Preface to the Second Edition

It was back in March of 2012 that I penned the preface for the first edition of this book. That was over eight years and four Stata versions ago (using Stata 12.1). The techniques illustrated in this book are as relevant today as they were back in 2012. Over this time, Stata has grown considerably. A key change that impacts the interpretation of statistical results (a focus of this book) is that the levels of factor variables are now labeled using value labels (instead of group numbers). For example, a two-level version of marital status might be labeled as Married and Unmarried instead of using numeric values such as 1 and 2. All the output in this new edition capitalizes on this feature, emphasizing the interpretation of results based on variables labeled using intuitive value labels. Stata now includes features that allow you to customize output in ways that increase the clarity of the results, aiding interpretation. This new edition includes a new appendix (appendix A) that illustrates how you can customize the output of estimation commands for maximum clarity.

The margins, contrast, and pwcompare commands also reflect this new output style, defaulting to labeling groups according to their value labels. Results of these commands are easier to interpret than ever. For instance, a contrast regarding marital status might be labeled as widowed vs. married, making it very clear which groups are being compared. This new edition uses this labeling style and also includes appendices that describe how to customize such output. Appendix B is on the margins command, appendix D is on the contrast command, and appendix E is on the pwcompare command—each illustrate how you can customize the display of output produced by these commands. Additionally, appendix C on the marginsplot command illustrates new graphical features that have been recently introduced, including using transparency to more clearly visualize overlapping confidence intervals.

Among the other new features introduced since the last edition of this book, the **mixed** and **contrast** commands now include options for computing estimates for small-sample sizes. Chapter 17 describes these techniques and illustrates how the **mixed** and **contrast** commands can use small-sample size methods to analyze a longitudinal dataset with a small-sample size.

As with the first edition, I hope the examples shown in this book help you understand the results of your regression models so you can interpret and present them with clarity and confidence.

Ventura, California November 2020 Michael N. Mitchell