

# **Generating descriptive statistics from the MXFLS**

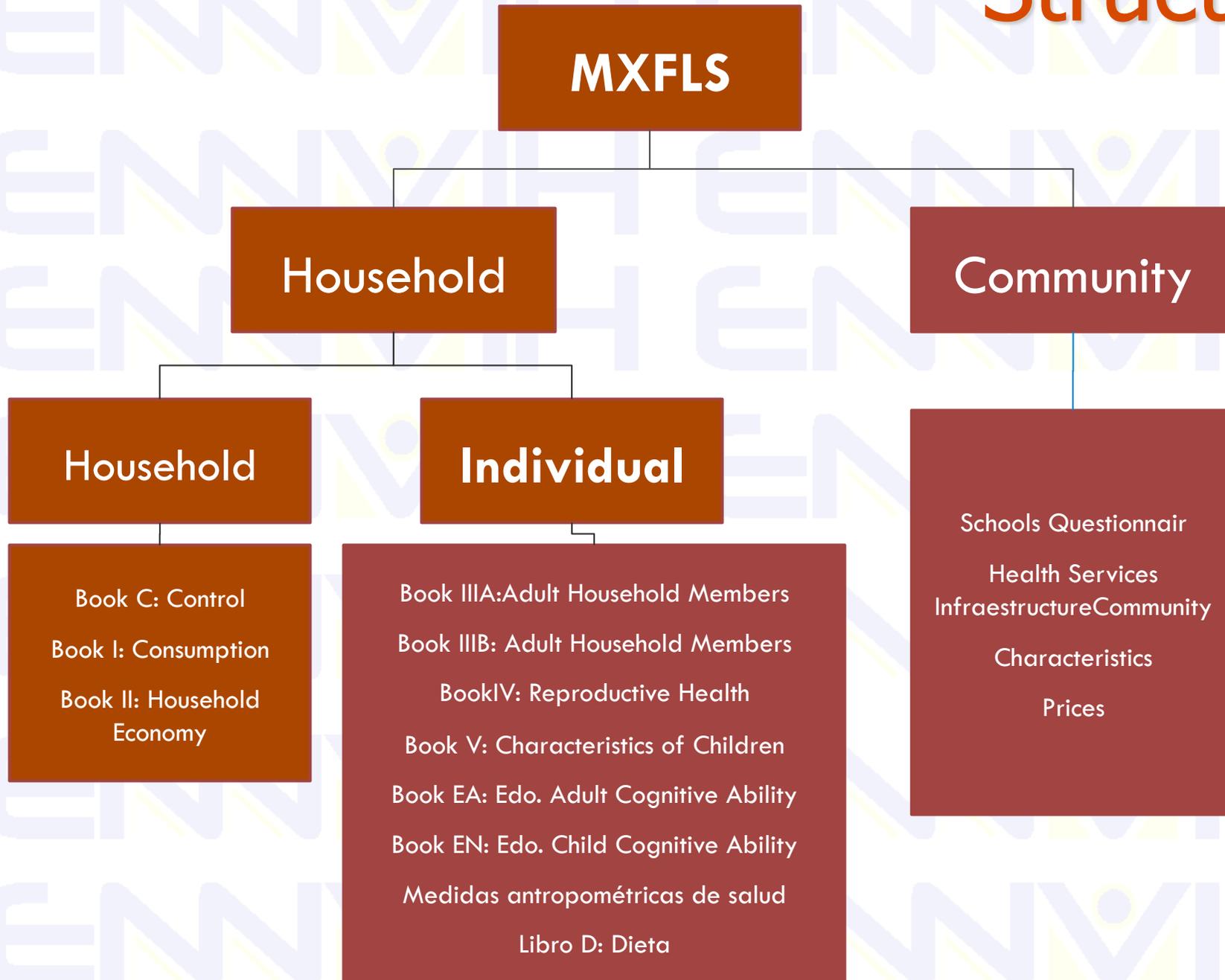
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# Characteristics

- Multi-thematic and longitudinal database
- National, urban-rural and regional representation
- The approximate sampling size is 8,440 households with approximately 35,000 individual interviews

Panel 2002 ..... 2005 ..... 2009 .....

# Structure



# Topics

## Household

- Dwelling characteristics
- Household economy
- Land
- INR- Rural income
- Household Assets
- Household economic shocks

## Individuals

Education  
Schooling interruptions  
Individual non-labor income  
Marital history  
Migration  
Employment  
Adult time allocation  
Individual crime and victimization  
Health condition  
Emotional well-being  
Insurance condition  
Credit  
Transfers  
Pregnancy history  
Contraception  
Health Measures

## Community

Schools Questionnaire  
Health Services  
InfrastructureCommunity  
Characteristics  
Prices

<http://www.ennvih-mxfls.org/>

# Longitudinal database

**Objective:** The purpose of MxFLS-2 is to re-interview all individuals and households who were interviewed during the base line (MxFLS-1) and all individuals and households who, due to the growth and family developments from our original sample size, were added on.

**Attritions:** For MXFLS it was decided refresh our sample size naturally. In this way, a home or individual is defined as panel if they belong to the original sample size and if they were interviewed during 2002. If on the other hand, new individuals who were integrated into the home and were not interviewed in 2002, but are now considered family members, they would be classified as new members and interviewed for the first time.

# Combining files

Suppose your objective is to analyze a file containing information about different books, you need organize each of the two or more files by order of folio and Ls and subsequently we merge by folio and Ls

## **Combining MxFLS-1 information with MxFLS-2**

**Panel Households** folio is the same for MxFLS1 and MXFLS2, and the last two digits will be 00.

# Combining files

**New Home Folio:** If an MxFLS-1 original member has departed from the home and forms his/her own household, that individual's folio will be made up of the first six digits stemming from the original home and the last two digits will be made up of the individual identifier in MxFLS-1.

**pid\_link:** In order to have an individual identifier in both databases, the identifier pid\_link was created, allowing individual identification in both survey rounds. The pid\_link is comprised of the individuals' original folio and Ls identifiers, that is to say, the folio and Ls corresponding to MxFLS-1, regardless if the individual is in the original or new household during MxFLS-2. The pid\_link is made up of 10 digits, the first 8 digits are the folio digits and the last two correspond to the LS.

# Combining files

In STATA, the way to create the original folio from the pid\_link is as follows

```
gen str8 var = substr (pid_link, 1,8)
```

In contrast to MxFLS-2, the folio from the first survey round is numeric and in order to carryout the adding and combination of both databases, it is necessary to have the same format for both folios. To turn the MxFLS-1 folio to STRING using STATA, you could use the following instruction

```
gen str8 var1=string(folio, "%08.0f")
```

STATA commands in order to create MxFLS-1 pid\_links:

```
gen str8 var1 = string (folio, "%08.0f")
```

```
gen str2 var2 = string (ls, "%02.0f")
```

```
gen pid_link = var1 + var2
```

# Weights

The weight is the value used to adjust the information of the variables captured through a sample in order to multiply the observations to better represent the whole population.

In order to adjust the basic weights, we had to consider the non-response rate of each book independently, such is the reason why each book has a different set of weights

# Weights

## 2005 Weights:

a) Continue to expand through 2002, so you must use the 2002 weights, adjusting for nonresponse and adjusting for demographic factor to expand the population. These weights are called longitudinal weights.

b) Expand the population of 2005. To do this we use the weights of 2002, adjusted for nonresponse and adjust for the demographic factor that makes the survey representative of 2005.

Application

Migration in Mexico

# Estadísticas descriptivas

by migration: tabstat añosesc edad02 if edad02 >= 15, stats(mean median sd var min max)

| <b>Characteristics of the migrant population at the time of departure</b> |                    |                 |           |
|---|--------------------|-----------------|-----------|
| <b>Years of schooling</b>   | <b>non-migrant</b> | <b>Internal</b> | <b>US</b> |
| mean  | 7.3636             | 9.0505          | 7.7907    |
| p50   | 7.0000             | 9.0000          | 8.0000    |
| sd  | 4.6863             | 4.2310          | 3.4357    |
| variance  | 21.9617            | 17.9015         | 11.8043   |
| min   | 0.0000             | 0.0000          | 0.0000    |
| max   | 18.0000            | 18.0000         | 16.0000   |
| <b>Age</b>  |                    |                 |           |
| mean  | 38.0237            | 28.8464         | 25.0690   |
| p50   | 35.0000            | 25.0000         | 21.0000   |
| sd  | 16.9016            | 12.3975         | 10.9939   |
| variance  | 285.6637           | 153.6990        | 120.8649  |
| min   | 15.0000            | 15.0000         | 15.0000   |
| max   | 98.0000            | 92.0000         | 77.0000   |

```
. mprobit mig2 edad02 edocivil2 genero añosesc rururb pobre desempleado casa
> ahorros, base(0)
```

```
Iteration 0: log likelihood = -5589.0881
Iteration 1: log likelihood = -5549.1463
Iteration 2: log likelihood = -5546.2357
Iteration 3: log likelihood = -5546.2289
Iteration 4: log likelihood = -5546.2289
```

Multinomial probit regression

```
Number of obs = 19688
Wald chi2(18) = 769.83
Prob > chi2 = 0.0000
```

Log likelihood = -5546.2289

| mig2              | Coef.     | Std. Err. | z      | P> z  | [95% Conf. Interva] |           |
|-------------------|-----------|-----------|--------|-------|---------------------|-----------|
| <b>_outcome_2</b> |           |           |        |       |                     |           |
| edad02            | -.026771  | .0019767  | -13.54 | 0.000 | -.0306452           | -.0228968 |
| edocivil2         | .0069851  | .0548054  | 0.13   | 0.899 | -.1004315           | .1144017  |
| genero            | .0182726  | .0450426  | 0.41   | 0.685 | -.0700092           | .1065544  |
| añosesc           | .0343012  | .005957   | 5.76   | 0.000 | .0226258            | .0459767  |
| rururb            | -.0080512 | .0487163  | -0.17  | 0.869 | -.1035334           | .0874311  |
| pobre             | -.0393422 | .0560356  | -0.70  | 0.483 | -.1491701           | .0704856  |
| desempleado       | -.3784337 | .0769324  | -4.92  | 0.000 | -.5292185           | -.227649  |
| casa              | -.3269157 | .0687357  | -4.76  | 0.000 | -.4616353           | -.1921961 |
| ahorros           | .3348203  | .105434   | 3.18   | 0.001 | .1281734            | .5414673  |
| _cons             | -1.621533 | .1018426  | -15.92 | 0.000 | -1.821141           | -1.421925 |
| <b>_outcome_3</b> |           |           |        |       |                     |           |
| edad02            | -.0394108 | .0027055  | -14.57 | 0.000 | -.0447135           | -.0341081 |
| edocivil2         | -.1364025 | .0711947  | -1.92  | 0.055 | -.2759416           | .0031367  |
| genero            | -.3875056 | .0559665  | -6.92  | 0.000 | -.497198            | -.2778132 |
| añosesc           | -.0091584 | .0081427  | -1.12  | 0.261 | -.0251179           | .0068011  |
| rururb            | .3309893  | .0590268  | 5.61   | 0.000 | .2152989            | .4466798  |
| pobre             | .4298464  | .0608867  | 7.06   | 0.000 | .3105107            | .5491821  |
| desempleado       | -.4313687 | .0906552  | -4.76  | 0.000 | -.6090497           | -.2536877 |
| casa              | -.1660828 | .0883047  | -1.88  | 0.060 | -.3391568           | .0069912  |
| ahorros           | -.0957527 | .1819954  | -0.53  | 0.599 | -.4524571           | .2609517  |
| _cons             | -1.276753 | .1268858  | -10.06 | 0.000 | -1.525444           | -1.028061 |

(mig2=0 is the base outcome)

. mfx, predict(p outcome(1))

Marginal effects after mprobit  
 y = Pr(mig2=1) (predict, p outcome(1))  
 = .03766329

| variable  | dy/dx     | std. Err. | z      | P> z  | [ 95% C.I. ]      | x       |
|-----------|-----------|-----------|--------|-------|-------------------|---------|
| edad02    | -.0014489 | .00011    | -13.54 | 0.000 | -.001659 -.001239 | 37.6189 |
| edociv~2* | .0009108  | .00321    | 0.28   | 0.776 | -.005376 .007198  | .612251 |
| genero*   | .0025111  | .00263    | 0.96   | 0.340 | -.002642 .007665  | .556278 |
| añosesc   | .0020695  | .00035    | 5.96   | 0.000 | .001389 .00275    | 7.15995 |
| rururb*   | -.0017012 | .00285    | -0.60  | 0.550 | -.007279 .003877  | .425538 |
| pobre*    | -.0040233 | .00317    | -1.27  | 0.204 | -.010235 .002188  | .275549 |
| desemp~o* | -.0175323 | .00306    | -5.72  | 0.000 | -.023538 -.011527 | .093306 |
| casa*     | -.0169178 | .00324    | -5.22  | 0.000 | -.023275 -.010561 | .230343 |
| ahorros*  | .024492   | .00895    | 2.74   | 0.006 | .006948 .042036   | .045815 |

(\*) dy/dx is for discrete change of dummy variable from 0 to 1

. mfx, predict(p outcome(2))

Marginal effects after mprobit  
 y = Pr(mig2=2) (predict, p outcome(2))  
 = .01567634

| variable  | dy/dx     | std. Err. | z      | P> z  | [ 95% C.I. ]      | x       |
|-----------|-----------|-----------|--------|-------|-------------------|---------|
| edad02    | -.0010508 | .00007    | -15.42 | 0.000 | -.001184 -.000917 | 37.6189 |
| edociv~2* | -.0040966 | .00219    | -1.87  | 0.061 | -.008387 .000193  | .612251 |
| genero*   | -.0118732 | .00179    | -6.63  | 0.000 | -.015385 -.008362 | .556278 |
| añosesc   | -.0003889 | .00024    | -1.65  | 0.098 | -.00085 .000072   | 7.15995 |
| rururb*   | .0101255  | .00188    | 5.38   | 0.000 | .006437 .013814   | .425538 |
| pobre*    | .0148975  | .00243    | 6.14   | 0.000 | .010141 .019654   | .275549 |
| desemp~o* | -.0088361 | .00158    | -5.58  | 0.000 | -.011941 -.005731 | .093306 |
| casa*     | -.0035326 | .00226    | -1.56  | 0.119 | -.007969 .000904  | .230343 |
| ahorros*  | -.0037921 | .00429    | -0.88  | 0.376 | -.012193 .004609  | .045815 |

(\*) dy/dx is for discrete change of dummy variable from 0 to 1