - Squared.....	.04854
F-Statistic (29, 351).....	1.66853
Significance of F-Test.....	.01846
Log-Likelihood.....	-1948.4
Restricted (Slopes=0) Log-L.	-1988.6
Chi-Squared (29).....	80.417

Significance Level..... .10056E-05

Estimated disturbance standard deviation = 44.3467
 Estimated correlation with selection equation A = -.131863
 Estimated correlation with selection equation B = .578677
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	3.79882	98.0967	.039 (.96911)	.99999	102.04
AGE	4.58600	4.27484	1.073 (.28337)	26.788	4.4269
AGESQ	-.589854E-01	.658135E-01	-.896 (.37012)	753.83	.68428E-01
AGE19T22	.814210	9.01362	.090 (.92802)	.28519	9.2933
HHSIZE	-.761166	1.80344	-.422 (.67298)	4.4242	1.8532
SPCINC	-30.9960	20.2074	-1.534 (.12506)	2.3674	20.105
SPCINCSQ	43.1945	34.9264	1.237 (.21619)	.66321	34.347
HEIGHT	.293038	.975884	.300 (.76396)	64.159	1.0267
BLACK	4.40742	9.83493	.448 (.65405)	.15157	9.2928
OTHRACE	2.06694	14.4755	.143 (.88646)	.27698E-01	15.001
HISPANIC	-10.6483	7.46001	-1.427 (.15347)	.13515	7.7106
SOMEHS	11.1269	10.8267	1.028 (.30408)	.19834	11.353
HSGRAD	13.2323	10.5505	1.254 (.20978)	.46643	10.849
SOMECOL	19.9315	11.4552	1.740 (.08187)	.18443	11.893
COLGRAD	-1.33576	14.2740	-.094 (.92544)	.87956E-01	14.299
PREG	-10.5155	7.50239	-1.402 (.16103)	.28770	7.5662
LACT	13.2275	8.96163	1.476 (.13994)	.14267	9.0342
DIETFLAG	7.44061	9.10478	.817 (.41380)	.69812E-01	9.3185
WIC	24.3368	25.6797	.948 (.34328)	.16295	25.392
FSPART	-30.3009	28.0533	-1.080 (.28009)	.28204	27.511
WICFS	-6.52174	13.6967	-.476 (.63396)	.64808E-01	13.899
LOPOV	1.81308	12.6161	.144 (.88573)	.59888E-01	12.656
MEDPOV	1.77659	10.1336	.175 (.86083)	.22434	10.111
HIPOV	7.14734	10.2234	.699 (.48448)	.24702	10.229
SUBCORE	15.1490	9.09497	1.666 (.09578)	.14270	9.1519
NMCOE	7.87606	10.3349	.762 (.44601)	.10703	10.315
SUBLOINC	1.26465	7.74798	.163 (.87034)	.15918	8.0086
NMLOINC	-7.66274	8.35661	-.917 (.35916)	.13605	8.5708
Lambda-W	-1.49926	17.1566	-.087 (.93036)	.11200	16.939
Lambda-F	25.4058	17.0079	1.494 (.13524)	-.77605E-02	16.516

(Elapsed time for model: 0 hours, 2 minutes, 45 seconds.)

MODEL COMMAND: SELECT ;LHS=VITB12PC ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCAL
EDWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELG = 0	FSELIG = 1			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELG = 1	FSELIG = 0			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELG = 1	FSELIG = 1			
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0		

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITB12PC
Number of Observations.....	381.
Mean of Dependent Variable..	150.27605
Std. Dev. of Dep. Variable..	230.13612
Std. Error of Regression....	216.75774
Sum of Squared Residuals....	.16491E+08
R - Squared.....	.11055
Adjusted R - Squared.....	.03706
F-Statistic (29, 351).....	1.50436
Significance of F-Test.....	.04871
Log-Likelihood.....	-2574.3
Restricted (Slopes=0) Log-L.	-2612.2
Chi-Squared (29).....	75.848

Significance Level..... .46131E-05

Estimated disturbance standard deviation = 251.611

Estimated correlation with selection equation A = -.392875

Estimated correlation with selection equation B = .835929

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	1026.54	515.008	1.993 (.04623)	.99999	527.57
AGE	-23.9803	22.6290	-1.060 (.28927)	26.788	22.887
AGESQ	.411274	.347453	1.184 (.23654)	753.83	.35377
AGE19T22	7.01157	47.5369	.147 (.88274)	.28519	48.046
HHSIZE	-1.88410	9.32358	-.202 (.83985)	4.4242	9.5812
SPCINC	-158.860	111.536	-1.424 (.15436)	2.3674	103.94
SPCINCSQ	146.429	196.870	.744 (.45701)	.66321	177.57
HEIGHT	-3.92644	5.00437	-.785 (.43269)	64.159	5.3081
BLACK	52.9297	56.6938	.934 (.35051)	.15157	48.044
OTHRACE	75.1393	71.2195	1.055 (.29141)	.27698E-01	77.557
HISPANIC	-54.6571	38.6910	-1.413 (.15776)	.13515	39.864
SOMEHS	29.9769	54.8630	.546 (.58479)	.19834	58.697
HSGRAD	56.1556	55.7990	1.006 (.31423)	.46643	56.089
SOMECOL	80.2069	59.7165	1.343 (.17923)	.18443	61.487
COLGRAD	49.7964	77.6757	.641 (.52147)	.87956E-01	73.926
PREG	8.99930	39.7135	.227 (.82073)	.28770	39.117
LACT	4.31872	49.0306	.088 (.92981)	.14267	46.707
DIETFLAG	172.862	49.0034	3.528 (.00042)	.69812E-01	48.177
WIC	165.859	139.845	1.186 (.23562)	.16295	131.28
FSPART	-269.262	154.395	-1.744 (.08116)	.28204	142.23
WICFS	-38.7618	69.4803	-.558 (.57692)	.64808E-01	71.860
LOPOV	-2.55755	67.6086	-.038 (.96982)	.59888E-01	65.433
MEDPOV	-27.8606	56.0190	-.497 (.61895)	.22434	52.276
HIPOV	16.1885	56.3937	.287 (.77407)	.24702	52.883
SUBCORE	-1.77562	50.1777	-.035 (.97177)	.14270	47.315
NMCORE	-38.4655	57.9644	-.664 (.50694)	.10703	53.327
SUBLOINC	-2.61567	41.0103	-.064 (.94914)	.15918	41.405
NMLOINC	-62.9970	45.5345	-1.383 (.16651)	.13605	44.311
Lambda-W	-64.7490	92.8335	-.697 (.48551)	.11200	87.577
Lambda-F	199.247	93.3842	2.134 (.03287)	-.77605E-02	85.389

(Elapsed time for model: 0 hours, 2 minutes, 46 seconds.)

MODEL COMMAND: SELECT ;LHS=VITCPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCALE
DWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0				
WIC miscoded = 0		FSPART miscoded = 0			
WICELG = 0	FSELIG = 1				
WIC miscoded = 0		FSPART miscoded = 0			
WICELG = 1	FSELIG = 0				
WIC miscoded = 0		FSPART miscoded = 0			
WICELG = 1	FSELIG = 1				
WIC miscoded = 0		FSPART miscoded = 0			
	WIC = 0	WIC = 1			
FSPART = 0	0	106			
FSPART = 0	0	0			

Number of incorrectly coded eligibilities:
WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITCPCT
Number of Observations.....	381.
Mean of Dependent Variable..	119.25790
Std. Dev. of Dep. Variable..	119.66018
Std. Error of Regression....	111.28461
Sum of Squared Residuals....	.43469E+07
R - Squared.....	.13281
Adjusted R - Squared.....	.06117
F-Statistic (29, 351)....	1.85370
Significance of F-Test.....	.00563
Log-Likelihood.....	-2320.3
Restricted (Slopes=0) Log-L.	-2363.1
Chi-Squared (29).....	85.506

Significance Level..... .16300E-07

Estimated disturbance standard deviation = 113.178

Estimated correlation with selection equation A = .194253

Estimated correlation with selection equation B = .401108

The column labelled std.dev.of X below is the

uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-152.511	263.484	-.579 (.56271)	.99999	270.86
AGE	31.3172	11.3763	2.753 (.00591)	26.788	11.750
AGESQ	-.439179	.175121	-2.508 (.01215)	753.83	.18163
AGE19T22	72.7085	24.0137	3.028 (.00246)	.28519	24.667
HHSIZE	-12.9395	5.00624	-2.585 (.00975)	4.4242	4.9190
SPCINC	-61.1914	55.4861	-1.103 (.27010)	2.3674	53.365
SPCINCSQ	98.3298	95.5371	1.029 (.30337)	.66321	91.166
HEIGHT	-2.29271	2.62311	-.874 (.38210)	64.159	2.7252
BLACK	42.0913	25.7027	1.638 (.10150)	.15157	24.666
OTHRACE	2.00670	40.5584	.049 (.96054)	.27698E-01	39.818
HISPANIC	-4.34880	20.1069	-.216 (.82877)	.13515	20.466
SOMEHS	3.73490	29.6280	.126 (.89968)	.19834	30.135
HSGRAD	-10.4682	28.7006	-.365 (.71531)	.46643	28.797
SOMECOL	3.39675	30.9575	.110 (.91263)	.18443	31.568
COLGRAD	65.0316	37.9110	1.715 (.08628)	.87956E-01	37.954
PREG	8.05318	21.9772	.366 (.71404)	.28770	20.083
LACT	9.06417	24.0100	.378 (.70579)	.14267	23.980
DIETFLAG	19.5838	24.0439	.815 (.41536)	.69812E-01	24.734
WIC	-31.2152	77.5202	-.403 (.68719)	.16295	67.397
FSPART	-68.2210	76.0683	-.897 (.36980)	.28204	73.022
WICFS	-14.7452	39.4522	-.374 (.70859)	.64808E-01	36.893
LOPOV	2.67097	34.1169	.078 (.93760)	.59888E-01	33.593
MEDPOV	39.5318	26.5972	1.486 (.13720)	.22434	26.839
HIPOV	47.7807	26.9334	1.774 (.07606)	.24702	27.150
SUBCORE	27.9435	23.9641	1.166 (.24359)	.14270	24.292
NMCORE	66.8110	27.5144	2.428 (.01517)	.10703	27.379
SUBLOINC	12.6326	21.6951	.582 (.56038)	.15918	21.257
NMLOINC	17.6272	22.6217	.779 (.43585)	.13605	22.750
Lambda-W	30.6531	54.9764	.558 (.57714)	.11200	44.962
Lambda-F	50.6430	46.5507	1.088 (.27663)	-.77605E-02	43.839

(Elapsed time for model: 0 hours, 2 minutes, 45 seconds.)

MODEL COMMAND: SELECT ;LHS=VITEPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCALE
DWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 0	FSELIG = 1		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
	WIC = 0	WIC = 1	
FSPART = 0	0	106	
FSPART = 0	0	0	

Number of incorrectly coded eligibilities:
WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITEPCT
Number of Observations.....	381.
Mean of Dependent Variable..	92.64422
Std. Dev. of Dep. Variable..	175.30929
Std. Error of Regression....	166.30221
Sum of Squared Residuals....	.97074E+07
R - Squared.....	.09775
Adjusted R - Squared.....	.02320
F-Statistic (29, 351).....	1.31127
Significance of F-Test.....	.13433
Log-Likelihood.....	-2473.4
Restricted (Slopes=0) Log-L.	-2508.6
Chi-Squared (29).....	70.403

Significance Level..... .26699E-04

Estimated disturbance standard deviation = 186.793
 Estimated correlation with selection equation A = .148140E-01
 Estimated correlation with selection equation B = .873215
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	390.083	392.504	.994 (.32030)	.99999	404.76
AGE	5.26429	17.0887	.308 (.75804)	26.788	17.560
AGESQ	-.754939E-01	.260432	-.290 (.77191)	753.83	.27142
AGE19T22	-3.63497	36.5823	-.099 (.92085)	.28519	36.862
HHSIZE	-3.07091	7.75022	-.396 (.69193)	4.4242	7.3509
SPCINC	-145.655	89.8113	-1.622 (.10485)	2.3674	79.748
SPCINCSQ	146.757	156.946	.935 (.34975)	.66321	136.24
HEIGHT	-1.44545	3.82597	-.378 (.70558)	64.159	4.0725
BLACK	89.6733	45.4970	1.971 (.04873)	.15157	36.860
OTHRACE	55.2778	62.7492	.881 (.37835)	.27698E-01	59.504
HISPANIC	-24.5230	30.6681	-.800 (.42393)	.13515	30.584
SOMEHS	-13.4805	43.9191	-.307 (.75889)	.19834	45.034
HSGRAD	8.74291	43.9418	.199 (.84229)	.46643	43.033
SOMECOL	65.8692	46.5353	1.415 (.15693)	.18443	47.174
COLGRAD	34.2857	61.1218	.561 (.57484)	.87956E-01	56.718
PREG	-4.92010	34.9476	-.141 (.88804)	.28770	30.012
LACT	-11.7923	38.0061	-.310 (.75635)	.14267	35.835
DIETFLAG	26.9468	36.9833	.729 (.46623)	.69812E-01	36.962
WIC	.522337	125.987	.004 (.99669)	.16295	100.72
FSPART	-249.663	127.223	-1.962 (.04971)	.28204	109.12
WICFS	54.7568	63.0654	.868 (.38526)	.64808E-01	55.133
LOPOV	25.8245	55.0921	.469 (.63925)	.59888E-01	50.202
MEDPOV	19.3766	43.0056	.451 (.65231)	.22434	40.108
HIPOV	2.45268	43.3004	.057 (.95483)	.24702	40.573
SUBCORE	18.2078	38.0008	.479 (.63184)	.14270	36.302
NMCORE	17.5328	44.0582	.398 (.69067)	.10703	40.914
SUBLOINC	13.7365	32.7505	.419 (.67490)	.15918	31.767
NMLOINC	-18.1624	34.3540	-.529 (.59702)	.13605	33.997
Lambda-W	31.6111	89.0137	.355 (.72250)	.11200	67.191
Lambda-F	168.521	79.2410	2.127 (.03345)	-.77605E-02	65.513

(Elapsed time for model: 0 hours, 2 minutes, 45 seconds.)

MODEL COMMAND: SELECT ;LHS=NIAPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 0	FSELIG = 1		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
	WIC = 0	WIC = 1	
FSPART = 0	0	106	
FSPART = 0	0	0	

Number of incorrectly coded eligibilities:
WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	NIAPCT
Number of Observations.....	381.
Mean of Dependent Variable..	126.12095
Std. Dev. of Dep. Variable..	79.75736
Std. Error of Regression....	72.70377
Sum of Squared Residuals....	.18553E+07
R - Squared.....	.16687
Adjusted R - Squared.....	.09803
F-Statistic (29, 351)....	2.42420
Significance of F-Test.....	.00010
Log-Likelihood.....	-2158.1
Restricted (Slopes=0) Log-L.	-2208.5
Chi-Squared (29).....	100.77

Significance Level..... .15077E-10

Estimated disturbance standard deviation = 87.2975
 Estimated correlation with selection equation A = -.448609
 Estimated correlation with selection equation B = .903797
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	146.225	174.003	.840 (.40071)	.99999	176.95
AGE	5.29406	7.66676	.691 (.48987)	26.788	7.6767
AGESQ	-.630423E-01	.117579	-.536 (.59184)	753.83	.11866
AGE19T22	-.709507E-01	16.0848	-.004 (.99648)	.28519	16.115
HHSIZE	-2.92707	3.13920	-.932 (.35112)	4.4242	3.2137
SPCINC	-90.7990	38.4956	-2.359 (.01834)	2.3674	34.864
SPCINC SQ	130.336	68.4295	1.905 (.05682)	.66321	59.560
HEIGHT	.376262	1.67380	.225 (.82214)	64.159	1.7804
BLACK	7.14359	19.8108	.361 (.71841)	.15157	16.115
OTHRACE	15.3026	23.4700	.652 (.51440)	.27698E-01	26.014
HISPANIC	-37.6450	13.0126	-2.893 (.00382)	.13515	13.371
SOMEHS	35.6169	18.2823	1.948 (.05140)	.19834	19.688
HSGRAD	35.5730	18.9309	1.879 (.06023)	.46643	18.813
SOMECOL	38.1006	20.1281	1.893 (.05837)	.18443	20.624
COLGRAD	8.15833	26.6128	.307 (.75918)	.87956E-01	24.796
PREG	-37.3625	13.5621	-2.755 (.00587)	.28770	13.121
LACT	-37.1774	16.8385	-2.208 (.02725)	.14267	15.666
DIETFLAG	23.0915	16.7061	1.382 (.16690)	.69812E-01	16.159
WIC	69.3309	48.3828	1.433 (.15187)	.16295	44.032
FSPART	-109.844	53.2070	-2.064 (.03897)	.28204	47.706
WICFS	-2.73854	23.2886	-.118 (.90639)	.64808E-01	24.103
LOPOV	34.0591	23.0585	1.477 (.13966)	.59888E-01	21.947
MEDPOV	5.95350	19.2892	.309 (.75759)	.22434	17.534
HIPOV	29.5465	19.4067	1.522 (.12789)	.24702	17.738
SUBCORE	26.1756	17.2667	1.516 (.12953)	.14270	15.870
NM CORE	15.3069	20.0757	.762 (.44579)	.10703	17.887
SUBLOINC	-2.30424	13.9460	-.165 (.86877)	.15918	13.888
NMLOINC	-19.9597	15.6193	-1.278 (.20129)	.13605	14.863
Lambda-W	-26.4325	32.2152	-.820 (.41193)	.11200	29.374
Lambda-F	74.3751	32.1811	2.311 (.02082)	-.77605E-02	28.641

(Elapsed time for model: 0 hours, 2 minutes, 46 seconds.)

MODEL COMMAND: SELECT ;LHS=FOLPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 0	FSELIG = 1		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELG = 1	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
	WIC = 0	WIC = 1	
FSPART = 0	0	106	
FSPART = 0	0	0	

Number of incorrectly coded eligibilities:
WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	FOLPCT
Number of Observations.....	381.
Mean of Dependent Variable..	44.20984
Std. Dev. of Dep. Variable..	38.52718
Std. Error of Regression....	35.70136
Sum of Squared Residuals....	.44738E+06
R - Squared.....	.13905
Adjusted R - Squared.....	.06792
F-Statistic (29, 351)....	1.95484
Significance of F-Test.....	.00284
Log-Likelihood.....	-1887.1
Restricted (Slopes=0) Log-L.	-1931.3
Chi-Squared (29).....	88.257

Significance Level..... .48611E-08

Estimated disturbance standard deviation = 38.4264
 Estimated correlation with selection equation A = -.716923E-01
 Estimated correlation with selection equation B = .682681
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	44.5473	83.6206	.533 (.59422)	.99999	86.894
AGE	1.33730	3.64459	.367 (.71367)	26.788	3.7697
AGESQ	-.204257E-01	.559521E-01	-.365 (.71507)	753.83	.58269E-01
AGE19T22	3.15871	7.71942	.409 (.68240)	.28519	7.9135
HHSIZE	.465399	1.56812	.297 (.76663)	4.4242	1.5781
SPCINC	-26.5955	17.7423	-1.499 (.13388)	2.3674	17.120
SPCINCSQ	30.7294	30.7659	.999 (.31789)	.66321	29.247
HEIGHT	.265969	.827649	.321 (.74794)	64.159	.87427
BLACK	18.0351	8.77328	2.056 (.03981)	.15157	7.9131
OTHRACE	8.40429	12.6321	.665 (.50585)	.27698E-01	12.774
HISPANIC	4.51902	6.41147	.705 (.48091)	.13515	6.5658
SOMEHS	-6.05135	9.26379	-.653 (.51361)	.19834	9.6677
HSGRAD	2.31706	9.09107	.255 (.79882)	.46643	9.2383
SOMECOL	9.04334	9.80623	.922 (.35642)	.18443	10.127
COLGRAD	-3.91961	12.4175	-.316 (.75227)	.87956E-01	12.176
PREG	-17.1250	6.67102	-2.567 (.01026)	.28770	6.4429
LACT	15.6906	7.76552	2.021 (.04333)	.14267	7.6929
DIETFLAG	5.27552	7.79894	.676 (.49876)	.69812E-01	7.9350
WIC	9.96770	23.2013	.430 (.66747)	.16295	21.622
FSPART	-35.0633	24.8285	-1.412 (.15789)	.28204	23.426
WICFS	1.39355	12.1620	.115 (.90878)	.64808E-01	11.836
LOPOV	5.16884	11.0366	.468 (.63954)	.59888E-01	10.777
MEDPOV	7.20950	8.79295	.820 (.41226)	.22434	8.6102
HIPOV	4.06143	8.86361	.458 (.64680)	.24702	8.7102
SUBCORE	17.0229	7.85165	2.168 (.03015)	.14270	7.7931
NMCORE	12.4169	8.96610	1.385 (.16609)	.10703	8.7834
SUBLOINC	5.36133	6.69126	.801 (.42299)	.15918	6.8196
NMLOINC	-.207315	7.16693	-.029 (.97692)	.13605	7.2983
Lambda-W	1.78749	15.7725	.113 (.90977)	.11200	14.424
Lambda-F	26.5389	15.1879	1.747 (.08057)	-.77605E-02	14.064

(Elapsed time for model: 0 hours, 2 minutes, 46 seconds.)

MODEL COMMAND: SELECT ;LHS=CALPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0			
WIC miscoded =	0	FSPART miscoded =		0
WICELG = 0	FSELIG = 1			
WIC miscoded =	0	FSPART miscoded =		0
WICELG = 1	FSELIG = 0			
WIC miscoded =	0	FSPART miscoded =		0
WICELG = 1	FSELIG = 1			
WIC miscoded =	0	FSPART miscoded =		0

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	CALPCT
Number of Observations.....	381.
Mean of Dependent Variable..	85.48744
Std. Dev. of Dep. Variable..	52.13308
Std. Error of Regression....	46.75004
Sum of Squared Residuals....	.76713E+06
R - Squared.....	.19373
Adjusted R - Squared.....	.12712
F-Statistic (29, 351).....	2.90828
Significance of F-Test.....	.00000
Log-Likelihood.....	-1989.9
Restricted (Slopes=0) Log-L.	-2046.5
Chi-Squared (29).....	113.26

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 53.3164

Estimated correlation with selection equation A = -.434285

Estimated correlation with selection equation B = .768519

uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-118.768	111.655	-1.064 (.28746)	.99999	113.79
AGE	7.66897	4.89118	1.568 (.11690)	26.788	4.9363
AGESQ	-.135938	.752540E-01	-1.806 (.07086)	753.83	.76301E-01
AGE19T22	7.54596	10.2373	.737 (.46106)	.28519	10.363
HHSIZE	2.70515	2.01177	1.345 (.17874)	4.4242	2.0665
SPCINC	-15.7809	23.9165	-.660 (.50936)	2.3674	22.418
SPCINCSQ	9.72360	42.1406	.231 (.81752)	.66321	38.299
HEIGHT	2.05022	1.08791	1.885 (.05949)	64.159	1.1448
BLACK	-6.15296	11.8599	-.519 (.60390)	.15157	10.362
OTHRACE	-11.7189	15.3072	-.766 (.44392)	.27698E-01	16.727
HISPANIC	-12.0957	8.33237	-1.452 (.14660)	.13515	8.5977
SOMEHS	13.4874	11.9144	1.132 (.25762)	.19834	12.660
HSGRAD	9.56967	12.0574	.794 (.42738)	.46643	12.097
SOMECOL	-3.62115	12.9247	-.280 (.77934)	.18443	13.261
COLGRAD	27.2121	16.5467	1.645 (.10006)	.87956E-01	15.944
PREG	-20.5072	8.62330	-2.378 (.01740)	.28770	8.4368
LACT	2.43263	10.5189	.231 (.81711)	.14267	10.074
DIETFLAG	28.6214	10.5374	2.716 (.00660)	.69812E-01	10.391
WIC	17.0705	30.4300	.561 (.57481)	.16295	28.313
FSPART	-62.8663	32.7174	-1.921 (.05467)	.28204	30.676
WICFS	14.4216	14.9272	.966 (.33398)	.64808E-01	15.499
LOPOV	12.2672	14.4071	.851 (.39451)	.59888E-01	14.112
MEDPOV	1.48560	11.9300	.125 (.90090)	.22434	11.275
HIPOV	-5.30303	12.0306	-.441 (.65936)	.24702	11.406
SUBCORE	-2.03273	10.7419	-.189 (.84991)	.14270	10.205
NMCORE	-9.74403	12.4284	-.784 (.43303)	.10703	11.502
SUBLOINC	6.78950	8.95119	.759 (.44815)	.15918	8.9301
NMLOINC	5.80972	9.88327	.588 (.55664)	.13605	9.5570
Lambda-W	-16.6285	20.4754	-.812 (.41672)	.11200	18.888
Lambda-F	38.1285	19.7014	1.935 (.05295)	-.77605E-02	18.417

(Elapsed time for model: 0 hours, 2 minutes, 46 seconds.)

MODEL COMMAND: SELECT ;LHS=PHOSPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCALE
DWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG	= 0	FSELIG	= 0		
WIC	miscoded =	0	FSPART	miscoded =	0
WICELG	= 0	FSELIG	= 1		
WIC	miscoded =	0	FSPART	miscoded =	0
WICELG	= 1	FSELIG	= 0		
WIC	miscoded =	0	FSPART	miscoded =	0
WICELG	= 1	FSELIG	= 1		
WIC	miscoded =	0	FSPART	miscoded =	0

		WIC	= 0	WIC	= 1
FSPART	= 0	0		106	

FSPART	= 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	PHOSPCT
Number of Observations.....	381.
Mean of Dependent Variable..	125.25195
Std. Dev. of Dep. Variable..	58.55307
Std. Error of Regression....	53.45180
Sum of Squared Residuals....	.10028E+07
R - Squared.....	.16446
Adjusted R - Squared.....	.09543
F-Statistic (29, 351).....	2.38235
Significance of F-Test.....	.00013
Log-Likelihood.....	-2040.9
Restricted (Slopes=0) Log-L.	-2090.7
Chi-Squared (29).....	99.670

Significance Level..... .25464E-10

Estimated disturbance standard deviation = 61.7370
 Estimated correlation with selection equation A = -.657107
 Estimated correlation with selection equation B = .720521
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-47.4849	132.993	-.357 (.72106)	.99999	130.10
AGE	12.0310	5.77790	2.082 (.03732)	26.788	5.6439
AGESQ	-.192538	.891154E-01	-2.161 (.03073)	753.83	.87239E-01
AGE19T22	13.3644	11.9472	1.119 (.26330)	.28519	11.848
HHSIZE	.852627	2.41085	.354 (.72359)	4.4242	2.3627
SPCINC	-34.1706	29.5448	-1.157 (.24745)	2.3674	25.632
SPCINCSQ	40.0319	52.5276	.762 (.44599)	.66321	43.789
HEIGHT	.807145	1.27595	.633 (.52700)	64.159	1.3090
BLACK	-14.1028	13.7326	-1.027 (.30444)	.15157	11.847
OTHRACE	-7.99332	17.4667	-.458 (.64722)	.27698E-01	19.125
HISPANIC	-26.2960	9.67093	-2.719 (.00655)	.13515	9.8303
SOMEHS	22.6482	14.0260	1.615 (.10637)	.19834	14.474
HSGRAD	21.9873	14.5123	1.515 (.12975)	.46643	13.831
SOMECOL	6.75566	15.3148	.441 (.65913)	.18443	15.162
COLGRAD	26.6419	19.2997	1.380 (.16745)	.87956E-01	18.230
PREG	-51.2927	11.2321	-4.567 (.00000)	.28770	9.6462
LACT	-24.2779	12.6498	-1.919 (.05496)	.14267	11.518
DIETFLAG	11.7487	12.3971	.948 (.34328)	.69812E-01	11.880
WIC	58.0229	41.4893	1.399 (.16196)	.16295	32.372
FSPART	-61.3396	38.7734	-1.582 (.11365)	.28204	35.073
WICFS	-2.38378	18.1137	-.132 (.89530)	.64808E-01	17.721
LOPOV	7.28023	16.8548	.432 (.66579)	.59888E-01	16.135
MEDPOV	8.78305	13.9701	.629 (.52954)	.22434	12.891
HIPOV	8.55189	14.1673	.604 (.54609)	.24702	13.041
SUBCORE	20.2246	12.7656	1.584 (.11312)	.14270	11.668
NMCORE	-2.95560	15.1657	-.195 (.84548)	.10703	13.150
SUBLOINC	6.97794	11.3173	.617 (.53752)	.15918	10.210
NMLOINC	-4.08665	12.2733	-.333 (.73916)	.13605	10.927
Lambda-W	-33.9487	29.8271	-1.138 (.25504)	.11200	21.596
Lambda-F	38.6722	23.2391	1.664 (.09609)	-.77605E-02	21.057

(Elapsed time for model: 0 hours, 2 minutes, 45 seconds.)

MODEL COMMAND: SELECT ;LHS=MAGPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELG = 0	FSELIG = 1			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELG = 1	FSELIG = 0			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELG = 1	FSELIG = 1			
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0		

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	MAGPCT
Number of Observations.....	381.
Mean of Dependent Variable..	63.26825
Std. Dev. of Dep. Variable..	28.81110
Std. Error of Regression....	25.68009
Sum of Squared Residuals....	.23147E+06
R - Squared.....	.20345
Adjusted R - Squared.....	.13764
F-Statistic (29, 351).....	3.09133
Significance of F-Test.....	.00000
Log-Likelihood.....	-1761.6
Restricted (Slopes=0) Log-L.	-1820.5
Chi-Squared (29).....	117.88

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 28.6887
Estimated correlation with selection equation A = -.721439
Estimated correlation with selection equation B = .585793
The column labelled std.dev.of X below is the
uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-52.9126	64.8449	-.816 (.41451)	.99999	62.503
AGE	5.72468	2.79370	2.049 (.04045)	26.788	2.7115
AGESQ	-.880186E-01	.431434E-01	-2.040 (.04134)	753.83	.41913E-01
AGE19T22	3.07270	5.76212	.533 (.59386)	.28519	5.6922
HHSIZE	-.737783	1.19964	-.615 (.53855)	4.4242	1.1351
SPCINC	-23.1538	14.5376	-1.593 (.11123)	2.3674	12.315
SPCINC SQ	32.4399	25.7676	1.259 (.20805)	.66321	21.038
HEIGHT	1.03319	.622794	1.659 (.09712)	64.159	.62887
BLACK	-12.1051	6.42181	-1.885 (.05943)	.15157	5.6919
OTHRACE	.659997	8.75502	.075 (.93991)	.27698E-01	9.1885
HISPANIC	-10.4980	4.70061	-2.233 (.02553)	.13515	4.7228
SOMEHS	9.39538	6.93302	1.355 (.17537)	.19834	6.9540
HSGRAD	7.94196	7.12569	1.115 (.26504)	.46643	6.6451
SOMECOL	15.3512	7.48867	2.050 (.04037)	.18443	7.2846
COLGRAD	18.9620	9.22915	2.055 (.03992)	.87956E-01	8.7583
PREG	-29.2177	5.77985	-5.055 (.00000)	.28770	4.6344
LACT	-17.6965	6.12635	-2.889 (.00387)	.14267	5.5335
DIETFLAG	2.19781	5.94495	.370 (.71161)	.69812E-01	5.7077
WIC	36.9000	21.5968	1.709 (.08753)	.16295	15.553
FSPART	-20.9409	18.7655	-1.116 (.26445)	.28204	16.851
WICFS	-3.51177	9.24629	-.380 (.70409)	.64808E-01	8.5136
LOPOV	5.72795	8.16339	.702 (.48289)	.59888E-01	7.7520
MEDPOV	.689228	6.63303	.104 (.91724)	.22434	6.1934
HIPOV	4.14378	6.75425	.614 (.53954)	.24702	6.2653
SUBCORE	11.7479	6.10594	1.924 (.05435)	.14270	5.6056
NMCORE	5.40470	7.32506	.738 (.46061)	.10703	6.3179
SUBLOINC	4.00091	5.68874	.703 (.48187)	.15918	4.9054
NMLOINC	2.88290	6.02909	.478 (.63253)	.13605	5.2497
Lambda-W	-18.3585	15.9481	-1.151 (.24968)	.11200	10.376
Lambda-F	13.6634	11.2847	1.211 (.22598)	-.77605E-02	10.116

(Elapsed time for model: 0 hours, 2 minutes, 45 seconds.)

MODEL COMMAND: SELECT ;LHS=IRONPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCALE
DWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0			
WIC miscoded =	0	FSPART miscoded =		0
WICELG = 0	FSELIG = 1			
WIC miscoded =	0	FSPART miscoded =		0
WICELG = 1	FSELIG = 0			
WIC miscoded =	0	FSPART miscoded =		0
WICELG = 1	FSELIG = 1			
WIC miscoded =	0	FSPART miscoded =		0

	WIC = 0	WIC = 1
FSPART = 0	0	106

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	IRONPCT
Number of Observations.....	381.
Mean of Dependent Variable..	66.09143
Std. Dev. of Dep. Variable..	48.82532
Std. Error of Regression....	45.72031
Sum of Squared Residuals....	.73371E+06
R - Squared.....	.12084
Adjusted R - Squared.....	.04820
F-Statistic (29, 351).....	1.66356
Significance of F-Test.....	.01903
Log-Likelihood.....	-1981.4
Restricted (Slopes=0) Log-L.	-2021.5
Chi-Squared (29).....	80.280

Significance Level..... .10535E-05

Estimated disturbance standard deviation = 49.9610
 Estimated correlation with selection equation A = -.156447
 Estimated correlation with selection equation B = .718234
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	28.7566	107.072	.269 (.78826)	.99999	111.28
AGE	3.43348	4.67872	.734 (.46304)	26.788	4.8275
AGESQ	-.476574E-01	.718415E-01	-.663 (.50709)	753.83	.74621E-01
AGE19T22	5.47613	9.89498	.553 (.57997)	.28519	10.134
HHSIZE	-.744447	1.98605	-.375 (.70778)	4.4242	2.0209
SPCINC	-27.6128	22.6687	-1.218 (.22319)	2.3674	21.925
SPCINCSQ	22.3395	39.4249	.567 (.57096)	.66321	37.455
HEIGHT	.398808E-01	1.05738	.038 (.96991)	64.159	1.1196
BLACK	11.8601	11.3289	1.047 (.29515)	.15157	10.134
OTHRACE	16.6701	15.8696	1.050 (.29352)	.27698E-01	16.359
HISPANIC	-4.41283	8.18011	-.539 (.58957)	.13515	8.4084
SOMEHS	26.5126	11.7637	2.254 (.02421)	.19834	12.381
HSGRAD	29.5397	11.6051	2.545 (.01092)	.46643	11.831
SOMECOL	34.8830	12.5226	2.786 (.00534)	.18443	12.969
COLGRAD	24.0819	15.9453	1.510 (.13097)	.87956E-01	15.593
PREG	5.01847	8.36346	.600 (.54847)	.28770	8.2509
LACT	6.93934	9.97267	.696 (.48653)	.14267	9.8518
DIETFLAG	24.0868	10.0376	2.400 (.01641)	.69812E-01	10.162
WIC	10.9058	28.9617	.377 (.70650)	.16295	27.690
FSPART	-53.2375	31.7292	-1.678 (.09337)	.28204	30.000
WICFS	12.5292	15.2185	.823 (.41034)	.64808E-01	15.157
LOPOV	1.80539	14.0892	.128 (.89804)	.59888E-01	13.802
MEDPOV	1.86156	11.3412	.164 (.86962)	.22434	11.027
HIPOV	12.4252	11.4243	1.088 (.27677)	.24702	11.155
SUBCORE	20.9938	10.1283	2.073 (.03819)	.14270	9.9802
NMCORE	26.6629	11.5633	2.306 (.02112)	.10703	11.248
SUBLOINC	9.38490	8.49682	1.105 (.26937)	.15918	8.7334
NMLOINC	-2.93092	9.20092	-.319 (.75007)	.13605	9.3465
Lambda-W	-1.72497	19.3884	-.089 (.92911)	.11200	18.472
Lambda-F	35.5885	19.3445	1.840 (.06581)	-.77605E-02	18.011

(Elapsed time for model: 0 hours, 2 minutes, 45 seconds.)

MODEL COMMAND: SELECT ;LHS=ZINCPCT ;RHS=X2,X3 ;RH2=WICELG,FSELIG ;WTS=SCALE
DWT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELG = 0	FSELIG = 0				
WIC miscoded =	0	FSPART miscoded =	0		
WICELG = 0	FSELIG = 1				
WIC miscoded =	0	FSPART miscoded =	0		
WICELG = 1	FSELIG = 0				
WIC miscoded =	0	FSPART miscoded =	0		
WICELG = 1	FSELIG = 1				
WIC miscoded =	0	FSPART miscoded =	0		
	WIC = 0	WIC = 1			
FSPART = 0	0	106			
FSPART = 0	0	0			

Number of incorrectly coded eligibilities:

WICELG = 0 FSELIG = 0

Full sample contains 381.0 observations.
Selected sample contains 381.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	ZINCPCT
Number of Observations.....	381.
Mean of Dependent Variable..	57.21476
Std. Dev. of Dep. Variable..	32.71572
Std. Error of Regression....	30.42517
Sum of Squared Residuals....	.32492E+06
R - Squared.....	.13285
Adjusted R - Squared.....	.06120
F-Statistic (29, 351).....	1.85428
Significance of F-Test.....	.00561
Log-Likelihood.....	-1826.2
Restricted (Slopes=0) Log-L.	-1869.0
Chi-Squared (29).....	85.522

Significance Level..... .16189E-07

Estimated disturbance standard deviation = 35.7881
 Estimated correlation with selection equation A = -.705908
 Estimated correlation with selection equation B = .752357
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	133.739	76.6387	1.745 (.08097)	.99999	74.052
AGE	-.695582	3.32707	-.209 (.83440)	26.788	3.2126
AGESQ	.132844E-01	.513083E-01	.259 (.79570)	753.83	.49657E-01
AGE19T22	5.17317	6.86030	.754 (.45081)	.28519	6.7440
HHSIZE	-.361015	1.39160	-.259 (.79531)	4.4242	1.3449
SPCINC	-18.5911	17.3150	-1.074 (.28296)	2.3674	14.590
SPCINCSQ	13.6258	30.9125	.441 (.65937)	.66321	24.925
HEIGHT	-.608152	.729710	-.833 (.40461)	64.159	.74507
BLACK	.172149	8.00520	.022 (.98284)	.15157	6.7436
OTHRACE	6.41587	9.89178	.649 (.51659)	.27698E-01	10.886
HISPANIC	-7.91259	5.53498	-1.430 (.15284)	.13515	5.5955
SOMEHS	18.4616	8.02356	2.301 (.02140)	.19834	8.2390
HSGRAD	20.0218	8.40084	2.383 (.01716)	.46643	7.8730
SOMECOL	17.7229	8.81066	2.012 (.04427)	.18443	8.6306
COLGRAD	19.5276	11.1503	1.751 (.07989)	.87956E-01	10.377
PREG	-10.7539	6.62456	-1.623 (.10452)	.28770	5.4907
LACT	-24.4597	7.35709	-3.325 (.00089)	.14267	6.5560
DIETFLAG	-1.61740	7.15195	-.226 (.82109)	.69812E-01	6.7623
WIC	43.9670	24.7452	1.777 (.07560)	.16295	18.426
FSPART	-35.2691	22.5572	-1.564 (.11793)	.28204	19.964
WICFS	-6.33619	10.4862	-.604 (.54568)	.64808E-01	10.087
LOPOV	2.59128	9.73130	.266 (.79002)	.59888E-01	9.1844
MEDPOV	-1.69196	8.09198	-.209 (.83438)	.22434	7.3377
HIPOV	-.768321	8.21290	-.094 (.92547)	.24702	7.4229
SUBCORE	8.59996	7.41082	1.160 (.24586)	.14270	6.6414
NMCORE	2.87928	8.87196	.325 (.74553)	.10703	7.4853
SUBLOINC	4.37121	6.61935	.660 (.50902)	.15918	5.8118
NMLOINC	-2.00937	7.17210	-.280 (.77935)	.13605	6.2197
Lambda-W	-21.2779	17.9621	-1.185 (.23617)	.11200	12.293
Lambda-F	23.2835	13.5188	1.722 (.08502)	-.77605E-02	11.986

(Elapsed time for model: 0 hours, 2 minutes, 46 seconds.)

1
 Job is completed

APPENDIX D

BIVARIATE SELECTION MODEL ESTIMATES OF
DIETARY INTAKE EQUATIONS FOR CHILDREN

MODEL COMMAND: SELECT ;LHS=FDENGPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC - *
Selection Criterion B: FSPART - *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1	FSPART miscoded = 0	
	WIC = 0	WIC = 1	
FSPART = 0	0	0	
FSPART = 0	0	0	

Number of incorrectly coded eligibilities:
WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	FDENGPCT
Number of Observations.....	818.
Mean of Dependent Variable..	97.50838
Std. Dev. of Dep. Variable..	40.54146
Std. Error of Regression....	35.93272
Sum of Squared Residuals....	.10200E+07
R - Squared.....	.21347
Adjusted R - Squared.....	.18659
F-Statistic (27, 790).....	7.94140
Significance of F-Test.....	.00000
Log-Likelihood.....	-4076.2
Restricted (Slopes=0) Log-L.	-4188.7
Chi-Squared (27).....	224.84

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 35.9906
 Estimated correlation with selection equation A = .114533
 Estimated correlation with selection equation B = -.516363E-01
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	56.4981	16.0453	3.521 (.00043)	1.0000	16.173
AGE2	17.0179	4.09721	4.154 (.00003)	.22026	4.1394
AGE3	28.6374	4.39445	6.517 (.00000)	.27373	4.4389
AGE4	-8.33282	5.18121	-1.608 (.10777)	.25720	5.2421
FEMALE	-7.48361	2.62538	-2.850 (.00437)	.50678	2.6658
HHSIZE	-.665352E-01	.904156	-.074 (.94134)	4.6904	.91146
SPCINC	3.74571	6.92103	.541 (.58837)	2.3836	6.9444
SPCINC SQ	-8.82329	13.4643	-.655 (.51227)	.68239	13.512
HEIGHT	.828292	.271433	3.052 (.00228)	35.349	.27585
BLACK	-2.68864	4.68730	-.574 (.56624)	.12700	4.7637
OTHRACE	-2.81563	7.72113	-.365 (.71536)	.29978E-01	7.8350
HISPANIC	-1.40802	4.96269	-.284 (.77662)	.80742E-01	5.0456
MSOMEHS	9.98285	7.12430	1.401 (.16114)	.22463	7.2500
MHSGRAD	-.165093	6.94312	-.024 (.98103)	.45911	7.0651
MSOME COL	-4.10553	7.32884	-.560 (.57535)	.21834	7.4546
M COLGRAD	-.650198	8.80069	-.074 (.94111)	.60431E-01	8.9469
WIC	10.3316	10.6823	.967 (.33346)	.23150	10.747
FSPART	13.6430	7.51938	1.814 (.06962)	.32799	7.5413
WICFS	-24.4811	6.87543	-3.561 (.00037)	.15297	6.9258
LOPOV	-11.9838	7.74332	-1.548 (.12171)	.54365E-01	7.7868
MEDPOV	-9.18997	6.07366	-1.513 (.13026)	.25620	6.1326
HIPOV	-12.9591	6.18214	-2.096 (.03606)	.20483	6.2490
SUBCORE	4.48809	4.48337	1.001 (.31680)	.25555	4.5325
NM CORE	11.7552	5.90760	1.990 (.04661)	.87055E-01	5.9623
SUBLOINC	8.85042	4.85749	1.822 (.06845)	.17220	4.8990
NMLOINC	11.5367	5.12621	2.251 (.02441)	.15247	5.1733
Lambda-W	4.14272	5.79192	.715 (.47445)	-.29305E-01	5.7511
Lambda-F	.448242E-01	4.29731	.010 (.99168)	-.17217E-05	4.2880

(Elapsed time for model: 0 hours, 6 minutes, 24 seconds.)

MODEL COMMAND: SELECT ;LHS=PROPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALEDWT
 \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
 Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
 (WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
	WIC = 0	WIC = 1	
FSPART = 0	0	0	
FSPART = 0	0	0	

Number of incorrectly coded eligibilities:
 WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
 Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	PROPCT
Number of Observations.....	818.
Mean of Dependent Variable..	213.76527
Std. Dev. of Dep. Variable..	88.40552
Std. Error of Regression....	80.12589
Sum of Squared Residuals....	.50719E+07
R - Squared.....	.17753
Adjusted R - Squared.....	.14942
F-Statistic (27, 790).....	6.31575
Significance of F-Test.....	.00000
Log-Likelihood.....	-4732.2
Restricted (Slopes=0) Log-L.	-4826.4
Chi-Squared (27).....	188.29

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 80.2426
 Estimated correlation with selection equation A = .163632
 Estimated correlation with selection equation B = .285304E-01
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	155.579	37.5442	4.144 (.00003)	1.0000	36.065
AGE2	15.5980	9.36430	1.666 (.09578)	.22026	9.2303
AGE3	38.2748	10.0229	3.819 (.00013)	.27373	9.8983
AGE4	-46.1921	11.7849	-3.920 (.00009)	.25720	11.689
FEMALE	-20.5878	5.89641	-3.492 (.00048)	.50678	5.9443
HHSIZE	-.970695	2.12314	-.457 (.64753)	4.6904	2.0324
SPCINC	-4.67870	16.3103	-.287 (.77422)	2.3836	15.485
SPCINCSQ	1.25442	31.4904	.040 (.96822)	.68239	30.130
HEIGHT	1.82338	.609039	2.994 (.00275)	35.349	.61511
BLACK	17.4224	10.5777	1.647 (.09954)	.12700	10.623
OTHRACE	6.47223	17.4736	.370 (.71108)	.29978E-01	17.471
HISPANIC	16.7737	11.1460	1.505 (.13235)	.80742E-01	11.251
MSOMEHS	22.4865	15.9164	1.413 (.15772)	.22463	16.167
MHSGRAD	2.61661	15.5153	.169 (.86607)	.45911	15.754
MSOMECOL	-2.63282	16.4022	-.161 (.87247)	.21834	16.623
MCOLGRAD	4.47501	19.6800	.227 (.82012)	.60431E-01	19.951
WIC	-5.43540	24.8856	-.218 (.82711)	.23150	23.964
FSPART	12.0427	18.4135	.654 (.51310)	.32799	16.816
WICFS	-33.7617	16.0720	-2.101 (.03567)	.15297	15.444
LOPOV	-24.4179	18.0021	-1.356 (.17497)	.54365E-01	17.364
MEDPOV	3.33194	13.9643	.239 (.81141)	.25620	13.675
HIPOV	-7.16120	14.1697	-.505 (.61329)	.20483	13.935
SUBCORE	28.7030	10.2020	2.813 (.00490)	.25555	10.107
NMCORE	23.1409	13.5141	1.712 (.08683)	.87055E-01	13.295
SUBLOINC	4.51646	11.1975	.403 (.68669)	.17220	10.924
NMLOINC	13.6863	11.8444	1.156 (.24789)	.15247	11.536
Lambda-W	17.9762	14.0077	1.283 (.19938)	-.29305E-01	12.824
Lambda-F	10.5480	10.9258	.965 (.33433)	-.17217E-05	9.5618

(Elapsed time for model: 0 hours, 6 minutes, 24 seconds.)

MODEL COMMAND: SELECT ;LHS=PROCMEPEG ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 1		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
	WIC = 0	WIC = 1	
FSPART = 0	0	0	
	WIC = 0	WIC = 1	
FSPART = 0	0	0	

Number of incorrectly coded eligibilities:
WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	PROCMEPEG
Number of Observations.....	818.
Mean of Dependent Variable..	15.58847
Std. Dev. of Dep. Variable..	3.97925
Std. Error of Regression....	3.69135
Sum of Squared Residuals....	10765.
R - Squared.....	.13841
Adjusted R - Squared.....	.10897
F-Statistic (27, 790)....	4.70047
Significance of F-Test.....	.00000
Log-Likelihood.....	-2214.7
Restricted (Slopes=0) Log-L.	-2289.9
Chi-Squared (27).....	150.28

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 3.71005

Estimated correlation with selection equation A = .287036

Estimated correlation with selection equation B = .101245

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	18.1524	2.00085	9.072 (.00000)	1.0000	1.6615
AGE2	-1.84942	.466594	-3.964 (.00007)	.22026	.42523
AGE3	-2.21127	.496918	-4.450 (.00001)	.27373	.45601
AGE4	-2.97979	.579726	-5.140 (.00000)	.25720	.53852
FEMALE	-.393158	.278491	-1.412 (.15803)	.50678	.27385
HHSIZE	-.663305E-01	.114452	-.580 (.56222)	4.6904	.93634E-01
SPCINC	-1.56662	.882091	-1.776 (.07573)	2.3836	.71340
SPCINCSQ	3.08526	1.66987	1.848 (.06466)	.68239	1.3881
HEIGHT	.402229E-01	.286521E-01	1.404 (.16037)	35.349	.28338E-01
BLACK	1.72689	.508257	3.398 (.00068)	.12700	.48938
OTHRACE	1.21240	.845468	1.434 (.15157)	.29978E-01	.80489
HISPANIC	1.14284	.525629	2.174 (.02969)	.80742E-01	.51833
MSOMEHS	-.168870	.735818	-.230 (.81848)	.22463	.74479
MHSGRAD	-.396512	.717690	-.552 (.58062)	.45911	.72579
MSOMECOL	-.880069E-01	.762962	-.115 (.90817)	.21834	.76580
MCOLGRAD	-.544485	.914700	-.595 (.55167)	.60431E-01	.91911
WIC	-3.06259	1.30624	-2.345 (.01905)	.23150	1.1040
FSPART	-1.27264	1.08311	-1.175 (.24000)	.32799	.77471
WICFS	.893532	.848206	1.053 (.29214)	.15297	.71149
LOPOV	-.315299E-01	.940771	-.034 (.97326)	.54365E-01	.79994
MEDPOV	2.03128	.709395	2.863 (.00419)	.25620	.63000
HIPOV	2.14990	.713148	3.015 (.00257)	.20483	.64196
SUBCORE	1.47456	.503859	2.927 (.00343)	.25555	.46562
NMFCORE	.351387E-01	.676905	.052 (.95860)	.87055E-01	.61250
SUBLOINC	-1.38827	.571823	-2.428 (.01519)	.17220	.50327
NMLOINC	-1.36241	.609781	-2.234 (.02547)	.15247	.53145
Lambda-W	1.56856	.798958	1.963 (.04962)	-.29305E-01	.59081
Lambda-F	1.09625	.682776	1.606 (.10837)	-.17217E-05	.44051

(Elapsed time for model: 0 hours, 6 minutes, 22 seconds.)

MODEL COMMAND: SELECT ;LHS=FATCMPEG ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *

Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	

	WIC = 0	WIC = 1
FSPART = 0	0	0

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.

Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	FATCMPEG
Number of Observations.....	818.
Mean of Dependent Variable..	34.04948
Std. Dev. of Dep. Variable..	8.14018
Std. Error of Regression....	7.63883
Sum of Squared Residuals....	46098.
R - Squared.....	.11831
Adjusted R - Squared.....	.08817
F-Statistic (27, 790).....	3.92611
Significance of F-Test.....	.00000
Log-Likelihood.....	-2809.6
Restricted (Slopes=0) Log-L.	-2875.3
Chi-Squared (27).....	131.41

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 7.67479

Estimated correlation with selection equation A = .286064

Estimated correlation with selection equation B = .100134E-01

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	37.9096	3.84585	9.857 (.00000)	1.0000	3.4382
AGE2	.979424	.936296	1.046 (.29553)	.22026	.87997
AGE3	-.676172	1.00018	-.676 (.49901)	.27373	.94365
AGE4	-.929458	1.16724	-.796 (.42586)	.25720	1.1144
FEMALE	-3.01723	.570484	-5.289 (.00000)	.50678	.56671
HHSIZE	-.612629E-02	.217709	-.028 (.97755)	4.6904	.19376
SPCINC	-1.74568	1.70163	-1.026 (.30494)	2.3836	1.4763
SPCINC SQ	1.39191	3.26766	.426 (.67013)	.68239	2.8724
HEIGHT	.462909E-01	.587211E-01	.788 (.43051)	35.349	.58642E-01
BLACK	1.64148	1.02481	1.602 (.10921)	.12700	1.0127
OTHRACE	.639679	1.70769	.375 (.70797)	.29978E-01	1.6656
HISPANIC	.756203	1.07474	.704 (.48167)	.80742E-01	1.0726
MSOMEHS	2.27183	1.52250	1.492 (.13565)	.22463	1.5413
MHSGRAD	.962490	1.48505	.648 (.51691)	.45911	1.5019
MSOMECOL	-1.77161	1.57451	-1.125 (.26051)	.21834	1.5847
MCOLGRAD	-3.02928	1.88886	-1.604 (.10877)	.60431E-01	1.9020
WIC	-5.61082	2.55840	-2.193 (.02830)	.23150	2.2846
FSPART	-2.01463	1.97063	-1.022 (.30663)	.32799	1.6032
WICFS	2.17597	1.65423	1.315 (.18838)	.15297	1.4723
LOPOV	-.526111	1.84888	-.285 (.77598)	.54365E-01	1.6554
MEDPOV	1.03151	1.40432	.735 (.46263)	.25620	1.3037
HIPOV	1.09431	1.41702	.772 (.43996)	.20483	1.3285
SUBCORE	1.08581	1.01186	1.073 (.28323)	.25555	.96354
NM CORE	-.697392	1.35444	-.515 (.60663)	.87055E-01	1.2675

MODEL COMMAND: SELECT ;LHS=CHOCMPEG ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
FSPART = 0	WIC = 0	WIC = 1	
	0	0	
FSPART = 0	0	0	

Number of incorrectly coded eligibilities:
WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	CHOCMPEG
Number of Observations.....	818.
Mean of Dependent Variable..	50.35722
Std. Dev. of Dep. Variable..	9.79377
Std. Error of Regression....	9.13294
Sum of Squared Residuals....	65894.
R - Squared.....	.12933
Adjusted R - Squared.....	.09957
F-Statistic (27, 790).....	4.34624
Significance of F-Test.....	.00000
Log-Likelihood.....	-2955.8
Restricted (Slopes=0) Log-L.	-3026.6
Chi-Squared (27).....	141.70

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 9.19567

Estimated correlation with selection equation A = -.353739

Estimated correlation with selection equation B = -.494231E-01

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	43.9430	5.02051	8.753 (.00000)	1.0000	4.1107
AGE2	.875968	1.17824	.743 (.45721)	.22026	1.0521
AGE3	2.89214	1.25483	2.305 (.02118)	.27373	1.1282
AGE4	3.90826	1.45665	2.683 (.00730)	.25720	1.3324
FEMALE	3.41063	.693722	4.916 (.00000)	.50678	.67755
HHSIZE	.723648E-01	.285804	.253 (.80012)	4.6904	.23166
SPCINC	3.29523	2.24136	1.470 (.14151)	2.3836	1.7651
SPCINC SQ	-4.43671	4.26108	-1.041 (.29777)	.68239	3.4343
HEIGHT	-.864339E-01	.712077E-01	-1.214 (.22481)	35.349	.70112E-01
BLACK	-3.37298	1.25774	-2.682 (.00732)	.12700	1.2108
OTHRACE	-1.88551	2.10795	-.894 (.37107)	.29978E-01	1.9914
HISPANIC	-1.89402	1.30515	-1.451 (.14673)	.80742E-01	1.2824
MSOMEHS	-2.09632	1.82625	-1.148 (.25102)	.22463	1.8427
MHSGRAD	-.561628	1.78224	-.315 (.75267)	.45911	1.7957
MSOMECOL	1.86017	1.89658	.981 (.32669)	.21834	1.8947
MCOLGRAD	3.56767	2.27342	1.569 (.11658)	.60431E-01	2.2740
WIC	8.66387	3.31685	2.612 (.00900)	.23150	2.7315
FSPART	3.28785	2.70897	1.214 (.22487)	.32799	1.9168
WICFS	-3.06750	2.15177	-1.426 (.15399)	.15297	1.7603
LOPOV	.560353	2.39114	.234 (.81472)	.54365E-01	1.9792
MEDPOV	-3.06039	1.78570	-1.714 (.08656)	.25620	1.5587
HIPOV	-3.24933	1.79201	-1.813 (.06980)	.20483	1.5883
SUBCORE	-2.56795	1.26514	-2.030 (.04238)	.25555	1.1520
NMCORE	.662250	1.70896	.388 (.69837)	.87055E-01	1.5154
SUBLOINC	2.81353	1.44666	1.945 (.05179)	.17220	1.2452
NMLOINC	.784009	1.53516	.511 (.60956)	.15247	1.3149
Lambda-W	-4.38779	2.06526	-2.125 (.03362)	-.29305E-01	1.4617
Lambda-F	-2.47032	1.71283	-1.442 (.14923)	-.17217E-05	1.0899

(Elapsed time for model: 0 hours, 6 minutes, 21 seconds.)

MODEL COMMAND: SELECT ;LHS=EODTCHOL ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELIG = 0	FSELIG = 1			
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0		
WICELIG = 1	FSELIG = 0			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELIG = 1	FSELIG = 1			
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0		
	WIC = 0	WIC = 1		
FSPART = 0	0	0		
FSPART = 0	0	0		

Number of incorrectly coded eligibilities:
WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	EODTCHOL
Number of Observations.....	818.
Mean of Dependent Variable..	238.95995
Std. Dev. of Dep. Variable..	189.03524
Std. Error of Regression....	172.44216
Sum of Squared Residuals....	.23492E+08
R - Squared.....	.16683
Adjusted R - Squared.....	.13836
F-Statistic (27, 790).....	5.85882
Significance of F-Test.....	.00000
Log-Likelihood.....	-5359.2
Restricted (Slopes=0) Log-L.	-5448.1
Chi-Squared (27).....	177.72

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 173.980
 Estimated correlation with selection equation A = -.113789
 Estimated correlation with selection equation B = .192205
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	150.800	78.7067	1.916 (.05537)	1.0000	77.616
AGE2	74.0324	19.5919	3.779 (.00016)	.22026	19.865
AGE3	46.1119	21.0514	2.190 (.02849)	.27373	21.302
AGE4	46.0212	24.8899	1.849 (.06446)	.25720	25.157
FEMALE	-84.8518	12.5968	-6.736 (.00000)	.50678	12.793
HHSIZE	-4.17315	4.49314	-.929 (.35300)	4.6904	4.3741
SPCINC	26.7684	33.5201	.799 (.42454)	2.3836	33.327
SPCINC SQ	-91.6887	64.5514	-1.420 (.15549)	.68239	64.843
HEIGHT	2.47700	1.30136	1.903 (.05699)	35.349	1.3238
BLACK	57.9116	22.6848	2.553 (.01068)	.12700	22.861
OTHRACE	74.2106	37.0957	2.001 (.04544)	.29978E-01	37.601
HISPANIC	48.9794	23.7712	2.060 (.03936)	.80742E-01	24.214
MSOMEHS	19.7929	33.9446	.583 (.55983)	.22463	34.793
MHSGRAD	-1.21587	33.0597	-.037 (.97066)	.45911	33.906
MSOMECOL	-46.1644	34.9159	-1.322 (.18611)	.21834	35.775
MCOLGRAD	39.0198	42.0975	.927 (.35398)	.60431E-01	42.936
WIC	115.793	51.2727	2.258 (.02392)	.23150	51.575
FSPART	-54.7021	38.0823	-1.436 (.15088)	.32799	36.191
WICFS	-78.6725	32.7700	-2.401 (.01636)	.15297	33.237
LOPOV	-102.198	37.1959	-2.748 (.00600)	.54365E-01	37.369
MEDPOV	3.70488	29.3411	.126 (.89952)	.25620	29.430
HIPOV	-3.93951	29.8149	-.132 (.89488)	.20483	29.989
SUBCORE	31.9269	21.6854	1.472 (.14095)	.25555	21.751
NMCORE	53.2836	28.4435	1.873 (.06102)	.87055E-01	28.613
SUBLOINC	33.9898	23.2974	1.459 (.14458)	.17220	23.510
NMLOINC	8.14924	24.8007	.329 (.74247)	.15247	24.827
Lambda-W	-5.62032	27.6571	-.203 (.83897)	-.29305E-01	27.600
Lambda-F	30.8577	21.9604	1.405 (.15998)	-.17217E-05	20.578

(Elapsed time for model: 0 hours, 6 minutes, 21 seconds.)

MODEL COMMAND: SELECT ;LHS=VITAPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALEDW
T \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	

	WIC = 0	WIC = 1
FSPART = 0	0	0

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:
WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITAPCT
Number of Observations.....	818.
Mean of Dependent Variable..	180.28057
Std. Dev. of Dep. Variable..	169.38038
Std. Error of Regression....	162.22907
Sum of Squared Residuals....	.20791E+08
R - Squared.....	.08154
Adjusted R - Squared.....	.05014
F-Statistic (27, 790).....	2.59745
Significance of F-Test.....	.00002
Log-Likelihood.....	-5309.3
Restricted (Slopes=0) Log-L.	-5358.3
Chi-Squared (27).....	97.989

Significance Level..... .91920E-11

Estimated disturbance standard deviation = 164.278
 Estimated correlation with selection equation A = .326306
 Estimated correlation with selection equation B = -.137966
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	265.418	77.4936	3.425 (.00061)	1.0000	73.019
AGE2	-13.8831	19.4794	-.713 (.47603)	.22026	18.688
AGE3	-2.34311	20.9076	-.112 (.91077)	.27373	20.041
AGE4	-56.0313	24.3832	-2.298 (.02156)	.25720	23.667
FEMALE	-18.5544	12.0448	-1.540 (.12345)	.50678	12.035
HHSIZE	-1.95445	4.36276	-.448 (.65416)	4.6904	4.1151
SPCINC	-102.637	34.3976	-2.984 (.00285)	2.3836	31.353
SPCINC SQ	200.928	66.8379	3.006 (.00265)	.68239	61.003
HEIGHT	2.64449	1.23760	2.137 (.03262)	35.349	1.2454
BLACK	13.1070	21.3700	.613 (.53965)	.12700	21.507
OTHRACE	-12.7528	35.6043	-.358 (.72021)	.29978E-01	35.374
HISPANIC	-53.7725	22.5647	-2.383 (.01717)	.80742E-01	22.780
MSOMEHS	-19.1125	32.1684	-.594 (.55242)	.22463	32.732
MHSGRAD	-33.4008	31.3700	-1.065 (.28699)	.45911	31.897
MSOMECOL	10.4196	33.2140	.314 (.75374)	.21834	33.656
MCOLGRAD	2.77725	40.0206	.069 (.94467)	.60431E-01	40.394
WIC	-96.6053	52.2282	-1.850 (.06436)	.23150	48.520
FSPART	-3.33051	37.5529	-.089 (.92933)	.32799	34.047
WICFS	72.3434	33.3829	2.167 (.03023)	.15297	31.269
LOPOV	53.2768	37.9430	1.404 (.16028)	.54365E-01	35.156
MEDPOV	-9.80170	28.9864	-.338 (.73525)	.25620	27.687
HIPOV	10.6176	29.2888	.363 (.71697)	.20483	28.213
SUBCORE	-16.2012	21.2011	-.764 (.44477)	.25555	20.463
NM CORE	-9.14158	28.2603	-.323 (.74633)	.87055E-01	26.919
SUBLOINC	4.44258	23.3658	.190 (.84921)	.17220	22.118
NMLOINC	9.47289	24.5564	.386 (.69967)	.15247	23.356
Lambda-W	54.7478	30.5522	1.792 (.07314)	-.29305E-01	25.965
Lambda-F	2.48745	22.1580	.112 (.91062)	-.17217E-05	19.360

(Elapsed time for model: 0 hours, 6 minutes, 23 seconds.)

MODEL COMMAND: SELECT ;LHS=LOGAPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALEDW
T \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *

Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	

	WIC = 0	WIC = 1
FSPART = 0	0	0
FSPART = 1	0	0

Number of incorrectly coded eligibilities:
WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	LOGAPCT
Number of Observations.....	818.
Mean of Dependent Variable..	4.91449
Std. Dev. of Dep. Variable..	.80560
Std. Error of Regression....	.75514
Sum of Squared Residuals....	450.49
R - Squared.....	.12027
Adjusted R - Squared.....	.09020
F-Statistic (27, 790).....	4.00006
Significance of F-Test.....	.00000
Log-Likelihood.....	-916.71
Restricted (Slopes=0) Log-L.	-983.33
Chi-Squared (27).....	133.23

Significance Level..... .32173E-13

Estimated disturbance standard deviation = .788084
 Estimated correlation with selection equation A = .447615
 Estimated correlation with selection equation B = -.333657
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	4.79757	.372639	12.875 (.00000)	1.0000	.33989
AGE2	-.439382E-01	.918948E-01	-.478 (.63255)	.22026	.86991E-01
AGE3	.464577E-01	.994740E-01	.467 (.64048)	.27373	.93286E-01
AGE4	-.380507	.115538	-3.293 (.00099)	.25720	.11017
FEMALE	-.121105	.564513E-01	-2.145 (.03193)	.50678	.56022E-01
HHSIZE	-.108288E-01	.212952E-01	-.509 (.61110)	4.6904	.19155E-01
SPCINC	-.403273	.165612	-2.435 (.01489)	2.3836	.14594
SPCINCSQ	.884875	.320667	2.759 (.00579)	.68239	.28396
HEIGHT	.174263E-01	.575197E-02	3.030 (.00245)	35.349	.57971E-02
BLACK	-.871086E-01	.999612E-01	-.871 (.38352)	.12700	.10011
OTHRACE	-.187682	.165752	-1.132 (.25751)	.29978E-01	.16466
HISPANIC	-.285807	.104016	-2.748 (.00600)	.80742E-01	.10603
MSOMEHS	.275662	.146862	1.877 (.06052)	.22463	.15236
MHSGRAD	.140913	.143078	.985 (.32469)	.45911	.14848
MSOMECOL	.340295	.151846	2.241 (.02502)	.21834	.15666
MCOLGRAD	.447393	.185815	2.408 (.01605)	.60431E-01	.18802
WIC	-.718706	.247922	-2.899 (.00374)	.23150	.22585
FSPART	.176139	.181883	.968 (.33284)	.32799	.15848
WICFS	.397822	.153866	2.586 (.00972)	.15297	.14555
LOPOV	.140251	.181630	.772 (.44001)	.54365E-01	.16364
MEDPOV	-.970039E-01	.138332	-.701 (.48315)	.25620	.12888
HIPOV	-.168091E-01	.138856	-.121 (.90365)	.20483	.13133
SUBCORE	-.785016E-01	.102291	-.767 (.44282)	.25555	.95252E-01
NMCORE	-.255367	.135848	-1.880 (.06013)	.87055E-01	.12530
SUBLOINC	-.316772E-01	.110668	-.286 (.77470)	.17220	.10295
NMLOINC	.124307E-01	.116911	.106 (.91532)	.15247	.10872
Lambda-W	.294009	.148079	1.985 (.04709)	-.29305E-01	.12086
Lambda-F	-.127875	.105096	-1.217 (.22370)	-.17217E-05	.90115E-01

(Elapsed time for model: 0 hours, 6 minutes, 22 seconds.)

MODEL COMMAND: SELECT ;LHS=VITB1PCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0				
WIC miscoded =	0	FSPART miscoded =		0	
WICELIG = 0	FSELIG = 1				
WIC miscoded =	0	FSPART miscoded =		0	
WICELIG = 1	FSELIG = 0				
WIC miscoded =	0	FSPART miscoded =		0	
WICELIG = 1	FSELIG = 1				
WIC miscoded =	0	FSPART miscoded =		0	

	WIC = 0	WIC = 1
FSPART = 0	0	0

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.

Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITB1PCT
Number of Observations.....	818.
Mean of Dependent Variable..	155.61584
Std. Dev. of Dep. Variable..	84.94747
Std. Error of Regression....	71.48244
Sum of Squared Residuals....	.40367E+07
R - Squared.....	.29103
Adjusted R - Squared.....	.26680
F-Statistic (27, 790).....	12.01072
Significance of F-Test.....	.00000
Log-Likelihood.....	-4638.9
Restricted (Slopes=0) Log-L.	-4793.7
Chi-Squared (27).....	309.76

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 73.6719

Estimated correlation with selection equation A = -.655747

Estimated correlation with selection equation B = .752216E-01

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	15.0060	47.3169	.317 (.75114)	1.0000	32.174
AGE2	18.7601	10.8345	1.732 (.08336)	.22026	8.2346
AGE3	47.9543	11.5203	4.163 (.00003)	.27373	8.8305
AGE4	5.31766	13.0460	.408 (.68356)	.25720	10.428
FEMALE	-8.29722	5.77444	-1.437 (.15075)	.50678	5.3031
HHSIZE	3.18019	2.67563	1.189 (.23461)	4.6904	1.8132
SPCINC	-29.1125	22.1451	-1.315 (.18863)	2.3836	13.815
SPCINC SQ	90.8974	42.1778	2.155 (.03115)	.68239	26.880
HEIGHT	1.38181	.582767	2.371 (.01773)	35.349	.54876
BLACK	9.90052	10.3229	.959 (.33752)	.12700	9.4767
OTHRACE	-9.21981	17.9809	-.513 (.60812)	.29978E-01	15.587
HISPANIC	-.129478	10.6379	-.012 (.99029)	.80742E-01	10.037
MSOMEHS	38.4072	14.4960	2.650 (.00806)	.22463	14.423
MHSGRAD	23.3034	14.1913	1.642 (.10057)	.45911	14.055
MSOME COL	3.52431	15.2816	.231 (.81761)	.21834	14.830
M COLGRAD	19.6193	18.3723	1.068 (.28558)	.60431E-01	17.798
WIC	127.967	32.1174	3.984 (.00007)	.23150	21.379
FSPART	38.1523	26.5888	1.435 (.15132)	.32799	15.002
WICFS	-11.9987	20.7349	-.579 (.56281)	.15297	13.778
LOPOV	34.9116	23.2008	1.505 (.13239)	.54365E-01	15.491
MEDPOV	-2.44861	16.4934	-.148 (.88198)	.25620	12.200
HIPOV	-16.5433	16.3229	-1.014 (.31082)	.20483	12.431
SUBCORE	21.8686	11.3834	1.921 (.05472)	.25555	9.0166
NM CORE	5.49393	15.8236	.347 (.72844)	.87055E-01	11.861
SUBLOINC	5.42264	13.6170	.398 (.69046)	.17220	9.7457
NM LOINC	4.29071	14.3015	.300 (.76416)	.15247	10.291
Lambda-W	-58.0076	21.8735	-2.652 (.00800)	-.29305E-01	11.441
Lambda-F	-21.1082	17.3273	-1.218 (.22315)	-.17217E-05	8.5304

(Elapsed time for model: 0 hours, 6 minutes, 22 seconds.)

MODEL COMMAND: SELECT ;LHS=VITB2PCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	

	WIC = 0	WIC = 1
FSPART = 0	0	0
FSPART = 0	0	0

Number of incorrectly coded eligibilities:
WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITB2PCT
Number of Observations.....	818.
Mean of Dependent Variable..	199.93942
Std. Dev. of Dep. Variable..	99.08519
Std. Error of Regression....	83.00844
Sum of Squared Residuals....	.54434E+07
R - Squared.....	.29732
Adjusted R - Squared.....	.27330
F-Statistic (27, 790).....	12.38019
Significance of F-Test.....	.00000
Log-Likelihood.....	-4761.1
Restricted (Slopes=0) Log-L.	-4919.7
Chi-Squared (27).....	317.05

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 84.1193
 Estimated correlation with selection equation A = -.489464
 Estimated correlation with selection equation B = -.527676E-01
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	58.7997	51.9262	1.132 (.25748)	1.0000	37.362
AGE2	-13.6233	11.7315	-1.161 (.24554)	.22026	9.5624
AGE3	11.6130	12.4500	.933 (.35094)	.27373	10.254
AGE4	-36.3158	14.2969	-2.540 (.01108)	.25720	12.110
FEMALE	-20.0606	6.51753	-3.078 (.00208)	.50678	6.1582
HHSIZE	4.83059	2.96439	1.630 (.10320)	4.6904	2.1056
SPCINC	-24.1381	23.6058	-1.023 (.30652)	2.3836	16.042
SPCINC SQ	88.9547	44.5397	1.997 (.04580)	.68239	31.214
HEIGHT	1.51765	.664622	2.283 (.02240)	35.349	.63724
BLACK	-19.1458	11.9071	-1.608 (.10785)	.12700	11.005
OTHRACE	-25.5711	20.2474	-1.263 (.20661)	.29978E-01	18.100
HISPANIC	-9.55048	12.1949	-.783 (.43354)	.80742E-01	11.656
MSOMEHS	35.7883	16.7250	2.140 (.03237)	.22463	16.748
MHSGRAD	24.2668	16.3434	1.485 (.13760)	.45911	16.321
MSOME COL	9.78052	17.5122	.558 (.57651)	.21834	17.221
M COLGRAD	36.2314	20.9745	1.727 (.08410)	.60431E-01	20.668
WIC	106.990	34.3300	3.117 (.00183)	.23150	24.826
FSPART	43.2439	29.3918	1.471 (.14121)	.32799	17.421
WICFS	18.1297	22.3209	.812 (.41666)	.15297	15.999
LOPOV	31.1274	24.7051	1.260 (.20769)	.54365E-01	17.988
MEDPOV	8.81212	17.9688	.490 (.62384)	.25620	14.167
HIPOV	4.51136	17.8863	.252 (.80087)	.20483	14.436
SUBCORE	40.1840	12.4478	3.228 (.00125)	.25555	10.470
NM CORE	20.0958	17.0781	1.177 (.23932)	.87055E-01	13.774
SUBLOINC	-1.57962	14.6738	-.108 (.91427)	.17220	11.317
NM LOINC	9.90297	15.5863	.635 (.52519)	.15247	11.951
Lambda-W	-54.7735	22.5806	-2.426 (.01528)	-.29305E-01	13.286
Lambda-F	-29.6029	19.0753	-1.552 (.12069)	-.17217E-05	9.9058

(Elapsed time for model: 0 hours, 6 minutes, 22 seconds.)

MODEL COMMAND: SELECT ;LHS=VITB6PCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *

Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	

	WIC = 0	WIC = 1
FSPART = 0	0	0

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:

WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.

Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITB6PCT
Number of Observations.....	818.
Mean of Dependent Variable..	121.45347
Std. Dev. of Dep. Variable..	74.99908
Std. Error of Regression....	68.81489
Sum of Squared Residuals....	.37410E+07
R - Squared.....	.15708
Adjusted R - Squared.....	.12828
F-Statistic (27, 790).....	5.45270
Significance of F-Test.....	.00000
Log-Likelihood.....	-4607.7
Restricted (Slopes=0) Log-L.	-4691.8
Chi-Squared (27).....	168.20

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 70.0558

Estimated correlation with selection equation A = -.203496

Estimated correlation with selection equation B = .256744

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	131.600	31.8920	4.126 (.00004)	1.0000	30.974
AGE2	23.8631	7.86007	3.036 (.00240)	.22026	7.9273
AGE3	45.9893	8.46756	5.431 (.00000)	.27373	8.5010
AGE4	-3.51243	9.99890	-.351 (.72538)	.25720	10.039
FEMALE	-4.51450	5.03873	-.896 (.37027)	.50678	5.1052
HHSIZE	-2.82601	1.83094	-1.543 (.12272)	4.6904	1.7455
SPCINC	-36.0223	13.5886	-2.651 (.00803)	2.3836	13.299
SPCINC SQ	56.0679	26.1009	2.148 (.03170)	.68239	25.876
HEIGHT	.882510E-01	.519276	.170 (.86505)	35.349	.52828
BLACK	3.85320	9.08042	.424 (.67132)	.12700	9.1230
OTHRACE	-6.71742	14.8212	-.453 (.65038)	.29978E-01	15.005
HISPANIC	-6.28547	9.46427	-.664 (.50661)	.80742E-01	9.6628
MSOMEHS	33.1345	13.4673	2.460 (.01388)	.22463	13.885
MHSGRAD	14.8828	13.1119	1.135 (.25635)	.45911	13.530
MSOME COL	15.4093	13.8588	1.112 (.26619)	.21834	14.276
M COLGRAD	13.9302	16.7850	.830 (.40658)	.60431E-01	17.134
WIC	33.4086	20.6516	1.618 (.10572)	.23150	20.581
FSPART	-7.66036	15.5607	-.492 (.62251)	.32799	14.442
WICFS	-9.56403	13.0727	-.732 (.46441)	.15297	13.264
LOPOV	32.4173	15.0212	2.158 (.03092)	.54365E-01	14.913
MEDPOV	-6.36616	11.8294	-.538 (.59046)	.25620	11.745
HIPOV	-2.78300	11.9912	-.232 (.81647)	.20483	11.968
SUBCORE	27.4691	8.76473	3.134 (.00172)	.25555	8.6802
NM CORE	9.53132	11.4856	.830 (.40662)	.87055E-01	11.418
SUBLOINC	13.9256	9.36758	1.487 (.13713)	.17220	9.3821
NMLOINC	5.80115	9.99708	.580 (.56172)	.15247	9.9073
Lambda-W	-7.59601	11.2653	-.674 (.50013)	-.29305E-01	11.014
Lambda-F	14.4966	8.95163	1.619 (.10535)	-.17217E-05	8.2120

(Elapsed time for model: 0 hours, 6 minutes, 21 seconds.)

MODEL COMMAND: SELECT ;LHS=VITB12PC ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALED
WT \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	

	WIC = 0	WIC = 1
FSPART = 0	0	0

FSPART = 0	0	0
------------	---	---

Number of incorrectly coded eligibilities:

WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.

Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITB12PC
Number of Observations.....	818.
Mean of Dependent Variable..	188.33995
Std. Dev. of Dep. Variable..	172.73150
Std. Error of Regression....	167.46477
Sum of Squared Residuals....	.22155E+08
R - Squared.....	.05890
Adjusted R - Squared.....	.02674
F-Statistic (27, 790).....	1.83128
Significance of F-Test.....	.00644
Log-Likelihood.....	-5335.2
Restricted (Slopes=0) Log-L.	-5374.3
Chi-Squared (27).....	78.076

Significance Level..... .73587E-06

Estimated disturbance standard deviation = 167.645
 Estimated correlation with selection equation A = .140299
 Estimated correlation with selection equation B = .176712E-01
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	148.295	77.0770	1.924 (.05436)	1.0000	75.376
AGE2	-2.10827	19.3870	-.109 (.91340)	.22026	19.291
AGE3	-3.85363	20.7633	-.186 (.85276)	.27373	20.688
AGE4	-54.4381	24.4414	-2.227 (.02593)	.25720	24.431
FEMALE	-3.78227	12.2889	-.308 (.75825)	.50678	12.424
HHSIZE	-1.39901	4.35293	-.321 (.74791)	4.6904	4.2479
SPCINC	-22.0490	33.3909	-.660 (.50904)	2.3836	32.365
SPCINC SQ	21.0786	64.6345	.326 (.74433)	.68239	62.972
HEIGHT	3.27437	1.26995	2.578 (.00993)	35.349	1.2856
BLACK	.957045	22.0104	.043 (.96532)	.12700	22.201
OTHRACE	-2.10778	36.3198	-.058 (.95372)	.29978E-01	36.515
HISPANIC	-19.2792	23.2359	-.830 (.40670)	.80742E-01	23.515
MSOMEHS	-33.5697	33.2491	-1.010 (.31267)	.22463	33.789
MHSGRAD	-47.4288	32.4084	-1.463 (.14334)	.45911	32.927
MSOME COL	-52.2665	34.2405	-1.526 (.12690)	.21834	34.742
M COLGRAD	-48.6723	41.0874	-1.185 (.23617)	.60431E-01	41.697
WIC	-34.2318	51.1631	-.669 (.50345)	.23150	50.086
FSPART	-3.13381	37.2284	-.084 (.93291)	.32799	35.146
WICFS	48.9104	33.0182	1.481 (.13852)	.15297	32.278
LOPOV	15.8847	37.0318	.429 (.66796)	.54365E-01	36.291
MEDPOV	15.1728	28.8463	.526 (.59890)	.25620	28.581
HIPOV	36.2332	29.3068	1.236 (.21633)	.20483	29.124
SUBCORE	55.7200	21.1499	2.635 (.00843)	.25555	21.124
NM CORE	45.6488	27.9617	1.633 (.10256)	.87055E-01	27.787
SUBLOINC	15.4559	23.1094	.669 (.50361)	.17220	22.832
NMLOINC	6.46465	24.4253	.265 (.79126)	.15247	24.110
Lambda-W	31.5381	28.4083	1.110 (.26692)	-.29305E-01	26.803
Lambda-F	17.4517	21.8330	.799 (.42410)	-.17217E-05	19.984

(Elapsed time for model: 0 hours, 6 minutes, 23 seconds.)

MODEL COMMAND: SELECT ;LHS=VITCPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALEDW
T \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0	FSPART miscoded = 0	
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	

	WIC = 0	WIC = 1
FSPART = 0	0	0
FSPART = 0	0	0

Number of incorrectly coded eligibilities:

WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITCPCT
Number of Observations.....	818.
Mean of Dependent Variable..	170.54467
Std. Dev. of Dep. Variable..	153.28196
Std. Error of Regression....	147.10548
Sum of Squared Residuals....	.17096E+08
R - Squared.....	.07784
Adjusted R - Squared.....	.04632
F-Statistic (27, 790).....	2.46975
Significance of F-Test.....	.00006
Log-Likelihood.....	-5229.2
Restricted (Slopes=0) Log-L.	-5276.6

Significance Level..... .45352E-10

Estimated disturbance standard deviation = 149.935
 Estimated correlation with selection equation A = -.195960
 Estimated correlation with selection equation B = .269974
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	116.560	68.6596	1.698 (.08957)	1.0000	66.212
AGE2	24.5580	16.7924	1.462 (.14362)	.22026	16.946
AGE3	42.8723	18.0930	2.370 (.01781)	.27373	18.173
AGE4	32.0511	21.3845	1.499 (.13393)	.25720	21.461
FEMALE	34.0360	10.7712	3.160 (.00158)	.50678	10.913
HHSIZE	-5.73740	3.95399	-1.451 (.14677)	4.6904	3.7314
SPCINC	3.46893	29.1532	.119 (.90528)	2.3836	28.430
SPCINC SQ	-49.8492	55.8201	-.893 (.37184)	.68239	55.316
HEIGHT	-.255212	1.11006	-.230 (.81816)	35.349	1.1293
BLACK	-7.99839	19.4670	-.411 (.68117)	.12700	19.502
OTHRACE	39.2664	31.7129	1.238 (.21565)	.29978E-01	32.076
HISPANIC	19.0881	20.2323	.943 (.34545)	.80742E-01	20.656
MSOMEHS	55.0016	28.7443	1.913 (.05569)	.22463	29.681
MHSGRAD	60.9410	27.9811	2.178 (.02941)	.45911	28.924
MSOME COL	73.0227	29.5800	2.469 (.01356)	.21834	30.518
M COLGRAD	107.717	35.8521	3.004 (.00266)	.60431E-01	36.628
WIC	60.4587	44.1944	1.368 (.17131)	.23150	43.997
FSPART	-60.4729	33.8299	-1.788 (.07385)	.32799	30.873
WICFS	24.5641	27.9521	.879 (.37951)	.15297	28.354
LOPOV	39.1494	32.1393	1.218 (.22318)	.54365E-01	31.879
MEDPOV	-20.5749	25.3457	-.812 (.41692)	.25620	25.106
HIPOV	-6.93700	25.6831	-.270 (.78708)	.20483	25.583
SUBCORE	41.0145	18.7711	2.185 (.02889)	.25555	18.556
NM CORE	-24.3174	24.5726	-.990 (.32236)	.87055E-01	24.409
SUBLOINC	25.2555	20.0354	1.261 (.20747)	.17220	20.056
NMLOINC	13.5655	21.4353	.633 (.52683)	.15247	21.179
Lambda-W	-13.6698	24.0837	-.568 (.57031)	-.29305E-01	23.544
Lambda-F	34.1984	19.5498	1.749 (.08024)	-.17217E-05	17.555

(Elapsed time for model: 0 hours, 6 minutes, 22 seconds.)

MODEL COMMAND: SELECT ;LHS=VITEPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALEDW
T \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 1		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
	WIC = 0	WIC = 1	
FSPART = 0	0	0	
FSPART = 0	0	0	

Number of incorrectly coded eligibilities:
WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	VITEPCT
Number of Observations.....	818.
Mean of Dependent Variable..	111.73639
Std. Dev. of Dep. Variable..	190.25787
Std. Error of Regression....	178.86184
Sum of Squared Residuals....	.25273E+08
R - Squared.....	.11513
Adjusted R - Squared.....	.08488
F-Statistic (27, 790).....	3.80676
Significance of F-Test.....	.00000
Log-Likelihood.....	-5389.1
Restricted (Slopes=0) Log-L.	-5453.3
Chi-Squared (27).....	128.47

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 182.000
 Estimated correlation with selection equation A = -.231369
 Estimated correlation with selection equation B = .241487
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	181.601	82.3795	2.204 (.02749)	1.0000	80.506
AGE2	21.0265	20.5179	1.025 (.30546)	.22026	20.604
AGE3	36.5366	22.1037	1.653 (.09834)	.27373	22.096
AGE4	7.03567	26.0449	.270 (.78706)	.25720	26.094
FEMALE	-13.3665	13.1108	-1.020 (.30796)	.50678	13.269
HHSIZE	3.36415	4.70733	.715 (.47482)	4.6904	4.5370
SPCINC	-96.9053	35.3602	-2.741 (.00613)	2.3836	34.567
SPCINC SQ	123.038	68.2440	1.803 (.07140)	.68239	67.257
HEIGHT	1.23332	1.35040	.913 (.36109)	35.349	1.3731
BLACK	-1.32887	23.5141	-.057 (.95493)	.12700	23.712
OTHRACE	-32.5191	38.5153	-.844 (.39849)	.29978E-01	39.000
HISPANIC	-34.5494	24.6028	-1.404 (.16023)	.80742E-01	25.115
MSOMEHS	40.6815	35.0707	1.160 (.24605)	.22463	36.088
MHSGRAD	-5.81358	34.1543	-.170 (.86484)	.45911	35.168
MSOMECOL	-17.1402	36.0988	-.475 (.63492)	.21834	37.106
MCOLGRAD	12.3922	43.6965	.284 (.77672)	.60431E-01	44.535
WIC	114.757	53.8756	2.130 (.03317)	.23150	53.495
FSPART	-61.2563	39.6461	-1.545 (.12233)	.32799	37.538
WICFS	-2.63878	34.1104	-.077 (.93834)	.15297	34.475
LOPOV	117.833	39.2112	3.005 (.00266)	.54365E-01	38.760
MEDPOV	-22.7140	30.7580	-.738 (.46023)	.25620	30.526
HIPOV	19.6711	31.1775	.631 (.52808)	.20483	31.106
SUBCORE	2.46762	22.7975	.108 (.91380)	.25555	22.561
NMCORE	25.6185	29.9419	.856 (.39222)	.87055E-01	29.678
SUBLOINC	-18.5607	24.4319	-.760 (.44744)	.17220	24.386
NMLOINC	-17.0220	25.9693	-.655 (.51217)	.15247	25.751
Lambda-W	-27.7810	29.6063	-.938 (.34807)	-.29305E-01	28.627
Lambda-F	31.1875	22.6700	1.376 (.16891)	-.17217E-05	21.344

(Elapsed time for model: 0 hours, 6 minutes, 22 seconds.)

MODEL COMMAND: SELECT ;LHS=NIAPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALEDWT
 \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
 Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
 (WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0			
WIC miscoded =	0	FSPART miscoded =		0
WICELIG = 0	FSELIG = 1			
WIC miscoded =	0	FSPART miscoded =		0
WICELIG = 1	FSELIG = 0			
WIC miscoded =	0	FSPART miscoded =		0
WICELIG = 1	FSELIG = 1			
WIC miscoded =	0	FSPART miscoded =		0
	WIC = 0	WIC = 1		
FSPART = 0	0	0		
FSPART = 0	0	0		

Number of incorrectly coded eligibilities:
 WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
 Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	NIAPCT
Number of Observations.....	818.
Mean of Dependent Variable..	143.27338
Std. Dev. of Dep. Variable..	79.65206
Std. Error of Regression....	73.02660
Sum of Squared Residuals....	.42130E+07
R - Squared.....	.15841
Adjusted R - Squared.....	.12965
F-Statistic (27, 790).....	5.50747
Significance of F-Test.....	.00000
Log-Likelihood.....	-4656.3
Restricted (Slopes=0) Log-L.	-4741.1
Chi-Squared (27).....	169.49

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 73.9809

Estimated correlation with selection equation A = -.265144

Estimated correlation with selection equation B = .179373

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	120.171	33.5972	3.577 (.00035)	1.0000	32.869
AGE2	23.3497	8.49921	2.747 (.00601)	.22026	8.4125
AGE3	51.5478	9.14017	5.640 (.00000)	.27373	9.0213
AGE4	17.1448	10.7223	1.599 (.10982)	.25720	10.654
FEMALE	-5.58919	5.37236	-1.040 (.29817)	.50678	5.4177
HHSIZE	-1.10438	1.89979	-.581 (.56103)	4.6904	1.8524
SPCINC	-28.9942	14.6587	-1.978 (.04793)	2.3836	14.113
SPCINC SQ	45.2009	28.4923	1.586 (.11264)	.68239	27.460
HEIGHT	.343312	.553106	.621 (.53480)	35.349	.56061
BLACK	12.7273	9.56156	1.331 (.18316)	.12700	9.6814
OTHRACE	-6.97879	15.7936	-.442 (.65858)	.29978E-01	15.923
HISPANIC	-14.6460	10.0820	-1.453 (.14631)	.80742E-01	10.254
MSOMEHS	29.5948	14.4115	2.054 (.04002)	.22463	14.734
MHSGRAD	12.4096	14.0447	.884 (.37692)	.45911	14.358
MSOME COL	2.29876	14.8471	.155 (.87696)	.21834	15.150
M COLGRAD	14.9160	17.9169	.833 (.40512)	.60431E-01	18.183
WIC	53.9513	22.4068	2.408 (.01605)	.23150	21.841
FSPART	6.24880	15.9331	.392 (.69492)	.32799	15.326
WICFS	-10.2890	14.2659	-.721 (.47077)	.15297	14.075
LOPOV	39.5653	16.2969	2.428 (.01519)	.54365E-01	15.825
MEDPOV	-8.66553	12.6501	-.685 (.49333)	.25620	12.463
HIPOV	-10.6827	12.8204	-.833 (.40470)	.20483	12.700
SUBCORE	23.8203	9.33935	2.551 (.01076)	.25555	9.2114
NM CORE	6.37298	12.3445	.516 (.60567)	.87055E-01	12.117
SUBLOINC	4.41592	10.1259	.436 (.66276)	.17220	9.9563
NMLOINC	6.53201	10.6813	.612 (.54084)	.15247	10.514
Lambda-W	-17.1358	12.5846	-1.362 (.17331)	-.29305E-01	11.688
Lambda-F	5.39766	9.14324	.590 (.55496)	-.17217E-05	8.7146

(Elapsed time for model: 0 hours, 6 minutes, 22 seconds.)

MODEL COMMAND: SELECT ;LHS=FOLPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALEDWT
 \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
 Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
 (WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0				
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0			
WICELIG = 0	FSELIG = 1				
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0			
WICELIG = 1	FSELIG = 0				
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0			
WICELIG = 1	FSELIG = 1				
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0			
	WIC = 0	WIC = 1			
FSPART = 0	0	0			
FSPART = 0	0	0			

Number of incorrectly coded eligibilities:
 WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
 Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	FOLPCT
Number of Observations.....	818.
Mean of Dependent Variable..	155.57498
Std. Dev. of Dep. Variable..	124.69851
Std. Error of Regression....	113.68395
Sum of Squared Residuals....	.10210E+08
R - Squared.....	.16784
Adjusted R - Squared.....	.13940
F-Statistic (27, 790).....	5.90134
Significance of F-Test.....	.00000
Log-Likelihood.....	-5018.4
Restricted (Slopes=0) Log-L.	-5107.7
Chi-Squared (27).....	178.71

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 115.235

Estimated correlation with selection equation A = -.243678

Estimated correlation with selection equation B = .196531

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	184.962	52.0083	3.556 (.00038)	1.0000	51.169
AGE2	42.4881	13.1235	3.238 (.00121)	.22026	13.096
AGE3	56.5225	14.1207	4.003 (.00006)	.27373	14.044
AGE4	-39.5764	16.5984	-2.384 (.01711)	.25720	16.585
FEMALE	1.86058	8.34447	.223 (.82356)	.50678	8.4339
HHSIZE	-1.90294	2.94960	-.645 (.51883)	4.6904	2.8837
SPCINC	-66.9193	22.5404	-2.969 (.00299)	2.3836	21.971
SPCINC SQ	100.131	43.7417	2.289 (.02207)	.68239	42.749
HEIGHT	1.60842	.859561	1.871 (.06132)	35.349	.87273
BLACK	26.2223	14.8865	1.761 (.07816)	.12700	15.071
OTHRACE	3.64644	24.5113	.149 (.88174)	.29978E-01	24.788
HISPANIC	25.1771	15.6680	1.607 (.10807)	.80742E-01	15.963
MSOMEHS	-2.55684	22.3931	-.114 (.90910)	.22463	22.938
MHSGRAD	-20.2060	21.8179	-.926 (.35438)	.45911	22.353
MSOMECOL	-13.9473	23.0575	-.605 (.54525)	.21834	23.585
MCOLGRAD	-17.4000	27.8436	-.625 (.53202)	.60431E-01	28.306
WIC	84.4314	34.4735	2.449 (.01432)	.23150	34.001
FSPART	-10.6223	24.6730	-.431 (.66681)	.32799	23.859
WICFS	-26.0837	21.9196	-1.190 (.23406)	.15297	21.912
LOPOV	28.4740	25.0770	1.135 (.25618)	.54365E-01	24.636
MEDPOV	-29.2041	19.5632	-1.493 (.13549)	.25620	19.402
HIPOV	-30.6219	19.8387	-1.544 (.12270)	.20483	19.771
SUBCORE	18.5628	14.4733	1.283 (.19965)	.25555	14.340
NM CORE	-18.1771	19.0787	-.953 (.34072)	.87055E-01	18.864
SUBLOINC	17.1620	15.6164	1.099 (.27178)	.17220	15.499
NMLOINC	.682853	16.5112	.041 (.96701)	.15247	16.367
Lambda-W	-22.4045	19.1254	-1.171 (.24142)	-.29305E-01	18.195
Lambda-F	12.3542	14.0905	.877 (.38061)	-.17217E-05	13.566

(Elapsed time for model: 0 hours, 6 minutes, 22 seconds.)

MODEL COMMAND: SELECT ;LHS=CALPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALEDWT
 \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
 Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
 (WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 1		
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
	WIC = 0	WIC = 1	
FSPART = 0	0	0	
FSPART = 0	0	0	

Number of incorrectly coded eligibilities:
 WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
 Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	CALPCT
Number of Observations.....	818.
Mean of Dependent Variable..	103.23569
Std. Dev. of Dep. Variable..	51.26361
Std. Error of Regression....	46.09489
Sum of Squared Residuals....	.16785E+07
R - Squared.....	.19050
Adjusted R - Squared.....	.16283
F-Statistic (27, 790)....	6.88546
Significance of F-Test.....	.00000
Log-Likelihood.....	-4280.0
Restricted (Slopes=0) Log-L.	-4380.6
Chi-Squared (27).....	201.29

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 46.2802

Estimated correlation with selection equation A = -.104634

Estimated correlation with selection equation B = -.153198

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	46.4631	22.6490	2.051 (.04022)	1.0000	20.747
AGE2	-16.1721	5.42985	-2.978 (.00290)	.22026	5.3100
AGE3	-5.35264	5.80523	-.922 (.35651)	.27373	5.6943
AGE4	-21.2892	6.84589	-3.110 (.00187)	.25720	6.7246
FEMALE	-9.99743	3.40168	-2.939 (.00329)	.50678	3.4197
HHSIZE	1.60060	1.29814	1.233 (.21758)	4.6904	1.1692
SPCINC	-9.66421	9.72476	-.994 (.32033)	2.3836	8.9084
SPCINC SQ	38.8216	18.4918	2.099 (.03578)	.68239	17.333
HEIGHT	.898379	.351467	2.556 (.01059)	35.349	.35386
BLACK	-23.2465	6.19310	-3.754 (.00017)	.12700	6.1110
OTHRACE	-18.7699	10.1628	-1.847 (.06476)	.29978E-01	10.051
HISPANIC	.714390E-01	6.44019	.011 (.99115)	.80742E-01	6.4725
MSOMEHS	16.5945	9.11911	1.820 (.06880)	.22463	9.3004
MHSGRAD	14.6130	8.88481	1.645 (.10003)	.45911	9.0632
MSOME COL	17.3337	9.40480	1.843 (.06532)	.21834	9.5628
MCOLGRAD	22.8103	11.2997	2.019 (.04352)	.60431E-01	11.477
WIC	19.6920	14.6407	1.345 (.17862)	.23150	13.786
FSPART	21.1202	11.7057	1.804 (.07119)	.32799	9.6741
WICFS	5.16144	9.46203	.545 (.58542)	.15297	8.8845
LOPOV	-6.64294	10.5661	-.629 (.52954)	.54365E-01	9.9891
MEDPOV	-.430112	8.20757	-.052 (.95821)	.25620	7.8669
HIPOV	-.222605	8.30940	-.027 (.97863)	.20483	8.0163
SUBCORE	13.0037	5.95315	2.184 (.02894)	.25555	5.8143
NMCORE	10.7362	7.87136	1.364 (.17258)	.87055E-01	7.6485
SUBLOINC	.408660	6.54495	.062 (.95021)	.17220	6.2845
NMLOINC	7.49984	6.99808	1.072 (.28386)	.15247	6.6363
Lambda-W	-10.2668	8.31667	-1.234 (.21702)	-.29305E-01	7.3775
Lambda-F	-11.8068	7.11910	-1.658 (.09722)	-.17217E-05	5.5007

(Elapsed time for model: 0 hours, 6 minutes, 22 seconds.)

MODEL COMMAND: SELECT ;LHS=PHOSPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALEDW
T \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0			
WIC miscoded =	0	FSPART miscoded =		0
WICELIG = 0	FSELIG = 1			
WIC miscoded =	0	FSPART miscoded =		0
WICELIG = 1	FSELIG = 0			
WIC miscoded =	0	FSPART miscoded =		0
WICELIG = 1	FSELIG = 1			
WIC miscoded =	0	FSPART miscoded =		0

	WIC = 0	WIC = 1
FSPART = 0	0	0

FSPART = 0	0	0
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Number of incorrectly coded eligibilities:
WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	PHOSPCT
Number of Observations.....	818.
Mean of Dependent Variable..	124.16111
Std. Dev. of Dep. Variable..	49.92587
Std. Error of Regression....	47.22755
Sum of Squared Residuals....	.17620E+07
R - Squared.....	.10408
Adjusted R - Squared.....	.07346
F-Statistic (27, 790).....	3.39897
Significance of F-Test.....	.00000
Log-Likelihood.....	-4299.8
Restricted (Slopes=0) Log-L.	-4359.0
Chi-Squared (27).....	118.32

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 47.2649

Estimated correlation with selection equation A = .631077E-01

Estimated correlation with selection equation B = -.459378E-01

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	66.2599	20.9367	3.165 (.00155)	1.0000	21.257
AGE2	-2.33885	5.35435	-.437 (.66225)	.22026	5.4405
AGE3	9.94627	5.74293	1.732 (.08329)	.27373	5.8342
AGE4	-10.3159	6.77966	-1.522 (.12811)	.25720	6.8899
FEMALE	-10.4935	3.44485	-3.046 (.00232)	.50678	3.5037
HHSIZE	.473246	1.18024	.401 (.68844)	4.6904	1.1980
SPCINC	-5.61665	8.99739	-.624 (.53246)	2.3836	9.1273
SPCINC SQ	17.4687	17.5044	.998 (.31830)	.68239	17.759
HEIGHT	1.27131	.356366	3.567 (.00036)	35.349	.36256
BLACK	-8.89362	6.15481	-1.445 (.14846)	.12700	6.2611
OTHRACE	-8.37939	10.1248	-.828 (.40789)	.29978E-01	10.298
HISPANIC	5.44063	6.51693	.835 (.40380)	.80742E-01	6.6315
MSOMEHS	17.2285	9.36138	1.840 (.06571)	.22463	9.5289
MHSGRAD	7.49327	9.12257	.821 (.41142)	.45911	9.2859
MSOME COL	11.2282	9.62646	1.166 (.24346)	.21834	9.7978
MCOLGRAD	12.2420	11.5575	1.059 (.28950)	.60431E-01	11.759
WIC	4.49514	13.9132	.323 (.74663)	.23150	14.125
FSPART	13.5766	9.77274	1.389 (.16476)	.32799	9.9118
WICFS	-8.00233	8.95922	-.893 (.37175)	.15297	9.1028
LOPOV	-16.2612	10.0836	-1.613 (.10682)	.54365E-01	10.235
MEDPOV	-4.88200	7.93519	-.615 (.53840)	.25620	8.0603
HIPOV	-6.31691	8.08327	-.781 (.43452)	.20483	8.2133
SUBCORE	13.8957	5.86470	2.369 (.01782)	.25555	5.9572
NMCORE	14.3846	7.71655	1.864 (.06230)	.87055E-01	7.8364
SUBLOINC	7.16288	6.33933	1.130 (.25851)	.17220	6.4389
NMLOINC	10.5531	6.69419	1.576 (.11492)	.15247	6.7994
Lambda-W	2.51640	7.46670	.337 (.73611)	-.29305E-01	7.5588
Lambda-F	-1.01516	5.55929	-.183 (.85511)	-.17217E-05	5.6359

(Elapsed time for model: 0 hours, 6 minutes, 24 seconds.)

MODEL COMMAND: SELECT ;LHS=MAGPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALEDWT
 §

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
 Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
 (WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0		
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 0	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 0	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1	FSPART miscoded = 0	
WICELIG = 1	FSELIG = 1	FSPART miscoded = 0	
	WIC = 0	WIC = 1	
FSPART = 0	0	0	
FSPART = 0	0	0	

Number of incorrectly coded eligibilities:
 WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
 Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	MAGPCT
Number of Observations.....	818.
Mean of Dependent Variable..	114.44051
Std. Dev. of Dep. Variable..	48.20096
Std. Error of Regression....	43.41938
Sum of Squared Residuals....	.14893E+07
R - Squared.....	.18757
Adjusted R - Squared.....	.15980
F-Statistic (27, 790).....	6.75515
Significance of F-Test.....	.00000
Log-Likelihood.....	-4231.0
Restricted (Slopes=0) Log-L.	-4330.2
Chi-Squared (27).....	198.33

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 43.4334
 Estimated correlation with selection equation A = .223790E-01
 Estimated correlation with selection equation B = -.366834E-01
 The column labelled std.dev.of X below is the
 uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	81.9666	19.2274	4.263 (.00002)	1.0000	19.543
AGE2	7.09698	4.91608	1.444 (.14884)	.22026	5.0018
AGE3	24.7353	5.27223	4.692 (.00000)	.27373	5.3638
AGE4	-23.5801	6.22647	-3.787 (.00015)	.25720	6.3343
FEMALE	-4.61939	3.16578	-1.459 (.14452)	.50678	3.2212
HHSIZE	-.822856	1.08410	-.759 (.44784)	4.6904	1.1014
SPCINC	-5.26941	8.25335	-.638 (.52318)	2.3836	8.3913
SPCINCSQ	11.2262	16.0526	.699 (.48434)	.68239	16.327
HEIGHT	.925238	.327572	2.825 (.00474)	35.349	.33332
BLACK	-10.2643	5.65881	-1.814 (.06970)	.12700	5.7563
OTHRACE	-9.61530	9.30528	-1.033 (.30146)	.29978E-01	9.4675
HISPANIC	13.6393	5.99131	2.277 (.02281)	.80742E-01	6.0968
MSOMEHS	5.22394	8.60710	.607 (.54389)	.22463	8.7606
MHSGRAD	-1.46248	8.38739	-.174 (.86158)	.45911	8.5371
MSOMECOL	5.22391	8.85005	.590 (.55501)	.21834	9.0077
MCOLGRAD	11.4395	10.6235	1.077 (.28156)	.60431E-01	10.811
WIC	8.79486	12.7671	.689 (.49090)	.23150	12.986
FSPART	20.0256	8.97805	2.231 (.02571)	.32799	9.1125
WICFS	-12.7734	8.22521	-1.553 (.12043)	.15297	8.3688
LOPOV	-11.9340	9.25105	-1.290 (.19704)	.54365E-01	9.4092
MEDPOV	-10.7336	7.28613	-1.473 (.14071)	.25620	7.4103
HIPOV	-14.2754	7.42372	-1.923 (.05449)	.20483	7.5510
SUBCORE	13.0238	5.38507	2.418 (.01558)	.25555	5.4768
NMCORE	4.19735	7.08311	.593 (.55346)	.87055E-01	7.2045
SUBLOINC	6.94570	5.81922	1.194 (.23264)	.17220	5.9197
NMLOINC	10.1457	6.14680	1.651 (.09883)	.15247	6.2511
Lambda-W	.304220	6.83416	.045 (.96449)	-.29305E-01	6.9493
Lambda-F	-1.45352	5.10778	-.285 (.77597)	-.17217E-05	5.1815

(Elapsed time for model: 0 hours, 6 minutes, 23 seconds.)

MODEL COMMAND: SELECT ;LHS=IRONPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALEDW
T \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0				
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0			
WICELIG = 0	FSELIG = 1				
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0			
WICELIG = 1	FSELIG = 0				
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0			
WICELIG = 1	FSELIG = 1				
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0			
	WIC = 0	WIC = 1			
FSPART = 0	0	0			
FSPART = 0	0	0			

Number of incorrectly coded eligibilities:
WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	IRONPCT
Number of Observations.....	818.
Mean of Dependent Variable..	79.90438
Std. Dev. of Dep. Variable..	56.47411
Std. Error of Regression....	44.19100
Sum of Squared Residuals....	.15427E+07
R - Squared.....	.38694
Adjusted R - Squared.....	.36599
F-Statistic (27, 790).....	18.46763
Significance of F-Test.....	.00000
Log-Likelihood.....	-4245.5
Restricted (Slopes=0) Log-L.	-4459.8
Chi-Squared (27).....	428.66

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 45.7261

Estimated correlation with selection equation A = -.751767

Estimated correlation with selection equation B = -.724416E-02

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-35.0670	34.2389	-1.024 (.30575)	1.0000	19.890
AGE2	.464533	7.46076	.062 (.95035)	.22026	5.0907
AGE3	12.5333	7.88906	1.589 (.11213)	.27373	5.4591
AGE4	47.4365	8.88000	5.342 (.00000)	.25720	6.4469
FEMALE	-4.25419	3.74404	-1.136 (.25585)	.50678	3.2784
HHSIZE	2.77102	1.95210	1.420 (.15575)	4.6904	1.1209
SPCINC	-13.7529	16.0382	-.858 (.39116)	2.3836	8.5405
SPCINC SQ	61.3863	30.1646	2.035 (.04185)	.68239	16.617
HEIGHT	.885135	.375684	2.356 (.01847)	35.349	.33925
BLACK	1.32776	6.85120	.194 (.84633)	.12700	5.8586
OTHRACE	-7.39518	12.0566	-.613 (.53963)	.29978E-01	9.6357
HISPANIC	-7.68874	6.89008	-1.116 (.26446)	.80742E-01	6.2052
MSOMEHS	13.4379	9.08148	1.480 (.13895)	.22463	8.9163
MHSGRAD	8.37694	8.90625	.941 (.34693)	.45911	8.6888
MSOMECOL	-3.56294	9.69283	-.368 (.71318)	.21834	9.1678
MCOLGRAD	9.74944	11.6072	.840 (.40094)	.60431E-01	11.003
WIC	87.6424	22.9116	3.825 (.00013)	.23150	13.217
FSPART	32.9793	20.2199	1.631 (.10288)	.32799	9.2745
WICFS	5.67461	14.8943	.381 (.70321)	.15297	8.5176
LOPOV	30.2209	16.4824	1.834 (.06672)	.54365E-01	9.5765
MEDPOV	7.55578	11.5351	.655 (.51245)	.25620	7.5420
HIPOV	4.01824	11.3452	.354 (.72321)	.20483	7.6852
SUBCORE	14.2652	7.75958	1.838 (.06600)	.25555	5.5742
NMCORE	18.3440	10.9189	1.680 (.09295)	.87055E-01	7.3326
SUBLOINC	-2.96075	9.55321	-.310 (.75662)	.17220	6.0249
NMLOINC	-2.57782	10.1066	-.255 (.79867)	.15247	6.3622
Lambda-W	-43.7649	16.0552	-2.726 (.00641)	-.29305E-01	7.0728
Lambda-F	-20.4378	13.4322	-1.522 (.12812)	-.17217E-05	5.2735

(Elapsed time for model: 0 hours, 6 minutes, 22 seconds.)

MODEL COMMAND: SELECT ;LHS=ZINCPCT ;RHS=X2 ;RH2=WICELIG,FSELIG ;WTS=SCALEDW
T \$

Bivariate Probit Sample Selection Model

Selection Criterion A: WIC = *
Selection Criterion B: FSPART = *

Modified selection model for Mathematica - 2/11/88
(WHG) Two level selection on eligibility and choice.

Bivariate frequencies for eligibility and participation:

WICELIG = 0	FSELIG = 0			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELIG = 0	FSELIG = 1			
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0		
WICELIG = 1	FSELIG = 0			
WIC miscoded = 0	FSELIG = 0	FSPART miscoded = 0		
WICELIG = 1	FSELIG = 1			
WIC miscoded = 0	FSELIG = 1	FSPART miscoded = 0		

	WIC = 0	WIC = 1
FSPART = 0	0	0
FSPART = 1	0	0

Number of incorrectly coded eligibilities:
WICELIG = 0 FSELIG = 0

Full sample contains 818.0 observations.
Selected sample contains 818.0 observations.

Ordinary Least Squares Estimates

Dependent Variable.....	ZINCPCT
Number of Observations.....	818.
Mean of Dependent Variable..	72.26123
Std. Dev. of Dep. Variable..	33.91145
Std. Error of Regression....	31.75109
Sum of Squared Residuals....	.79642E+06
R - Squared.....	.12228
Adjusted R - Squared.....	.09228
F-Statistic (27, 790).....	4.07629
Significance of F-Test.....	.00000
Log-Likelihood.....	-3975.0
Restricted (Slopes=0) Log-L.	-4042.6
Chi-Squared (27).....	135.11

Significance Level..... .32173E-13

Estimated disturbance standard deviation = 31.7733

Estimated correlation with selection equation A = .111609

Estimated correlation with selection equation B = .292058E-01

The column labelled std.dev.of X below is the uncorrected OLS standard errors.

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	43.3826	14.4961	2.993 (.00277)	1.0000	14.291
AGE2	4.08304	3.65437	1.117 (.26387)	.22026	3.6576
AGE3	11.5014	3.91464	2.938 (.00330)	.27373	3.9223
AGE4	3.22273	4.61317	.699 (.48481)	.25720	4.6321
FEMALE	-4.10182	2.32598	-1.763 (.07782)	.50678	2.3555
HHSIZE	-1.23259	.818876	-1.505 (.13227)	4.6904	.80539
SPCINC	-1.63810	6.26023	-.262 (.79358)	2.3836	6.1363
SPCINC SQ	.878910	12.1224	.073 (.94220)	.68239	11.939
HEIGHT	.828576	.240478	3.446 (.00057)	35.349	.24375
BLACK	8.42788	4.16716	2.022 (.04313)	.12700	4.2094
OTHRACE	.505976	6.86751	.074 (.94127)	.29978E-01	6.9232
HISPANIC	8.23801	4.40015	1.872 (.06118)	.80742E-01	4.4584
MSOMEHS	.977220	6.30097	.155 (.87675)	.22463	6.4063
MHSGRAD	-3.89616	6.14112	-.634 (.52580)	.45911	6.2429
MSOME COL	-7.29255	6.48624	-1.124 (.26088)	.21834	6.5870
MCOLGRAD	-9.38798	7.78349	-1.206 (.22776)	.60431E-01	7.9057
WIC	-2.99538	9.61001	-.312 (.75527)	.23150	9.4962
FSPART	5.54771	6.96572	.796 (.42578)	.32799	6.6637
WICFS	-12.7661	6.20126	-2.059 (.03953)	.15297	6.1198
LOPOV	-6.50389	6.95613	-.935 (.34979)	.54365E-01	6.8807
MEDPOV	7.27761	5.43517	1.339 (.18058)	.25620	5.4189
HIPOV	2.87873	5.52588	.521 (.60240)	.20483	5.5218
SUBCORE	16.3428	3.89155	4.194 (.00004)	.25555	4.0050

NM CORE	14.1414	5.26944	2.684 (.00728)	.87055E-01	5.2684
SUBLOINC	4.22925	4.34961	.972 (.33089)	.17220	4.3289
NMLOINC	3.89521	4.59915	.847 (.39703)	.15247	4.5712
Lambda-W	5.03532	5.28756	.952 (.34095)	-.29305E-01	5.0818
Lambda-F	3.24129	4.06417	.798 (.42514)	-.17217E-05	3.7890

(Elapsed time for model: 0 hours, 6 minutes, 23 seconds.)

APPENDIX E

ORDINARY LEAST-SQUARES REGRESSION ESTIMATES
OF DIETARY INTAKE EQUATIONS FOR WOMEN

MODEL COMMAND: CRMODEL ;LHS=FDENGPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... FDENGPCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 81.72380
 Std. Dev. of Dep. Variable.. 38.63000
 Std. Error of Regression.... 37.03676
 Sum of Squared Residuals.... .48422E+06
 R - Squared..... .14610
 Adjusted R - Squared..... .08079
 F-Statistic (27, 353)..... 2.23692
 Significance of F-Test..... .00054
 Log-Likelihood..... -1902.2
 Restricted (Slopes=0) Log-L. -1932.3
 Chi-Squared (27)..... 60.141
 Significance Level..... .25281E-03
 Durbin - Watson Statistic..... 1.9721
 Estimated Autocorrelation (Rho)..... .13943E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-134.487	81.2382	-1.655 (.09456)	1.0000	.00000
AGE	14.9363	3.73127	4.003 (.00013)	26.788	6.0267
AGESQ	-.226754	.575989E-01	-3.937 (.00016)	753.84	361.84
AGE19T22	21.5389	7.86282	2.739 (.00644)	.28520	.45210
HHSIZE	-2.07457	1.50341	-1.380 (.16463)	4.4242	1.6776
SPCINC	-7.54539	10.6106	-.711 (.48443)	2.3674	1.0150
SPCINCSQ	5.44948	23.0334	.237 (.79921)	.66321	.46943
HEIGHT	.666265E-01	.858673	.078 (.89692)	64.160	2.4599
BLACK	-14.1033	7.16695	-1.968 (.04713)	.15157	.35907
OTHRACE	-8.87218	12.2822	-.722 (.47736)	.27698E-01	.16432
HISPANIC	-22.2183	6.50660	-3.415 (.00086)	.13515	.34234
SOMEHS	12.3589	9.61267	1.286 (.19627)	.19834	.39928
HSGRAD	14.0849	9.16607	1.537 (.12097)	.46644	.49953
SOMECOL	13.0613	10.0749	1.296 (.19245)	.18444	.38835
COLGRAD	13.1320	12.1070	1.085 (.27854)	.87957E-01	.28360
PREG	-16.7607	5.19077	-3.229 (.00153)	.28770	.45329
LACT	-11.8831	7.27842	-1.633 (.09922)	.14267	.35020
DIETFLAG	-6.34412	7.90094	-.803 (.42805)	.69812E-01	.25517
WIC	.696726	7.36837	.095 (.88683)	.16295	.36981
FSPART	-2.09142	6.47434	-.323 (.74268)	.28204	.45058
WICFS	-3.10062	11.7555	-.264 (.78166)	.64809E-01	.24651
LOPOV	-5.86344	10.5558	-.555 (.58599)	.59888E-01	.23759
MEDPOV	-7.53812	8.48564	-.888 (.37874)	.22434	.41770
HIPOV	1.69050	8.57552	.197 (.82425)	.24702	.43184
SUBCORE	11.8790	7.75552	1.532 (.12219)	.14270	.35023
NMCORE	-6.75186	8.59971	-.785 (.43874)	.10703	.30955
SUBLOINC	3.38985	6.78834	.499 (.62376)	.15918	.36632
NMLOINC	4.32842	7.22646	.599 (.55702)	.13605	.34329
Sigma	37.0368	1.34170	27.604 (.00000)		

MODEL COMMAND: CRMODEL

MODEL COMMAND: CRMODEL ;LHS=PROPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	PROPCT
Number of Observations.....	381.
Mean of Dependent Variable..	134.06613
Std. Dev. of Dep. Variable..	65.59550
Std. Error of Regression....	60.98505
Sum of Squared Residuals....	.13129E+07
R - Squared.....	.19705
Adjusted R - Squared.....	.13563
F-Statistic (27, 353).....	3.20843
Significance of F-Test.....	.00000
Log-Likelihood.....	-2092.2
Restricted (Slopes=0) Log-L.	-2134.0
Chi-Squared (27).....	83.580
Significance Level.....	.80952E-08
Durbin - Watson Statistic.....	1.9159
Estimated Autocorrelation (Rho).....	.42044E-01

Variable Coefficient Std. Error T-ratio (Sig.Lvl) Mean of X Std.Dev.of X

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	57.0991	133.768	.427 (.67287)	1.0000	.00000
AGE	6.08904	6.14393	.991 (.32391)	26.788	6.0267
AGESQ	-.100425	.948428E-01	-1.059 (.29060)	753.84	361.84
AGE19T22	17.6238	12.9470	1.361 (.17057)	.28520	.45210
HHSIZE	.802542	2.47553	.324 (.74191)	4.4242	1.6776
SPCINC	-4.37434	17.4716	-.250 (.79034)	2.3674	1.0150
SPCINCSQ	2.54180	37.9271	.067 (.90321)	.66321	.46943
HEIGHT	-.290091	1.41390	-.205 (.81919)	64.160	2.4599
BLACK	-11.7194	11.8012	-.993 (.32289)	.15157	.35907
OTHRACE	-11.5854	20.2240	-.573 (.57437)	.27698E-01	.16432
HISPANIC	-26.5257	10.7138	-2.476 (.01323)	.13515	.34234
SOMEHS	28.5555	15.8283	1.804 (.06848)	.19834	.39928
HSGRAD	30.1522	15.0929	1.998 (.04393)	.46644	.49953
SOMECOL	16.6079	16.5894	1.001 (.31883)	.18444	.38835
COLGRAD	17.5684	19.9355	.881 (.38270)	.87957E-01	.28360
PREG	-59.5680	8.54717	-6.969 (.00000)	.28770	.45329
LACT	-28.9613	11.9847	-2.417 (.01547)	.14267	.35020
DIETFLAG	10.4828	13.0098	.806 (.42638)	.69812E-01	.25517
WIC	15.0509	12.1328	1.241 (.21297)	.16295	.36981
FSPART	9.22035	10.6607	.865 (.39196)	.28204	.45058
WICFS	-19.6983	19.3567	-1.018 (.31057)	.64809E-01	.24651
LOPOV	10.4582	17.3813	.602 (.55522)	.59888E-01	.23759
MEDPOV	2.88383	13.9725	.206 (.81842)	.22434	.41770
HIPOV	10.4588	14.1205	.741 (.46594)	.24702	.43184
SUBCORE	23.9913	12.7703	1.879 (.05790)	.14270	.35023
NMCORE	9.59182	14.1604	.677 (.50590)	.10703	.30955
SUBLOINC	1.02027	11.1777	.091 (.88878)	.15918	.36632
NMLOINC	-15.4350	11.8992	-1.297 (.19219)	.13605	.34329
Sigma	60.9850	2.20926	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=PROCMEG ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... PROCMEG
 Number of Observations..... 381.
 Mean of Dependent Variable.. 16.67897
 Std. Dev. of Dep. Variable.. 5.28450
 Std. Error of Regression.... 4.75388
 Sum of Squared Residuals.... 7977.6
 R - Squared..... .24824
 Adjusted R - Squared..... .19074
 F-Statistic (27, 353)..... 4.31716
 Significance of F-Test..... .00000
 Log-Likelihood..... -1120.0
 Restricted (Slopes=0) Log-L. -1174.4
 Chi-Squared (27)..... 108.68
 Significance Level..... .42658E-13
 Durbin - Watson Statistic..... 1.8234
 Estimated Autocorrelation (Rho)..... .88296E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	58.0830	10.4274	5.570 (.00000)	1.0000	.00000
AGE	-2.35101	.478929	-4.909 (.00000)	26.788	6.0267
AGESQ	.362039E-01	.739315E-02	4.897 (.00001)	753.84	361.84
AGE19T22	-2.83327	1.00924	-2.807 (.00531)	.28520	.45210
HHSIZE	.496542	.192972	2.573 (.01019)	4.4242	1.6776
SPCINC	.961763	1.36194	.706 (.48755)	2.3674	1.0150
SPCINC SQ	-.636448	2.95648	-.215 (.81280)	.66321	.46943
HEIGHT	-.176820	.110216	-1.604 (.10527)	64.160	2.4599
BLACK	1.18706	.919919	1.290 (.19459)	.15157	.35907
OTHRACE	.281616	1.57650	.179 (.83580)	.27698E-01	.16432
HISPANIC	1.59788	.835159	1.913 (.05349)	.13515	.34234
SOMEHS	1.88458	1.23384	1.527 (.12325)	.19834	.39928
HSGRAD	2.14315	1.17652	1.822 (.06586)	.46644	.49953
SOMECOL	.952122E-02	1.29317	.007 (.94176)	.18444	.38835
COLGRAD	-.433004	1.55400	-.279 (.77196)	.87957E-01	.28360
PREG	1.84440	.666265	2.768 (.00594)	.28770	.45329
LACT	.113937	.934228	.122 (.87044)	.14267	.35020
DIETFLAG	3.04075	1.01413	2.998 (.00306)	.69812E-01	.25517
WIC	1.60436	.945772	1.696 (.08667)	.16295	.36981
FSPART	1.51828	.831019	1.827 (.06506)	.28204	.45058
WICFS	-2.16163	1.50889	-1.433 (.14875)	.64809E-01	.24651
LOPOV	1.46427	1.35490	1.081 (.28037)	.59888E-01	.23759
MEDPOV	-.536758	1.08918	-.493 (.62819)	.22434	.41770
HIPOV	-1.25196	1.10072	-1.137 (.25496)	.24702	.43184
SUBCORE	-1.44677	.995466	-1.453 (.14283)	.14270	.35023
NM CORE	.617690	1.10382	.560 (.58323)	.10703	.30955
SUBLOINC	.741042E-01	.871323	.085 (.89249)	.15918	.36632
NMLOINC	-1.42599	.927558	-1.537 (.12079)	.13605	.34329
Sigma	4.75388	.172215	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=FATCMPEG ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... FATCMPEG
 Number of Observations..... 381.
 Mean of Dependent Variable.. 36.07624
 Std. Dev. of Dep. Variable.. 9.00133
 Std. Error of Regression.... 8.81040
 Sum of Squared Residuals.... 27401.
 R - Squared..... .11004
 Adjusted R - Squared..... .04197
 F-Statistic (27, 353)..... 1.61659
 Significance of F-Test..... .02878
 Log-Likelihood..... -1355.1
 Restricted (Slopes=0) Log-L. -1377.3
 Chi-Squared (27)..... 44.383
 Significance Level..... .18871E-01
 Durbin - Watson Statistic..... 1.9027
 Estimated Autocorrelation (Rho)..... .48662E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	31.7322	19.3252	1.642 (.09729)	1.0000	.00000
AGE	-.137755	.887603	-.155 (.85026)	26.788	6.0267
AGESQ	-.951549E-03	.137018E-01	-.069 (.90177)	753.84	361.84
AGE19T22	-3.23426	1.87043	-1.729 (.08074)	.28520	.45210
HHSIZE	-.638989E-01	.357636	-.179 (.83578)	4.4242	1.6776
SPCINC	1.92991	2.52409	.765 (.45121)	2.3674	1.0150
SPCINC SQ	-4.08164	5.47926	-.745 (.46331)	.66321	.46943
HEIGHT	.125595	.204263	.615 (.54653)	64.160	2.4599
BLACK	.559547	1.70489	.328 (.73924)	.15157	.35907
OTHRACE	-1.49903	2.92173	-.513 (.61451)	.27698E-01	.16432
HISPANIC	-1.81392	1.54781	-1.172 (.24030)	.13515	.34234
SOMEHS	.443679	2.28669	.194 (.82620)	.19834	.39928
HSGRAD	-1.10308	2.18045	-.506 (.61934)	.46644	.49953
SOMECOL	-.760690E-01	2.39665	-.032 (.92469)	.18444	.38835
COLGRAD	-1.54472	2.88004	-.536 (.59881)	.87957E-01	.28360
PREG	.928101E-02	1.23479	.008 (.94163)	.28770	.45329
LACT	-4.12489	1.73141	-2.382 (.01691)	.14267	.35020
DIETFLAG	.282484	1.87950	.150 (.85326)	.69812E-01	.25517
WIC	-2.08159	1.75281	-1.188 (.23385)	.16295	.36981
FSPART	.794639	1.54013	.516 (.61255)	.28204	.45058
WICFS	3.52665	2.79643	1.261 (.20523)	.64809E-01	.24651
LOPOV	2.29769	2.51105	.915 (.36400)	.59888E-01	.23759
MEDPOV	2.16317	2.01859	1.072 (.28459)	.22434	.41770
HIPOV	1.48835	2.03997	.730 (.47284)	.24702	.43184
SUBCORE	4.48461	1.84490	2.431 (.01490)	.14270	.35023
NM CORE	-.284774E-02	2.04572	-.001 (.94776)	.10703	.30955
SUBLOINC	-.421436	1.61483	-.261 (.78347)	.15918	.36632
NMLOINC	-2.17166	1.71905	-1.263 (.20442)	.13605	.34329
Sigma	8.81040	.319167	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=CHOCMPEG ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... CHOCMPEG
 Number of Observations..... 381.
 Mean of Dependent Variable.. 47.01912
 Std. Dev. of Dep. Variable.. 11.03532
 Std. Error of Regression.... 10.62080
 Sum of Squared Residuals.... 39819.
 R - Squared..... .13953
 Adjusted R - Squared..... .07371
 F-Statistic (27, 353)..... 2.12002
 Significance of F-Test..... .00121
 Log-Likelihood..... -1426.3
 Restricted (Slopes=0) Log-L. -1454.9
 Chi-Squared (27)..... 57.221
 Significance Level..... .60295E-03
 Durbin - Watson Statistic..... 1.8665
 Estimated Autocorrelation (Rho)..... .66730E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	6.00073	23.2962	.258 (.78567)	1.0000	.00000
AGE	2.60726	1.06999	2.437 (.01467)	26.788	6.0267
AGESQ	-.370487E-01	.165173E-01	-2.243 (.02416)	753.84	361.84
AGE19T22	6.34745	2.25477	2.815 (.00520)	.28520	.45210
HHSIZE	-.477137	.431124	-1.107 (.26850)	4.4242	1.6776
SPCINC	-1.28893	3.04275	-.424 (.67507)	2.3674	1.0150
SPCINCSQ	1.87122	6.60516	.283 (.76891)	.66321	.46943
HEIGHT	.411495E-01	.246236	.167 (.84293)	64.160	2.4599
BLACK	-1.06899	2.05522	-.520 (.60974)	.15157	.35907
OTHRACE	2.11942	3.52210	.602 (.55519)	.27698E-01	.16432
HISPANIC	.477551E-01	1.86586	.026 (.92865)	.13515	.34234
SOMEHS	-1.24410	2.75657	-.451 (.65629)	.19834	.39928
HSGRAD	-.329135E-01	2.62850	-.013 (.93768)	.46644	.49953
SOMECOL	1.00287	2.88912	.347 (.72662)	.18444	.38835
COLGRAD	2.87994	3.47184	.830 (.41237)	.87957E-01	.28360
PREG	-1.65209	1.48853	-1.110 (.26709)	.28770	.45329
LACT	4.06978	2.08719	1.950 (.04914)	.14267	.35020
DIETFLAG	-3.73188	2.26570	-1.647 (.09624)	.69812E-01	.25517
WIC	.462523	2.11298	.219 (.81050)	.16295	.36981
FSPART	-2.25259	1.85661	-1.213 (.22354)	.28204	.45058
WICFS	-1.77500	3.37106	-.527 (.60542)	.64809E-01	.24651
LOPOV	-3.77632	3.02703	-1.248 (.21031)	.59888E-01	.23759
MEDPOV	-1.46185	2.43338	-.601 (.55585)	.22434	.41770
HIPOV	-.438099	2.45915	-.178 (.83610)	.24702	.43184
SUBCORE	-3.32016	2.22400	-1.493 (.13209)	.14270	.35023
NMCOE	-.415314	2.46609	-.168 (.84213)	.10703	.30955
SUBLOINC	.481029	1.94665	.247 (.79244)	.15918	.36632
NMLOINC	3.15182	2.07229	1.521 (.12487)	.13605	.34329
Sigma	10.6208	.384751	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=EODTCHOL ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... EODTCHOL
 Number of Observations..... 381.
 Mean of Dependent Variable.. 349.61542
 Std. Dev. of Dep. Variable.. 269.89596
 Std. Error of Regression.... 248.70896
 Sum of Squared Residuals.... .21835E+08
 R - Squared..... .21117
 Adjusted R - Squared..... .15084
 F-Statistic (27, 353)..... 3.50002
 Significance of F-Test..... .00000
 Log-Likelihood..... -2627.8
 Restricted (Slopes=0) Log-L. -2672.9
 Chi-Squared (27)..... 90.343
 Significance Level..... .36104E-09
 Durbin - Watson Statistic..... 1.9831
 Estimated Autocorrelation (Rho)..... .84664E-02

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-459.027	545.530	-.841 (.40543)	1.0000	.00000
AGE	43.4366	25.0562	1.734 (.07997)	26.788	6.0267
AGESQ	-.714559	.386788	-1.847 (.06215)	753.84	361.84
AGE19T22	85.4008	52.8004	1.617 (.10243)	.28520	.45210
HHSIZE	5.97037	10.0957	.591 (.56205)	4.4242	1.6776
SPCINC	101.538	71.2525	1.425 (.15095)	2.3674	1.0150
SPCINC SQ	-319.955	154.674	-2.069 (.03712)	.66321	.46943
HEIGHT	-.138920	5.76615	-.024 (.92963)	64.160	2.4599
BLACK	-2.06818	48.1274	-.043 (.91770)	.15157	.35907
OTHRACE	21.4315	82.4776	.260 (.78420)	.27698E-01	.16432
HISPANIC	50.6086	43.6930	1.158 (.24602)	.13515	.34234
SOMEHS	84.9530	64.5509	1.316 (.18560)	.19834	.39928
HSGRAD	59.0829	61.5519	.960 (.34001)	.46644	.49953
SOMECOL	75.6246	67.6549	1.118 (.26356)	.18444	.38835
COLGRAD	-59.2153	81.3007	-.728 (.47361)	.87957E-01	.28360
PREG	87.1799	34.8570	2.501 (.01237)	.28770	.45329
LACT	121.846	48.8760	2.493 (.01264)	.14267	.35020
DIETFLAG	-106.396	53.0563	-2.005 (.04315)	.69812E-01	.25517
WIC	15.8713	49.4800	.321 (.74419)	.16295	.36981
FSPART	43.9721	43.4764	1.011 (.31368)	.28204	.45058
WICPS	-103.470	78.9406	-1.311 (.18744)	.64809E-01	.24651
LOPOV	-117.374	70.8844	-1.656 (.09448)	.59888E-01	.23759
MEDPOV	-46.6221	56.9827	-.818 (.41903)	.22434	.41770
HIPOV	-58.5314	57.5863	-1.016 (.31119)	.24702	.43184
SUBCORE	230.431	52.0798	4.425 (.00003)	.14270	.35023
NM CORE	-75.6344	57.7487	-1.310 (.18780)	.10703	.30955
SUBLOINC	84.3910	45.5850	1.851 (.06161)	.15918	.36632
NMLOINC	28.0264	48.5271	.578 (.57125)	.13605	.34329
Sigma	248.709	9.00978	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=VITAPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates
 Dependent Variable..... VITAPCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 102.99840
 Std. Dev. of Dep. Variable.. 137.28283
 Std. Error of Regression.... 135.25529
 Sum of Squared Residuals.... .64578E+07
 R - Squared..... .09829
 Adjusted R - Squared..... .02932
 F-Statistic (27, 353)..... 1.42512
 Significance of F-Test..... .08101
 Log-Likelihood..... -2395.7
 Restricted (Slopes=0) Log-L. -2415.4
 Chi-Squared (27)..... 39.385
 Significance Level..... .58432E-01
 Durbin - Watson Statistic..... 1.7794
 Estimated Autocorrelation (Rho)..... .11031

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-5.31812	296.676	-.018 (.93380)	1.0000	.00000
AGE	2.14983	13.6263	.158 (.84868)	26.788	6.0267
AGESQ	-.359990E-01	.210347	-.171 (.84045)	753.84	361.84
AGE19T22	-7.51762	28.7144	-.262 (.78293)	.28520	.45210
HHSIZE	5.32159	5.49034	.969 (.33512)	4.4242	1.6776
SPCINC	-10.1672	38.7492	-.262 (.78256)	2.3674	1.0150
SPCINC SQ	22.5734	84.1163	.268 (.77867)	.66321	.46943
HEIGHT	1.83073	3.13580	.584 (.56708)	64.160	2.4599
BLACK	13.8738	26.1731	.530 (.60304)	.15157	.35907
OTHRACE	-6.90787	44.8537	-.154 (.85099)	.27698E-01	.16432
HISPANIC	-51.4042	23.7616	-2.163 (.02947)	.13515	.34234
SOMEHS	-100.053	35.1047	-2.850 (.00470)	.19834	.39928
HSGRAD	-65.3289	33.4738	-1.952 (.04894)	.46644	.49953
SOMECOL	-20.4789	36.7928	-.557 (.58523)	.18444	.38835
COLGRAD	-53.7890	44.2137	-1.217 (.22224)	.87957E-01	.28360
PREG	13.1147	18.9563	.692 (.49665)	.28770	.45329
LACT	-20.3546	26.5802	-.766 (.45049)	.14267	.35020
DIETFLAG	70.3873	28.8536	2.439 (.01457)	.69812E-01	.25517
WIC	1.29987	26.9087	.048 (.91445)	.16295	.36981
FSPART	15.5083	23.6438	.656 (.51973)	.28204	.45058
WICFS	-4.57030	42.9302	-.106 (.87973)	.64809E-01	.24651
LOPOV	36.1713	38.5490	.938 (.35142)	.59888E-01	.23759
MEDPOV	.249935	30.9889	.008 (.94117)	.22434	.41770
HIPOV	18.8492	31.3171	.602 (.55510)	.24702	.43184
SUBCORE	-5.94687	28.3226	-.210 (.81616)	.14270	.35023
NM CORE	15.3634	31.4055	.489 (.63064)	.10703	.30955
SUBLOINC	-13.2862	24.7905	-.536 (.59909)	.15918	.36632
NMLOINC	-26.9578	26.3905	-1.021 (.30867)	.13605	.34329
Sigma	135.255	4.89978	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=LOGAPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... LOGAPCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 4.12781
 Std. Dev. of Dep. Variable.. 1.07134
 Std. Error of Regression.... 1.03059
 Sum of Squared Residuals.... 374.92
 R - Squared..... .14039
 Adjusted R - Squared..... .07464
 F-Statistic (27, 353)..... 2.13516
 Significance of F-Test..... .00109
 Log-Likelihood..... -537.55
 Restricted (Slopes=0) Log-L. -566.35
 Chi-Squared (27)..... 57.600
 Significance Level..... .53939E-03
 Durbin - Watson Statistic..... 1.8295
 Estimated Autocorrelation (Rho)..... .85268E-01

Variable Coefficient Std. Error T-ratio (Sig.Lvl) Mean of X Std.Dev.of X

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	.461186E-01	2.26054	.020 (.93210)	1.0000	.00000
AGE	.973248E-01	.103826	.937 (.35193)	26.788	6.0267
AGESQ	-.180694E-02	.160275E-02	-1.127 (.25932)	753.84	361.84
AGE19T22	.566485E-01	.218791	.259 (.78481)	.28520	.45210
HHSIZE	.262211E-01	.418340E-01	.627 (.53870)	4.4242	1.6776
SPCINC	.449757E-01	.295253	.152 (.85202)	2.3674	1.0150
SPCINC SQ	-.863434E-01	.640930	-.135 (.86274)	.66321	.46943
HEIGHT	.488679E-01	.238935E-01	2.045 (.03925)	64.160	2.4599
BLACK	-.664698E-01	.199428	-.333 (.73585)	.15157	.35907
OTHRACE	.515700E-01	.341766	.151 (.85289)	.27698E-01	.16432
HISPANIC	-.238464	.181053	-1.317 (.18525)	.13515	.34234
SOMEHS	-.763479	.267483	-2.854 (.00465)	.19834	.39928
HSGRAD	-.488837	.255056	-1.917 (.05308)	.46644	.49953
SOME COL	-.452463E-01	.280345	-.161 (.84646)	.18444	.38835
COLGRAD	-.320089E-01	.336890	-.095 (.88656)	.87957E-01	.28360
PREG	.957163E-01	.144439	.663 (.51535)	.28770	.45329
LACT	-.907341E-01	.202530	-.448 (.65854)	.14267	.35020
DIETFLAG	.424158	.219852	1.929 (.05155)	.69812E-01	.25517
WIC	-.298642	.205033	-1.457 (.14194)	.16295	.36981
FSPART	.625469E-01	.180155	.347 (.72657)	.28204	.45058
WICFS	.144675	.327110	.442 (.66242)	.64809E-01	.24651
LOPOV	.284736	.293727	.969 (.33505)	.59888E-01	.23759
MEDPOV	-.275537	.236122	-1.167 (.24238)	.22434	.41770
HIPOV	-.155512	.238623	-.652 (.52245)	.24702	.43184
SUBCORE	.194516E-01	.215806	.090 (.88946)	.14270	.35023
NM CORE	-.136961	.239296	-.572 (.57471)	.10703	.30955
SUBLOINC	.134827	.188893	.714 (.48275)	.15918	.36632
NMLOINC	.180956E-01	.201084	.090 (.88955)	.13605	.34329
Sigma	1.03059	.373342E-01	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=VITB1PCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... VITB1PCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 117.88861
 Std. Dev. of Dep. Variable.. 85.84651
 Std. Error of Regression.... 78.78541
 Sum of Squared Residuals.... .21911E+07
 R - Squared..... .21758
 Adjusted R - Squared..... .15774
 F-Statistic (27, 353)..... 3.63581
 Significance of F-Test..... .00000
 Log-Likelihood..... -2189.8
 Restricted (Slopes=0) Log-L. -2236.5
 Chi-Squared (27)..... 93.451
 Significance Level..... .82710E-10
 Durbin - Watson Statistic..... 1.9912
 Estimated Autocorrelation (Rho)..... .44145E-02

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-413.591	172.812	-2.393 (.01644)	1.0000	.00000
AGE	24.3150	7.93723	3.063 (.00252)	26.788	6.0267
AGESQ	-.361447	.122526	-2.950 (.00352)	753.84	361.84
AGE19T22	11.9667	16.7260	.715 (.48170)	.28520	.45210
HHSIZE	2.02673	3.19809	.634 (.53416)	4.4242	1.6776
SPCINC	5.57800	22.5712	.247 (.79243)	2.3674	1.0150
SPCINCSQ	-2.92156	48.9973	-.060 (.90763)	.66321	.46943
HEIGHT	1.16046	1.82659	.635 (.53313)	64.160	2.4599
BLACK	-.274429E-01	15.2457	-.002 (.94723)	.15157	.35907
OTHRACE	-7.10483	26.1270	-.272 (.77634)	.27698E-01	.16432
HISPANIC	-15.9177	13.8410	-1.150 (.24952)	.13515	.34234
SOMEHS	59.7926	20.4483	2.924 (.00380)	.19834	.39928
HSGRAD	54.6620	19.4983	2.803 (.00537)	.46644	.49953
SOMECOL	36.7090	21.4316	1.713 (.08364)	.18444	.38835
COLGRAD	9.50386	25.7542	.369 (.71193)	.87957E-01	.28360
PREG	-52.2090	11.0419	-4.728 (.00001)	.28770	.45329
LACT	-9.95379	15.4828	-.643 (.52818)	.14267	.35020
DIETFLAG	37.7117	16.8070	2.244 (.02411)	.69812E-01	.25517
WIC	10.7225	15.6742	.684 (.50159)	.16295	.36981
FSPART	12.0493	13.7724	.875 (.38629)	.28204	.45058
WICFS	4.80714	25.0066	.192 (.82732)	.64809E-01	.24651
LOPOV	-4.35956	22.4546	-.194 (.82612)	.59888E-01	.23759
MEDPOV	4.22833	18.0508	.234 (.80071)	.22434	.41770
HIPOV	15.2785	18.2420	.838 (.40769)	.24702	.43184
SUBCORE	35.7013	16.4977	2.164 (.02942)	.14270	.35023
NMCORE	71.3932	18.2935	3.903 (.00018)	.10703	.30955
SUBLOINC	21.3855	14.4403	1.481 (.13526)	.15918	.36632
NMLOINC	-2.69984	15.3723	-.176 (.83767)	.13605	.34329
Sigma	78.7854	2.85409	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=VITB2PCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... VITB2PCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 125.35667
 Std. Dev. of Dep. Variable.. 85.42936
 Std. Error of Regression.... 82.55433
 Sum of Squared Residuals.... .24058E+07
 R - Squared..... .13253
 Adjusted R - Squared..... .06618
 F-Statistic (27, 353)..... 1.99735
 Significance of F-Test..... .00274
 Log-Likelihood..... -2207.6
 Restricted (Slopes=0) Log-L. -2234.7
 Chi-Squared (27)..... 54.132
 Significance Level..... .14657E-02
 Durbin - Watson Statistic..... 2.0632
 Estimated Autocorrelation (Rho)..... -.31579E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-266.879	181.079	-1.474 (.13719)	1.0000	.00000
AGE	12.0319	8.31693	1.447 (.14472)	26.788	6.0267
AGESQ	-.197426	.128387	-1.538 (.12070)	753.84	361.84
AGE19T22	.680107	17.5261	.039 (.92027)	.28520	.45210
HHSIZE	4.20739	3.35108	1.256 (.20731)	4.4242	1.6776
SPCINC	27.0099	23.6510	1.142 (.25296)	2.3674	1.0150
SPCINC SQ	-53.8368	51.3412	-1.049 (.29549)	.66321	.46943
HEIGHT	1.80571	1.91397	.943 (.34869)	64.160	2.4599
BLACK	-8.05566	15.9750	-.504 (.62044)	.15157	.35907
OTHRACE	-10.1351	27.3769	-.370 (.71113)	.27698E-01	.16432
HISPANIC	-24.5802	14.5031	-1.695 (.08695)	.13515	.34234
SOMEHS	39.8346	21.4265	1.859 (.06052)	.19834	.39928
HSGRAD	38.9488	20.4310	1.906 (.05435)	.46644	.49953
SOMECOL	34.9925	22.4568	1.558 (.11577)	.18444	.38835
COLGRAD	47.8194	26.9863	1.772 (.07352)	.87957E-01	.28360
PREG	-11.1091	11.5701	-.960 (.33987)	.28770	.45329
LACT	3.18513	16.2235	.196 (.82476)	.14267	.35020
DIETFLAG	70.6522	17.6111	4.012 (.00012)	.69812E-01	.25517
WIC	-3.58407	16.4240	-.218 (.81093)	.16295	.36981
FSPART	14.2646	14.4312	.988 (.32524)	.28204	.45058
WICFS	14.4263	26.2029	.551 (.58928)	.64809E-01	.24651
LOPOV	25.9697	23.5288	1.104 (.26985)	.59888E-01	.23759
MEDPOV	10.9719	18.9144	.580 (.56956)	.22434	.41770
HIPOV	16.4545	19.1147	.861 (.39427)	.24702	.43184
SUBCORE	25.0448	17.2869	1.449 (.14412)	.14270	.35023
NMCORE	42.9081	19.1686	2.238 (.02444)	.10703	.30955
SUBLOINC	11.8405	15.1311	.783 (.44031)	.15918	.36632
NMLOINC	-5.52667	16.1077	-.343 (.72930)	.13605	.34329
Sigma	82.5543	2.99063	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=VITB6PCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... VITB6PCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 62.79161
 Std. Dev. of Dep. Variable.. 44.78131
 Std. Error of Regression.... 43.70450
 Sum of Squared Residuals.... .67426E+06
 R - Squared..... .11519
 Adjusted R - Squared..... .04751
 F-Statistic (27, 353)..... 1.70207
 Significance of F-Test..... .01749
 Log-Likelihood..... -1965.3
 Restricted (Slopes=0) Log-L. -1988.6
 Chi-Squared (27)..... 46.594
 Significance Level..... .10973E-01
 Durbin - Watson Statistic..... 2.0544
 Estimated Autocorrelation (Rho)..... -.27219E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev. of X
ONE	-48.3188	95.8636	-.504 (.62060)	1.0000	.00000
AGE	5.32257	4.40301	1.209 (.22529)	26.788	6.0267
AGESQ	-.716106E-01	.679684E-01	-1.054 (.29311)	753.84	361.84
AGE19T22	.611222	9.27837	.066 (.90390)	.28520	.45210
HHSIZE	-.151476E-01	1.77407	-.009 (.94078)	4.4242	1.6776
SPCINC	-6.86679	12.5209	-.548 (.59071)	2.3674	1.0150
SPCINC SQ	11.0345	27.1802	.406 (.68700)	.66321	.46943
HEIGHT	.189834	1.01326	.187 (.83038)	64.160	2.4599
BLACK	-1.54397	8.45722	-.183 (.83336)	.15157	.35907
OTHRACE	-3.85995	14.4934	-.266 (.77999)	.27698E-01	.16432
HISPANIC	-11.7498	7.67798	-1.530 (.12252)	.13515	.34234
SOMEHS	10.5728	11.3432	.932 (.35477)	.19834	.39928
HSGRAD	14.3688	10.8162	1.328 (.18138)	.46644	.49953
SOMECOL	20.4841	11.8887	1.723 (.08183)	.18444	.38835
COLGRAD	-2.50244	14.2866	-.175 (.83796)	.87957E-01	.28360
PREG	-9.80212	6.12527	-1.600 (.10616)	.28770	.45329
LACT	14.6582	8.58876	1.707 (.08476)	.14267	.35020
DIETFLAG	7.40754	9.32335	.795 (.43310)	.69812E-01	.25517
WIC	19.5003	8.69490	2.243 (.02418)	.16295	.36981
FSPART	10.2671	7.63992	1.344 (.17623)	.28204	.45058
WICFS	-7.77364	13.8719	-.560 (.58270)	.64809E-01	.24651
LOPOV	-1.59420	12.4562	-.128 (.86680)	.59888E-01	.23759
MEDPOV	-.408932	10.0133	-.041 (.91902)	.22434	.41770
HIPOV	4.79378	10.1194	.474 (.64111)	.24702	.43184
SUBCORE	14.8106	9.15175	1.618 (.10224)	.14270	.35023
NM CORE	9.72015	10.1479	.958 (.34108)	.10703	.30955
SUBLOINC	1.09483	8.01045	.137 (.86155)	.15918	.36632
NMLOINC	-6.97743	8.52745	-.818 (.41900)	.13605	.34329
Sigma	43.7045	1.58325	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS-VITB12PC ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... VITB12PC
 Number of Observations..... 381.
 Mean of Dependent Variable.. 150.27712
 Std. Dev. of Dep. Variable.. 230.13658
 Std. Error of Regression.... 226.99616
 Sum of Squared Residuals.... .18189E+08
 R - Squared..... .09623
 Adjusted R - Squared..... .02711
 F-Statistic (27, 353)..... 1.39211
 Significance of F-Test..... .09558
 Log-Likelihood..... -2593.0
 Restricted (Slopes=0) Log-L. -2612.2
 Chi-Squared (27)..... 38.516
 Significance Level..... .70055E-01
 Durbin - Watson Statistic..... 1.7080
 Estimated Autocorrelation (Rho)..... .14602

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	654.866	497.904	1.315 (.18589)	1.0000	.00000
AGE	-18.4933	22.8687	-.809 (.42465)	26.788	6.0267
AGESQ	.316330	.353020	.896 (.37444)	753.84	361.84
AGE19722	7 31328	48 1908	152 (.85237)	28520	45210

MODEL COMMAND: CRMODEL ;LHS=VITCPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... VITCPCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 119.25874
 Std. Dev. of Dep. Variable.. 119.66018
 Std. Error of Regression.... 115.94767
 Sum of Squared Residuals.... .47457E+07
 R - Squared..... .12780
 Adjusted R - Squared..... .06109
 F-Statistic (27, 353)..... 1.91570
 Significance of F-Test..... .00466
 Log-Likelihood..... -2337.0
 Restricted (Slopes=0) Log-L. -2363.1
 Chi-Squared (27)..... 52.063
 Significance Level..... .26071E-02
 Durbin - Watson Statistic..... 2.0716
 Estimated Autocorrelation (Rho)..... -.35793E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-279.927	254.325	-1.101 (.27124)	1.0000	.00000
AGE	32.9693	11.6811	2.822 (.00509)	26.788	6.0267
AGESQ	-.466929	.180320	-2.589 (.00975)	753.84	361.84
AGE19T22	71.1017	24.6154	2.889 (.00421)	.28520	.45210
HHSIZE	-10.9132	4.70660	-2.319 (.01994)	4.4242	1.6776
SPCINC	-14.2451	33.2178	-.429 (.67153)	2.3674	1.0150
SPCINCSQ	36.5401	72.1087	.507 (.61878)	.66321	.46943
HEIGHT	-2.19776	2.68817	-.818 (.41939)	64.160	2.4599
BLACK	29.5486	22.4369	1.317 (.18530)	.15157	.35907
OTHRACE	-9.02033	38.4509	-.235 (.80049)	.27698E-01	.16432
HISPANIC	-7.10428	20.3696	-.349 (.72551)	.13515	.34234
SOMEHS	1.60848	30.0935	.053 (.91134)	.19834	.39928
HSGRAD	-7.02483	28.6954	-.245 (.79392)	.46644	.49953
SOMECOL	5.25306	31.5406	.167 (.84328)	.18444	.38835
COLGRAD	62.5256	37.9022	1.650 (.09573)	.87957E-01	.28360
PREG	.706583	16.2503	.043 (.91739)	.28770	.45329
LACT	6.73179	22.7859	.295 (.76094)	.14267	.35020
DIETFLAG	19.5908	24.7348	.792 (.43458)	.69812E-01	.25517
WIC	5.95343	23.0675	.258 (.78534)	.16295	.36981
FSPART	11.2432	20.2686	.555 (.58650)	.28204	.45058
WICFS	-16.2340	36.8019	-.441 (.66321)	.64809E-01	.24651
LOPOV	-5.51930	33.0462	-.167 (.84299)	.59888E-01	.23759
MEDPOV	35.5214	26.5652	1.337 (.17847)	.22434	.41770
HIPOV	42.7279	26.8466	1.592 (.10810)	.24702	.43184
SUBCORE	26.8195	24.2795	1.105 (.26945)	.14270	.35023
NMCORE	67.7584	26.9224	2.517 (.01186)	.10703	.30955
SUBLOINC	12.6090	21.2517	.593 (.56077)	.15918	.36632
NMLOINC	20.6280	22.6232	.912 (.36577)	.13605	.34329
Sigma	115.948	4.20034	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=VITEPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... VITEPCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 92.64488
 Std. Dev. of Dep. Variable.. 175.30974
 Std. Error of Regression.... 174.54821
 Sum of Squared Residuals.... .10755E+08
 R - Squared..... .07911
 Adjusted R - Squared..... .00867
 F-Statistic (27, 353)..... 1.12307
 Significance of F-Test..... .30919
 Log-Likelihood..... -2492.9
 Restricted (Slopes=0) Log-L. -2508.6
 Chi-Squared (27)..... 31.364
 Significance Level..... .25646
 Durbin - Watson Statistic..... 2.0544
 Estimated Autocorrelation (Rho)..... -.27219E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	15.3166	382.863	.040 (.91953)	1.0000	.00000
AGE	10.3771	17.5848	.590 (.56289)	26.788	6.0267
AGESQ	-.162430	.271454	-.598 (.55742)	753.84	361.84
AGE19T22	-6.46644	37.0562	-.175 (.83837)	.28520	.45210
HHSIZE	2.54362	7.08533	.359 (.71866)	4.4242	1.6776
SPCINC	12.9753	50.0063	.259 (.78445)	2.3674	1.0150
SPCINC SQ	-63.7035	108.553	-.587 (.56506)	.66321	.46943
HEIGHT	-1.75861	4.04678	-.435 (.66764)	64.160	2.4599
BLACK	49.3574	33.7767	1.461 (.14062)	.15157	.35907
OTHRACE	16.9363	57.8842	.293 (.76281)	.27698E-01	.16432
HISPANIC	-32.5210	30.6645	-1.061 (.28981)	.13515	.34234
SOMEHS	-18.4182	45.3029	-.407 (.68661)	.19834	.39928
HSGRAD	17.7364	43.1982	.411 (.68389)	.46644	.49953
SOMECOL	70.4672	47.4814	1.484 (.13442)	.18444	.38835
COLGRAD	26.3241	57.0582	.461 (.64949)	.87957E-01	.28360
PREG	-11.0196	24.4633	-.450 (.65688)	.28770	.45329
LACT	-8.70632	34.3020	-.254 (.78811)	.14267	.35020
DIETFLAG	26.8176	37.2358	.720 (.47871)	.69812E-01	.25517
WIC	26.2624	34.7259	.756 (.45631)	.16295	.36981
FSPART	17.6991	30.5125	.580 (.56957)	.28204	.45058
WICFS	47.6964	55.4018	.861 (.39422)	.64809E-01	.24651
LOPOV	1.49615	49.7479	.030 (.92575)	.59888E-01	.23759
MEDPOV	5.30731	39.9915	.133 (.86395)	.22434	.41770
HIPOV	-13.6051	40.4150	-.337 (.73362)	.24702	.43184
SUBCORE	15.4080	36.5505	.422 (.67646)	.14270	.35023
NM CORE	26.3945	40.5291	.651 (.52275)	.10703	.30955
SUBLOINC	12.9991	31.9924	.406 (.68677)	.15918	.36632
NMLOINC	-11.5973	34.0571	-.341 (.73103)	.13605	.34329
Sigma	174.548	6.32321	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=NIAPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... NIAPCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 126.12184
 Std. Dev. of Dep. Variable.. 79.75693
 Std. Error of Regression.... 76.29056
 Sum of Squared Residuals.... .20545E+07
 R - Squared..... .15005
 Adjusted R - Squared..... .08503
 F-Statistic (27, 353)..... 2.30801
 Significance of F-Test..... .00033
 Log-Likelihood..... -2177.5
 Restricted (Slopes=0) Log-L. -2208.5
 Chi-Squared (27)..... 61.906
 Significance Level..... .14760E-03
 Durbin - Watson Statistic..... 1.9274
 Estimated Autocorrelation (Rho)..... .36298E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	9.06749	167.339	.054 (.91090)	1.0000	.00000
AGE	7.32987	7.68589	.954 (.34327)	26.788	6.0267
AGESQ	-.983095E-01	.118646	-.829 (.41291)	753.84	361.84
AGE19T22	.122538	16.1963	.008 (.94158)	.28520	.45210
HHSIZE	-1.09642	3.09682	-.354 (.72198)	4.4242	1.6776
SPCINC	-19.4065	21.8565	-.888 (.37898)	2.3674	1.0150
SPCINCSQ	34.6700	47.4457	.731 (.47213)	.66321	.46943
HEIGHT	-.122878	1.76875	-.069 (.90175)	64.160	2.4599
BLACK	-9.83379	14.7629	-.666 (.51314)	.15157	.35907
OTHRACE	-2.56423	25.2997	-.101 (.88278)	.27698E-01	.16432
HISPANIC	-40.5029	13.4027	-3.022 (.00285)	.13515	.34234
SOMEHS	34.6645	19.8008	1.751 (.07704)	.19834	.39928
HSGRAD	38.1282	18.8808	2.019 (.04174)	.46644	.49953
SOMECOL	39.2238	20.7529	1.890 (.05641)	.18444	.38835
COLGRAD	4.86107	24.9387	.195 (.82564)	.87957E-01	.28360
PREG	-29.5285	10.6923	-2.762 (.00605)	.28770	.45329
LACT	-29.5924	14.9925	-1.974 (.04648)	.14267	.35020
DIETFLAG	22.9469	16.2748	1.410 (.15542)	.69812E-01	.25517
WIC	24.5005	15.1778	1.614 (.10312)	.16295	.36981
FSPART	9.83705	13.3362	.738 (.46784)	.28204	.45058
WICFS	-7.06312	24.2147	-.292 (.76341)	.64809E-01	.24651
LOPOV	25.0006	21.7435	1.150 (.24963)	.59888E-01	.23759
MEDPOV	-.671410	17.4792	-.038 (.92051)	.22434	.41770
HIPOV	22.8933	17.6644	1.296 (.19259)	.24702	.43184
SUBCORE	25.4795	15.9753	1.595 (.10734)	.14270	.35023
NMCORE	22.4933	17.7142	1.270 (.20203)	.10703	.30955
SUBLOINC	-3.00777	13.9830	-.215 (.81291)	.15918	.36632
NMLOINC	-19.0246	14.8855	-1.278 (.19902)	.13605	.34329
Sigma	76.2906	2.76372	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=FOLPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... FOLPCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 44.21015
 Std. Dev. of Dep. Variable.. 38.52713
 Std. Error of Regression.... 37.28492
 Sum of Squared Residuals.... .49073E+06
 R - Squared..... .12999
 Adjusted R - Squared..... .06345
 F-Statistic (27, 353)..... 1.95342
 Significance of F-Test..... .00365
 Log-Likelihood..... -1904.8
 Restricted (Slopes=0) Log-L. -1931.3
 Chi-Squared (27)..... 53.020
 Significance Level..... .20013E-02
 Durbin - Watson Statistic..... 2.1097
 Estimated Autocorrelation (Rho)..... -.54840E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-12.2400	81.7826	-.150 (.85364)	1.0000	.00000
AGE	2.12504	3.75627	.566 (.57913)	26.788	6.0267
AGESQ	-.338715E-01	.579848E-01	-.584 (.56686)	753.84	361.84
AGE19T22	2.82683	7.91551	.357 (.71991)	.28520	.45210
HHSIZE	1.29844	1.51349	.858 (.39594)	4.4242	1.6776
SPCINC	-1.50508	10.6817	-.141 (.85898)	2.3674	1.0150
SPCINC SQ	-2.63394	23.1878	-.114 (.87546)	.66321	.46943
HEIGHT	.188135	.864426	.218 (.81130)	64.160	2.4599
BLACK	11.7506	7.21497	1.629 (.10006)	.15157	.35907
OTHRACE	2.29157	12.3645	.185 (.83163)	.27698E-01	.16432
HISPANIC	3.31259	6.55019	.506 (.61946)	.13515	.34234
SOMEHS	-6.73201	9.67708	-.696 (.49421)	.19834	.39928
HSGRAD	3.62166	9.22749	.392 (.69612)	.46644	.49953
SOMECOL	9.69586	10.1424	.956 (.34206)	.18444	.38835
COLGRAD	-5.15631	12.1881	-.423 (.67544)	.87957E-01	.28360
PREG	-17.2539	5.22555	-3.302 (.00122)	.28770	.45329
LACT	16.6682	7.32719	2.275 (.02229)	.14267	.35020
DIETFLAG	5.24825	7.95388	.660 (.51719)	.69812E-01	.25517
WIC	9.58175	7.41774	1.292 (.19411)	.16295	.36981
FSPART	7.17421	6.51772	1.101 (.27121)	.28204	.45058
WICFS	.186183	11.8343	.016 (.93534)	.64809E-01	.24651
LOPOV	1.47020	10.6266	.138 (.86053)	.59888E-01	.23759
MEDPOV	4.96102	8.54250	.581 (.56912)	.22434	.41770
HIPOV	1.56689	8.63298	.182 (.83402)	.24702	.43184
SUBCORE	16.6246	7.80749	2.129 (.03203)	.14270	.35023
NM CORE	14.0712	8.65734	1.625 (.10075)	.10703	.30955
SUBLOINC	5.21533	6.83383	.763 (.45209)	.15918	.36632
NMLOINC	.671527	7.27488	.092 (.88817)	.13605	.34329
Sigma	37.2849	1.35069	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=CALPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... CALPCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 85.48805
 Std. Dev. of Dep. Variable.. 52.13277
 Std. Error of Regression.... 48.89167
 Sum of Squared Residuals.... .84381E+06
 R - Squared..... .18297
 Adjusted R - Squared..... .12048
 F-Statistic (27, 353)..... 2.92783
 Significance of F-Test..... .00000
 Log-Likelihood..... -2008.0
 Restricted (Slopes=0) Log-L. -2046.5
 Chi-Squared (27)..... 76.957
 Significance Level..... .10820E-05
 Durbin - Watson Statistic..... 2.1427
 Estimated Autocorrelation (Rho)..... -.71348E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-186.930	107.241	-1.743 (.07833)	1.0000	.00000
AGE	8.69581	4.92559	1.765 (.07459)	26.788	6.0267
AGESQ	-.153781	.760354E-01	-2.022 (.04144)	753.84	361.84
AGE19T22	7.75513	10.3796	.747 (.46193)	.28520	.45210
HHSIZE	3.59430	1.98463	1.811 (.06742)	4.4242	1.6776
SPCINC	20.9240	14.0070	1.494 (.13184)	2.3674	1.0150
SPCINCSQ	-39.5316	30.4061	-1.300 (.19115)	.66321	.46943
HEIGHT	1.76683	1.13352	1.559 (.11565)	64.160	2.4599
BLACK	-14.7943	9.46098	-1.564 (.11447)	.15157	.35907
OTHRACE	-20.9504	16.2136	-1.292 (.19396)	.27698E-01	.16432
HISPANIC	-13.5095	8.58926	-1.573 (.11235)	.13515	.34234
SOMEHS	13.0927	12.6895	1.032 (.30363)	.19834	.39928
HSGRAD	10.7718	12.1000	.890 (.37768)	.46644	.49953
SOMECOL	-3.11434	13.2997	-.234 (.80076)	.18444	.38835
COLGRAD	25.5383	15.9822	1.598 (.10668)	.87957E-01	.28360
PREG	-15.6889	6.85226	-2.290 (.02147)	.28770	.45329
LACT	6.79540	9.60814	.707 (.48687)	.14267	.35020
DIETFLAG	28.5406	10.4299	2.736 (.00649)	.69812E-01	.25517
WIC	-10.1944	9.72687	-1.048 (.29575)	.16295	.36981
FSPART	-1.38324	8.54668	-.162 (.84618)	.28204	.45058
WICFS	12.1125	15.5183	.781 (.44152)	.64809E-01	.24651
LOPOV	7.75122	13.9346	.556 (.58546)	.59888E-01	.23759
MEDPOV	-1.94234	11.2018	-.173 (.83905)	.22434	.41770
HIPOV	-8.68079	11.3204	-.767 (.44985)	.24702	.43184
SUBCORE	-2.34848	10.2380	-.229 (.80382)	.14270	.35023
NMCORE	-5.81028	11.3524	-.512 (.61535)	.10703	.30955
SUBLOINC	6.40002	8.96119	.714 (.48249)	.15918	.36632
NMLOINC	6.13954	9.53955	.644 (.52773)	.13605	.34329
Sigma	48.8917	1.77116	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=PHOSPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... PHOSPCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 125.25283
 Std. Dev. of Dep. Variable.. 58.55233
 Std. Error of Regression... 55.94176
 Sum of Squared Residuals.... .11047E+07
 R - Squared..... .15204
 Adjusted R - Squared..... .08718
 F-Statistic (27, 353)..... 2.34421
 Significance of F-Test..... .00026
 Log-Likelihood..... -2059.3
 Restricted (Slopes=0) Log-L. -2090.7
 Chi-Squared (27)..... 62.801
 Significance Level..... .11194E-03
 Durbin - Watson Statistic..... 2.0512
 Estimated Autocorrelation (Rho)..... -.25590E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-104.672	122.705	-.853 (.39874)	1.0000	.00000
AGE	12.9792	5.63585	2.303 (.02076)	26.788	6.0267
AGESQ	-.209324	.869996E-01	-2.406 (.01590)	753.84	361.84
AGE19T22	14.1871	11.8763	1.195 (.23101)	.28520	.45210
HHSIZE	1.48065	2.27081	.652 (.52224)	4.4242	1.6776
SPCINC	3.64252	16.0267	.227 (.80516)	2.3674	1.0150
SPCINC SQ	-11.1022	34.7906	-.319 (.74528)	.66321	.46943
HEIGHT	.367032	1.29697	.283 (.76911)	64.160	2.4599
BLACK	-22.5223	10.8252	-2.081 (.03606)	.15157	.35907
OTHRACE	-17.7563	18.5516	-.957 (.34146)	.27698E-01	.16432
HISPANIC	-27.4458	9.82781	-2.793 (.00554)	.13515	.34234
SOMEHS	22.7668	14.5194	1.568 (.11346)	.19834	.39928
HSGRAD	22.6085	13.8448	1.633 (.09915)	.46644	.49953
SOMECOL	6.88645	15.2175	.453 (.65547)	.18444	.38835
COLGRAD	25.0358	18.2869	1.369 (.16806)	.87957E-01	.28360
PREG	-41.9530	7.84034	-5.351 (.00000)	.28770	.45329
LACT	-17.2204	10.9936	-1.566 (.11384)	.14267	.35020
DIETFLAG	11.6297	11.9339	.975 (.33240)	.69812E-01	.25517
WIC	6.59962	11.1295	.593 (.56099)	.16295	.36981
FSPART	1.73234	9.77909	.177 (.83673)	.28204	.45058
WICFS	-5.23705	17.7560	-.295 (.76126)	.64809E-01	.24651
LOPOV	3.40996	15.9439	.214 (.81369)	.59888E-01	.23759
MEDPOV	5.13044	12.8170	.400 (.69085)	.22434	.41770
HIPOV	5.30943	12.9528	.410 (.68434)	.24702	.43184
SUBCORE	20.1326	11.7142	1.719 (.08260)	.14270	.35023
NM CORE	2.41977	12.9893	.186 (.83104)	.10703	.30955
SUBLOINC	6.42297	10.2534	.626 (.53894)	.15918	.36632
NMLOINC	-4.58225	10.9151	-.420 (.67764)	.13605	.34329
Sigma	55.9418	2.02656	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=MAGPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... MAGPCT
 Number of Observations..... 381.
 Mean of Dependent Variable.. 63.26870
 Std. Dev. of Dep. Variable.. 28.81071
 Std. Error of Regression.... 26.84700
 Sum of Squared Residuals.... .25443E+06
 R - Squared..... .19337
 Adjusted R - Squared..... .13167
 F-Statistic (27, 353)..... 3.13417
 Significance of F-Test..... .00000
 Log-Likelihood..... -1779.6
 Restricted (Slopes=0) Log-L. -1820.5
 Chi-Squared (27)..... 81.838
 Significance Level..... .17630E-07
 Durbin - Watson Statistic..... 1.9914
 Estimated Autocorrelation (Rho)..... .42754E-02

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-68.6669	58.8875	-1.166 (.24274)	1.0000	.00000
AGE	6.02489	2.70470	2.228 (.02512)	26.788	6.0267
AGESQ	-.934606E-01	.417520E-01	-2.238 (.02444)	753.84	361.84
AGE19T22	3.59076	5.69956	.630 (.53660)	.28520	.45210
HHSIZE	-.617893	1.08978	-.567 (.57829)	4.4242	1.6776
SPCINC	-9.57595	7.69139	-1.245 (.21126)	2.3674	1.0150
SPCINC SQ	13.9353	16.6964	.835 (.40939)	.66321	.46943
HEIGHT	.820811	.622430	1.319 (.18469)	64.160	2.4599
BLACK	-14.9512	5.19514	-2.878 (.00434)	.15157	.35907
OTHRACE	-2.93834	8.90308	-.330 (.73802)	.27698E-01	.16432
HISPANIC	-10.7984	4.71647	-2.290 (.02148)	.13515	.34234
SOMEHS	9.63058	6.96798	1.382 (.16394)	.19834	.39928
HSGRAD	7.93860	6.64425	1.195 (.23092)	.46644	.49953
SOME COL	15.2547	7.30304	2.089 (.03535)	.18444	.38835
COLGRAD	18.4287	8.77604	2.100 (.03441)	.87957E-01	.28360
PREG	-24.2591	3.76266	-6.447 (.00000)	.28770	.45329
LACT	-14.2223	5.27594	-2.696 (.00728)	.14267	.35020
DIETFLAG	2.14197	5.72719	.374 (.70858)	.69812E-01	.25517
WIC	9.87656	5.34114	1.849 (.06190)	.16295	.36981
FSPART	1.60865	4.69308	.343 (.72953)	.28204	.45058
WICFS	-4.71032	8.52128	-.553 (.58780)	.64809E-01	.24651
LOPOV	4.62505	7.65165	.604 (.55340)	.59888E-01	.23759
MEDPOV	-.666775	6.15103	-.108 (.87857)	.22434	.41770
HIPOV	3.06652	6.21618	.493 (.62785)	.24702	.43184
SUBCORE	11.8004	5.62178	2.099 (.03448)	.14270	.35023
NM CORE	7.82005	6.23371	1.254 (.20770)	.10703	.30955
SUBLOINC	3.74525	4.92070	.761 (.45334)	.15918	.36632
NMLOINC	2.39855	5.23828	.458 (.65184)	.13605	.34329
Sigma	26.8470	.972564	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=IRONPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	IRONPCT
Number of Observations.....	381.
Mean of Dependent Variable..	66.09189
Std. Dev. of Dep. Variable..	48.82517
Std. Error of Regression....	47.76419
Sum of Squared Residuals....	.80534E+06
R - Squared.....	.11099
Adjusted R - Squared.....	.04299
F-Statistic (27, 353).....	1.63220
Significance of F-Test.....	.02632
Log-Likelihood.....	-1999.1
Restricted (Slopes=0) Log-L.	-2021.5
Chi-Squared (27).....	44.788
Significance Level.....	.17119E-01
Durbin - Watson Statistic.....	1.9894
Estimated Autocorrelation (Rho).....	.52863E-02

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	-44.5121	104.768	-.425 (.67422)	1.0000	.00000
AGE	4.46730	4.81200	.928 (.35677)	26.788	6.0267
AGESQ	-.653715E-01	.742820E-01	-.880 (.38339)	753.84	361.84
AGE19T22	5.17838	10.1402	.511 (.61612)	.28520	.45210
HHSIZE	.306588	1.93886	.158 (.84846)	4.4242	1.6776
SPCINC	6.17447	13.6839	.451 (.65636)	2.3674	1.0150
SPCINCSQ	-22.6843	29.7049	-.764 (.45179)	.66321	.46943
HEIGHT	-.101334	1.10738	-.092 (.88864)	64.160	2.4599
BLACK	3.51586	9.24280	.380 (.70427)	.15157	.35907
OTHRACE	8.37649	15.8397	.529 (.60388)	.27698E-01	.16432
HISPANIC	-5.96207	8.39118	-.711 (.48481)	.13515	.34234
SOMEHS	25.7250	12.3969	2.075 (.03654)	.19834	.39928
HSGRAD	31.1448	11.8210	2.635 (.00861)	.46644	.49953
SOMECOL	35.6655	12.9930	2.745 (.00634)	.18444	.38835
COLGRAD	22.4456	15.6137	1.438 (.14732)	.87957E-01	.28360
PREG	5.91998	6.69424	.884 (.38098)	.28770	.45329
LACT	8.88556	9.38656	.947 (.34700)	.14267	.35020
DIETFLAG	24.0413	10.1894	2.359 (.01795)	.69812E-01	.25517
WIC	4.65284	9.50256	.490 (.63033)	.16295	.36981
FSPART	3.57448	8.34958	.428 (.67203)	.28204	.45058
WICFS	10.7868	15.1604	.712 (.48418)	.64809E-01	.24651
LOPOV	-2.98312	13.6132	-.219 (.81035)	.59888E-01	.23759
MEDPOV	-1.19606	10.9434	-.109 (.87803)	.22434	.41770
HIPOV	9.12430	11.0594	.825 (.41500)	.24702	.43184
SUBCORE	20.5148	10.0019	2.051 (.03870)	.14270	.35023
NMCORE	29.2157	11.0906	2.634 (.00862)	.10703	.30955
SUBLOINC	9.15052	8.75454	1.045 (.29711)	.15918	.36632
NMLOINC	-1.95270	9.31956	-.210 (.81644)	.13605	.34329
Sigma	47.7642	1.73031	27.604 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=ZINCPCT ;RHS=X2E ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	ZINCPCT
Number of Observations.....	381.
Mean of Dependent Variable..	57.21516
Std. Dev. of Dep. Variable..	32.71548
Std. Error of Regression....	31.87911
Sum of Squared Residuals....	.35875E+06
R - Squared.....	.11794
Adjusted R - Squared.....	.05048
F-Statistic (27, 353).....	1.74817
Significance of F-Test.....	.01327
Log-Likelihood.....	-1845.1
Restricted (Slopes=0) Log-L.	-1869.0
Chi-Squared (27).....	47.780
Significance Level.....	.81232E-02
Durbin - Watson Statistic.....	1.9228
Estimated Autocorrelation (Rho).....	.38586E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	99.8951	69.9252	1.429 (.14991)	1.0000	.00000
AGE	-.129316	3.21166	-.040 (.91937)	26.788	6.0267
AGESQ	.324240E-02	.495778E-01	.065 (.90418)	753.84	361.84
AGE19T22	5.69841	6.76786	.842 (.40512)	.28520	.45210
HHSIZE	.366644E-02	1.29405	.003 (.94602)	4.4242	1.6776
SPCINC	4.20388	9.13303	.460 (.65021)	2.3674	1.0150
SPCINCSQ	-17.2184	19.8259	-.868 (.38992)	.66321	.46943
HEIGHT	-.880625	.739096	-1.191 (.23226)	64.160	2.4599
BLACK	-4.88008	6.16890	-.791 (.43516)	.15157	.35907
OTHRACE	.518239	10.5718	.049 (.91402)	.27698E-01	.16432
HISPANIC	-8.59089	5.60050	-1.534 (.12163)	.13515	.34234
SOMEHS	18.5584	8.27403	2.243 (.02416)	.19834	.39928
HSGRAD	20.3664	7.88962	2.581 (.00996)	.46644	.49953
SOMECOL	17.7829	8.67190	2.051 (.03875)	.18444	.38835
COLGRAD	18.5651	10.4210	1.782 (.07199)	.87957E-01	.28360
PREG	-4.91225	4.46792	-1.099 (.27179)	.28770	.45329
LACT	-20.0814	6.26485	-3.205 (.00164)	.14267	.35020
DIETFLAG	-1.69087	6.80067	-.249 (.79146)	.69812E-01	.25517
WIC	11.8400	6.34226	1.867 (.05947)	.16295	.36981
FSPART	2.73985	5.57274	.492 (.62897)	.28204	.45058
WICFS	-8.07916	10.1185	-.798 (.43074)	.64809E-01	.24651
LOPOV	.295940	9.08584	.033 (.92417)	.59888E-01	.23759
MEDPOV	-3.89973	7.30395	-.534 (.60045)	.22434	.41770
HIPOV	-2.71152	7.38132	-.367 (.71305)	.24702	.43184
SUBCORE	8.55576	6.67551	1.282 (.19772)	.14270	.35023
NMCORE	6.18365	7.40214	.835 (.40894)	.10703	.30955
SUBLOINC	4.02923	5.84301	.690 (.49809)	.15918	.36632
NMLOINC	-2.34849	6.22012	-.378 (.70618)	.13605	.34329
Sigma	31.8791	1.15486	27.604 (.00000)		

APPENDIX F

ORDINARY LEAST-SQUARES REGRESSION ESTIMATES
OF DIETARY INTAKE EQUATIONS FOR CHILDREN

MODEL COMMAND: CRMODEL ;LHS=FDENGPCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	FDENGPCT
Number of Observations.....	818.
Mean of Dependent Variable..	97.50796
Std. Dev. of Dep. Variable..	40.54187
Std. Error of Regression....	36.52969
Sum of Squared Residuals....	.10569E+07
R - Squared.....	.21298
Adjusted R - Squared.....	.18813
F-Statistic (25, 792).....	8.57293
Significance of F-Test.....	.00000
Log-Likelihood.....	-4090.7
Restricted (Slopes=0) Log-L.	-4188.7
Chi-Squared (25).....	195.84
Significance Level.....	.32173E-13
Durbin - Watson Statistic.....	1.6269
Estimated Autocorrelation (Rho).....	.18653

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	54.6563	14.3885	3.799 (.00023)	1.0000	.00000
AGE2	17.6452	4.04189	4.366 (.00003)	.22025	.41467
AGE3	29.8879	4.08185	7.322 (.00000)	.27373	.44614
AGE4	-6.64627	4.68659	-1.418 (.15246)	.25720	.43736
FEMALE	-7.37489	2.65303	-2.780 (.00560)	.50678	.50026
HHSIZE	-.897398E-01	.899371	-.100 (.88369)	4.6904	1.5539
SPCINC	4.42984	6.07715	.729 (.47300)	2.3836	1.0695
SPCINC SQ	-10.6648	12.3877	-.861 (.39390)	.68239	.52686
HEIGHT	.819811	.274995	2.981 (.00311)	35.349	6.0710
BLACK	-2.74323	4.74696	-.578 (.57084)	.12700	.33318
OTHRACE	-2.62046	7.82122	-.335 (.73460)	.29978E-01	.17063
HISPANIC	-1.58200	5.01439	-.315 (.74761)	.80742E-01	.27260
MSOMEHS	9.93566	7.23539	1.373 (.16623)	.22463	.41759
MHSGRAD	-.156855	7.05542	-.022 (.93086)	.45911	.49863
MSOME COL	-4.05908	7.43166	-.546 (.59205)	.21834	.41337
M COLGRAD	-.666588	8.92933	-.075 (.89865)	.60431E-01	.23843
WIC	17.1325	5.02036	3.413 (.00083)	.23150	.42205
FSPART	11.7902	4.30523	2.739 (.00629)	.32799	.46977
WICFS	-25.0093	6.88022	-3.635 (.00040)	.15297	.36018
LOPOV	-12.0716	7.75645	-1.556 (.11569)	.54365E-01	.22687
MEDPOV	-8.79425	5.90503	-1.489 (.13252)	.25620	.43680
HIPOV	-12.8718	6.09569	-2.112 (.03307)	.20483	.40382
SUBCORE	4.64425	4.48204	1.036 (.30107)	.25555	.43644
NM CORE	11.7751	5.94134	1.982 (.04518)	.87055E-01	.28209
SUBLOINC	8.19018	4.77730	1.714 (.08286)	.17220	.37778
NM LOINC	10.6846	4.87380	2.192 (.02708)	.15247	.35970
Sigma	36.5297	.903139	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=PROPCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	PROPCT
Number of Observations.....	818.
Mean of Dependent Variable..	213.76436
Std. Dev. of Dep. Variable..	88.40643
Std. Error of Regression....	81.58588
Sum of Squared Residuals....	.52718E+07
R - Squared.....	.17441
Adjusted R - Squared.....	.14835
F-Statistic (25, 792).....	6.69246
Significance of F-Test.....	.00000
Log-Likelihood.....	-4748.0
Restricted (Slopes=0) Log-L.	-4826.4
Chi-Squared (25).....	156.70
Significance Level.....	.32173E-13
Durbin - Watson Statistic.....	1.6616
Estimated Autocorrelation (Rho).....	.16921

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	131.159	32.1354	4.081 (.00009)	1.0000	.00000
AGE2	18.4715	9.02721	2.046 (.03876)	.22025	.41467
AGE3	43.6530	9.11645	4.788 (.00001)	.27373	.44614
AGE4	-39.0044	10.4671	-3.726 (.00030)	.25720	.43736
FEMALE	-19.6999	5.92530	-3.325 (.00109)	.50678	.50026
HHSIZE	-.732282	2.00867	-.365 (.71483)	4.6904	1.5539
SPCINC	5.96096	13.5728	.439 (.66440)	2.3836	1.0695
SPCINC SQ	-17.8982	27.6668	-.647 (.52535)	.68239	.52686
HEIGHT	1.82108	.614178	2.965 (.00327)	35.349	6.0710
BLACK	16.3858	10.6019	1.546 (.11827)	.12700	.33318
OTHRACE	6.88589	17.4680	.394 (.69486)	.29978E-01	.17063
HISPANIC	14.9399	11.1992	1.334 (.17900)	.80742E-01	.27260
MSOMEHS	23.0878	16.1596	1.429 (.14935)	.22463	.41759
MHSGRAD	3.15292	15.7577	.200 (.82235)	.45911	.49863
MSOME COL	-1.27071	16.5980	-.077 (.89752)	.21834	.41337
MCOLGRAD	5.38577	19.9429	.270 (.77750)	.60431E-01	.23843
WIC	20.4542	11.2125	1.824 (.06499)	.23150	.42205
FSPART	17.8556	9.61535	1.857 (.06035)	.32799	.46977
WICFS	-36.1376	15.3664	-2.352 (.01803)	.15297	.36018
LOPOV	-26.2062	17.3234	-1.513 (.12641)	.54365E-01	.22687
MEDPOV	1.27399	13.1884	.097 (.88559)	.25620	.43680
HIPOV	-10.0434	13.6142	-.738 (.46752)	.20483	.40382
SUBCORE	27.8896	10.0102	2.786 (.00550)	.25555	.43644
NM CORE	22.1923	13.2695	1.672 (.09070)	.87055E-01	.28209
SUBLOINC	3.05489	10.6697	.286 (.76687)	.17220	.37778
NMLOINC	13.1282	10.8852	1.206 (.22592)	.15247	.35970
Sigma	81.5859	2.01708	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=PROCMEG ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	PROCMEG
Number of Observations.....	818.
Mean of Dependent Variable..	15.58841
Std. Dev. of Dep. Variable..	3.97938
Std. Error of Regression....	3.78114
Sum of Squared Residuals....	11323.
R - Squared.....	.12478
Adjusted R - Squared.....	.09715
F-Statistic (25, 792).....	4.51642
Significance of F-Test.....	.00000
Log-Likelihood.....	-2235.4
Restricted (Slopes=0) Log-L.	-2289.9
Chi-Squared (25).....	108.95
Significance Level.....	.32173E-13
Durbin - Watson Statistic.....	1.7868
Estimated Autocorrelation (Rho).....	.10661

MODEL COMMAND: CRMODEL ;LHS=FATCMPEG ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	FATCMPEG
Number of Observations.....	818.
Mean of Dependent Variable..	34.04934
Std. Dev. of Dep. Variable..	8.14047
Std. Error of Regression....	7.79881
Sum of Squared Residuals....	48171.
R - Squared.....	.11026
Adjusted R - Squared.....	.08218
F-Statistic (25, 792).....	3.92607
Significance of F-Test.....	.00000
Log-Likelihood.....	-2827.6
Restricted (Slopes=0) Log-L.	-2875.4
Chi-Squared (25).....	95.494
Significance Level.....	.45846E-11
Durbin - Watson Statistic.....	1.5821
Estimated Autocorrelation (Rho).....	.20897

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	34.5180	3.07183	11.237 (.00000)	1.0000	.00000
AGE2	1.42728	.862913	1.654 (.09434)	.22025	.41467
AGE3	.171118	.871443	.196 (.82469)	.27373	.44614
AGE4	.204717	1.00055	.205 (.81950)	.25720	.43736
FEMALE	-2.88895	.566401	-5.101 (.00000)	.50678	.50026
HHSIZE	.220981E-01	.192009	.115 (.87454)	4.6904	1.5539
SPCINC	-.281961	1.29743	-.217 (.81145)	2.3836	1.0695
SPCINC SQ	-1.31537	2.64468	-.497 (.62497)	.68239	.52686
HEIGHT	.449848E-01	.587094E-01	.766 (.44994)	35.349	6.0710
BLACK	1.50031	1.01344	1.480 (.13488)	.12700	.33318
OTHRACE	.716598	1.66977	.429 (.67120)	.29978E-01	.17063
HISPANIC	.497260	1.07053	.464 (.64724)	.80742E-01	.27260
MSOMEHS	2.34436	1.54470	1.518 (.12517)	.22463	.41759
MHSGRAD	1.03315	1.50628	.686 (.50021)	.45911	.49863
MSOME COL	-1.58910	1.58660	-1.002 (.31820)	.21834	.41337
MCOLGRAD	-2.91288	1.90634	-1.528 (.12258)	.60431E-01	.23843
WIC	-1.43940	1.07181	-1.343 (.17602)	.23150	.42205
FSPART	-1.47927	.919133	-1.609 (.10364)	.32799	.46977
WICFS	1.80454	1.46887	1.229 (.21710)	.15297	.36018
LOPOV	-.768891	1.65594	-.464 (.64736)	.54365E-01	.22687
MEDPOV	.811078	1.26068	.643 (.52767)	.25620	.43680
HIPOV	.730170	1.30138	.561 (.58207)	.20483	.40382
SUBCORE	.998658	.956880	1.044 (.29745)	.25555	.43644
NM CORE	-.818287	1.26843	-.645 (.52653)	.87055E-01	.28209
SUBLOINC	-1.69030	1.01992	-1.657 (.09368)	.17220	.37778
NMLOINC	.401528	1.04052	.386 (.70047)	.15247	.35970
Sigma	7.79881	.192813	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=CHOCMPEG ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... CHOCMPEG
 Number of Observations..... 818.
 Mean of Dependent Variable.. 50.35701
 Std. Dev. of Dep. Variable.. 9.79430
 Std. Error of Regression.... 9.36027
 Sum of Squared Residuals.... 69391.
 R - Squared..... .11461
 Adjusted R - Squared..... .08667
 F-Statistic (25, 792)..... 4.10099
 Significance of F-Test..... .00000
 Log-Likelihood..... -2976.9
 Restricted (Slopes=0) Log-L. -3026.7
 Chi-Squared (25)..... 99.503
 Significance Level..... .59738E-12
 Durbin - Watson Statistic..... 1.6055
 Estimated Autocorrelation (Rho)..... .19724

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev. of X
ONE	49.7379	3.68686	13.491 (.00000)	1.0000	.00000
AGE2	.176104	1.03568	.170 (.84109)	.22025	.41467
AGE3	1.57890	1.04592	1.510 (.12723)	.27373	.44614
AGE4	2.15251	1.20088	1.792 (.06979)	.25720	.43736
FEMALE	3.19810	.679804	4.704 (.00001)	.50678	.50026
HHSIZE	.175877E-01	.230452	.076 (.89766)	4.6904	1.5539
SPCINC	.775509	1.55719	.498 (.62453)	2.3836	1.0695
SPCINCSQ	.125751	3.17419	.040 (.91976)	.68239	.52686
HEIGHT	-.855240E-01	.704640E-01	-1.214 (.22288)	35.349	6.0710
BLACK	-3.12802	1.21635	-2.572 (.01002)	.12700	.33318
OTHRACE	-1.99084	2.00409	-.993 (.32234)	.29978E-01	.17063
HISPANIC	-1.45727	1.28487	-1.134 (.25591)	.80742E-01	.27260
MSOMEHS	-2.23497	1.85397	-1.206 (.22614)	.22463	.41759
MHSGRAD	-.687489	1.80786	-.380 (.70425)	.45911	.49863
MSOMECOL	1.53939	1.90427	.808 (.42452)	.21834	.41337
MCOLGRAD	3.35526	2.28803	1.466 (.13868)	.60431E-01	.23843
WIC	2.30802	1.28640	1.794 (.06952)	.23150	.42205
FSPART	2.00857	1.10316	1.821 (.06551)	.32799	.46977
WICFS	-2.48841	1.76297	-1.411 (.15444)	.15297	.36018
LOPOV	.982655	1.98749	.494 (.62696)	.54365E-01	.22687
MEDPOV	-2.59611	1.51309	-1.716 (.08261)	.25620	.43680
HIPOV	-2.57867	1.56194	-1.651 (.09496)	.20483	.40382
SUBCORE	-2.38443	1.14846	-2.076 (.03605)	.25555	.43644
NMCORE	.883368	1.52239	.580 (.56927)	.87055E-01	.28209
SUBLOINC	3.18443	1.22412	2.601 (.00923)	.17220	.37778
NMLOINC	.951871	1.24885	.762 (.45241)	.15247	.35970
Sigma	9.36027	.231418	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=EODTCHOL ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... EODTCHOL
 Number of Observations..... 818.
 Mean of Dependent Variable.. 238.95893
 Std. Dev. of Dep. Variable.. 189.03548
 Std. Error of Regression.... 175.50772
 Sum of Squared Residuals.... .24396E+08
 R - Squared..... .16438
 Adjusted R - Squared..... .13800
 F-Statistic (25, 792)..... 6.23196
 Significance of F-Test..... .00000
 Log-Likelihood..... -5374.6
 Restricted (Slopes=0) Log-L. -5448.1
 Chi-Squared (25)..... 146.82
 Significance Level..... .32173E-13
 Durbin - Watson Statistic..... 1.5380
 Estimated Autocorrelation (Rho)..... .23099

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	104.242	69.1297	1.508 (.12765)	1.0000	.00000
AGE2	73.6333	19.4194	3.792 (.00024)	.22025	.41467
AGE3	44.2722	19.6113	2.257 (.02297)	.27373	.44614
AGE4	43.3430	22.5168	1.925 (.05163)	.25720	.43736
FEMALE	-83.7568	12.7465	-6.571 (.00000)	.50678	.50026
HHSIZE	-3.12901	4.32105	-.724 (.47600)	4.6904	1.5539
SPCINC	48.7482	29.1978	1.670 (.09126)	2.3836	1.0695
SPCINCSQ	-122.522	59.5169	-2.059 (.03762)	.68239	.52686
HEIGHT	2.59152	1.32122	1.961 (.04741)	35.349	6.0710
BLACK	55.5974	22.8069	2.438 (.01438)	.12700	.33318
OTHRACE	72.6520	37.5772	1.933 (.05062)	.29978E-01	.17063
HISPANIC	45.9935	24.0918	1.909 (.05355)	.80742E-01	.27260
MSOMEHS	22.2640	34.7626	.640 (.52956)	.22463	.41759
MHSGRAD	.267752	33.8979	.008 (.94130)	.45911	.49863
MSOMECOL	-42.7617	35.7056	-1.198 (.22931)	.21834	.41337
MCOLGRAD	41.9742	42.9012	.978 (.33001)	.60431E-01	.23843
WIC	95.7540	24.1204	3.970 (.00013)	.23150	.42205
FSPART	-10.8201	20.6846	-.523 (.60759)	.32799	.46977
WICFS	-78.2066	33.0562	-2.366 (.01737)	.15297	.36018
LOPOV	-106.281	37.2660	-2.852 (.00455)	.54365E-01	.22687
MEDPOV	-8.10538	28.3708	-.286 (.76728)	.25620	.43680
HIPOV	-13.7968	29.2869	-.471 (.64277)	.20483	.40382
SUBCORE	27.2625	21.5340	1.266 (.20292)	.25555	.43644
NMCORE	50.1651	28.5453	1.757 (.07543)	.87055E-01	.28209
SUBLOINC	39.0764	22.9527	1.702 (.08503)	.17220	.37778
NMLOINC	18.6810	23.4163	.798 (.43085)	.15247	.35970
Sigma	175.508	4.33915	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=VITAPCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	VITAPCT
Number of Observations.....	818.
Mean of Dependent Variable..	180.27981
Std. Dev. of Dep. Variable..	169.38043
Std. Error of Regression....	165.33336
Sum of Squared Residuals....	.21649E+08
R - Squared.....	.07637
Adjusted R - Squared.....	.04722
F-Statistic (25, 792).....	2.61948
Significance of F-Test.....	.00003
Log-Likelihood.....	-5325.8
Restricted (Slopes=0) Log-L.	-5358.3
Chi-Squared (25).....	64.912
Significance Level.....	.21294E-04
Durbin - Watson Statistic.....	1.5907
Estimated Autocorrelation (Rho).....	.20464

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	238.071	65.1222	3.656 (.00037)	1.0000	.00000
AGE2	-5.56486	18.2936	-.304 (.75509)	.22025	.41467
AGE3	14.1739	18.4744	.767 (.44934)	.27373	.44614
AGE4	-33.7668	21.2115	-1.592 (.10750)	.25720	.43736
FEMALE	-17.0414	12.0076	-1.419 (.15214)	.50678	.50026
HHSIZE	-2.19904	4.07055	-.540 (.59605)	4.6904	1.5539
SPCINC	-92.1914	27.5052	-3.352 (.00100)	2.3836	1.0695
SPCINC SQ	174.548	56.0667	3.113 (.00210)	.68239	.52686
HEIGHT	2.53873	1.24463	2.040 (.03936)	35.349	6.0710
BLACK	12.2392	21.4847	.570 (.57632)	.12700	.33318
OTHRACE	-10.2528	35.3988	-.290 (.76469)	.29978E-01	.17063
HISPANIC	-56.2692	22.6951	-2.479 (.01287)	.80742E-01	.27260
MSOMEHS	-19.5885	32.7474	-.598 (.55737)	.22463	.41759
MHSGRAD	-33.2003	31.9328	-1.040 (.29937)	.45911	.49863
MSOME COL	11.2459	33.6357	.334 (.73507)	.21834	.41337
MCOLGRAD	2.74036	40.4142	.068 (.90273)	.60431E-01	.23843
WIC	-7.39188	22.7222	-.325 (.74109)	.23150	.42205
FSPART	-25.2808	19.4855	-1.297 (.19159)	.32799	.46977
WICFS	65.3476	31.1399	2.099 (.03414)	.15297	.36018
LOPOV	51.8590	35.1057	1.477 (.13574)	.54365E-01	.22687
MEDPOV	-5.26311	26.7261	-.197 (.82434)	.25620	.43680
HIPOV	11.1748	27.5891	.405 (.68753)	.20483	.40382
SUBCORE	-14.4104	20.2857	-.710 (.48466)	.25555	.43644
NMCORE	-9.06740	26.8905	-.337 (.73317)	.87055E-01	.28209
SUBLOINC	-4.02594	21.6221	-.186 (.83105)	.17220	.37778
NMLOINC	-1.21395	22.0588	-.055 (.91038)	.15247	.35970
Sigma	165.333	4.08760	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=LOGAPCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... LOGAPCT
 Number of Observations..... 818.
 Mean of Dependent Variable.. 4.91447
 Std. Dev. of Dep. Variable.. .80566
 Std. Error of Regression.... .77148
 Sum of Squared Residuals.... 471.38
 R - Squared..... .11113
 Adjusted R - Squared..... .08307
 F-Statistic (25, 792)..... 3.96072
 Significance of F-Test..... .00000
 Log-Likelihood..... -935.25
 Restricted (Slopes=0) Log-L. -983.39
 Chi-Squared (25)..... 96.289
 Significance Level..... .30690E-11
 Durbin - Watson Statistic..... 1.7219
 Estimated Autocorrelation (Rho)..... .13904

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	4.87480	.303872	16.042 (.00000)	1.0000	.00000
AGE2	-.133192E-02	.853612E-01	-.016 (.93543)	.22025	.41467
AGE3	.135812	.862050E-01	1.575 (.11122)	.27373	.44614
AGE4	-.259158	.989766E-01	-2.618 (.00881)	.25720	.43736
FEMALE	-.118656	.560296E-01	-2.118 (.03258)	.50678	.50026
HHSIZE	-.167681E-01	.189939E-01	-.883 (.38150)	4.6904	1.5539
SPCINC	-.451822	.128344	-3.520 (.00058)	2.3836	1.0695
SPCINCSQ	.895466	.261617	3.423 (.00080)	.68239	.52686
HEIGHT	.163878E-01	.580766E-02	2.822 (.00496)	35.349	6.0710
BLACK	-.808590E-01	.100252	-.807 (.42561)	.12700	.33318
OTHRACE	-.168346	.165177	-1.019 (.30941)	.29978E-01	.17063
HISPANIC	-.284498	.105900	-2.686 (.00729)	.80742E-01	.27260
MSOMEHS	.262111	.152805	1.715 (.08269)	.22463	.41759
MHSGRAD	.135162	.149004	.907 (.36800)	.45911	.49863
MSOMECOL	.328901	.156950	2.096 (.03439)	.21834	.41337
MCOLGRAD	.433801	.188580	2.300 (.02059)	.60431E-01	.23843
WIC	-.190215	.106026	-1.794 (.06954)	.23150	.42205
FSPART	-.130707	.909227E-01	-1.438 (.14679)	.32799	.46977
WICFS	.361398	.145304	2.487 (.01260)	.15297	.36018
LOPOV	.151834	.163809	.927 (.35721)	.54365E-01	.22687
MEDPOV	-.211344E-01	.124709	-.169 (.84144)	.25620	.43680
HIPOV	.306694E-01	.128736	.238 (.79810)	.20483	.40382
SUBCORE	-.485459E-01	.946567E-01	-.513 (.61449)	.25555	.43644
NMCORE	-.240848	.125476	-1.919 (.05228)	.87055E-01	.28209
SUBLOINC	-.962990E-01	.100892	-.954 (.34248)	.17220	.37778
NMLOINC	-.877875E-01	.102930	-.853 (.39851)	.15247	.35970
Sigma	.771475	.190735E-01	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=VITB1PCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	VITB1PCT
Number of Observations.....	818.
Mean of Dependent Variable..	155.61518
Std. Dev. of Dep. Variable..	84.94790
Std. Error of Regression....	74.03743
Sum of Squared Residuals....	.43414E+07
R - Squared.....	.26362
Adjusted R - Squared.....	.24038
F-Statistic (25, 792).....	11.34141
Significance of F-Test.....	.00000
Log-Likelihood.....	-4668.6
Restricted (Slopes=0) Log-L.	-4793.7
Chi-Squared (25).....	250.24
Significance Level.....	.32173E-13
Durbin - Watson Statistic.....	1.6300
Estimated Autocorrelation (Rho).....	.18498

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	73.2902	29.1622	2.513 (.01175)	1.0000	.00000
AGE2 .	9.67659	8.19200	1.181 (.23598)	.22025	.41467
AGE3	30.5394	8.27298	3.691 (.00033)	.27373	.44614
AGE4	-18.0395	9.49865	-1.899 (.05480)	.25720	.43736
FEMALE	-10.6427	5.37708	-1.979 (.04546)	.50678	.50026
HHSIZE	2.83432	1.82282	1.555 (.11603)	4.6904	1.5539
SPCINC	-53.8663	12.3170	-4.373 (.00003)	2.3836	1.0695
SPCINC SQ	138.763	25.1070	5.527 (.00000)	.68239	.52686
HEIGHT	1.43232	.557353	2.570 (.01007)	35.349	6.0710
BLACK	12.2468	9.62101	1.273 (.20039)	.12700	.33318
OTHRACE	-11.0957	15.8518	-.700 (.49125)	.29978E-01	.17063
HISPANIC	4.44088	10.1630	.437 (.66591)	.80742E-01	.27260
MSOMEHS	37.4733	14.6645	2.555 (.01047)	.22463	.41759
MHSGRAD	22.1979	14.2997	1.552 (.11664)	.45911	.49863
MSOME COL	.578174	15.0623	.038 (.92052)	.21834	.41337
MCOLGRAD	17.9065	18.0977	.989 (.32435)	.60431E-01	.23843
WIC	39.9021	10.1751	3.922 (.00015)	.23150	.42205
FSPART	36.6936	8.72573	4.205 (.00006)	.32799	.46977
WICFS	-4.43660	13.9446	-.318 (.74584)	.15297	.36018
LOPOV	38.9246	15.7206	2.476 (.01298)	.54365E-01	.22687
MEDPOV	-.522018	11.9682	-.044 (.91730)	.25620	.43680
HIPOV	-11.3152	12.3546	-.916 (.36319)	.20483	.40382
SUBCORE	22.6314	9.08407	2.491 (.01246)	.25555	.43644
NM CORE	7.26233	12.0417	.603 (.55411)	.87055E-01	.28209
SUBLOINC	11.8915	9.68251	1.228 (.21724)	.17220	.37778
NMLOINC	10.0123	9.87810	1.014 (.31219)	.15247	.35970
Sigma	74.0374	1.83046	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=VITB2PCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... VITB2PCT
 Number of Observations..... 818.
 Mean of Dependent Variable.. 199.93858
 Std. Dev. of Dep. Variable.. 99.08583
 Std. Error of Regression.... 85.66600
 Sum of Squared Residuals.... .58122E+07
 R - Squared..... .27540
 Adjusted R - Squared..... .25253
 F-Statistic (25, 792)..... 12.04081
 Significance of F-Test..... .00000
 Log-Likelihood..... -4788.0
 Restricted (Slopes=0) Log-L. -4919.7
 Chi-Squared (25)..... 263.44
 Significance Level..... .32173E-13
 Durbin - Watson Statistic..... 1.7027
 Estimated Autocorrelation (Rho)..... .14867

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	129.180	33.7425	3.828 (.00021)	1.0000	.00000
AGE2	-22.3418	9.47867	-2.357 (.01778)	.22025	.41467
AGE3	-4.78617	9.57237	-.500 (.62319)	.27373	.44614
AGE4	-58.2487	10.9905	-5.300 (.00000)	.25720	.43736
FEMALE	-22.6640	6.22163	-3.643 (.00039)	.50678	.50026
HHSIZE	4.18723	2.10912	1.985 (.04482)	4.6904	1.5539
SPCINC	-54.6776	14.2516	-3.837 (.00020)	2.3836	1.0695
SPCINC SQ	144.578	29.0504	4.977 (.00000)	.68239	.52686
HEIGHT	1.53312	.644893	2.377 (.01686)	35.349	6.0710
BLACK	-16.1832	11.1321	-1.454 (.14220)	.12700	.33318
OTHRACE	-26.9377	18.3416	-1.469 (.13807)	.29978E-01	.17063
HISPANIC	-4.22710	11.7593	-.359 (.71825)	.80742E-01	.27260
MSOMEHS	34.1536	16.9677	2.013 (.04198)	.22463	.41759
MHSGRAD	22.7553	16.5457	1.375 (.16556)	.45911	.49863
MSOME COL	5.91454	17.4280	.339 (.73172)	.21834	.41337
MCOLGRAD	33.6969	20.9402	1.609 (.10369)	.60431E-01	.23843
WIC	27.2174	11.7733	2.312 (.01999)	.23150	.42205
FSPART	28.9263	10.0962	2.865 (.00438)	.32799	.46977
WICFS	25.3485	16.1348	1.571 (.11224)	.15297	.36018
LOPOV	36.2312	18.1897	1.992 (.04413)	.54365E-01	.22687
MEDPOV	14.1577	13.8479	1.022 (.30784)	.25620	.43680
HIPOV	12.4944	14.2950	.874 (.38644)	.20483	.40382
SUBCORE	42.2972	10.5108	4.024 (.00011)	.25555	.43644
NM CORE	22.7326	13.9331	1.632 (.09893)	.87055E-01	.28209
SUBLOINC	3.21765	11.2033	.287 (.76628)	.17220	.37778
NM LOINC	12.3728	11.4296	1.083 (.27910)	.15247	.35970
Sigma	85.6660	2.11796	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=VITB6PCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... VITB6PCT
 Number of Observations..... 818.
 Mean of Dependent Variable.. 121.45296
 Std. Dev. of Dep. Variable.. 74.99934
 Std. Error of Regression.... 70.10034
 Sum of Squared Residuals.... .38919E+07
 R - Squared..... .15311
 Adjusted R - Squared..... .12637
 F-Statistic (25, 792)..... 5.72733
 Significance of F-Test..... .00000
 Log-Likelihood..... -4623.9
 Restricted (Slopes=0) Log-L. -4691.9
 Chi-Squared (25)..... 135.86
 Significance Level..... .32173E-13
 Durbin - Watson Statistic..... 1.6401
 Estimated Autocorrelation (Rho)..... .17993

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	111.846	27.6114	4.051 (.00010)	1.0000	.00000
AGE2	22.9259	7.75638	2.956 (.00336)	.22025	.41467
AGE3	43.6289	7.83305	5.570 (.00000)	.27373	.44614
AGE4	-6.78882	8.99354	-.755 (.45692)	.25720	.43736
FEMALE	-4.12797	5.09115	-.811 (.42308)	.50678	.50026
HHSIZE	-2.30597	1.72589	-1.336 (.17830)	4.6904	1.5539
SPCINC	-26.4750	11.6620	-2.270 (.02224)	2.3836	1.0695
SPCINCSQ	43.7277	23.7719	1.839 (.06280)	.68239	.52686
HEIGHT	.152374	.527715	.289 (.76527)	35.349	6.0710
BLACK	2.82715	9.10939	.310 (.75102)	.12700	.33318
OTHRACE	-7.68534	15.0089	-.512 (.61504)	.29978E-01	.17063
HISPANIC	-7.48568	9.62260	-.778 (.44282)	.80742E-01	.27260
MSOMEHS	34.3560	13.8847	2.474 (.01304)	.22463	.41759
MHSGRAD	15.5726	13.5393	1.150 (.24900)	.45911	.49863
MSOMECOL	16.9582	14.2613	1.189 (.23275)	.21834	.41337
MCOLGRAD	15.3429	17.1354	.895 (.37447)	.60431E-01	.23843
WIC	15.8402	9.63406	1.644 (.09633)	.23150	.42205
FSPART	15.2431	8.26172	1.845 (.06201)	.32799	.46977
WICFS	-8.71371	13.2031	-.660 (.51688)	.15297	.36018
LOPOV	30.5967	14.8846	2.056 (.03789)	.54365E-01	.22687
MEDPOV	-12.4074	11.3317	-1.095 (.27340)	.25620	.43680
HIPOV	-7.53520	11.6976	-.644 (.52715)	.20483	.40382
SUBCORE	25.0833	8.60101	2.916 (.00377)	.25555	.43644
NMCORE	8.03707	11.4014	.705 (.48811)	.87055E-01	.28209
SUBLOINC	17.1123	9.16762	1.867 (.05904)	.17220	.37778
NMLOINC	11.7845	9.35281	1.260 (.20515)	.15247	.35970
Sigma	70.1003	1.73312	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=VITB12PC ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	VITB12PC
Number of Observations.....	818.
Mean of Dependent Variable..	188.33915
Std. Dev. of Dep. Variable..	172.73157
Std. Error of Regression....	170.41070
Sum of Squared Residuals....	.23000E+08
R - Squared.....	.05648
Adjusted R - Squared.....	.02669
F-Statistic (25, 792).....	1.89622
Significance of F-Test.....	.00537
Log-Likelihood.....	-5350.5
Restricted (Slopes=0) Log-L.	-5374.3
Chi-Squared (25).....	47.479
Significance Level.....	.43036E-02
Durbin - Watson Statistic.....	1.9644
Estimated Autocorrelation (Rho).....	.17786E-01

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	107.125	67.1221	1.596 (.10659)	1.0000	.00000
AGE2	2.91771	18.8554	.155 (.85051)	.22025	.41467
AGE3	5.58701	19.0418	.293 (.76221)	.27373	.44614
AGE4	-41.8144	21.8629	-1.913 (.05313)	.25720	.43736
FEMALE	-2.26692	12.3763	-.183 (.83294)	.50678	.50026
HHSIZE	-1.01525	4.19556	-.242 (.79569)	4.6904	1.5539
SPCINC	-4.16340	28.3499	-.147 (.85533)	2.3836	1.0695
SPCINC SQ	-11.3871	57.7884	-.197 (.82426)	.68239	.52686
HEIGHT	3.26682	1.28285	2.547 (.01073)	35.349	6.0710
BLACK	-.780190	22.1445	-.035 (.92249)	.12700	.33318
OTHRACE	-1.33795	36.4859	-.037 (.92159)	.29978E-01	.17063
HISPANIC	-22.3867	23.3921	-.957 (.34114)	.80742E-01	.27260
MSOMEHS	-32.5968	33.7530	-.966 (.33657)	.22463	.41759
MHSGRAD	-46.5389	32.9135	-1.414 (.15370)	.45911	.49863
MSOME COL	-49.9949	34.6686	-1.442 (.14550)	.21834	.41337
M COLGRAD	-47.1744	41.6553	-1.132 (.25664)	.60431E-01	.23843
WIC	11.5585	23.4200	.494 (.62756)	.23150	.42205
FSPART	5.65426	20.0839	.282 (.77000)	.32799	.46977
WICFS	44.7505	32.0962	1.394 (.15966)	.15297	.36018
LOPOV	12.8907	36.1838	.356 (.72041)	.54365E-01	.22687
MEDPOV	11.9466	27.5469	.434 (.66813)	.25620	.43680
HIPOV	31.5086	28.4363	1.108 (.26747)	.20483	.40382
SUBCORE	54.4448	20.9087	2.604 (.00917)	.25555	.43644
NM CORE	44.0899	27.7163	1.591 (.10775)	.87055E-01	.28209
SUBLOINC	12.7488	22.2861	.572 (.57473)	.17220	.37778
NM LOINC	5.16587	22.7363	.227 (.80516)	.15247	.35970
Sigma	170.411	4.21313	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=VITCPCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	VITCPCT
Number of Observations.....	818.
Mean of Dependent Variable..	170.54395
Std. Dev. of Dep. Variable..	153.28204
Std. Error of Regression....	149.90363
Sum of Squared Residuals....	.17797E+08
R - Squared.....	.07286
Adjusted R - Squared.....	.04360
F-Statistic (25, 792).....	2.48963
Significance of F-Test.....	.00009
Log-Likelihood.....	-5245.7
Restricted (Slopes=0) Log-L.	-5276.6
Chi-Squared (25).....	61.809
Significance Level.....	.58616E-04
Durbin - Watson Statistic.....	1.6602
Estimated Autocorrelation (Rho).....	.16991

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	68.1429	59.0447	1.154 (.24733)	1.0000	.00000
AGE2	22.9900	16.5864	1.386 (.16219)	.22025	.41467
AGE3	38.5869	16.7503	2.304 (.02041)	.27373	.44614
AGE4	26.0525	19.2319	1.355 (.17218)	.25720	.43736
FEMALE	35.0575	10.8870	3.220 (.00151)	.50678	.50026
HHSIZE	-4.53590	3.69067	-1.229 (.21690)	4.6904	1.5539
SPCINC	26.6591	24.9383	1.069 (.28539)	2.3836	1.0695
SPCINC SQ	-80.7999	50.8342	-1.589 (.10804)	.68239	.52686
HEIGHT	-.112795	1.12847	-.100 (.88359)	35.349	6.0710
BLACK	-10.4713	19.4797	-.538 (.59785)	.12700	.33318
OTHRACE	37.1852	32.0952	1.159 (.24543)	.29978E-01	.17063
HISPANIC	16.0831	20.5771	.782 (.44059)	.80742E-01	.27260
MSOMEHS	57.8313	29.6912	1.948 (.04895)	.22463	.41759
MHSGRAD	62.5743	28.9527	2.161 (.02926)	.45911	.49863
MSOME COL	76.7194	30.4966	2.516 (.01167)	.21834	.41337
M COLGRAD	111.028	36.6425	3.030 (.00269)	.60431E-01	.23843
WIC	26.0062	20.6016	1.262 (.20428)	.23150	.42205
FSPART	-8.40456	17.6670	-.476 (.63963)	.32799	.46977
WICFS	26.0286	28.2337	.922 (.35991)	.15297	.36018
LOPOV	34.7707	31.8294	1.092 (.27455)	.54365E-01	.22687
MEDPOV	-34.4038	24.2319	-1.420 (.15198)	.25620	.43680
HIPOV	-18.0436	25.0143	-.721 (.47776)	.20483	.40382
SUBCORE	35.5530	18.3925	1.933 (.05066)	.25555	.43644
NM CORE	-27.8174	24.3809	-1.141 (.25297)	.87055E-01	.28209
SUBLOINC	32.0897	19.6042	1.637 (.09783)	.17220	.37778
NMLOINC	26.7924	20.0002	1.340 (.17713)	.15247	.35970
Sigma	149.904	3.70613	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=VITEPCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... VITEPCT
 Number of Observations..... 818.
 Mean of Dependent Variable.. 111.73592
 Std. Dev. of Dep. Variable.. 190.25761
 Std. Error of Regression.... 182.14616
 Sum of Squared Residuals.... .26276E+08
 R - Squared..... .11150
 Adjusted R - Squared..... .08345
 F-Statistic (25, 792)..... 3.97546
 Significance of F-Test..... .00000
 Log-Likelihood..... -5405.0
 Restricted (Slopes=0) Log-L. -5453.3
 Chi-Squared (25)..... 96.628
 Significance Level..... .25862E-11
 Durbin - Watson Statistic..... 1.5004
 Estimated Autocorrelation (Rho)..... .24978

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev. of X
ONE	143.991	71.7445	2.007 (.04257)	1.0000	.00000
AGE2	17.2799	20.1539	.857 (.39591)	.22025	.41467
AGE3	28.0050	20.3531	1.376 (.16536)	.27373	.44614
AGE4	-4.67167	23.3685	-.200 (.82246)	.25720	.43736
FEMALE	-12.8302	13.2286	-.970 (.33442)	.50678	.50026
HHSIZE	4.55108	4.48449	1.015 (.31156)	4.6904	1.5539
SPCINC	-78.1631	30.3022	-2.579 (.00981)	2.3836	1.0695
SPCINC SQ	101.442	61.7681	1.642 (.09671)	.68239	.52686
HEIGHT	1.39510	1.37120	1.017 (.31028)	35.349	6.0710
BLACK	-3.39512	23.6695	-.143 (.85741)	.12700	.33318
OTHRACE	-35.1455	38.9985	-.901 (.37125)	.29978E-01	.17063
HISPANIC	-36.6640	25.0030	-1.466 (.13869)	.80742E-01	.27260
MSOMEHS	43.4494	36.0774	1.204 (.22661)	.22463	.41759
MHSGRAD	-4.34649	35.1801	-.124 (.86945)	.45911	.49863
MSOME COL	-13.9221	37.0561	-.376 (.70734)	.21834	.41337
MCOLGRAD	15.4883	44.5239	.348 (.72604)	.60431E-01	.23843
WIC	58.1388	25.0328	2.323 (.01945)	.23150	.42205
FSPART	-6.70086	21.4669	-.312 (.74983)	.32799	.46977
WICFS	.648103	34.3065	.019 (.93313)	.15297	.36018
LOPOV	114.142	38.6756	2.951 (.00340)	.54365E-01	.22687
MEDPOV	-36.8488	29.4439	-1.251 (.20833)	.25620	.43680
HIPOV	9.16723	30.3946	.302 (.75680)	.20483	.40382
SUBCORE	-3.11413	22.3485	-.139 (.85990)	.25555	.43644
NMCORE	22.3363	29.6250	.754 (.45746)	.87055E-01	.28209
SUBLOINC	-9.86497	23.8208	-.414 (.68138)	.17220	.37778
NMLOINC	-1.75915	24.3020	-.072 (.90000)	.15247	.35970
Sigma	182.146	4.50327	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=NIAPCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... NIAPCT
 Number of Observations..... 818.
 Mean of Dependent Variable.. 143.27277
 Std. Dev. of Dep. Variable.. 79.65244
 Std. Error of Regression.... 74.33935
 Sum of Squared Residuals.... .43769E+07
 R - Squared..... .15561
 Adjusted R - Squared..... .12896
 F-Statistic (25, 792)..... 5.83826
 Significance of F-Test..... .00000
 Log-Likelihood..... -4671.9
 Restricted (Slopes=0) Log-L. -4741.1
 Chi-Squared (25)..... 138.28
 Significance Level..... .32173E-13
 Durbin - Watson Statistic..... 1.6316
 Estimated Autocorrelation (Rho)..... .18422

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	118.931	29.2811	4.062 (.00009)	1.0000	.00000
AGE2	20.8364	8.22541	2.533 (.01113)	.22025	.41467
AGE3	46.3495	8.30672	5.580 (.00000)	.27373	.44614
AGE4	10.0982	9.53739	1.059 (.29021)	.25720	.43736
FEMALE	-5.81455	5.39901	-1.077 (.28167)	.50678	.50026
HHSIZE	-.825537	1.83026	-.451 (.65636)	4.6904	1.5539
SPCINC	-27.6875	12.3672	-2.239 (.02409)	2.3836	1.0695
SPCINC SQ	46.7994	25.2094	1.856 (.06043)	.68239	.52686
HEIGHT	.396992	.559626	.709 (.48528)	35.349	6.0710
BLACK	12.5218	9.66024	1.296 (.19202)	.12700	.33318
OTHRACE	-8.01972	15.9165	-.504 (.62058)	.29978E-01	.17063
HISPANIC	-14.5082	10.2045	-1.422 (.15140)	.80742E-01	.27260
MSOMEHS	30.2246	14.7243	2.053 (.03816)	.22463	.41759
MHSGRAD	12.6454	14.3581	.881 (.38267)	.45911	.49863
MSOME COL	2.73243	15.1237	.181 (.83450)	.21834	.41337
MCOLGRAD	15.5132	18.1715	.854 (.39803)	.60431E-01	.23843
WIC	23.8679	10.2166	2.336 (.01877)	.23150	.42205
FSPART	21.3828	8.76131	2.441 (.01427)	.32799	.46977
WICFS	-8.14938	14.0015	-.582 (.56808)	.15297	.36018
LOPOV	39.1696	15.7847	2.481 (.01279)	.54365E-01	.22687
MEDPOV	-12.3380	12.0170	-1.027 (.30570)	.25620	.43680
HIPOV	-12.8025	12.4050	-1.032 (.30309)	.20483	.40382
SURCORE	22.3704	9.12112	2.453 (.01382)	.25555	.43644

NM CORE	5.73223	12.0908	.474 (.64073)	.87055E-01	.28209
SUBLOINC	7.90369	9.72200	.813 (.42181)	.17220	.37778
NMLOINC	11.7498	9.91838	1.185 (.23458)	.15247	.35970
Sigma	74.3394	1.83792	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=FOLPCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... FOLPCT
 Number of Observations..... 818.
 Mean of Dependent Variable.. 155.57432
 Std. Dev. of Dep. Variable.. 124.69866
 Std. Error of Regression.... 115.71554
 Sum of Squared Residuals.... .10605E+08
 R - Squared..... .16524
 Adjusted R - Squared..... .13889
 F-Statistic (25, 792)..... 6.27091
 Significance of F-Test..... .00000
 Log-Likelihood..... -5033.9
 Restricted (Slopes=0) Log-L. -5107.7
 Chi-Squared (25)..... 147.66
 Significance Level..... .32173E-13
 Durbin - Watson Statistic..... 1.5350
 Estimated Autocorrelation (Rho)..... .23252

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	174.936	45.5785	3.838 (.00020)	1.0000	.00000
AGE2	39.2795	12.8036	3.068 (.00240)	.22025	.41467
AGE3	49.7013	12.9301	3.844 (.00020)	.27373	.44614
AGE4	-48.8565	14.8458	-3.291 (.00121)	.25720	.43736
FEMALE	1.77880	8.40402	.212 (.81505)	.50678	.50026
HHSIZE	-1.36487	2.84895	-.479 (.63735)	4.6904	1.5539
SPCINC	-61.2862	19.2507	-3.184 (.00169)	2.3836	1.0695
SPCINC SQ	96.5103	39.2406	2.459 (.01357)	.68239	.52686
HEIGHT	1.69625	.871106	1.947 (.04901)	35.349	6.0710
BLACK	25.5444	15.0370	1.699 (.08571)	.12700	.33318
OTHRACE	2.06381	24.7754	.083 (.89351)	.29978E-01	.17063
HISPANIC	24.8053	15.8841	1.562 (.11444)	.80742E-01	.27260
MSOMEHS	-1.32098	22.9196	-.058 (.90881)	.22463	.41759
MHSGRAD	-19.6416	22.3495	-.879 (.38373)	.45911	.49863
MSOME COL	-12.7866	23.5414	-.543 (.59409)	.21834	.41337
MCOLGRAD	-16.1168	28.2856	-.570 (.57625)	.60431E-01	.23843
WIC	43.2460	15.9031	2.719 (.00665)	.23150	.42205
FSPART	16.2521	13.6377	1.192 (.23170)	.32799	.46977
WICFS	-23.3292	21.7946	-1.070 (.28473)	.15297	.36018
LOPOV	27.2366	24.5702	1.109 (.26725)	.54365E-01	.22687
MEDPOV	-35.9372	18.7054	-1.921 (.05207)	.25620	.43680
HIPOV	-35.0619	19.3094	-1.816 (.06624)	.20483	.40382
SUBCORE	15.9043	14.1978	1.120 (.26205)	.25555	.43644
NMCORE	-19.5445	18.8204	-1.038 (.29996)	.87055E-01	.28209
SUBLOINC	22.4401	15.1331	1.483 (.13423)	.17220	.37778
NMLOINC	9.11117	15.4388	.590 (.56269)	.15247	.35970
Sigma	115.716	2.86088	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=CALPCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable..... CALPCT
 Number of Observations..... 818.
 Mean of Dependent Variable.. 103.23525
 Std. Dev. of Dep. Variable.. 51.26395
 Std. Error of Regression.... 47.02981
 Sum of Squared Residuals.... .17517E+07
 R - Squared..... .18412
 Adjusted R - Squared..... .15837
 F-Statistic (25, 792)..... 7.14931
 Significance of F-Test..... .00000
 Log-Likelihood..... -4297.4
 Restricted (Slopes=0) Log-L. -4380.6
 Chi-Squared (25)..... 166.38
 Significance Level..... .32173E-13
 Durbin - Watson Statistic..... 1.6343
 Estimated Autocorrelation (Rho)..... .18284

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	69.5843	18.5243	3.756 (.00027)	1.0000	.00000
AGE2	-17.8978	5.20370	-3.439 (.00076)	.22025	.41467
AGE3	-8.39752	5.25514	-1.598 (.10615)	.27373	.44614
AGE4	-25.3213	6.03370	-4.197 (.00006)	.25720	.43736
FEMALE	-10.7369	3.41561	-3.143 (.00191)	.50678	.50026
HHSIZE	1.27505	1.15789	1.101 (.27056)	4.6904	1.5539
SPCINC	-20.0252	7.82397	-2.559 (.01036)	2.3836	1.0695
SPCINCSQ	55.9942	15.9484	3.511 (.00060)	.68239	.52686
HEIGHT	.880429	.354040	2.487 (.01261)	35.349	6.0710
BLACK	-22.2078	6.11143	-3.634 (.00040)	.12700	.33318
OTHRACE	-18.7642	10.0694	-1.863 (.05946)	.29978E-01	.17063
HISPANIC	1.72139	6.45573	.267 (.77973)	.80742E-01	.27260
MSOMEHS	15.8009	9.31513	1.696 (.08618)	.22463	.41759
MHSGRAD	14.0271	9.08343	1.544 (.11859)	.45911	.49863
MSOMECOL	15.9076	9.56782	1.663 (.09263)	.21834	.41337
MCOLGRAD	21.7418	11.4960	1.891 (.05580)	.60431E-01	.23843
WIC	6.92798	6.46342	1.072 (.28405)	.23150	.42205
FSPART	10.0634	5.54273	1.816 (.06627)	.32799	.46977
WICFS	6.56528	8.85787	.741 (.46537)	.15297	.36018
LOPOV	-4.83566	9.98597	-.484 (.63385)	.54365E-01	.22687
MEDPOV	2.85365	7.60237	.375 (.70757)	.25620	.43680
HIPOV	3.24491	7.84784	.413 (.68182)	.20483	.40382
SUBCORE	14.3011	5.77035	2.478 (.01290)	.25555	.43644
NMCORE	11.8561	7.64912	1.550 (.11720)	.87055E-01	.28209
SUBLOINC	.459606	6.15049	.075 (.89861)	.17220	.37778
NMLOINC	6.06511	6.27473	.967 (.33613)	.15247	.35970
Sigma	47.0298	1.16274	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=PHOSPCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	PHOSPCT
Number of Observations.....	818.
Mean of Dependent Variable..	124.16059
Std. Dev. of Dep. Variable..	49.92642
Std. Error of Regression....	48.00095
Sum of Squared Residuals....	.18248E+07
R - Squared.....	.10393
Adjusted R - Squared.....	.07564
F-Statistic (25, 792).....	3.67438
Significance of F-Test.....	.00000
Log-Likelihood.....	-4314.1
Restricted (Slopes=0) Log-L.	-4359.0
Chi-Squared (25).....	89.691
Significance Level.....	.81517E-10
Durbin - Watson Statistic.....	1.6366
Estimated Autocorrelation (Rho).....	.18170

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	66.7951	18.9068	3.533 (.00056)	1.0000	.00000
AGE2	-1.97303	5.31115	-.371 (.71018)	.22025	.41467
AGE3	10.7107	5.36365	1.997 (.04360)	.27373	.44614
AGE4	-9.27825	6.15829	-1.507 (.12799)	.25720	.43736
FEMALE	-10.4694	3.48614	-3.003 (.00292)	.50678	.50026
HHSIZE	.425010	1.18180	.360 (.71815)	4.6904	1.5539
SPCINC	-5.97341	7.98553	-.748 (.46113)	2.3836	1.0695
SPCINC SQ	17.4738	16.2777	1.073 (.28330)	.68239	.52686
HEIGHT	1.26269	.361351	3.494 (.00063)	35.349	6.0710
BLACK	-8.84626	6.23762	-1.418 (.15244)	.12700	.33318
OTHRACE	-8.21722	10.2773	-.800 (.42979)	.29978E-01	.17063
HISPANIC	5.44357	6.58904	.826 (.41403)	.80742E-01	.27260
MSOMEHS	17.1187	9.50748	1.801 (.06854)	.22463	.41759
MHSGRAD	7.44788	9.27100	.803 (.42752)	.45911	.49863
MSOME COL	11.1395	9.76539	1.141 (.25307)	.21834	.41337
MCOLGRAD	12.1332	11.7334	1.034 (.30210)	.60431E-01	.23843
WIC	8.99070	6.59689	1.363 (.16952)	.23150	.42205
FSPART	11.0565	5.65718	1.954 (.04820)	.32799	.46977
WICFS	-8.31472	9.04078	-.920 (.36111)	.15297	.36018
LOPOV	-16.1728	10.1922	-1.587 (.10865)	.54365E-01	.22687
MEDPOV	-4.26156	7.75936	-.549 (.59002)	.25620	.43680
HIPOV	-5.93553	8.00989	-.741 (.46547)	.20483	.40382
SUBCORE	14.1406	5.88951	2.401 (.01584)	.25555	.43644
NMCORE	14.5010	7.80707	1.857 (.06029)	.87055E-01	.28209
SUBLOINC	6.62054	6.27750	1.055 (.29219)	.17220	.37778
NMLOINC	9.71937	6.40430	1.518 (.12518)	.15247	.35970
Sigma	48.0010	1.18675	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=MAGPCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	MAGPCT
Number of Observations.....	818.
Mean of Dependent Variable..	114.44003
Std. Dev. of Dep. Variable..	48.20143
Std. Error of Regression....	44.12851
Sum of Squared Residuals....	.15423E+07
R - Squared.....	.18750
Adjusted R - Squared.....	.16186
F-Statistic (25, 792).....	7.31091
Significance of F-Test.....	.00000
Log-Likelihood.....	-4245.3
Restricted (Slopes=0) Log-L.	-4330.2
Chi-Squared (25).....	169.78
Significance Level.....	.32173E-13
Durbin - Watson Statistic.....	1.6152
Estimated Autocorrelation (Rho).....	.19241

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
ONE	84.1428	17.3815	4.841 (.00001)	1.0000	.00000
AGE2	7.12175	4.88268	1.459 (.14085)	.22025	.41467
AGE3	24.8339	4.93094	5.036 (.00000)	.27373	.44614
AGE4	-23.4379	5.66148	-4.140 (.00007)	.25720	.43736
FEMALE	-4.66995	3.20490	-1.457 (.14126)	.50678	.50026
HHSIZE	-.872274	1.08646	-.803 (.42782)	4.6904	1.5539
SPCINC	-6.29854	7.34131	-.858 (.39559)	2.3836	1.0695
SPCINCSQ	12.6615	14.9645	.846 (.40242)	.68239	.52686
HEIGHT	.919761	.332199	2.769 (.00578)	35.349	6.0710
BLACK	-10.1558	5.73441	-1.771 (.07319)	.12700	.33318
OTHRACE	-9.54000	9.44817	-1.010 (.31412)	.29978E-01	.17063
HISPANIC	13.7784	6.05747	2.275 (.02199)	.80742E-01	.27260
MSOMEHS	5.10706	8.74047	.584 (.56657)	.22463	.41759
MHSGRAD	-1.53230	8.52307	-.180 (.83505)	.45911	.49863
MSOMECOL	5.06402	8.97758	.564 (.58006)	.21834	.41337
MCOLGRAD	11.3002	10.7868	1.048 (.29556)	.60431E-01	.23843
WIC	9.80376	6.06469	1.617 (.10211)	.23150	.42205
FSPART	17.9404	5.20079	3.450 (.00073)	.32799	.46977
WICFS	-12.8003	8.31143	-1.540 (.11960)	.15297	.36018
LOPOV	-11.7424	9.36993	-1.253 (.20769)	.54365E-01	.22687
MEDPOV	-10.1734	7.13338	-1.426 (.15010)	.25620	.43680
HIPOV	-13.8101	7.36370	-1.875 (.05786)	.20483	.40382
SUBCORE	13.2451	5.41438	2.446 (.01405)	.25555	.43644
NMCORE	4.34447	7.17724	.605 (.55264)	.87055E-01	.28209
SUBLOINC	6.69975	5.77107	1.161 (.24444)	.17220	.37778
NMLOINC	9.64133	5.88764	1.638 (.09769)	.15247	.35970
Sigma	44.1285	1.09101	40.447 (.00000)		

MODEL COMMAND: CRMODEL ;LHS=IRONPCT ;RHS=X2 ;WTS=SCALEDWT \$

Ordinary Least Squares Estimates

Dependent Variable.....	IRONPCT
Number of Observations.....	818.
Mean of Dependent Variable..	79.90404
Std. Dev. of Dep. Variable..	56.47423
Std. Error of Regression....	46.33289
Sum of Squared Residuals....	.17002E+07
R - Squared.....	.34750
Adjusted R - Squared.....	.32690
F-Statistic (25, 792).....	16.87163
Significance of F-Test.....	.00000
Log-Likelihood.....	-4285.2
Restricted (Slopes=0) Log-L.	-4459.8
Chi-Squared (25).....	349.17
Significance Level.....	.32173E-13
Durbin - Watson Statistic.....	1.6767
Estimated Autocorrelation (Rho).....	.16165

Variable	Coefficient	Std. Error	T-ratio (Sig.Lvl)	Mean of X	Std.Dev.of X
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ONE	16.0660	18.2498	.880 (.38289)	1.0000	.00000
AGE2	-6.45467	5.12659	-1.259 (.20550)	.22025	.41467
AGE3	-.584823	5.17726	-.113 (.87581)	.27373	.44614
AGE4	29.8712	5.94429	5.025 (.00000)	.25720	.43736
FEMALE	-6.20512	3.36500	-1.844 (.06215)	.50678	.50026
HHSIZE	2.36228	1.14073	2.071 (.03652)	4.6904	1.5539
SPCINC	-35.7721	7.70803	-4.641 (.00001)	2.3836	1.0695
SPCINCSQ	102.364	15.7121	6.515 (.00000)	.68239	.52686
HEIGHT	.908210	.348794	2.604 (.00917)	35.349	6.0710
BLACK	3.44653	6.02086	.572 (.57448)	.12700	.33318
OTHRACE	-8.62163	9.92014	-.869 (.38924)	.29978E-01	.17063
HISPANIC	-3.77033	6.36007	-.593 (.56092)	.80742E-01	.27260
MSOMEHS	12.3820	9.17709	1.349 (.17395)	.22463	.41759
MHSGRAD	7.32471	8.94883	.819 (.41853)	.45911	.49863
MSOMECOL	-6.29150	9.42604	-.667 (.51205)	.21834	.41337
MCOLGRAD	8.02927	11.3256	.709 (.48556)	.60431E-01	.23843
WIC	22.7781	6.36764	3.577 (.00049)	.23150	.42205
FSPART	25.8414	5.46059	4.732 (.00001)	.32799	.46977
WICFS	11.4165	8.72661	1.308 (.18780)	.15297	.36018
LOPOV	33.8620	9.83799	3.442 (.00075)	.54365E-01	.22687
MEDPOV	10.6546	7.48971	1.423 (.15115)	.25620	.43680
HIPOV	9.38400	7.73154	1.214 (.22288)	.20483	.40382
SUBCORE	15.4906	5.68485	2.725 (.00654)	.25555	.43644
NMCORE	20.1294	7.53577	2.671 (.00761)	.87055E-01	.28209
SUBLOINC	1.30818	6.05935	.216 (.81236)	.17220	.37778
NMLOINC	.370637	6.18175	.060 (.90742)	.15247	.35970
Sigma	46.3329	1.14551	40.447 (.00000)		