SEA Fertility Transition Project Codebook

Philippines

The Merged 1970 and 1980 file: Geographical Comparability, Construction of Contextual Measures, Comparability of Variables, and Computer Programs: PHILIPPINES

A. Geographical Comparability

     The 1970 province boundaries have been used for both 1970 and 1980. With the increase from 67 provinces in 1970, to 74 provinces in 1980, this has required that 1980 provinces be recoded. In general this has not posed any problems except for the case of Manila. In the 1980 sample tape that was made available by NSO, Metro Manila has been given one code (39). This code subsumes those parts of Manila that in 1970 were part of the provinces of Rizal and Bulacan. To ensure that the province boundaries were the same for 1970 and 1980, Manila was redistributed based on municipality codes. Those persons residing in municipality 1 of Metro Manila in 1980 were classified as residing in Manila, those residing in municipality 17 were classified as residing in Bulacan, while those persons living in other municipalities were reclassified into Rizal.

     With one exception, described below, provinces contained sufficient numbers of observations[1] for the generation of the contextual measures. The exception was the province of Batanes. In measures constructed from data from the sample tapes, this province was combined with the province of Cagayan. In several other instances where the measures were obtained from other sources, and were not sample based (for example the 1970 housing variables and the infant mortality measures), independent measures for Batanes were retained. In the final complimation of data all 67 provinces were used, with Batanes having the same values as Cagayan on those measures in which aggregation had taken place.

---

    [1] A base population of over one hundred for any measure was used as the minimum acceptable.

An analysis of the weighted population, by province, showed that in two of the provinces there was serious under-estimates of the total population (comparisons were made between the weighted sample data[2] and the published full count of the population). In the province of Tarlac the undercount was in the order of 27 percent while for the province of Palawan the undercount was approximately 6 percent. Appropriate adjustments have made to the sample weights to adjust for these deficiencies. As the undercounts resulted from the exclusion of whole municipalities from the sample tape, the adjustments that have been made implicitly assumes that the population of the missing municipalities are not systematically different from the population of the included municipalities.

B. <u>Construction of Contextual Measures</u>

i) Women's Status

The following indicators of women's status were constructed for both 1970 and 1980:

1. E1 : % Women 15-49 with Education greater than Primary level.

2. E2 : % Women 15-49 with Education greater than High School level.

3. E3 : Mean Educational Level of Women aged 15-49.

4. MED1 : Median level of Education of Women aged 15-49.

5. E4 : % Women 15-34 with Education greater than Primary level.

6. E5 : % Women 15-34 with Education greater than High School level.

7. E6 : Mean Educational Level of Women aged 15-34.

8. MED2 : Median level of Education of Women aged 15-34.

9. W1 : % Women 15-49 working in Non-Agricultural Sector.

10. W2 : % Women 15-49 working in Non-Agricultural Sector and not working as Family Workers in Sales or Service Sector (1970 only).

11. W3 : % Women 15-49 working in Non-Agricultural Sector and not working in Sales or Service Sector.

12. W4 : % Working Women 15-49 working in Non-Agricultural Sector.

13. W5 : % Working Women 15-49 working in Non-Agricultural Sector and not working as Family Workers in Sales or Service Sector (1970 only).

---

[2] The weighted data was multiplied by a factor of four to approximate the total population.

14. W6   : % Working Women 15-49 working in Non-Agricultural Sector and not
           working in Sales or Service Sector.

15. W7   : % Women 15-34 working in Non-Agricultural Sector.

16. W8   : % Women 15-34 working in Non-Agricultural Sector and not working
           as Family Workers in Sales or Service Sector (1970 only).

17. W9   : % Women 15-34 working in Non-Agricultural Sector and not working
           in Sales or Service Sector.

18. W10 : % Working Women 15-34 working in Non-Agricultural Sector.

19. W11 : % Working Women 15-34 working in Non-Agricultural Sector and not
           working as Family Workers in Sales or Service Sector (1970 only).

20. W12 : % Working Women 15-34 working in Non-Agricultural Sector and not
           working in Sales or Service Sector.

21. AGE1 : Mean Husband Wife age difference (Women aged 15-49).

22. AGE3 : Proportion of couples where Wife's Age is greater than Husband's
Age   (For women aged 15-49).

23. AGE2 : Mean Husband Wife age difference (Women aged 15-34).

24. AGE4 : Proportion of couples where Wife's Age is greater than Husband's
Age   (For women aged 15-34).

25. ED1 : Mean Difference of Husband's and Wife's Logged Level of Education
           (Women aged 15-49).

26. ED3 : Proportion of couples where Wife's Education is greater than
           Husband's Education (For women aged 15-49).

27. ED2 : Mean Difference of Husband's and Wife's Logged Level of Education
           (Women aged 15-34).

28. ED4 : Proportion of couples where Wife's Education is greater than
           Husband's Education (For women aged 15-34).

     Half of the 28 indicators of women's status were based on measures
aggregated from the sample of women aged 15-49 while the other half were
aggregated from women aged 15-34. For all of the possible 14 comparisons
between indicators that varied only by the age of the sample population the
correlations were .95 or above, and in most cases were .99 or 1.00.
Therefore there would appear to be no empirical preference for measures based
on these two different age groups.

     Correlations between the women's status variables and the two
dependent variables, children-ever-born and own-children aged 2 were run.

The most striking pattern was that, although the correlations for own-children were less than those for CEB, the pattern across indicators are similar. As expected, given the high correlations between indicators of women's status, there was little difference in the relationships with the dependent variables between indicators based on different ages. If the correlations are taken to 4 decimal places it was usually the indicator based on the age group 15-34 that displayed the highest correlation with the DV's.

For education and educational differences the indicators based on the amount of variation around a fixed point were related more highly to the DV's than indicators based on some measure of central tendency such as the mean or median. Also for education indicators there seems to be little difference in using completion of primary or secondary school as the cut-point. In fact the indicators using completion of secondary school are marginally more highly related to the DV's than the corresponding measures using completion of primary school as the cut-point.

ii) Marriage

Three indicators of the marriage market were employed. These indicators varied only in terms of the age group employed in the denominator.

1. MAR1 : Proportion of women aged 15-24 who are single.

2. MAR2 : Proportion of women aged 25-29 who are single.

3. MAR3 : Proportion of women aged 15-29 who are single.

An analysis of the relationships between the different indicators shows a high level of coresspondence, also the relationships with the fertility variables are similar across the different marriage measures.

iii). Infant Mortality

Several different sources were used in an attempt to obtain reliable estimates of infant mortality at the province level. Indirect estimates based on the Brass technique of adjusting children-ever-born and children-surviving, indirect estimates based on inter-censual survival (1975-80), vital statistics, and published estimates based on a combination of vital statistics and indirect estimates (Flieger, W., M. K. Abenoja, and A. C. Lim, 1981, <u>On the Road to Longevity: 1970 National, Regional and Provincial Mortality Estimates for the Philippines</u>. San Carlos Publications, Cebu City, Philippines).

Flieger, 1981) were compared.

The Brass technique provided estimates that when compared to other estimates of mortality, were much too low. The problem appears to be that the information on proportion of children dead from the Philippines 1970 and 1980 Census is seriously undernumerated. In addition the indirect methods based on census survival, with data from the 1975 and 1980 census (adjusted for migration by using the question from the 1980 census which asked place of residence in 1975), provided in many instances results that were not possible (life expectancies over 100 years). In many instances there were recorded increases in population over five year cohorts. Therefore these estimates were rejected.

The vital statistics are known to be incomplete, with the level of coverage varying between provinces. However, under the assumption that the level of coverage **between provinces** did not change markedly over the period 1970 to 1980 the ratio of 1970 to 1980 vital statistics on infant mortality could be used to adjust a reliable 1970 estimate of infant mortality (or vice versa if a reliable set of 1980 estimates were available). It was felt that Flieger's estimates for 1970 were valid and therefore could be used as the 1970 measure. For 1980 the vital statistics ratio was applied to Flieger's 1970 estimates to obtain an estimated 1980 measure of infant mortality.

iv). Value of Children

The indicators of the value of children reflect two activities, children's education and children's work. There are three education variables which can be used. The first variable is defined as the proportion of children 7-15 years, the second is the proportion of children 13-18 years, and the third is the proportion of children 10-14 years of age, who attended school. Only one work variable could be constructed, this is the proportion of children, age 15-18, who are in the labor force. These indicators are shown below:

1. CHWORK - Proportion of Children Aged 15-18 in Labor Force.[3]
2. CHSCL   - Proportion of Children Aged 7-15 attending school.

---

[3] The Labor Force includes all persons employed (ie. with a usual occupation)

3. CHSCL1 - Proportion of Children Aged 13-18 attending school.

   4. CHSCL2 - Proportion of Children Aged 10-14 attending school.

     There is little difference in the correlation coefficients of the
education variables and the dependent variables. All are similar in terms of
the magnitude and the sign of the coefficients. Of the three education
variables, the CHSCL (ages 7-15) emerges as the best of the three. CHSCL is
most highly correlated with the OWNCH (Current Fertility) variable for 1980
(r= -.0306) and 1970 (r= -.0361). One point should be noted: the 1970 OWNCH
variable is more highly correlated with the CHSCL1 (ages 13-18) variable (r=
-.0362), however, the difference is extreme small and unlikely to be
significant. A similar pattern of association is found for the dependent
variable, CEB (Children-Ever-Born). In 1980, CEB is most highly associated
with CHSCHL (r= -.0577). In 1970, CEB is most highly associated with CHSCL1
(r= -.0853). Again, however, the correlation of CEB with CHSCL is only
slightly lower (r= -.0819), a difference which is not likely to be
significant. Additional reasons for using the CHSCL variable are that,
first, the two contextual variables are quite highly intercorrelated, at
least .82 for 1980 and 1970. Given this high degree of association between
the two variables, either one could be used. Second, CHSCL will allow
comparability across countries as the Malaysian Value of Children variable is
also defined in terms of the age group 7-15.

     The Children's work variable can only be defined in terms of children
ages, 15-18. The relationship between the dependent variables and CHWORK is
stronger for the CEB variable for both 1970 and 1980 (r= .0817 and r= .0408,
respectively). For the OWNCH variable, there is a much weaker association
for both years (r= .0390 for 1970, and r= .0224 for 1980).

v). Family Planning
     The family planning variable was obtained from the Population
Commission (POPCOM) in Manila. For each province in 1970 and 1980 the number
of clinics dispensing family planning services operated under the auspices of
the following organizations was recorded:
     - Bureau of Hospitals
     - Rural Health Unit
     - Social Hygiene Clinic

- Leprosy Family Planning Clinic

- Regional Comprehensive Family Planning Clinic

- City Health Office

- Tulungan Family Planning and Mothercraft Project

- Health Operations Center

- Family Planning Organization of the Philippines

- Institute of Maternal and Child Health

- Regional Contracted/Assisted Clinic

- Community Assisted Clinic

- Ministry of National Defense

- Ministry of Labor and Employment

- Ministry of Local Government and Community Development

- Ministry of Agrarian Reform

The number of clinics for each organization, and the total number of clinics, were correlated with the fertility measures. Similar patterns were observed for the separate and total measures. Therefore it was decided to use, as the contextual measure, the number of clinics per 100000 currently married women. The measures were constructed separately for 1970 and 1980.

vi). Other Contextual Variables

1) Urban

The urban residence measure in the 1980 census was based on urban classifications which had not been revised since 1975. Therefore, rather than utilize a measure that would underestimate the variation in 'urbanness' between 1970 and 1980, a new measure: based on municipal residence would be employed. For each province the proportion of persons residing in municipalities with populations greater than 10,000, 50,000 and 75,000 were obtained from the sample tapes. An analysis of the distributions revealed that for there was little between province variation for municipalities with populations over 10,000 (the proportions were uniformly high) and with populations over 75,000 (most provinces had no municipalities of this size). Therefore 50,000 was chosen as the criterion for 'urbanness'.

2) Household Characteristics

Four contextual measures (based on household characteristics) were estimated. These measures are listed below:

a) Proportion of Households with flush toilets.

b) Proportion of Households with piped water.

c) Proportion of Households with radios.

d) Proportion of Households with electric lighting.

For 1980 the household component of the census was included in the sample tape therefore the above measures could be estimated from the sample data. Household data was not however, available on the 1970 census tape. Therefore comparable data, by province, was collected from 1970 Census reports.

3) Sex Ratio

The proportion of males to females in the age group 15-34 was chosen as the measure of the sex-ratio. This measure can be converted to a traditional sexratio (the number of males per 100 females) by doubling the proportion and multiplying by 100.

4) Non-Agricultural Employment

One other contextual variable, the proportion of persons aged 15 and over who were engaged in non-agricultural occupations, was estimated from the sample tape.

C. Construction of Merged File

i) Comparability of Individual level variables between 1970 and 1980

In creating the merged file for the Philippines, an effort was made to match variables from the 1970 and 1980 censuses in such a way that they would be comparable across the censuses. For the majority of the variables, this was accomplished. For several, however, perfect comparability could not be established. There were two reasons for this, including changes in the targeted respondent, and changes in the reference period.

Most of the variables required little, if any recoding, or other manipulation to establish comparability. For instance, the responses to the variable, Relationship to Household Head, in 1980 were recoded to reflect the less specific categories of responses which were available for 1970. Thus in 1980, the categories son, daughter, son-in-law, daughter-in-law, grandson, granddaughter were recoded into the 1970 categories of son/daughter,

son/daughter-in-law, and grandchild. Similar changes were made for the other variables, including the marital status variable, the highest grade completed education variable, and the usual occupation variable.

For others, some recoding was also necessary, but perfect comparability could not be established. These variables include language, literacy, industry, and age at first marriage. Some of the comparability problems stemmed from the fact that different respondents were targeted when asking about the language spoken in the home, literacy, and the age at first marriage. In the first case, in 1970, the language spoken in the home was treated as an individual level characteristic. Each individual in the household was asked about their mother tongue or the language spoken at home in earliest childhood. In 1980, the question referred to language as a household characteristic. The question asked was "What language/dialect is generally spoken in this household?" These were included in the merged file with the understanding that they are not comparable.

In the second case, the literacy of the respondent, in 1980, only those respondent who had not completed at least the fourth grade were asked if they could read and write a simple message. Those who had completed at least the fourth grade were assumed to be literate. In 1970, this question had been asked of all persons, six years and older. Analysis by the Philippines National Statistics Office revealed that the method in which the question was asked in 1980 may have biased the results in the sense that because enumerators were instructed not to ask the question to those with higher than a fourth grade education, some may have assumed that those respondents with less than a fourth grade education were illiterate.

The last case in which the targeted respondent has changed from 1970 to 1980 is the age at first marriage variable. In 1980, this question was only asked of those women who had been married only one time. In 1970, the question was asked of all ever-married women.

Additional problems of comparability arose because of changes in the reference period of the question. This problem applies specifically to the question regarding the kind of business/industry the individual engaged in. In 1970, the kind of business referred to the business/industry where work in the past week is pursued. In 1980, it referred to the business/industry pursued in most of the past 12 months. The 1970 question, essentially gives a measure of current industry; the 1980, usual industry.

ii) Sample Sizes and Weights

The data, if saved as an SPSSX system file and stored in its entirety would occupy more than one magnetic tape. Given the practical considerations of time and computer resources,necessary to do any analysis on this amount of data, and the theoretical consideration that we would not be involved in estimation of population characteristics, it was decided to sample the data before creation of the merged file. The sampling was done within the statistical package SPSSX with 67 percent of the 1970 observations and 50 percent of the 1980 observations (in the standard files) being sampled. The unweighted number of sampled cases for 1970 was 246,566 and for 1980, 270,314.

In both the 1970 and 1980 sample data, individual weights, designed to inflate the sample to either the total population (1970) or the full sample (1980), and to correct for compositional differences between the sample and full count (see codebooks for a more complete discussion), were attached to each record. As analysis conducted on the merged file is not intended to be used to provide estimates of the total population only the second aspect of the weight (ensuring representativeness) needed to be retained. As the weighting schemes for 1970 and 1980 were different it was necessary to transform the weight to ensure comparability across years while at the same time adjusting for representativeness within years. This was achieved by dividing, for each census year, the individual weights by the mean weight (obtained from the full sample). Therefore the weight will vary among observations within years but the mean weights for 1970 and 1980 will both be close to 1.

ii) Selection of Contextual Measures

The following list of contextual variables were chosen to be included in the merged file.

1. E4   : Proportion of Women 15-34 with Education greater than Primary   level.
2. W7   : Proportion of Women 15-34 working in Non-Agricultural Sector.
3. MAR1 : Proportion of women aged 15-24 who are single.

4. MAR3 : Proportion of women aged 15-29 who are single.

5. CHWORK: Proportion of Children Aged 15-18 in Labor Force.

6. CHSCL : Proportion of Children Aged 7-15 attending school.

7. IM1   : Infant Mortality q0 (x1000) based on Flieger estimate.

8. IM2   : Infant Mortality q0 (x1000) based on West Life Table.

9. SEXRAT: Proportion of Males 15-34

10. CP   : Family Planning Clinics per 100000 Currently-Married Women.

11. LIGHT : Proportion of households with electric light.

12. WATER : Proportion of households with piped water.

13. RADIO : Proportion of households with radio.

14. TOILET: Proportion of households with flush toilet.

15. URBAN : Proportion of persons living in Municipalities with populations greater or equal to 50,000.

16. WORK : Proportion of Population aged over 15 working in non-agricultural   occupations.

The indicators selected were included in a raw data file. The file, named PCONTEXT DAT, contains 33 variables. The first variable, named PROVINCE, indicates the province of residence, while the remaining 32 variables consist of the sixteen indicators measured for 1970 and for 1980. The year is identified by the addition of 70 or 80 onto the variable name. Therefore mar170 and mar180 are the respective 1970 and 1980 contextual measures for marriage.

This file has been matched to the 1970 and 1980 micro-data files and the resulting matched files have been merged. A new variable, YEAR, coded as either 1970 or 1980, identifies from which census each observation was derived. Each record contains the contextual variables for 1970 and 1980. This will enable the contextual change scores to be easily calculated. The tape information for the merged file, the EXEC file, and the SPSSX file that created the merged system file, are provided in Appendix A.

Every effort was made to ensure that the coding for variables was the same for both 1970 and 1980. For five variables, municipality, occupation (respondents and husbands) and industry (respondents and husbands), the coding schemes are different for each of the two years. Therefore, for these variables it will be necessary to recode the variables so that they be comparable across years. The recodes that were employed for other variables

can be seen in the SPSSX program shown in Appendix A. In Appendix B the Philippine component of the standard file codebooks are provided while in Appendix C the dictionary information from the SPSSX merged system file is shown.

Tape Information:

BIN NUMBER - BN0166

DSNAME - PH8BACK

VOL ID - CH166

FILE ID - PHMERGE

LRECL - 1024

BLKSIZE - 30720

RECFM - FB

The tape can be mounted with the command:

    VMTAPE MOUNT BN0166 (LAB BLP NOWAIT

As the file is an SPSSX system file, the only details needed in the EXEC file
are:

    FI INDATA TAP1 SL 1

Under the assumption that the tape is mounted on the default drive (181) and
the chosen designation for the tape your SPSSX file is INDATA (the
designation is arbitrary).

The exec file used to read the raw data and create the system file is shown
below:

```
/* To Run the Philippine Contextual Variables */

VMTAPE MOUNT BN0041 181 DSN PHIL70.STDFCOPY (LAB BLP NOWAIT

VMTAPE MOUNT BN0094 182 DSN CH104 (LAB BLP NOWAIT

VMTAPE MOUNT BN0113 183 DSN COPY7 (RING LAB BLP NOWAIT

FI INDATA TAP1 SL 1 (RECFM FB BLKSIZE 32600 LRECL 200

FI INDATA1 TAP2 SL 1 (RECFM FB BLKSIZE 32600 LRECL 200

FI OUTDATA DISK P70 SYS

FI OUTDATA1 DISK P80 SYS

FI INDATA2 DISK PCONTEXT DAT

FI OUTCON DISK PCONTEXT SYS

FI OUTDATA3 TAP3 SL 1 (RECFM FB BLKSIZE 30720 LRECL 1024

LA OUTDATA3 FID PHIL VOLID PMERGE FSEQ 1 EXDTE 99364

SPSSX PCONTEXT (100K
```

The SPSSX file (PCONTEXT SPSSX) associated with this exec is provided below:

```
DATA LIST FILE=INDATA2 FIXED/PROV MAR170 MAR370 E470 W770
   CHWORK70 CHSCL70 SEXRAT70 FIM70 WIM70
   CP70 LIGHT70 WATER70 RADIO70 TOILET70 URBAN70 WORK70
   MAR180 MAR380 E480 W780
   CHWORK80 CHSCL80 SEXRAT80 FIM80 WIM80
   CP80 LIGHT80 WATER80 RADIO80 TOILET80 URBAN80 WORK80 1-198
SAVE OUTFILE=OUTCON/COMPRESSED
DATA LIST FILE=INDATA/PROV 16-19  MUNICIP 12-15
  URBAN 24 WEIGH 28-32 (2)
  AGE 33-34 RELHH 35-36 MARSTAT 37-38 LANG 42-44
  HILEVEL 51-52 LIT 58-59 SCATT 60-61
  DEGREE 56-57 HDEGREE 148-149
  POB 64-67 MOB 68-71 PORESID 80-81 MORESID 82-85 AGEMARR 86-87
  CEBM 100-101 CEBF 102-103 CSM 106-107 CSF 108-109
  USOCC 136-139 IND 124-127
  MATCH 140 HAGE 141-142 HHILEVEL 143-144
  HLIT 150-151 HSCATT 152-153
  HUSOCC 154-157 HIND 158-161
  NKIDS 174 C1 TO C8 175-182 NUKIDS 183-184 UC1 TO UC16 185-200
SAMPLE .67
COMPUTE WT=WEIGH/22.21
RECODE HAGE AGE (99=98) (-9=99)/
     HILEVEL HHILEVEL (17=16) (36=35)(-8=98)/HLIT LIT (8=0)/
     HSCATT SCATT (8=0)/AGEMARR (-8=0)/
     USOCC HUSOCC (-10=-88)/LANG (11 THRU 99=11)
IF (POB LE 9 OR (POB GE 84 AND POB LE 87) OR
   (POB GE 90 AND POB LE 96)) POB=99
IF (PORESID LE 9 OR (PORESID GE 84 AND PORESID LE 87) OR
   (PORESID GE 90 AND PORESID LE 96)) PORESID=99
DO IF (RELHH EQ 7)
COMPUTE RELHH=6
ELSE IF (RELHH EQ 8)
COMPUTE RELHH=7
END IF
DO IF (MARSTAT EQ 5)
COMPUTE MARSTAT=4
ELSE IF (MARSTAT EQ 6)
COMPUTE MARSTAT=5
END IF
DO IF (POB EQ PROV AND MOB EQ MUNICIP)
COMPUTE POB=88
ELSE IF (POB EQ PROV AND MOB NE MUNICIP)
COMPUTE POB=89
END IF
DO IF (PORESID EQ PROV AND MORESID EQ MUNICIP)
COMPUTE PORESID=88
ELSE IF (PORESID EQ PROV AND MORESID NE MUNICIP)
COMPUTE PORESID=89
END IF
DO IF (CEBM EQ -8 OR CEBF EQ -8)
COMPUTE CEB=98
ELSE IF (CEBM EQ -9 OR CEBF EQ -9)
COMPUTE CEB=99
ELSE
COMPUTE CEB=CEBM+CEBF
END IF
DO IF (CSM EQ -8 OR CSF EQ -8)
COMPUTE CS=98
```

```
ELSE IF (CSM EQ -9 OR CSF EQ -9)
COMPUTE CS=99
ELSE
COMPUTE CS=CSM+CSF
END IF
RECODE CEB CS (20 THRU 97=99)
RECODE DEGREE HDEGREE (-8=998) (-9=999)
COMPUTE YEAR=1970
SORT CASES BY PROV
MATCH FILES FILE=*/TABLE=OUTCON/BY PROV


VALUE LABELS URBAN 1 'URBAN' 2 'RURAL'/ RELHH 1 'HEAD'
  2 'WIFE/HUSBAND' 3 'SON/DAUGHTER' 4 'SON/DAUGHTER-IN-LAW'
  5 'GRANDCHILD' 6 'OTHER RELATIVE' 7 'NOT RELATED'/
  MARSTAT 1 'SINGLE' 2 'MARRIED' 3 'WIDOWED'
  4 'SEP-DIV' 5 'UNKNOWN' / LANG 1 'TAGALOG' 2 'CEBUANO'
  3 'HILIGAYNON' 4 'ILOCO' 5 'PAMPANGO' 6 'PANGASINAN'
  7 'SAMAR-LEYTE'
  8 'BICOL' 9 'MAGINDANAO' 10 'MARANAO' 11 'OTHER' /HILEVEL  HHILEVEL
  00 'NONE' 11 '1ST GRADE' 12 '2ND GRADE'
  13 '3RD GRADE' 14 '4TH GRADE' 15 '5TH GRADE'
  16 '6TH AND 7TH GRADE' 21 '1ST YEAR HIGH'
  22 '2ND YEAR HIGH' 23 '3RD YEAR HIGH'
  24 '4TH YEAR HIGH' 31 '1ST YEAR COLLEGE' 32 '2ND YEAR COLLEGE'
  33 '3RD YEAR COLLEGE' 34 '4TH YEAR COLLEGE'  35 '5TH PLUS COLLEGE'/
  LIT  HLIT 0 'NA' 1 'LITERATE' 2 'ILLITERATE'/
  DEGREE HDEGREE 0 'NO DEGREE' 998 'NA' 999 'MISSING'/
  MATCH 1 'HUSBAND MATCH' 0 'NO MATCH'/AGEMARR 0 'NA'/
  SCATT HSCATT 0 'NA' 1 'YES' 2 'NO'/CEB CS 98 'NA' 99 'MISSING'/
  AGE HAGE 98 '98 AND OVER' 99 'MISSING'/
  PROV POB PORESID 10 'MANILA' 11 'ABRA'
  12 'AGUSAN N' 13 'AKLAN' 14 'ALBAY' 15 'ANTIQUE' 16 'BATAAN'
  17 'BATANES' 18 'BATANGAS' 19 'BENGUET' 21 'BOHOL'
  22 'BUKIDNON'  23 'BULACAN' 24 'CAGAYAN' 25 'CAMARINES N'
  26 'CAMARINES S' 27 'CAMIGUIN' 28 'CAPIZ' 29 'CATANDUANES'
  31 'CAVITE' 32 'CEBU' 33 'COTABATO' 34 'S COTABATO'
  35 'DAVAO'  36 'DAVAO S' 37 'DAVAO O'
  38 'IFUGAO' 39 'ILOCOS N' 41 'ILOCOS S' 42 'ILOILO'
  43 'ISABELA' 44 'K APAYAO' 45 'LA UNION' 46 'LAGUNA'
  47 'LANAO N' 48 'LANAO S' 49 'LEYTE' 51 'S LEYTE'
  52 'MARINDUQUE' 53 'MASBATE'
  54 'MIS OCC' 55 'MIS OR' 56 'MT PROV' 57 'NEG OCC' 58 'NEG OR'
  59 'N ECIJA' 61 'NUEVA V' 62 'OCC MINDORO' 63 'OR MINDORO'
  64 'PALAWAN' 65 'PAMPANGA' 66 'PANGASINAN' 67 'QUEZON'
  68 'RIZAL'  69 'ROMBLON' 71 'E SAMAR' 72 'N SAMAR'
  73 'SAMAR' 74 'SORSOGON'
  75 'SULU' 76 'SURIGAO N' 77 'SURIGAO S' 78 'TARLAC'
  79 'ZAMBALES'  81 'ZAMBOANGA N' 82 'ZAMBOANGA S' 83 'AGUSAN S'
  88 'SAME PROV AND MUNICIP' 89 'SAME PROV DIFF MUNICIP'
  97 'UNKNOWN' 99 'MISSING'
VARIABLE LABELS  PROV 'PROVINCE'/MUNICIP 'MUNICIPALITY'
  /AGE 'AGE'/ AGEMARR 'AGE OF 1ST MARRIAGE'
  /HAGE  'HUSBANDS AGE'/MARSTAT 'MARITAL STATUS'
  /RELHH 'RELATIONSHIP TO HOUSEHOLD HEAD'
  /HILEVEL 'EDUCATIONAL ATTAINMENT'/HHILEVEL 'HUSBANDS EDUC ATTAINMENT'
  /SCATT 'SCHOOL ATTENDANCE'/HSCATT 'HUSBANDS SCHOOL ATTENDANCE'
  /LIT 'LITERACY'/HLIT 'HUSBANDS LITERACY'
  /POB 'PLACE OF BIRTH'/ PORESID 'PLACE OF RESIDENCE 5 YRS AGO'
  /USOCC 'USUAL OCCUPATION'/HUSOCC 'HUSBANDS USUAL OCCUPATION'
```

```
/IND 'INDUSTRY'/HIND 'HUSBANDS INDUSTRY'
/DEGREE 'TYPE OF DEGREE'
/HDEGREE 'HUSBANDS TYPE OF DEGREE'
/CEB 'CHILDREN-EVER-BORN'/ CS 'CHILDREN STILL LIVING'
/MATCH 'HUSBAND MATCH'
/NKIDS 'NUMBER OF MATCHED CHILDREN'/NUKIDS 'NUMBER KIDS UNMATCHED'
/C1 'AGE OF IST MATCHED CHILD'/C2 'AGE OF 2ND MATCHED CHILD'
/C3 'AGE OF 3RD MATCHED CHILD'/C4 'AGE OF 4TH MATCHED CHILD'
/C5 'AGE OF 5TH MATCHED CHILD'/C6 'AGE OF 6TH MATCHED CHILD'
/C7 'AGE OF 7TH MATCHED CHILD'/C8 'AGE OF 8TH MATCHED CHILD'
/UC1 'AGE OF IST UNMATCHED CHILD'
/UC2 'AGE OF 2ND UNMATCHED CHILD'
/UC3 'AGE OF 3RD UNMATCHED CHILD'
/UC4 'AGE OF 4TH UNMATCHED CHILD'
/UC5 'AGE OF 5TH UNMATCHED CHILD'
/UC6 'AGE OF 6TH UNMATCHED CHILD'
/UC7 'AGE OF 7TH UNMATCHED CHILD'
/UC8 'AGE OF 8TH UNMATCHED CHILD'
/UC9 'AGE OF 9TH UNMATCHED CHILD'
/UC10 'AGE OF 10TH UNMATCHED CHILD'
/UC11 'AGE OF 11TH UNMATCHED CHILD'
/UC12 'AGE OF 12TH UNMATCHED CHILD'
/UC13 'AGE OF 13TH UNMATCHED CHILD'
/UC14 'AGE OF 14TH UNMATCHED CHILD'
/UC15 'AGE OF 15TH UNMATCHED CHILD'
/UC16 'AGE OF 16TH UNMATCHED CHILD'
/WT 'INDIVIDUAL WEIGHT'
/YEAR 'YEAR OF CENSUS'
/MAR170 '1970 PROP 15-24 WOMEN SINGLE'
/MAR370 '1970 PROP 15-29 WOMEN SINGLE'
/E470  '1970 PROP WOMEN 15-34 WITH EDUC GT ELEMENTARY'
/W770  '1970 PROP WOMEN 15-34 IN NON-AG OCCUPATIONS'
/CHWORK70 '1970 15-18 IN LABOR FORCE'
/CHSCL70  '1970 AGE 7-15 ATTENDING SCHOOL'
/SEXRAT70 '1970 PROP MALES'
/FIM70   '1970 Q0 FLIEGER ESTS'
/WIM70   'Q0 WEST MODEL WOMEN AGED 25-29'
/CP70    '1970 FP CLINICS PER 100000 CMW'
/LIGHT70 'PROP 1970 HOUSEHOLDS WITH ELECTRIC LIGHT'
/WATER70 'PROP 1970 HOUSEHOLDS WITH PIPED WATER'
/RADIO70 'PROP 1970 HOUSEHOLDS WITH RADIO'
/TOILET70 'PROP 1970 HOUSEHOLDS WITH FLUSH TOILET'
/URBAN70 'PROP 1970 LIVING IN MUNIICIPS GE 50000'
/WORK70 'PROP OF 1970 POP AGED 15+ WORKING IN NON-AG OCCUPS'
/MAR180 '1980 PROP 15-24 WOMEN SINGLE'
/MAR380 '1980 PROP 15-29 WOMEN SINGLE'
/E480  '1980 PROP WOMEN 15-34 WITH EDUC GT ELEMENTARY'
/W780  '1980 PROP WOMEN 15-34 IN NON-AG OCCUPATIONS'
/CHWORK80 '1980 15-18 IN LABOR FORCE'
/CHSCL80  '1980 AGE 7-15 ATTENDING SCHOOL'
/SEXRAT80 '1980 PROP MALES'
/FIM80   '1980 Q0 ADJ FLIEGER 1970 ESTS'
/WIM80   'Q0 WEST MODEL WOMEN AGED 25-29'
/CP80    '1980 FP CLINICS PER 100000 CMW'
/LIGHT80 'PROP 1980 HOUSEHOLDS WITH ELECTRIC LIGHT'
/WATER80 'PROP 1980 HOUSEHOLDS WITH PIPED WATER'
/RADIO80 'PROP 1980 HOUSEHOLDS WITH FLUSH RADIO'
/TOILET80 'PROP 1980 HOUSEHOLDS WITH TOILET'
/URBAN80 'PROP 1980 LIVING IN MUNIICIPS GE 50000'
/WORK80 'PROP OF 1980 POP AGED 15+ WORKING IN NON-AG OCCUPS'
```

```
SAVE OUTFILE=OUTDATA/KEEP=PROV MUNICIP URBAN AGE HAGE RELHH
    MARSTAT  HILEVEL  HHILEVEL  LIT  HLIT  POB  PORESID  SCATT  HSCATT  LANG  USOCC
HUSOCC     IND HIND AGEMARR CEB CS YEAR WT MATCH DEGREE   HDEGREE NKIDS NUKIDS
C1 C2 C3      C4 C5 C6 C7 C8 UC1 UC2 UC3 UC4 UC5 UC6 UC7 UC8 UC9 UC10 UC11
UC12 UC13 UC14      UC15 UC16 MAR170 MAR370 E470 W770 CHWORK70 CHSCL70
SEXRAT70 FIM70 WIM70
    CP70 LIGHT70 WATER70 RADIO70 TOILET70 URBAN70 WORK70 MAR180 MAR380 E480
W780     CHWORK80 CHSCL80 SEXRAT80 FIM80 WIM80
    CP80 LIGHT80 WATER80 RADIO80 TOILET80 URBAN80 WORK80/COMPRESSED


DATA LIST FILE=INDATA1/PROV 16-19 MUNICIP 12-15 WEIGH 29-32
   URBAN 24 LANG 42-44 AGE 33-34 RELHH 35-36 MARSTAT 37-38
   HILEVEL 53-55 LIT 58-59 SCATT 60-61 POB 64-67 PORESID 72-75
   DEGREE 53-55 HDEGREE 145-147
   CEBM 100-101 CEBF 102-103 CSM 106-107 CSF 108-109
   USOCC 120-123 IND 124-127 MATCH 140 HAGE 141-142 HHILEVEL
   145-147 AGEMARR 86-87 HLIT 150-151 HSCATT 152-153
   HUSOCC 154-157 HIND 158-161
   NKIDS 174 C1 TO C8 175-182 NUKIDS 183-184 UC1 TO UC16 185-200
SAMPLE .50
DO IF (PROV EQ 69)
COMPUTE WT=(WEIGH/5.283)*1.267185
ELSE IF (PROV EQ 53)
COMPUTE WT=(WEIGH/5.283)*1.057893
ELSE
COMPUTE WT=WEIGH/5.283
END IF
RECODE PROV (01=11) (02=12) (03=83) (04=13) (05=14) (06=15)
   (07=82) (08=16) (09=17) (10=18) (11=19) (12=21) (13=22) (14=23)
   (15=24) (16=25) (17=26) (18=27) (19=28) (20=29) (21=31)
   (22=32) (23=35) (24=36) (25=37) (26=71) (27=38) (28=39)
   (29=41) (30=42) (31=43) (32=44) (33=45) (34=46) (35=47)
   (36=48) (37=49) (38=33) (39=90) (40=52) (41=53) (42=54)
   (43=55) (44=56) (45=57) (46=58) (47=33) (48=72) (49=59)
   (50=61) (51=62) (52=63) (53=64) (54=65) (55=66) (56=67)
   (57=61) (58=68) (59=69) (60=73) (61=58) (62=74) (63=34)
   (64=51) (65=33) (66=75) (67=76) (68=77) (69=78) (70=75)
   (71=79) (72=81) (73=82) (77=67)
DO IF (PROV EQ 90 AND MUNICIP EQ 1)
COMPUTE PROV=10
ELSE IF (PROV EQ 90 AND MUNICIP EQ 17)
COMPUTE PROV=23
ELSE IF (PROV EQ 90)
COMPUTE PROV=68
END IF
RECODE POB PORESID (01=11) (02=12) (03=83) (04=13) (05=14)
   (06=15) (07=82) (08=16) (09=17) (10=18) (11=19) (12=21)
   (13=22) (14=23) (15=24) (16=25) (17=26) (18=27) (19=28)
   (20=29) (21=31) (22=32) (23=35) (24=36) (25=37) (26=71)
   (27=38) (28=39)
   (29=41) (30=42) (31=43) (32=44) (33=45) (34=46) (35=47)
   (36=48) (37=49) (38=33) (39=10) (40=52) (41=53) (42=54)
   (43=55) (44=56) (45=57) (46=58) (47=33) (48=72) (49=59)
   (50=61) (51=62) (52=63) (53=64) (54=65) (55=66) (56=67)
   (57=61) (58=68) (59=69) (60=73) (61=58) (62=74) (63=34)
   (64=51) (65=33) (66=75) (67=76) (68=77) (69=78) (70=75)
   (71=79) (72=81) (73=82) (77=67) (74=68) (75=68) (76=68)
   (88=88) (89=89) (97=97) (ELSE=99)
RECODE LANG (88=01)(22=02)(35=03)(42=04)(74=05)(75=06)(82=07)
```

```
      (12=08)(58=09)(66=10)(ELSE=11)/
      HAGE AGE (99 THRU 199= 98)/
      HILEVEL HHILEVEL (000=00)(110=11)(120=12)(130=13)(140=14)
      (150=15)(160=16)(210=21)(220=22)(230=23)(240=24)
      (310=31)(320=32)(330=33)(340=34)(350 THRU 993=35) (998=98)(999=99)/
      USOCC HUSOCC (121, 125=129)
DO IF (RELHH EQ 4)
COMPUTE RELHH=3
ELSE IF (RELHH GE 5 AND RELHH LE 6)
COMPUTE RELHH=4
ELSE IF (RELHH GE 7 AND RELHH LE 8)
COMPUTE RELHH=5
ELSE IF (RELHH EQ 9)
COMPUTE RELHH=6
ELSE IF (RELHH EQ 0)
COMPUTE RELHH=7
END IF
DO IF (CEBM EQ 98 OR CEBF EQ 98)
COMPUTE CEB=98
ELSE IF (CEBM EQ 99 OR CEBF EQ 99)
COMPUTE CEB=99
ELSE
COMPUTE CEB=CEBM+CEBF
END IF
DO IF (CSM EQ 98 OR CSF EQ 98)
COMPUTE CS=98
ELSE IF (CSM EQ 99 OR CSF EQ 99)
COMPUTE CS=99
ELSE
COMPUTE CS=CSM+CSF
RECODE CEB CS (20 THRU 97=99)
END IF
RECODE DEGREE HDEGREE (400 THRU 452=92) (453 THRU 492=93)
 (500,502 THRU 520, 522 THRU 536=72) (501,521,537=32)
 (538 THRU 540, 581=35) (541 THRU 580=74) (600 THRU 604, 608 THRU  654=22)
 (605  THRU  607=28)  (655,664,665=27)  (656,666,676=24)  (657,658,660,661=26)
(659,662,663,667 THRU 675,687=23) (677 THRU 686, 783=56) (700 THRU 759=52)
(760,761,767 THRU 776,779 THRU 782, 784 THRU 793=53)
 (762   THRU   764,   777,   778,   796   THRU   798,   945   THRU   955=58)
(957,958,960,961,963,972,977,987,990=58)  (765,766,794,795=57)  (799,978=54)
(800 THRU 861=62) (862=87)  (863, 867 THRU 872=88) (864 THRU 866=86) (873=82)
(874=85)  (875=83) (876=84) (877 THRU 879=86) (880 THRU 892, 895 THRU 898=64)
(893  THRU  894=63)  (900  THRU  944=12)  (956,959,976,979,984=55)  (962=15)
(964,988=16) (965 THRU 968, 989,993=17) (969, 980 THRU 981=43) (970=58)
 (971,985=36) (973 THRU 975=44) (982 THRU 983, 986=64) (991 THRU  992=39)
 (000 THRU 993=00)
COMPUTE YEAR=1980
SORT CASES BY PROV
MATCH FILES FILE=*/TABLE=OUTCON/BY PROV
VALUE LABELS URBAN 1 'URBAN' 2 'RURAL'/ RELHH 1 'HEAD'
  2 'WIFE/HUSBAND' 3 'SON/DAUGHTER' 4 'SON/DAUGHTER-IN-LAW'
  5 'GRANDCHILD' 6 'OTHER RELATIVE' 7 'NOT RELATED'/
  MARSTAT 1 'SINGLE' 2 'MARRIED' 3 'WIDOWED'
  4 'SEP-DIV' 5 'UNKNOWN' / LANG 1 'TAGALOG' 2 'CEBUANO'
  3 'HILIGAYNON' 4 'ILOCO' 5 'PAMPANGO' 6 'PANGASINAN'
  7 'SAMAR-LEYTE'
  8 'BICOL' 9 'MAGINDANAO' 10 'MARANAO' 11 'OTHER' /HILEVEL HHILEVEL
  00 'NONE' 11 '1ST GRADE' 12 '2ND GRADE'
  13 '3RD GRADE' 14 '4TH GRADE' 15 '5TH GRADE'
  16 '6TH AND 7TH GRADE' 21 '1ST YEAR HIGH'
```

```
    22 '2ND YEAR HIGH' 23 '3RD YEAR HIGH'
    24 '4TH YEAR HIGH' 31 '1ST YEAR COLLEGE' 32 '2ND YEAR COLLEGE'
    33 '3RD YEAR COLLEGE' 34 '4TH YEAR COLLEGE'  35 '5TH PLUS COLLEGE'/
    LIT  HLIT 0 'NA' 1 'LITERATE' 2 'ILLITERATE'/
    DEGREE HDEGREE 0 'NO DEGREE' 998 'NA' 999 'MISSING'/
    MATCH 1 'HUSBAND MATCH' 0 'NO MATCH'/AGEMARR 0 'NA'/
    SCATT HSCATT 0 'NA' 1 'YES' 2 'NO'/CEB CS 98 'NA' 99 'MISSING'/  AGE HAGE
98     '98 AND OVER' 99 'MISSING'/
   PROV POB PORESID 10 'MANILA' 11 'ABRA'
    12 'AGUSAN N' 13 'AKLAN' 14 'ALBAY' 15 'ANTIQUE' 16 'BATAAN'
    17 'BATANES' 18 'BATANGAS' 19 'BENGUET' 21 'BOHOL'
    22 'BUKIDNON'  23 'BULACAN' 24 'CAGAYAN' 25 'CAMARINES N'
    26 'CAMARINES S' 27 'CAMIGUIN' 28 'CAPIZ' 29 'CATANDUANES'
    31 'CAVITE' 32 'CEBU' 33 'COTABATO' 34 'S COTABATO'
    35 'DAVAO'  36 'DAVAO S' 37 'DAVAO O'
    38 'IFUGAO' 39 'ILOCOS N' 41 'ILOCOS S' 42 'ILOILO'
    43 'ISABELA' 44 'K APAYAO' 45 'LA UNION' 46 'LAGUNA'
    47 'LANAO N' 48 'LANAO S' 49 'LEYTE' 51 'S LEYTE'
    52  'MARINDUQUE'  53 'MASBATE' 54 'MIS OCC' 55 'MIS OR'
    56 'MT  PROV' 57 'NEG OCC' 58 'NEG OR'
    59 'N ECIJA' 61 'NUEVA V' 62 'OCC MINDORO' 63 'OR MINDORO'
    64 'PALAWAN' 65 'PAMPANGA' 66 'PANGASINAN' 67 'QUEZON'
    68 'RIZAL'  69 'ROMBLON' 71 'E SAMAR' 72 'N SAMAR'
    73 'SAMAR' 74 'SORSOGON'
    75 'SULU' 76 'SURIGAO N' 77 'SURIGAO S' 78 'TARLAC'
    79 'ZAMBALES'  81 'ZAMBOANGA N' 82 'ZAMBOANGA S' 83 'AGUSAN S'
    88 'SAME PROV AND MUNICIP' 89 'SAME PROV DIFF MUNICIP'
    97 'UNKNOWN' 99 'MISSING'
VARIABLE LABELS  PROV 'PROVINCE'/MUNICIP 'MUNICIPALITY'
    /AGE 'AGE'/ AGEMARR 'AGE OF 1ST MARRIAGE'
    /HAGE  'HUSBANDS AGE'/MARSTAT 'MARITAL STATUS'
    /RELHH 'RELATIONSHIP TO HOUSEHOLD HEAD'
    /HILEVEL 'EDUCATIONAL ATTAINMENT'/HHILEVEL 'HUSBANDS EDUC ATTAINMENT'
    /SCATT 'SCHOOL ATTENDANCE'/HSCATT 'HUSBANDS SCHOOL ATTENDANCE'
    /LIT 'LITERACY'/HLIT 'HUSBANDS LITERACY'
    /POB 'PLACE OF BIRTH'/ PORESID 'PLACE OF RESIDENCE 5 YRS AGO'
    /USOCC 'USUAL OCCUPATION'/HUSOCC 'HUSBANDS USUAL OCCUPATION'
    /IND 'INDUSTRY'/HIND 'HUSBANDS INDUSTRY'
    /DEGREE 'TYPE OF DEGREE'
    /HDEGREE 'HUSBANDS TYPE OF DEGREE'
    /CEB 'CHILDREN-EVER-BORN'
    /CS 'CHILDREN STILL LIVING'
    /MATCH 'HUSBAND MATCH'
    /NKIDS 'NUMBER OF MATCHED CHILDREN'
    /NUKIDS 'NUMBER KIDS UNMATCHED'
    /C1 'AGE OF IST MATCHED CHILD'/C2 'AGE OF 2ND MATCHED CHILD'
    /C3 'AGE OF 3RD MATCHED CHILD'/C4 'AGE OF 4TH MATCHED CHILD'
    /C5 'AGE OF 5TH MATCHED CHILD'/C6 'AGE OF 6TH MATCHED CHILD'
    /C7 'AGE OF 7TH MATCHED CHILD'/C8 'AGE OF 8TH MATCHED CHILD'
    /UC1 'AGE OF IST UNMATCHED CHILD'
    /UC2 'AGE OF 2ND UNMATCHED CHILD'
    /UC3 'AGE OF 3RD UNMATCHED CHILD'
    /UC4 'AGE OF 4TH UNMATCHED CHILD'
    /UC5 'AGE OF 5TH UNMATCHED CHILD'
    /UC6 'AGE OF 6TH UNMATCHED CHILD'
    /UC7 'AGE OF 7TH UNMATCHED CHILD'
    /UC8 'AGE OF 8TH UNMATCHED CHILD'
    /UC9 'AGE OF 9TH UNMATCHED CHILD'
    /UC10 'AGE OF 10TH UNMATCHED CHILD'
    /UC11 'AGE OF 11TH UNMATCHED CHILD'
```

```
  /UC12 'AGE OF 12TH UNMATCHED CHILD'
  /UC13 'AGE OF 13TH UNMATCHED CHILD'
  /UC14 'AGE OF 14TH UNMATCHED CHILD'
  /UC15 'AGE OF 15TH UNMATCHED CHILD'
  /UC16 'AGE OF 16TH UNMATCHED CHILD'
  /WT 'INDIVIDUAL WEIGHT'
  /YEAR 'YEAR OF CENSUS'
  /MAR170 '1970 PROP 15-24 WOMEN SINGLE'
  /MAR370 '1970 PROP 15-29 WOMEN SINGLE'
  /E470  '1970 PROP WOMEN 15-34 WITH EDUC GT ELEMENTARY'
  /W770  '1970 PROP WOMEN 15-34 IN NON-AG OCCUPATIONS'
  /CHWORK70 '1970 15-18 IN LABOR FORCE'
  /CHSCL70  '1970 AGE 7-15 ATTENDING SCHOOL'
  /SEXRAT70 '1970 PROP MALES'
  /FIM70   '1970 Q0 FLIEGER ESTS'
  /WIM70   'Q0 WEST MODEL WOMEN AGED 25-29'
  /CP70    '1970 FP CLINICS PER 100000 CMW'
  /LIGHT70 'PROP 1970 HOUSEHOLDS WITH ELECTRIC LIGHT'
  /WATER70 'PROP 1970 HOUSEHOLDS WITH PIPED WATER'
  /RADIO70 'PROP 1970 HOUSEHOLDS WITH RADIO'
  /TOILET70 'PROP 1970 HOUSEHOLDS WITH FLUSH TOILET'
  /URBAN70 'PROP 1970 LIVING IN MUNIICIPS GE 50000'
  /WORK70 'PROP OF 1970 POP AGED 15+ WORKING IN NON-AG OCCUPS'
  /MAR180 '1980 PROP 15-24 WOMEN SINGLE'
  /MAR380 '1980 PROP 15-29 WOMEN SINGLE'
  /E480  '1980 PROP WOMEN 15-34 WITH EDUC GT ELEMENTARY'
  /W780  '1980 PROP WOMEN 15-34 IN NON-AG OCCUPATIONS'
  /CHWORK80 '1980 15-18 IN LABOR FORCE'
  /CHSCL80  '1980 AGE 7-15 ATTENDING SCHOOL'
  /SEXRAT80 '1980 PROP MALES'
  /FIM80   '1980 Q0 ADJ FLIEGER 1970 ESTS'
  /WIM80   'Q0 WEST MODEL WOMEN AGED 25-29'
  /CP80    '1980 FP CLINICS PER 100000 CMW'
  /LIGHT80 'PROP 1980 HOUSEHOLDS WITH ELECTRIC LIGHT'
  /WATER80 'PROP 1980 HOUSEHOLDS WITH PIPED WATER'
  /RADIO80 'PROP 1980 HOUSEHOLDS WITH RADIO'
  /TOILET80 'PROP 1980 HOUSEHOLDS WITH FLUSH TOILET'
  /URBAN80 'PROP 1980 LIVING IN MUNIICIPS GE 50000'
  /WORK80 'PROP OF 1980 POP AGED 15+ WORKING IN NON-AG OCCUPS'
SAVE OUTFILE=OUTDATA1/KEEP=PROV MUNICIP URBAN AGE HAGE RELHH
    MARSTAT HILEVEL HHILEVEL LIT HLIT POB PORESID SCATT HSCATT
    LANG USOCC HUSOCC IND HIND DEGREE HDEGREE AGEMARR CEB CS YEAR
    WT MATCH NKIDS NUKIDS C1 C2 C3 C4 C5 C6 C7 C8 UC1 UC2 UC3 UC4
    UC5 UC6 UC7 UC8 UC9 UC10 UC11 UC12 UC13 UC14 UC15 UC16
    MAR170 MAR370 E470 W770 CHWORK70 CHSCL70 SEXRAT70 FIM70 WIM70
    CP70 LIGHT70 WATER70 RADIO70 TOILET70 URBAN70 WORK70
    MAR180 MAR380 E480 W780 CHWORK80 CHSCL80 SEXRAT80 FIM80 WIM80
    CP80 LIGHT80 WATER80 RADIO80 TOILET80 URBAN80 WORK80/COMPRESSED
FINISH
GET FILE=OUTDATA
ADD FILES FILE=*/FILE=OUTDATA1
SAVE OUTFILE=OUTDATA3/COMPRESSED
CROSSTABS TABLES=PROV TO WORK80 BY YEAR
FINISH
```

```
                              APPENDIX B

                      PHILIPPINES, 1970 CENSUS.
                      ------------------------
        INPUT                                         STANDARD
     LOCATION, as                                       FILE
     substring of                                     (output)
     raw data rec        VARIABLE DESCRIPTION          LOCATION
    ------------    --------------------------------   --------


WIFE INFORMATION:
    -----------------------------------------------------------------
    YH(F(7))        Computed: Serial No. of HH in sample    1-  7
    ' '||(13,3)        District                             8- 11
    '  '||(16,2)       Municipality                        12- 15
    '  '||(18,2)       Province                            16- 19
    ' '||(20,3)        Island                              20- 23
    (12,1)             Urban-Rural                         24- 24
    '  '||(23,2)       Number of Household members         25- 27
    (95,5)             Weighting factor                    28- 32
    (31,2)             Age                                 33- 34
    ' '||(29,1)        Relationship to HH head             35- 36
    ' '||(33,1)        Marital status                      37- 38
    (46,1)             Able to speak Tagalog               39- 39
    (47,1)             Able to speak Spanish               40- 40
    (48,1)             Able to speak English               41- 41
    ' '||(36,2)        Language                            42- 44
    '  '||(49,1)       Religion                            45- 47
    ' '||(34,2)        Citizenship                         48- 50
    (39,2)             Highest grade completed             51- 52
    ' '||(41,2)        Undergraduate in College            53- 55
    (43,2)             Highest degree received             56- 57
    ' '||(45,1)        Literacy                            58- 59
    ' '||(38,1)        School attendance                   60- 61
    '99'               Migrant status (N.A.)               62- 63
    '  '||(50,2)       Province of birth                   64- 67
    '  '||(52,2)       Municipality of birth               68- 71
    '  '||(54,2)       Province in 1960                    72- 75
    '  '||(56,2)       Municipality in 1960                76- 79
    (58,2)             Province in 1965                    80- 81
    '  '||(60,2)       Municipality in 1965                82- 85
    (85,2)             Age at marriage                     86- 87
    '99'               Duration of marriage (N.A.)         88- 89
    '99'               Previous marriages (N.A.)           90- 91
    '99'               Marriage, other info (N.A.)         92- 93
    '99'               Contraception: Ever use (N.A)       94- 95
    '99'               Contraception: Current use (N.A.)   96- 97
    '99'               Children ever born, Total (N.A.)    98- 99
    (87,2)                children ever born, male        100-101
    (89,2)                children ever born, female      102-103
    '99'               Live children, Total (N.A.)        104-105
    (91,2)                live children, male             106-107
    (93,2)                live children, female           108-109
    '99'               Number of children who died (N.A.) 110-111
    '99'               Date of last birth, month (N.A.)   112-113
    '99'               Date of last birth, year (N.A.)    114-115
    '99'               Last born is still alive (N.A.)    116-117
    '99'               Number of births last year (N.A.)  118-119
    '  '||(74,3)       Occupation                         120-123
    (77,4)             Industry                           124-127
```

```
(65,1)              Usual activity last week          128-128
(66,1)              Working last week                 129-129
(69,1)              Job/business last week            130-130
(70,1)              Wanted work                       131-131
(71,1)              Look for work                     132-132
(72,1)              Reason not looking for job        133-133
(73,1)              Ever worked                       134-134
(81,1)              Class of worker                   135-135
' '||(82,3)         Usual occupation                  136-139


HUSBAND INFORMATION:
----------------------------------------------------------------
0,1 (f(1))     Computed: Husband match=1, else=0      140-140
(31,2)              Age, husband                      141-142
(39,2)              Highest grade completed, husband  143-144
' '||(41,2)         Undergraduate in College, husband 145-147
(43,2)              Highest degree received, husband  148-149
' '||(45,1)         Literacy, husband                 150-151
' '||(38,1)         School attendance, husband        152-153
' '||(74,3)         Occupation, husband               154-157
(77,4)              Industry, husband                 158-161
(65,1)              Usual activity last week, husband 162-162
(66,1)              Working last week, husband        163-163
(69,1)              Job/business last week, husband   164-164
(70,1)              Wanted work, husband              165-165
(71,1)              Look for work, husband            166-166
(72,1)              Reason not looking, husband       167-167
(73,1)              Ever worked, husband              168-168
(81,1)              Class of worker, husband          169-169
' '||(82,3)         Usual occupation, husband         170-173

OWN (matched) CHILDREN INFORMATION:
----------------------------------------------------------------
OWN(f(1))      Computed: Number of matched own kids   174-174
K1(31,2)            Age of matched own kid No.1       175-175
K2(31,2)            Age of matched own kid No.2       176-176
K3(31,2)            Age of matched own kid No.3       177-177
K4(31,2)            Age of matched own kid No.4       178-178
K5(31,2)            Age of matched own kid No.5       179-179
k6(31,2)            Age of matched own kid no.6       180-180
K7(31,2)            Age of matched own kid No.7       181-181
K8(31,2)            Age of matched own kid No.8       182-182

CHILDREN (in Household) WITH NO MOTHER-MATCH:
----------------------------------------------------------------
OTH(f(2))      Computed: Number of unmatched kids in HH 183-184
K 1(31,2)           Age of unmatched kid in HH, No. 1 185-185
K 2(31,2)           Age of unmatched kid in HH, No. 2 186-186
K 3(31,2)           Age of unmatched kid in HH, No. 3 187-187
K 4(31,2)           Age of unmatched kid in HH, No. 4 188-188
K 5(31,2)           Age of unmatched kid in HH, No. 5 189-189
K 6(31,2)           Age of unmatched kid in HH, No. 6 190-190
K 7(31,2)           Age of unmatched kid in HH, No. 7 191-191
K 8(31,2)           Age of unmatched kid in HH, No. 8 192-192
K 9(31,2)           Age of unmatched kid in HH, No. 9 193-193
K10(31,2)           Age of unmatched kid in HH, No.10 194-194
K11(31,2)           Age of unmatched kid in HH, No.11 195-195
K12(31,2)           Age of unmatched kid in HH, No.12 196-196
```

```
K13(31,2)          Age of unmatched kid in HH, No.13    197-197
K14(31,2)          Age of unmatched kid in HH, No.14    198-198
K15(31,2)          Age of unmatched kid in HH, No.15    199-199
K16(31,2)          Age of unmatched kid in HH, No.16    200-200
```

```
                    PHILIPPINES, 1980 CENSUS.
                    ------------------------
         INPUT                                          STANDARD
       LOCATION, as                                       FILE
       substring of                                     (output)
       raw data rec      VARIABLE DESCRIPTION           LOCATION
       ------------   -------------------------------   --------

WIFE INFORMATION:
       -----------------------------------------------------------
       YH(F(7))       Computed: Serial No. of HH in sample    1-  7
       ' '||(5,3)        Barangay                             8- 11
       ' '||(3,2)        Municipality                        12- 15
       ' '||(1,2)        Province                            16- 19
       ' '||(8,3)        Enumeration area (20-22) + suffix (23)  20- 23
       (11,1)            Urban-Rural                         24- 24
       (74,4)            Weighting factor for Household      25- 28
       (78,4)            Weighting factor for individual     29- 32
       (66,3)            Age (ages 100+ recoded as 99)       33- 34
       ' '||(26,1)       Relationship to HH head             35- 36
       ' '||(32,1)       Marital status                      37- 38
       (39,1)            Able to speak Pilipino or Tagalog   39- 39
       (40,1)            Able to speak English               40- 41
       ' '||(22,2)       Language                            42- 44
       '999'             Religion (N.A.)                     45- 47
       ' '||(33,2)       Citizenship                         48- 50
       '99'              Education (see next variable) (N.A.)  51- 52
       ' '||(42,3)       Highest grade completed             53- 55
       '99'              Highest degree received (N.A.)      56- 57
       ' '||(45,1)       Literacy                            58- 59
       ' '||(41,1)       School attendance                   60- 61
       '99'              Migrant status (N.A.)               62- 63
       ' '||(35,2)       Mother's place of resid. at R's birth  64- 67
       '9999'            Municipality of birth (N.A.)        68- 71
       ' '||(37,2)       Residence in 1975                   72- 75
       '9999'            Municipality in 1975 (N.A.)         76- 79
```

```
'99'              Other migration variable (N.A.)          80- 81
'9999'            Other migration variables (N.A.)         82- 85
(64,2)            Age at marriage                          86- 87
'99'              Duration of marriage (N.A.)              88- 89
' '||(63,1)       Number of times married                  90- 91
'99'              Marriage, other info (N.A.)              92- 93
'99'              Contraception: Ever use (N.A)            94- 95
'99'              Contraception: Current use (N.A.)        96- 97
'99'              Children ever born, Total (N.A.)         98- 99
(54,2)              children ever born, male              100-101
(56,2)              children ever born, female            102-103
'99'              Live children, Total (N.A.)             104-105
(58,2)              live children, male                   106-107
(60,2)              live children, female                 108-109
'99'              Number of children who died (N.A.)      110-111
'99'              Date of last birth, month (N.A.)        112-113
'99'              Date of last birth, year (N.A.)         114-115
'99'              Last born is still alive (N.A.)         116-117
' '||(62,1)       Number of births last year              118-119
' '||(69,3)       Occupation                              120-123
'  '||(48,2)      Industry or business                    124-127
(50,4)            Place of work or schooling              128-131
'99999999'        Other work variables (N.A.)             132-139
```

HUSBAND INFORMATION:
```
-------------------------------------------------------------
0,1 (f(1))      Computed: Husband match=1, else=0        140-140
(66,3)          Age, husband (100+ recoded into 99)      141-142
'99'            Education, husband (see next) (N.A.)     143-144
(42,3)          Highest grade completed, husband         145-147
'  '            Highest degree received, husb. (N.A.)    148-149
' '||(45,1)     Literacy, husband                        150-151
' '||(41,1)     School attendance, husband               152-153
' '||(69,3)     Occupation, husband                      154-157
' '||(48,2)     Industry, husband                        158-161
(50,4)          Place of work, schooling, husband        162-165
'99999999'      Other work variables, husband (N.A.)     166-173
```

OWN (matched) CHILDREN INFORMATION:
```
-------------------------------------------------------------
OWN(f(1))       Computed: Number of matched own kids     174-174
K1(31,2)        Age of matched own kid No.1              175-175
K2(31,2)        Age of matched own kid No.2              176-176
K3(31,2)        Age of matched own kid No.3              177-177
K4(31,2)        Age of matched own kid No.4              178-178
K5(31,2)        Age of matched own kid No.5              179-179
k6(31,2)        Age of matched own kid no.6              180-180
K7(31,2)        Age of matched own kid No.7              181-181
```

```
        K8(31,2)           Age of matched own kid No.8              182-182

CHILDREN (in Household) WITH NO MOTHER-MATCH:
--------------------------------------------------------------
    OTH(f(2))      Computed: Number of unmatched kids in HH   183-184
    K 1(31,2)         Age of unmatched kid in HH, No. 1       185-185
    K 2(31,2)         Age of unmatched kid in HH, No. 2       186-186
    K 3(31,2)         Age of unmatched kid in HH, No. 3       187-187
    K 4(31,2)         Age of unmatched kid in HH, No. 4       188-188
    K 5(31,2)         Age of unmatched kid in HH, No. 5       189-189
    K 6(31,2)         Age of unmatched kid in HH, No. 6       190-190
    K 7(31,2)         Age of unmatched kid in HH, No. 7       191-191
    K 8(31,2)         Age of unmatched kid in HH, No. 8       192-192
    K 9(31,2)         Age of unmatched kid in HH, No. 9       193-193
    K10(31,2)         Age of unmatched kid in HH, No.10       194-194
    K11(31,2)         Age of unmatched kid in HH, No.11       195-195
    K12(31,2)         Age of unmatched kid in HH, No.12       196-196
    K13(31,2)         Age of unmatched kid in HH, No.13       197-197
    K14(31,2)         Age of unmatched kid in HH, No.14       198-198
    K15(31,2)         Age of unmatched kid in HH, No.15       199-199
    K16(31,2)         Age of unmatched kid in HH, No.16       200-200
```

```
                         APPENDIX C
              LIST OF VARIABLES ON THE ACTIVE FILE

═══════════════════════════════════════════════════════════════

      NAME                                            POSITION

═══════════════════════════════════════════════════════════════


      PROV      PROVINCE                                  1
      MUNICIP   MUNICIPALITY                              2
      URBAN                                               3
      AGE       AGE                                       4
      HAGE      HUSBANDS AGE                              5
      RELHH     RELATIONSHIP TO HOUSEHOLD HEAD            6
      MARSTAT   MARITAL STATUS                            7
      HILEVEL   EDUCATIONAL ATTAINMENT                    8
      HHILEVEL  HUSBANDS EDUC ATTAINMENT                  9
      LIT       LITERACY                                 10
      HLIT      HUSBANDS LITERACY                        11
      POB       PLACE OF BIRTH                           12
      PORESID   PLACE OF RESIDENCE 5 YRS AGO             13
      SCATT     SCHOOL ATTENDANCE                        14
      HSCATT    HUSBANDS SCHOOL ATTENDANCE               15
      LANG                                               16
      USOCC     USUAL OCCUPATION                         17
      HUSOCC    HUSBANDS USUAL OCCUPATION                18
      IND       INDUSTRY                                 19
      HIND      HUSBANDS INDUSTRY                        20
      AGEMARR   AGE OF 1ST MARRIAGE                      21
      CEB       CHILDREN-EVER-BORN                       22
      CS        CHILDREN STILL LIVING                    23
      YEAR      YEAR OF CENSUS                           24
      WT        INDIVIDUAL WEIGHT                        25
      MATCH     HUSBAND MATCH                            26
      DEGREE    TYPE OF DEGREE                           27
      HDEGREE   HUSBANDS TYPE OF DEGREE                  28
      NKIDS     NUMBER OF MATCHED CHILDREN               29
      NUKIDS    NUMBER KIDS UNMATCHED                    30
      C1        AGE OF  IST MATCHED CHILD                31
      C2        AGE OF  2ND MATCHED CHILD                32
      C3        AGE OF  3RD MATCHED CHILD                33
      C4        AGE OF  4TH MATCHED CHILD                34
      C5        AGE OF  5TH MATCHED CHILD                35
      C6        AGE OF  6TH MATCHED CHILD                36
      C7        AGE OF  7TH MATCHED CHILD                37
      C8        AGE OF  8TH MATCHED CHILD                38
      UC1       AGE OF  IST UNMATCHED CHILD              39
      UC2       AGE OF  2ND UNMATCHED CHILD              40
      UC3       AGE OF  3RD UNMATCHED CHILD              41
      UC4       AGE OF  4TH UNMATCHED CHILD              42
      UC5       AGE OF  5TH UNMATCHED CHILD              43
      UC6       AGE OF  6TH UNMATCHED CHILD              44
      UC7       AGE OF  7TH UNMATCHED CHILD              45
      UC8       AGE OF  8TH UNMATCHED CHILD              46
      UC9       AGE OF  9TH UNMATCHED CHILD              47
      UC10      AGE OF 10TH UNMATCHED CHILD              48
      UC11      AGE OF 11TH UNMATCHED CHILD              49
      UC12      AGE OF 12TH UNMATCHED CHILD              50
      UC13      AGE OF 13TH UNMATCHED CHILD              51
      UC14      AGE OF 14TH UNMATCHED CHILD              52
      UC15      AGE OF 15TH UNMATCHED CHILD              53
```

```
UC16        AGE OF 16TH UNMATCHED CHILD                  54
MAR170      1970 PROP 15-24 WOMEN SINGLE                 55
MAR370      1970 PROP 15-29 WOMEN SINGLE                 56
E470        1970 PROP WOMEN 15-34 WITH EDUC GT ELEME     57
W770        1970 PROP WOMEN 15-34 IN NON-AG OCCUPATI     58
CHWORK70    1970 15-18 IN LABOR FORCE                    59
CHSCL70     1970 AGE 7-15 ATTENDING SCHOOL               60
SEXRAT70    1970 PROP MALES                              61
FIM70       1970 Q0 FLIEGER ESTS                         62
WIM70       Q0 WEST MODEL WOMEN AGED 25-29               63
CP70        1970 FP CLINICS PER 100000 CMW               64
LIGHT70     PROP 1970 HOUSEHOLDS WITH ELECTRIC LIGHT     65
WATER70     PROP 1970 HOUSEHOLDS WITH PIPED WATER        66
RADIO70     PROP 1970 HOUSEHOLDS WITH RADIO              67
TOILET70    PROP 1970 HOUSEHOLDS WITH FLUSH TOILET       68
URBAN70     PROP 1970 LIVING IN MUNIICIPS GE 50000       69
WORK70      PROP OF 1970 POP AGED 15+ WORKING IN NON     70
MAR180      1980 PROP 15-24 WOMEN SINGLE                 71
MAR380      1980 PROP 15-29 WOMEN SINGLE                 72
E480        1980 PROP WOMEN 15-34 WITH EDUC GT ELEME     73
W780        1980 PROP WOMEN 15-34 IN NON-AG OCCUPATI     74
CHWORK80    1980 15-18 IN LABOR FORCE                    75
CHSCL80     1980 AGE 7-15 ATTENDING SCHOOL               76
SEXRAT80    1980 PROP MALES                              77
FIM80       1980 Q0 ADJ FLIEGER 1970 ESTS                78
WIM80       Q0 WEST MODEL WOMEN AGED 25-29               79
CP80        1980 FP CLINICS PER 100000 CMW               80
LIGHT80     PROP 1980 HOUSEHOLDS WITH ELECTRIC LIGHT     81
WATER80     PROP 1980 HOUSEHOLDS WITH PIPED WATER        82
RADIO80     PROP 1980 HOUSEHOLDS WITH RADIO              83
TOILET80    PROP 1980 HOUSEHOLDS WITH FLUSH TOILET       84
URBAN80     PROP 1980 LIVING IN MUNIICIPS GE 50000       85
WORK80      PROP OF 1980 POP AGED 15+ WORKING IN NON     86
```

Note: Position refers not to a column number but to the order of the SPSSX system file