

intro — Introduction and advice

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[M-1] Entry	Description
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Introductory material

first	Introduction and first session
interactive	Using Mata interactively
ado	Using Mata with ado-files
help	Obtaining help in Stata

How Mata works & finding examples

how	How Mata works
source	Viewing the source code

Special topics

returnedargs	Function arguments used to return results
naming	Advice on naming functions and variables
limits	Limits and memory utilization
tolerance	Use and specification of tolerances
permutation	An aside on permutation matrices and vectors
LAPACK	The LAPACK linear-algebra routines

Description

This section provides an introduction to Mata along with reference material common to all sections.

In addition, we should mention two helpful books.

An Introduction to Stata Programming (412 pages) by Christopher Baum introduces Mata more gently than this manual. It assumes that you are familiar with Stata but new to programming.

The Mata Book (428 pages) by William Gould assumes familiarity with programming in some language, but it does not assume a lot of experience. It goes further and deeper into Mata and also covers programming, numerical accuracy, workflow, verifications, and certification.

Remarks and examples

The most important entry in this section is [\[M-1\] first](#). Also see [\[M-6\] Glossary](#).

The Stata commands `putmata` and `getmata` are useful for moving data from Stata to Mata and back again; see [\[D\] putmata](#).

Those looking for a textbook-like introduction to Mata may want to consider [Baum \(2016\)](#), particularly chapters 13 and 14.

References

Baum, C. F. 2016. *An Introduction to Stata Programming*. 2nd ed. College Station, TX: Stata Press.

Gould, W. W. 2018. *The Mata Book: A Book for Serious Programmers and Those Who Want to Be*. College Station, TX: Stata Press.

Also see

[\[M-0\] intro](#) — Introduction to the Mata manual

[\[D\] putmata](#) — Put Stata variables into Mata and vice versa