SABRE

EXERCISE 3 STATE DEPENDENCE

File: WEMP2.DAT

THE VARIABLES

case	individual identifier
femp	wife's employment status; 1=employed, 0=unemployed
mune	husband's employment status; 1=unemployed, 0=employed
time	calendar time (year-1975)
und1	children aged < 1 year old; 1=yes, 0=no
und5	children aged 1 - 5 years old; 1=yes, 0=no
age	mother's age

1. Declare the variables; read the data; specify the response variable.
You should have read in 1580 observations.

2. To keep a log of your work.

<S> outfile out3

3. Fit an appropriate series of pooled logistic regression models with mune and und5 as explanatory variables. Note the deviances and degrees of freedom.

4. Fit a logistic mixture regression model with mune and und5 as explanatory variables.

5. Note the deviance and degrees of freedom for the longitudinal model and examine the parameter estimates.

6. Fit a DROP model.

<S> drop y

7. You can now use a handy shortcut to refit your model (i.e. a space and then a dot).

<S> fit .

8. Note the deviance and the degrees of freedom for this model.

9. Now fit a lagged y variable.

<S> lag y
<S> fit .

10. Is the lag significant?

11. What does this mean substantively?

12. Is there still significant residual heterogeneity?

13. Now fit a two-state Markov model.

<S> Markov y
<S> fit .

14. State 0 are the women who were unemployed at t-1. What is the effect of husband's employment status for these women?

15. State 1 are women who were employed at t-1. What is the effect of husbands's employment status for these women?

16. What is the effect of having a child age 1- 5 years old the same for women in State 0 and State 1?

17. Is there significant residual heterogeneity?

18. Now exit SABRE and take a look in the log file out3.