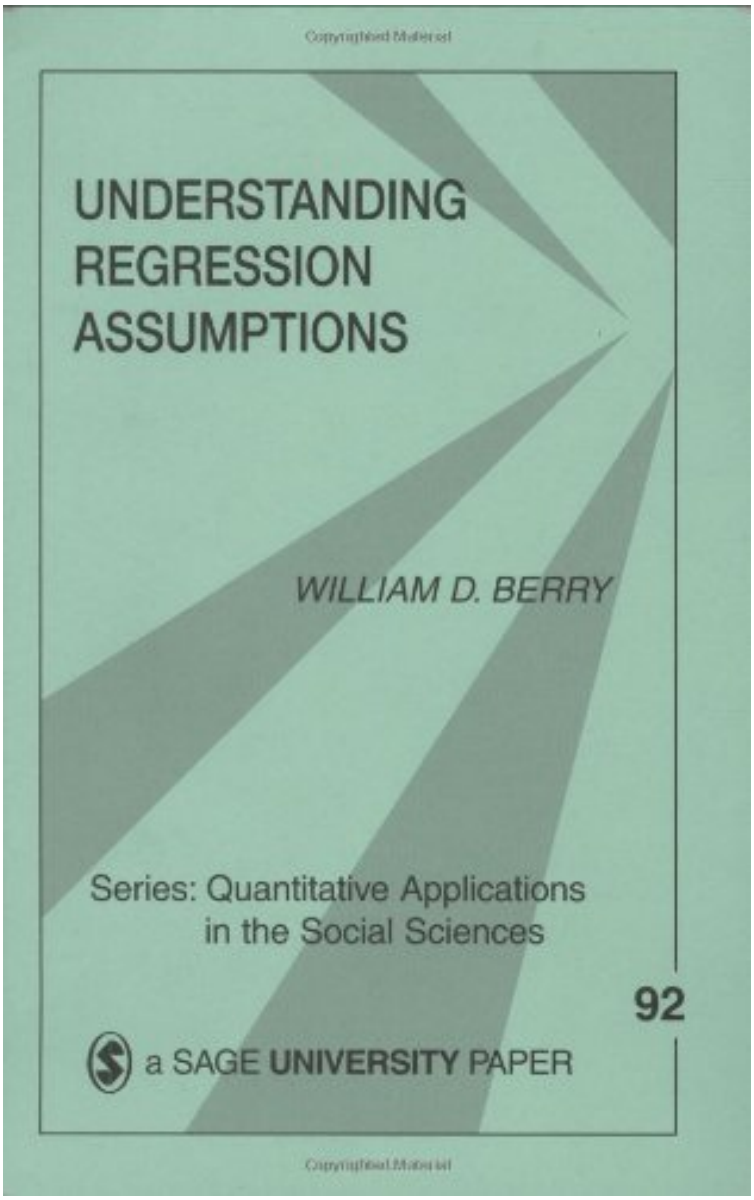
Understanding Regression Assumptions (Quantitative Applications in the Social Sciences)

William D. Berry
**Download PDF | ePub | DOC | audiobook | ebooks*



#830005 in Books 1993-02-25Original language:EnglishPDF # 1 8.70 x .23 x 5.36l, .28 #File Name: 080394263X104 pages | File size: 42.Mb

William D. Berry : Understanding Regression Assumptions (Quantitative Applications in the Social Sciences) before purchasing it in order to gage whether or not it would be worth my time, and all praised Understanding Regression Assumptions (Quantitative Applications in the Social Sciences):

0 of 0 people found the following review helpful. PhD analysis assistanceBy Douglas YurovichAnother great asset if your are using regression as a method of analyzing data for a masters thesis, doctoral dissertation or study. A very well written presentation on the assumptions that precede a regression analytical effort.2 of 11 people found the following review helpful. Author is an elitist snob of a statisticianBy Curtis M. KularskiThis book is not accessible, not useful and is a waste of money. The book is about 150 pages of statistical babble that has no meaning or relevance to anyone outside of statistics. Understanding regression assumptions is important component of being able to use a statistical software package for data analysis using regression in any meaningful way. Unfortunately this book is written very high-level and does not provide any accessible way to understand the nuances of regression assumptions. Perhaps the author could have spent a few more pages explaining himself and his elaborate functions?3 of 3 people found the following review helpful. Its sterngth is in the examplesBy not a naturalI've owned a copy of Berry's Understanding Regression Assumptions for ten years, but I didn't get around to reading it until a few days ago. Better late than never, I suppose, but Berry's text would have been an invaluable adjunct to any of the more complete regression/econometrics texts -- Gujarati, Wooldridge, Wittink -- I've used for teaching multiple regression in years past.It's easy to list the assumptions, explain the consequences of their violation, and provide corrective procedures to assure that OLS regression provides BLUE estimates of slopes. It's a good deal more difficult, however, to identify and explain concrete circumstances that give rise to violation of assumptions in the first place. Sure, mis-specification is easy, at least in principle: variables that should be in the equation are, those that should not be are not, and funtional forms of all relationships are correct. But providing specific examples that illustrate violation of even this most fundamental of assumptions requires a good deal of work on the part of an instructor who wants to do the job right.Futhermore, when we get past the conceptually easier issues and have to provide examples of circumstances that generate, say, heteroscedasticity or serial correlation with cross-sectional data, the task of making these ideas concrete becomes much more demanding. Only a practiced hand who has attended to these issues in purposeful fashion will be able to provided illustrations which will attune students to the conditions that are likely to cause essential assumptions to be violated.Berry's book is replete with examples that make the usual OLS regression assumptions real and easy to remember, rather than leaving them as odd-sounding abstractions that we memorize and take on faith as essential to best use of OLS estimators. I'm retiring at the end of this semester, so maybe better late than never doesn't really apply after all. Still I'm glad I finally got around to reading this fine book.

Through the use of careful explanation and examples, Berry demonstrates how to consider whether the assumptions of multiple regression are actually satisfied in a particular research project. Beginning with a brief review of the regression assumptions as they are typically presented in text books, he moves on to explore in detail the substantive meaning of each assumption; for example, lack of measurement error, absence of specification error, linearity, homoscedasticity, and lack of auto-correlation.

About the AuthorPh.D., University of Minnesota, 1980. Major research and teaching interests include public policy, budgeting, state politics and research methodology. Berrys primary areas of interest are public policy, American state politics, and research methodology. Throughout his career, his work has focused on explaining why governments make the policy choices they do, and improving the methodologies available for studying policy making. Among his current research projects are analyses of the impact of electoral competition on the policy choices made by state legislators, and the effect of state welfare policy on poverty in the United States. Berrys current research on methodology focuses on the development of techniques for estimating econometric models with binary dependent variables, and methods for studying policy diffusion using geographical information systems. Berry has also been working for several years collecting data on outcomes of all state legislative elections in the U.S. since the 1960s; he has begun to use these data to study the behavior of challengers in state legislative elections, and the role of partisan and incumbent protection goals in determining the nature of redistricting in state legislatures.