

1 Displaying Matrices

1.1 Example 2: Regression and Variance-Covariance Matrix

To display the regression result in L^AT_EX format, we can use Stata command `outtex`. The code for generating variance-covariance matrix after regression can be produced by `outtable` command.

```
. regress write math female read
```

Source	SS	df	MS	Number of obs =	200
Model	9405.34864	3	3135.11621	F(3, 196) =	72.52
Residual	8473.52636	196	43.2322773	Prob > F =	0.0000
				R-squared =	0.5261
				Adj R-squared =	0.5188
Total	17878.875	199	89.843593	Root MSE =	6.5751

write	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
math	.3974826	.0664037	5.99	0.000	.266525 .5284401
female	5.44337	.9349987	5.82	0.000	3.59942 7.287319
read	.3252389	.0607348	5.36	0.000	.2054613 .4450166
_cons	11.89566	2.862845	4.16	0.000	6.249728 17.5416

```
. outtex
```

```
%----- Begin LaTeX code -----%
```

```
{  
\begin{table}[htbp]\centering  
\caption{Estimation results : regress  
\label{tabresult regress}}  
\begin{tabular}{l c c }\hline\hline  
\multicolumn{1}{c}  
{\textbf{Variable}}  
& {\textbf{Coefficient}} & \textbf{(Std. Err.)} \\ \hline  
math & 0.397 & (0.066)\\  
female & 5.443 & (0.935)\\  
read & 0.325 & (0.061)\\  
Intercept & 11.896 & (2.863)\\  
\hline  
\end{tabular}  
\end{table}  
}
```

```
%----- End LaTeX code -----%
```

```
. matrix v=e(V)
```

```
. outtable using table2, mat(v) nobox caption("Variance-Covariance Matrix") format(%6.4f)
```

Here is the real output in \LaTeX format.

Table 1: Estimation results : regress

Variable	Coefficient	(Std. Err.)
math	0.397	(0.066)
female	5.443	(0.935)
read	0.325	(0.061)
Intercept	11.896	(2.863)

Table 2: Variance-Covariance Matrix

	math	female	read	cons
math	0.0044			
female	-0.0005	0.8742		
read	-0.0027	0.0026	0.0037	
cons	-0.0924	-0.5843	-0.0535	8.1959