Description

Multiple-imputation data analysis in Stata is similar to standard data analysis. The standard syntax applies, but you need to remember the following for MI data analysis:

1. The data must be declared as mi data.

   If you already have multiply imputed data (saved in Stata format), use `mi import` to import it into mi; see [MI] mi import.

   If you do not have multiply imputed data, use `mi set` (see [MI] mi set) to declare your original data to be mi data and use `mi impute` (see [MI] mi impute) to fill in missing values.

2. After you have declared mi data, commands such as `svyset`, `stset`, and `xtset` cannot be used. Instead use `mi svyset` to declare survey data, use `mi stset` to declare survival data, and use `mi xtset` to declare panel data. See [MI] mi XXXset.

3. Prefix the estimation command with `mi estimate:` (see [MI] mi estimate).

The following estimation commands support the `mi estimate` prefix.

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## Estimation — Estimation commands for use with `mi estimate`

### Fractional-response regression models
- `fracreg`  
  **Fractional response regression**

### Quantile regression models
- `qreg`  
  **Quantile regression**
- `iqreg`  
  **Interquantile range regression**
- `sqreg`  
  **Simultaneous-quantile regression**
- `bsqreg`  
  **Bootstrapped quantile regression**

### Survival regression models
- `stcox`  
  **Cox proportional hazards model**
- `streg`  
  **Parametric survival models**
- `stcrreg`  
  **Competing-risks regression**

### Other regression models
- `glm`  
  **Generalized linear models**
- `areg`  
  **Linear regression with a large dummy-variable set**
- `rreg`  
  **Robust regression**
- `truncreg`  
  **Truncated regression**

### Descriptive statistics
- `mean`  
  **Estimate means**
- `proportion`  
  **Estimate proportions**
- `ratio`  
  **Estimate ratios**
- `total`  
  **Estimate totals**

### Panel-data models
- `xtreg`  
  **Fixed-, between- and random-effects, and population-averaged linear models**
- `xtrc`  
  **Random-coefficients model**
- `xtlogit`  
  **Fixed-effects, random-effects, and population-averaged logit models**
- `xtprobit`  
  **Random-effects and population-averaged probit models**
- `xtcloglog`  
  **Random-effects and population-averaged cloglog models**
- `xtpoisson`  
  **Fixed-effects, random-effects, and population-averaged Poisson models**
- `xtnbreg`  
  **Fixed-effects, random-effects, and population-averaged negative binomial models**
- `xtgee`  
  **Fit population-averaged panel-data models by using GEE**

### Multilevel mixed-effects models
- `mixed`  
  **Multilevel mixed-effects linear regression**

### Survey regression models
- `svy:`  
  **Estimation commands for survey data (excluding commands that are not listed above)**

Only Taylor-linearized survey variance estimation is supported with `svy:`.
Also see

[MI] mi estimate — Estimation using multiple imputations
[MI] mi estimate postestimation — Postestimation tools for mi estimate
[MI] mi import — Import data into mi
[MI] mi impute — Impute missing values
[MI] mi set — Declare multiple-imputation data
[MI] Workflow — Suggested workflow
[MI] Intro — Introduction to mi
[MI] Intro substantive — Introduction to multiple-imputation analysis
[MI] Glossary