

[help missing](#)

Missing values are omitted from computations on casewise (calculations involving one variable) or pairwise (calculations involving more than one variable) basis. Therefore, any computation on missing values yields another missing value. For instance, when running a regression of returns on earnings and there are 100 usable observations for returns and 120 for earnings, then the regression will naturally run only on 100 observations. Stata's default missing value for either type of variable (numerical, string or date) is the period `'.'`.

This means that a missing value `'.'` may be assigned to a cell of the dataset either because the data was imported with a missing observation in the first place, or it was created by invalid calculations, or some other reason (*e.g.* by taking lags and therefore losing the first time series observation).

Apart from the period `'.'`, Stata further supports another 26 user-defined missing values which are represented again by a period `'.'` followed by a lower-case letter, but all missing values are ranked higher than real numbers  $\mathbb{R} < . < .a < .b < .c < \dots < .z$ . Note the ranking amongst the missing values, *i.e.* the default missing value `'.'` is ranked by Stata higher than real numbers  $\mathbb{R}$ , and thereafter `.a` is ranked higher than `'.'`, `.b` higher than `.a`, and so on.

User-defined missing values can be useful in studies that need to identify the specific reason why there is a missing observation and therefore be able to control and quantify their significance. For instance, a financial analysis project that employs firm-year datasets may benefit from user-defined missing values that explain why these data points are missing. Consider the following reasons for missing observations in a firm-year dataset with financial orientation:

<code>.a</code>	all other reasons	<code>.b</code>	management buyout	<code>.c</code>	private consortium
<code>.d</code>	delisted	<code>.l</code>	leverage buyout	<code>.m</code>	merger
<code>.p</code>	database problem	<code>.q</code>	acquisitions	<code>.r</code>	other restructure
<code>.s</code>	suspended	<code>.t</code>	takeover	<code>.u</code>	unlisted yet

