\textbf{\texttt{st_numscalar}()} — Obtain values from and put values into Stata scalars

\begin{tabular}{llll}
Description & Syntax & Remarks and examples & Conformability \\
Diagnostics & Also see & & \\
\end{tabular}

\section*{Description}

\texttt{st_numscalar(\textit{name})} returns the value of the specified Stata numeric scalar, or it returns \texttt{J(0,0,.)} if the scalar does not exist.

\texttt{st_numscalar(\textit{name}, \textit{value})} sets or resets the value of the specified numeric scalar, assuming \textit{value} \texttt{!= J(0,0,.)}. \texttt{st_numscalar(\textit{name}, \textit{value})} deletes the specified scalar if \textit{value} \texttt{== J(0,0,.)}.

\texttt{st_numscalar("x", J(0,0,.))} erases the scalar \textit{x}, or it does nothing if scalar \textit{x} did not exist.

\texttt{st_strscalar(\textit{name})} returns the value of the specified Stata string scalar, or it returns \texttt{J(0,0,"")} if the scalar does not exist.

\texttt{st_strscalar(\textit{name}, \textit{value})} sets or resets the value of the specified scalar, assuming \textit{value} \texttt{!= J(0,0,"")}. \texttt{st_strscalar(\textit{name}, \textit{value})} deletes the specified scalar if \textit{value} \texttt{== J(0,0,"")}.

\texttt{st_strscalar("x", J(0,0,""))} erases the scalar \textit{x}, or it does nothing if scalar \textit{x} did not exist.

Concerning deletion of a scalar, it does not matter whether you code \texttt{st_numscalar(\textit{name}, J(0,0,.))} or \texttt{st_strscalar(\textit{name}, J(0,0,""))}; both yield the same result.

\texttt{st_numscalar(\textit{name}, \textit{value}, \textit{hcat})} and \texttt{st_numscalar\_hcat(\textit{name})} are used to set and query the \textit{hcat} corresponding to an \texttt{e()} or \texttt{r()} value. They are also rarely used. See [R] Stored results and [P] return for more information.

\section*{Syntax}

\begin{verbatim}
real   st_numscalar(string scalar name)
void   st_numscalar(string scalar name, real value)
void   st_numscalar(string scalar name, real value, string scalar hcat)
string st_numscalar\_hcat(string scalar name)
string st_strscalar(string scalar name)
void   st_strscalar(string scalar name, string value)
\end{verbatim}

where

1. Functions allow \textit{name} to be
   \begin{enumerate}
   \item global scalar such as "myname",
   \item \texttt{r()} scalar such as "r(mean)",
   \item \texttt{e()} scalar such as "e(N)", or
   \item \texttt{c()} scalar such as "c(namelenchar)".
   \end{enumerate}
Note that string scalars never appear in \texttt{r()} and \texttt{e()}; thus (b) and (c) do not apply to \texttt{st_strscalar()}. 

2. \texttt{st_numscalar(name)} and \texttt{st_strscalar(name)} return the value of the specified Stata scalar. They return a 1 \times 1 result if the specified Stata scalar exists and return a 0 \times 0 result otherwise. 

3. \texttt{st_numscalar(name, value)} and \texttt{st_strscalar(name, value)} set or reset the contents of the specified Stata scalar. 

4. \texttt{st_numscalar(name, value)} and \texttt{st_strscalar(name, value)} delete the specified Stata scalar if \texttt{value==J(0,0,.)} (if \texttt{value} is 0 \times 0). 

5. \texttt{st_numscalar(name, value, hcat)} sets or resets the specified Stata scalar and sets or resets the hidden or historical status when \texttt{name} is an \texttt{e()} or \texttt{r()} value. Allowed \texttt{hcat} values are "visible", "hidden", "historical", and a string scalar release number such as such as "10", "10.1", or any string release number matching "#[#][.#[#]]". See \cite{P return} for a description of hidden and historical stored results. 

When \texttt{st_numscalar(name, value)} is used to set an \texttt{e()} or \texttt{r()} value, its \texttt{hcat} is set to "visible". 

There is no three-argument form of \texttt{st_strscalar()} because there are no \texttt{r()} or \texttt{e()} string scalar values.

**Remarks and examples**

See \cite{M-5 st_global()} and \cite{M-5 st_rclear()}. 

**Conformability**

\texttt{st_numscalar(name), st_strscalar(name)}:

\begin{itemize}
  \item \texttt{name}: 1 \times 1
  \item \texttt{result}: 1 \times 1 \text{ or } 0 \times 0
\end{itemize}

\texttt{st_numscalar(name, value), st_strscalar(name, value)}:

\begin{itemize}
  \item \texttt{name}: 1 \times 1
  \item \texttt{value}: 1 \times 1 \text{ or } 0 \times 0
  \item \texttt{result}: \text{void}
\end{itemize}

\texttt{st_numscalar(name, value, hcat)}:

\begin{itemize}
  \item \texttt{name}: 1 \times 1
  \item \texttt{value}: 1 \times 1
  \item \texttt{hcat}: 1 \times 1
  \item \texttt{result}: \text{void}
\end{itemize}

\texttt{st_numscalar(name)}:

\begin{itemize}
  \item \texttt{name}: 1 \times 1
  \item \texttt{result}: 1 \times 1
\end{itemize}
Diagnostics

All functions abort with error if name is malformed.

st_numscalar(name) and st_strscalar(name) return J(0,0,.) or J(0,0,"") if Stata scalar name does not exist. They abort with error, however, if the name is malformed.

st_numscalar(name, value, hcat) aborts with error if hcat is not an allowed value.

st_numscalar_hcat(name) returns "visible" when name is not an e() or r() value and returns "" when name is an e() or r() value that does not exist.

Also see

[M-5] st_rclear() — Clear r(), e(), or s()

[M-4] Stata — Stata interface functions