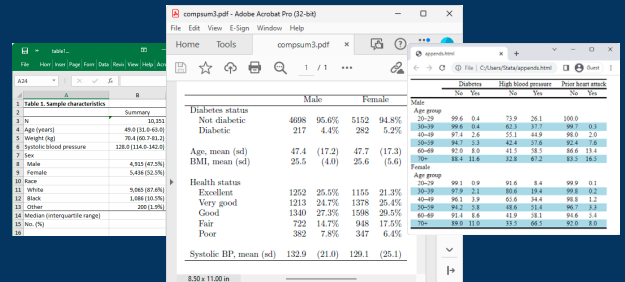


# Customizable tables

- Build tables of
  - Summary statistics
  - Hypothesis test results
  - Regression results
  - Postestimation tests
  - Marginal means, marginal effects, adjusted predictions
  - Results returned by any Stata command
- Export tables to
  - Word
  - Excel
  - L<sup>A</sup>T<sub>E</sub>X
  - PDF
  - HTML
  - Markdown
  - More
- Incorporate tables into reports
- Save table styles and apply customizations to future tables
- Customize table look
  - Table layout
  - Row and column header styles
  - Numeric formats, font, shading, color, and alignment
  - Labels



With the **table** command, you can create tabulations, tables of summary statistics, tables of regression results, and more.

## Cross-tabulations

**table** can create one-way, two-way, and multiway tables, reporting frequencies, percentages, and proportions. For instance, you can create a two-way tabulation:

	Hypertension		
	No	Yes	Total
Sex			
Male	2,611	2,304	4,915
Female	3,364	2,072	5,436
Total	5,975	4,376	10,351

And you can add percentages and format the results:

```

table (sex) (highbp),
> statistic(frequency) statistic(percent)
> nformat(%6.1f percent) sformat("%%%" percent)
    
```

	Hypertension		
	No	Yes	Total
Sex			
Male			
Frequency	2,611	2,304	4,915
Percent	25.2%	22.3%	47.5%
Female			
Frequency	3,364	2,072	5,436
Percent	32.5%	20.0%	52.5%
Total			
Frequency	5,975	4,376	10,351
Percent	57.7%	42.3%	100.0%

## Summary statistics

With **table's** **statistic()** option, you can create tables of means, standard deviations, percentiles, counts, and much more. For example, you can create a table of means and SDs:

```

table (var result) (highbp),
> statistic(mean age weight bpsystol)
> statistic(sd age weight bpsystol)
> nformat(%6.3f)
    
```

	Hypertension		
	No	Yes	Total
Age (years)			
Mean	42.165	54.973	47.580
Standard deviation	16.772	14.909	17.215
Weight (kg)			
Mean	68.266	76.856	71.898
Standard deviation	13.572	16.241	15.356
Systolic blood pressure			
Mean	116.485	150.539	130.882
Standard deviation	11.799	20.695	23.333

## Regression results

The **command()** option reports results from any Stata command in your table. You may want to compare regression results across groups:

```

table (colname result) (highbp),
> command(regress bpsystol age weight i.sex i.diabetes)
> style(myreg)
    
```

	Hypertension		
	No	Yes	Total
Age (years)	0.22 (0.01)	0.53 (0.02)	0.63 (0.01)
Weight (kg)	0.20 (0.01)	0.17 (0.02)	0.41 (0.01)
Sex			
Female	-2.32 (0.31)	3.58 (0.60)	0.71 (0.41)
Diabetes status			
Diabetic	-0.45 (0.82)	6.52 (1.11)	5.87 (0.91)
Intercept	94.63 (0.94)	105.99 (2.03)	70.99 (1.19)

With the new **dtable** command, you can create and export a table of descriptive statistics, commonly known as a Table 1.

## Create and export your Table 1

You can use **dtable** to easily create a Table 1 with means and standard deviations for continuous variables and with counts and percentages for categorical variables. And with the same command, export the table to, say, a PDF.

```

view dtable1.smcld
+
Dialog ▾ Also see ▾ Jump to ▾
. dtable i.sex i.rural bmi bpsystol, ///
> title(Table 1) export(table1.pdf, replace)
Table 1
-----
Summary
N 10,351
Sex
  Male 4,915 (47.5%)
  Female 5,436 (52.5%)
Rural
  Urban 6,548 (63.3%)
  Rural 3,803 (36.7%)
Body mass index (BMI) 25.538 (4.915)
Systolic blood pressure 130.882 (23.333)
(collection DTable exported to file table1.pdf)
CAP NUM INS
  
```

You could have instead exported the table to Word, Excel, LaTeX, HTML, or Markdown by specifying the appropriate file extension.

## Customize the table contents

You can change formats and select which statistics you want for each variable. For instance, you can report quartiles for **bmi** and **bpsystol**, formatted to display one digit after the decimal.

```

view dtable2.smcld
+
Dialog ▾ Also see ▾ Jump to ▾
. dtable i.sex i.rural age, ///
> continuous(bmi bpsystol, stat(q1 q2 q3)) ///
> nformat(%6.1f q1 q2 q3)
Table 1
-----
Summary
N 10,351
Sex
  Male 4,915 (47.5%)
  Female 5,436 (52.5%)
Rural
  Urban 6,548 (63.3%)
  Rural 3,803 (36.7%)
Age (years) 47.580 (17.215)
Body mass index (BMI) 22.1 24.8 28.0
Systolic blood pressure 114.0 128.0 142.0
CAP NUM INS
  
```

## Report statistics by group

You can compute statistics separately for each group and test for equality across groups. For instance, you can test for equality of means in rural and urban populations.

```

Viewer - view dtable3.smcld
view dtable3.smcld
+
Dialog ▾ Also see ▾ Jump to ▾
. dtable age bpsystol tresult, by(rural, tests) ///
> sample(, stat(freq) place(seplabels)) ///
> sformat("(N=%s)" frequency) column(by(hide))
note: using test regress across levels of rural for age, bpsystol, and tresult.
Table 1
-----
Urban (N=6,548) Rural (N=3,803) Total (N=10,351) Test
Age (years) 46.835 (17.484) 48.862 (16.666) 47.580 (17.215) <0.001
Systolic blood pressure 130.460 (23.526) 131.607 (22.980) 130.882 (23.333) 0.016
Serum cholesterol (mg/dL) 217.742 (49.874) 217.545 (48.544) 217.670 (49.387) 0.845
CAP NUM INS
  
```

## Survey data

Do you have data from a complex survey design? You can add the **svy** option to compute summary statistics and perform tests that account for the survey design.

```

Viewer - view dtable4.smcld
view dtable4.smcld
+
Dialog ▾ Also see ▾ Jump to ▾
. dtable, by(heartatk, tests) svy ///
> factor(highbp diabetes, test(svylr))
note: using test svylr across levels of heartatk for highbp and diabetes.
Table 1
-----
Prior heart attack
No heart attack Had heart attack Total Test
N 113,647,835 (97.0%) 3,483,276 (3.0%) 117,131,111 (100.0%)
High blood pressure
  No 72,451,166 (63.8%) 1,502,443 (43.1%) 73,953,609 (63.1%) <0.001
  Yes 41,196,669 (36.2%) 1,980,833 (56.9%) 43,177,502 (36.9%)
Diabetes status
  Not diabetic 110,028,641 (96.8%) 3,091,189 (88.7%) 113,119,830 (96.6%) <0.001
  Diabetic 3,619,194 (3.2%) 392,087 (11.3%) 4,011,281 (3.4%)
CAP NUM INS
  
```

## Further customization

**dtable** allows you to customize how each statistic is reported. You can even build your own composite results made up of multiple statistics so that you can display them combined and with any format you like. And because **dtable** creates a collection, you can customize results even further with the **collect** suite of commands. (See page 4.)

With the **etable** command, you can create and export a table of estimation results in one step.

## Create and export a table

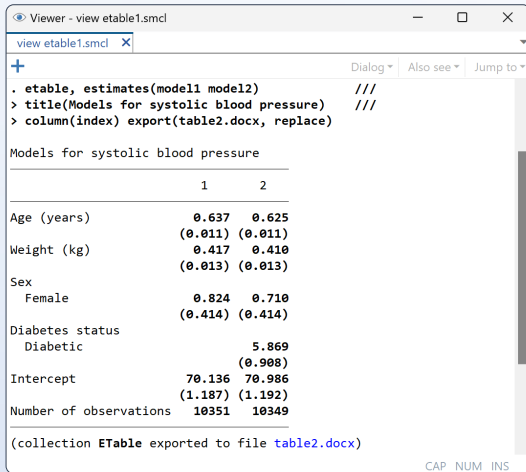
You can create a table immediately after fitting a model with any estimation command.

```
. regress bpsystol age weight i.sex  
. etable
```

Or you can fit multiple models and store the results. For instance,

```
. regress bpsystol age weight i.sex  
. estimates store model1  
. regress bpsystol age weight i.sex i.diabetes  
. estimates store model2
```

And then you can use **etable** to create, customize, and export a table with results from the stored models.



```
Viewer - view etable1.smcl  
view etable1.smcl X  
+ Dialog Also see Jump to  
. etable, estimates(model1 model2) ///  
> title(Models for systolic blood pressure) ///  
> column(index) export(table2.docx, replace)  
  
Models for systolic blood pressure  

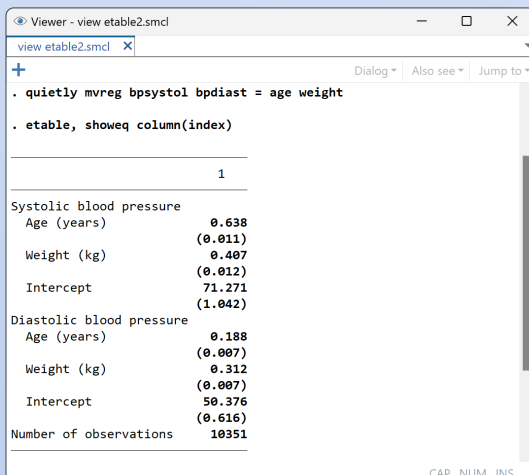

|                        | 1                         | 2                         |
|------------------------|---------------------------|---------------------------|
| Age (years)            | 0.637<br>(0.011) (0.011)  | 0.625<br>(0.011) (0.011)  |
| Weight (kg)            | 0.417<br>(0.013) (0.013)  | 0.410<br>(0.013) (0.013)  |
| Sex                    |                           |                           |
| Female                 | 0.824<br>(0.414) (0.414)  | 0.710<br>(0.414) (0.414)  |
| Diabetes status        |                           |                           |
| Diabetic               |                           | 5.869<br>(0.908)          |
| Intercept              | 70.136<br>(1.187) (1.192) | 70.986<br>(1.187) (1.192) |
| R-squared              | 0.30                      | 0.31                      |
| AIC                    | 90848.72                  | 90791.95                  |
| Number of observations | 10351                     | 10349                     |

  
(collection ETable exported to file table2.docx)  
CAP NUM INS
```

This table is exported in Word format, but you can also export to Excel, LaTeX, PDF, HTML, or SMCL.

## Multiple-equation models

**etable** can easily report results of a multivariate regression or any other model that includes multiple equations. And you can customize the table to show equation descriptions.



```
Viewer - view etable2.smcl  
view etable2.smcl X  
+ Dialog Also see Jump to  
. quietly mvreg bpsystol bpdiastr = age weight  
. etable, showeq column(index)  
  
Systolic blood pressure  


|             | 1                 |
|-------------|-------------------|
| Age (years) | 0.638<br>(0.011)  |
| Weight (kg) | 0.407<br>(0.012)  |
| Intercept   | 71.271<br>(1.042) |

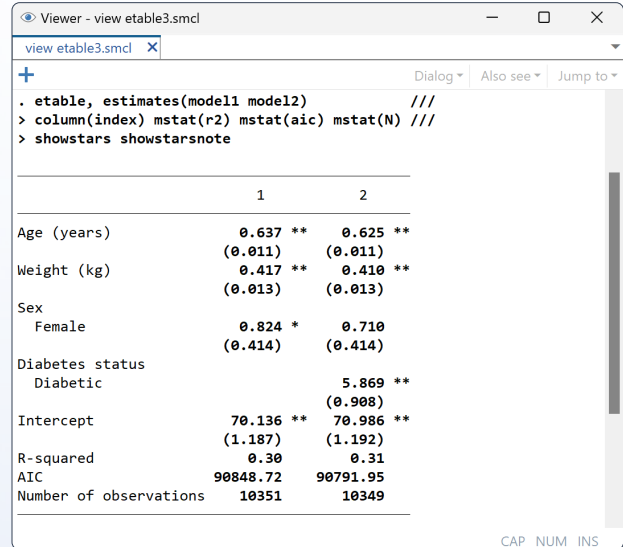
  
Diastolic blood pressure  


|             | 1                 |
|-------------|-------------------|
| Age (years) | 0.188<br>(0.007)  |
| Weight (kg) | 0.312<br>(0.007)  |
| Intercept   | 50.376<br>(0.616) |

  
Number of observations 10351  
CAP NUM INS
```

## Customize the table contents

With **etable**, you can specify which statistics should be displayed. Select from coefficients, standard errors, *p*-values, confidence intervals, *R*-squared, AIC, BIC, stars for significance levels, and more. And you can specify how you would like these statistics to be displayed.



```
Viewer - view etable3.smcl  
view etable3.smcl X  
+ Dialog Also see Jump to  
. etable, estimates(model1 model2) ///  
> column(index) mstat(r2) mstat(aic) mstat(N) ///  
> showstars showstarsnote  
  


|                        | 1                            | 2                            |
|------------------------|------------------------------|------------------------------|
| Age (years)            | 0.637 **<br>(0.011) (0.011)  | 0.625 **<br>(0.011) (0.011)  |
| Weight (kg)            | 0.417 **<br>(0.013) (0.013)  | 0.410 **<br>(0.013) (0.013)  |
| Sex                    |                              |                              |
| Female                 | 0.824 *<br>(0.414) (0.414)   | 0.710<br>(0.414) (0.414)     |
| Diabetes status        |                              |                              |
| Diabetic               |                              | 5.869 **<br>(0.908)          |
| Intercept              | 70.136 **<br>(1.187) (1.192) | 70.986 **<br>(1.187) (1.192) |
| R-squared              | 0.30                         | 0.31                         |
| AIC                    | 90848.72                     | 90791.95                     |
| Number of observations | 10351                        | 10349                        |

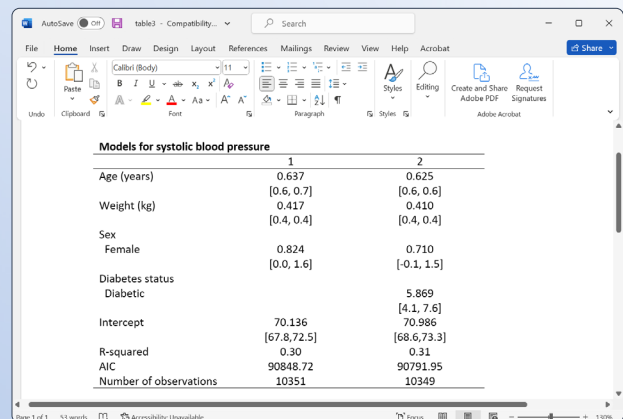
  
CAP NUM INS
```

## Further customization

**etable** allows you to customize your table in many ways, including column headers, labels, alignment, formats, fonts, shading, titles, notes, and stars. Beyond this, because **etable** creates a collection, you can use the **collect** suite of commands to further customize your table. (See page 4.)

For example, you can specify the width of a table in a Word document.

```
. collect style putdocx, width(75%)  
. collect export table3.docx
```



```
AutoSave [CH] table3 - Compatibility... Search  
File Home Insert Draw Design Layout References Mailings Review View Help Acrobat  
Calibri (Body) 11  
Paste Font Paragraph Styles Editing Create and Share Adobe PDF Signatures  
Undo Clipboard Font Paragraph Styles Styles Adobe Acrobat  
  
Models for systolic blood pressure  


|                        | 1                      | 2                      |
|------------------------|------------------------|------------------------|
| Age (years)            | 0.637<br>[0.6, 0.7]    | 0.625<br>[0.6, 0.6]    |
| Weight (kg)            | 0.417<br>[0.4, 0.4]    | 0.410<br>[0.4, 0.4]    |
| Sex                    |                        |                        |
| Female                 | 0.824<br>[0.0, 1.6]    | 0.710<br>[-0.1, 1.5]   |
| Diabetes status        |                        |                        |
| Diabetic               |                        | 5.869<br>[4.1, 7.6]    |
| Intercept              | 70.136<br>[67.8, 72.5] | 70.986<br>[68.6, 73.3] |
| R-squared              | 0.30                   | 0.31                   |
| AIC                    | 90848.72               | 90791.95               |
| Number of observations | 10351                  | 10349                  |

  
Page 1 of 1 53 words Accessibility: Unavailable Focus 100%
```

With the **collect** suite of commands, you can build more complex tables, and you can modify the labels, layout, formatting, and more.

## Collect results from multiple commands

You can store three sets of results in a collection.

```
. collect: regress bpsystol age i.sex
. collect: regress bpsystol age i.sex c.age#i.sex
. collect: regress bpsystol age i.sex c.age#i.sex
           i.diabetes
```

## Lay out the table

Then you define rows and columns—place covariates (**colname**) and results (coefficients, standard errors, and  $R^2$ ) on the rows, and place models (**cmdset**) on columns.

```
. collect layout (colname#result[_r_b _r_se]
                 result[r2]) (cmdset)
```

## Modify the labels

You may specify new labels for your column headers.

```
. collect label levels cmdset 1 "Model 1" 2 "Model 2"
                               3 "Model 3"
```

## Customize the table style

You can modify formats, results for base levels, labels, delimiters for interactions, spacing, alignment, and borders.

```
. collect style cell, nformat(%6.2f)
. collect style cell result[_r_se], sformat(("%s"))
```

```
. collect style showbase off
```

```
. collect style header result, level(hide)
. collect style header result[r2], level(label)
```

```
. collect style row stack, spacer delimiter(" x ")
. collect style column, extraspace(1)
```

```
. collect style cell cell_type[item column-header],
                 halign(center)
```

```
. collect style cell border_block, border
                 (right, pattern(none))
```

## Preview the table

	Model 1	Model 2	Model 3
Age (years)	0.65 (0.01)	0.47 (0.02)	0.45 (0.02)
Female	-4.01 (0.40)	-20.46 (1.17)	-20.56 (1.16)
Female x Age (years)		0.35 (0.02)	0.35 (0.02)
Diabetic			8.06 (0.93)
Intercept	101.92 (0.62)	110.57 (0.84)	111.06 (0.84)
R-squared	0.24	0.26	0.26

## Export the table

Once you have customized your table, you can export it to Word, Excel, L<sup>A</sup>T<sub>E</sub>X, PDF, HTML, Markdown, and more.

```
. collect export regtable.docx
```

	Model 1	Model 2	Model 3
Age (years)	0.65 (0.01)	0.47 (0.02)	0.45 (0.02)
Female	-4.01 (0.40)	-20.46 (1.17)	-20.56 (1.16)
Female x Age (years)		0.35 (0.02)	0.35 (0.02)
Diabetic			8.06 (0.93)
Intercept	101.92 (0.62)	110.57 (0.84)	111.06 (0.84)
R-squared	0.24	0.26	0.26

Or include your table in a complete report.

```
. putdocx begin
...
. putdocx collect
...
. putdocx save myrpt
```

## Easily create similar tables

Want to use the same style for future tables? Save the style,

```
. collect style save mystyle
```

And use it again,

```
. collect style use mystyle
```

## Type commands or use the GUI

	Model 1	Model 2	Model 3
Age (years)	0.65 (0.01)	0.47 (0.02)	0.45 (0.02)
Female	-4.01 (0.40)	-20.46 (1.17)	-20.56 (1.16)
Female x Age (years)		0.35 (0.02)	0.35 (0.02)
Diabetic			8.06 (0.93)
Intercept	101.92 (0.62)	110.57 (0.84)	111.06 (0.84)
R-squared	0.24	0.26	0.26