Title

Intro — Introduction

Description

This is the [TABLES] manual. What is surprising is that, used alone, the commands in this manual cannot create a table. The tables created here are all based on results collected from other commands, commands not documented in this manual, commands like `regress`, `margins`, `bayes`, `ttest`, `mi`, `mean`, `table`, and so on.

This manual documents the commands that collect results from other commands; lay out those results into one-way, two-way, or multiway tables; customize the headers of those tables; change the appearance of the results; and export the tables to Microsoft Word, Microsoft Excel, PDF, HTML, LaTeX, SMCL, or Markdown.

We call the collected results from one or more commands collections. The purpose of this manual is to explain how to create collections, manage collections, create tables from collections, and export those tables.

Remarks and examples

Remarks are presented under the following headings:

What is in this manual?

Presenting results is the final step for most research, and a major part of presenting results is creating effective tables.

Here are some tables created with the collection system:

```
. use https://www.stata-press.com/data/r17/nhanes2l
. table ...
...
...
...
. collect layout ...
. collect preview

───────────────────────────────────────────────────────
                             Male            Female
───────────────────────────────────────────────────────
Diabetes status
  Not diabetic           4698    95.6%    5152    94.8%
  Diabetic                217     4.4%     282     5.2%
Age, mean (sd)           47.4   (17.2)    47.7   (17.3)
BMI, mean (sd)           25.5    (4.0)    25.6    (5.6)
Health status
  Excellent              1252    25.5%    1155    21.3%
  Very good              1213    24.7%    1378    25.4%
  Good                   1340    27.3%    1598    29.5%
  Fair                    722    14.7%     948    17.5%
  Poor                    382     7.8%     347     6.4%
Systolic BP, mean (sd)  132.9   (21.0)   129.1   (25.1)
───────────────────────────────────────────────────────
```

```
. use https://www.stata-press.com/data/r17/nhanes2l
. collect: ...
...
...
...
. collect layout ...
. collect preview

────────────────────────────────────────────────────────
                                Region
                NE       MW        S       W       All
────────────────────────────────────────────────────────
Age (years)
  Odds ratio   1.07     1.06     1.06     1.06     1.06
  SE          (0.01)   (0.01)   (0.01)   (0.01)   (0.00)
Weight (kg)
  Odds ratio   1.03     1.03     1.02     1.02     1.03
  SE          (0.01)   (0.01)   (0.01)   (0.01)   (0.00)
Female
  Odds ratio   1.93     1.41     1.48     1.25     1.48
  SE          (0.44)   (0.27)   (0.26)   (0.25)   (0.15)
Intercept
  Odds ratio   0.00     0.00     0.00     0.00     0.00
  SE          (0.00)   (0.00)   (0.00)   (0.00)   (0.00)
────────────────────────────────────────────────────────
```

This manual is a little bit about the `collect:` prefix. It is a lot about the

```
...
...
...
```

you saw above in the command listings.

What are collections?

Collections are the collected results from one or more commands. They contain every result stored by the commands. They also contain labels for everything in the collection. Some labels are system default labels such as "Coefficient" for regression coefficients or χ^2 for chi-squared statistics. Some labels come from you and your dataset. If the collected commands reference variables, such as regression coefficients, the variables will be labeled with the variable labels from the dataset. If the collected commands use categorical variables that are value labeled, those labels become part of the collection.

Collections also contain styles. Styles determine how everything looks on the tables you create. Styles determine how row and column headers are composed. Styles determine what numeric format is used. Styles determine whether text is bolded, italicized, colored, etc. When you create a collection, it will have the default system styles unless you specified that it start from a set of styles you previously saved.

You have great control over which values or labels are affected by styles. You can choose an overall numeric format for all values or a custom numeric format for coefficients, their standard errors, and their confidence intervals. All of this while using a different format for their z statistics and a yet different format for their p-values. And the control can be even finer still. You can choose to have all coefficient statistics for the variable `weight` highlighted by giving their cells a light-blue background.

You can modify anything in a collection. You can modify any label. You can modify any style.

You cannot modify values. Those were produced by your commands, and they are sacrosanct. You can modify anything that identifies, labels, formats, or presents those values.

You reference everything stored in a collection using tags. Those tags are created automatically for you when you collect results. You can also specify additional tags while collecting, and you can even remap tags in a collection. Tags are organized into groupings called dimensions; this organization makes it easier to specify what you want on the rows and columns of your tables.

Do you need collections?

There are three primary reasons you may need collections.

1. You want to create a table showing the results from more than one command.
2. You want to customize how a table looks—layout, headers, numeric formats, bolding, italics, colors, etc.
3. You want to present your results in Microsoft Word, Microsoft Excel, PDF, HTML, LaTeX, SMCL, or Markdown.

Other commands in Stata are built for creating specific kinds of tables from data. Conversely, collections do not create results from data. They give you a framework to format the results you have collected from other commands.

Collecting results is easy; simply prefix almost any command with `collect:`, or type `collect get` after the command has run. You have created a collection. Every time you type `collect:` or `collect get` again, you are adding to a collection.

The table command

Other commands produce tabular results; primary among these is table. If your intent is to summarize data to understand them, you may need only these commands and not need collections. If you want to customize the layout and appearance of the results from these commands, then collect their results. (An exception to collecting is table, which automatically produces a collection.) Likewise, you can export the results of table to one of the formats in 3.

The table command can create a stunningly large range of tables. If you came here to do any of the following things, you should begin with the table command:

- One-way tabulations of frequencies, percentages, and proportions
- Two-way tabulations of frequencies, percentages, and proportions
- Multiway tabulations of frequencies, percentages, and proportions
- One-way, two-way, and multiway tables of summary statistics
- Tables of hypothesis tests
- Tables of regression results (this includes the possibility of multiple regression commands)
- Combinations of the above

If you want to customize the results of table or export them, simply start with a table command, and then use any of the collection commands in this manual to customize and export the results. You may find that you need to combine the results of several table commands to create a collection with all the results you need on a table. You can do that by using collect combine or the append option of table. You can even combine the results from the table command with other commands such as regression commands, lincom, nlcom, ttest, margins, and more.

The etable command

One common goal is to export a table of estimation results. The etable command is designed to create a table of estimation results, from one or more models, and export it all in a single step. You can use it to create a table with the active estimation results, results from a preceding margins command, or results you stored with estimates store. It is unique in that it allows you to export a table without using any of the commands in this manual. However, you can also make further modifications to the table created by etable because it stores the results it uses in a collection. To learn more, see [R] **etable**.

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