

THE STATA JOURNAL

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Stata tip 22: Variable name abbreviation

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Stata allows users to abbreviate any variable name to the shortest string of characters that uniquely identifies it, given the data currently loaded in memory (see [U] 11.2.3 **Variable-name abbreviation**). Stata also offers three wildcard characters, *, ~, and ? (see [U] 11.4.1 **Lists of existing variables**), so users have substantial flexibility in how variables may be referenced.

Stata also allows users to control the values of many of its system parameters using the `set` command (see [R] `set`). One of these parameters is `varabbrev`, which may be toggled on, allowing variable names to be abbreviated, or off, requiring the user to spell out entire variable names.

The default is to allow abbreviations. But this convenience feature can bite. Suppose that in a program we wish to confirm the existence of a variable and that variable does not in fact exist:

```
. clear
. set varabbrev on
. set obs 10
(obs was 0, now 10)
. generate byte myvar7 = 1
. confirm variable myvar
```

There is no error message here because `myvar` is an allowed abbreviation for `myvar7`. A bigger deal is that as `myvar7` exists and not `myvar`, typing `drop myvar` would drop `myvar7`, which may or may not have been our intention.

But what if we had wanted to confirm explicitly the existence of variable `myvar`? There are two ways to do this:

1. Specify the `confirm` command with the `exact` option (see [P] `confirm`):

```
. confirm variable myvar, exact
variable myvar not found
r(111);
```

2. Toggle variable abbreviation off:

```
. set varabbrev off
. confirm variable myvar
variable myvar not found
r(111);
```

Note that the status of `varabbrev` does not affect the display of variable names. For example,

```
. sysuse auto, clear
(1978 Automobile Data)
. set varabbrev off
. rename weight this_is_a_very_long_varname
. regress price turn length this_is_a_very_long_varname
(output omitted)
```

price	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
turn	-318.2055	127.1241	-2.50	0.015	-571.7465	-64.66452
length	-66.17856	39.87361	-1.66	0.101	-145.704	13.34684
this_is_a_~e	5.382135	1.116756	4.82	0.000	3.154834	7.609435
_cons	14967.64	4541.836	3.30	0.002	5909.228	24026.04

In this display, Stata has abbreviated the long variable name, despite the current value of `varabbrev`.

Note that the `list` command has its own option to allow the user partial control of the display; see [D] `list`. As we `set varabbrev off`, we must specify only unabbreviated variable names in a `list` command, but we can override Stata's default abbreviation in the display using the `abbreviate()` option:

```
. list make turn this_is_a_very_long_varname in 1/4, abb(21)
```

	make	turn	this_is_a_very_long-e
1.	AMC Concord	40	2,930
2.	AMC Pacer	40	3,350
3.	AMC Spirit	35	2,640
4.	Buick Century	40	3,250

The default value for `abbreviate()` is 8, so that otherwise the variable name would have been displayed as `this_i~e`.