

CHIS Pooling Macro Documentation

`%MACRO CHISPOOLING (DATAIN = , DATAOUT = , YEARLIST = , PREFIX =)`

The macro includes the following four arguments:

- **DATAIN**
Specify the input dataset name.
The data should be concatenated of all designated individual data and include the following variable
 - **YEAR:** in character format. For one-year datafiles, the year variable should be in the form like “2018”, “2019”.
Two-year data file, it should be in the form of “2017_18”.
- **DATAOUT:** Specifies the outputted dataset name
- **YEARLIST**
Specify the year involved in the DATAIN
The argument should be in the form of a list of years (unquoted).
One-year datafile: e.g. 2017, 2018
Two-year datafile: e.g. 2013_14, 2019_20
- **PREFIX:** Specify the prefix of new variable names for the bases weight and replicate weights.
For example, PREFIX = FNWGT will generate weight variables in the form of FNWGT0, FNWGT1, FNWGT2, ...

After successfully executing this macro, the following will be outputted:

- **DATAOUT:** As described above.
- **Datafile Summary** written to the log.
e.g. YEARLIST = 2015_16 2017 2018 2019

```
*****INPUT DATA FILE SUMMARY*****
NOTE: INPUT YEAR LIST: 2015_16 2017 2018 2019
NOTE: # OF DATA FILE(S) INVOLVED: 4
NOTE: # OF YEAR(S) OF DATA INVOLVED: 5
*****
NOTE: 3 ONE YEAR FILE(S): 2017 2018 2019
*****
NOTE: 1 TWO YEAR: 2015_16
*****OUTPUT OBJECT SUMMARY*****
NOTE: OUTPUT DATASET COMBINED CONTAINS A TOTAL OF
NOTE: 320 REPLICATE WEIGHTS ARE GENERATED:
NOTE: FNWTG1 - FNWTG320
NOTE: A GLOBAL MACRO VARIABLE: REPN IS GENERATED.
NOTE: REPN = # OF REPLICATE WEIGHTS
*****\
```

- **Global Macro Variable: REPN**
REPN = # of replicate weights in the final output dataset. User can use this macro variable in REPWEIGHT statement in later survey procedure.
e.g. `REPWEIGHT FNWGT1-FNWTG&REPN./JKCOEFF = 1;`

Sample Code:

```
DATA COMBINED; ❶
  SET
    CHIS16 (IN = A)
    CHIS1718 (IN = B)
    CHIS19 (IN = C);
  LENGTH YEAR $8;
  IF A THEN YEAR = "2016";
  ELSE IF B THEN YEAR = "2017_18";
  ELSE IF C THEN YEAR = "2019";
RUN;

%INC "~FOLDER PATH\CHISPOOLING.sas"; ❷

%CHISPOOLING(DATAIN = COMBINED ❶, DATAOUT = COMBINED_OUT ❸, YEARLIST = 2016
2017_18 2019, PREFIX = FNWGT);

PROC SURVEYFREQ DATA = COMBINED_OUT ❸;
  WEIGHT FNWGT0;
  TABLE INS/CV CL;
  REPWEIGHT FNWGT1-FNWGT&REPN. ❹ /JKCOEFF = 1;
RUN;
```

- ❶ This data step creates the combined dataset as the input dataset for the CHISPOOLING macro.
- ❷ Use %INC to call for macro.
- ❸ Output dataset from CHISPOOLING macro to be used for later analysis procedure.
- ❹ &REPN. is generated from the macro representing the number of replicate weights in the final dataset.