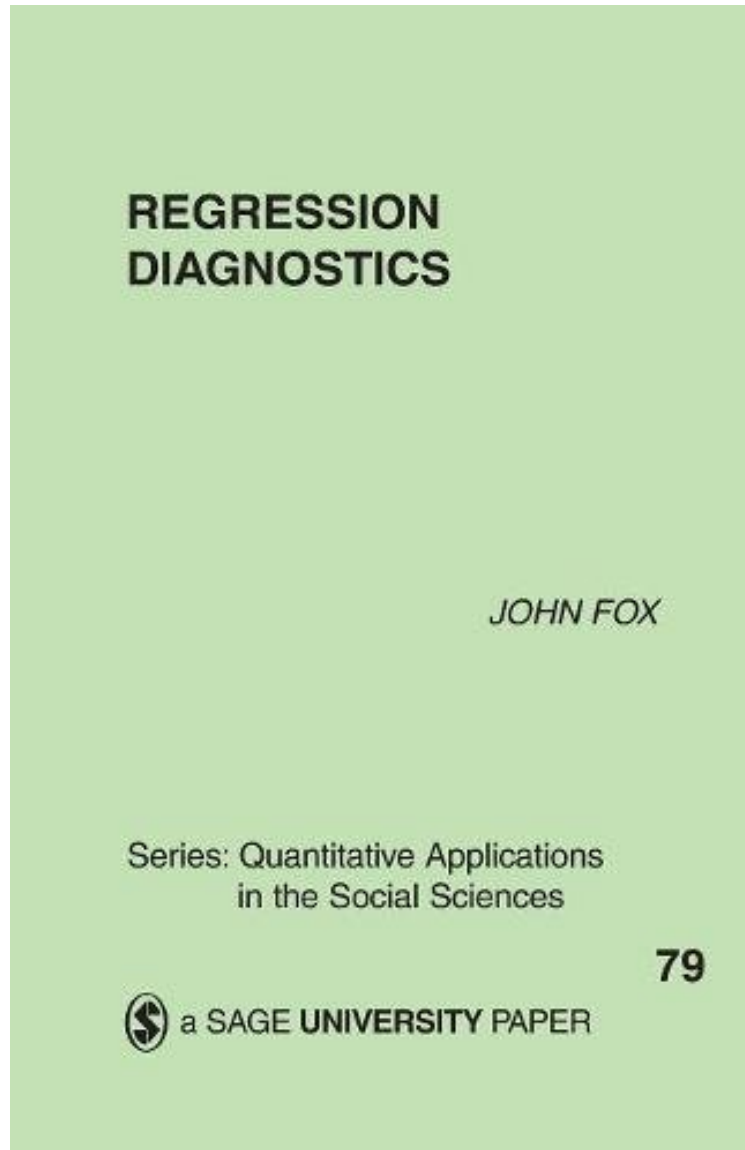


Regression Diagnostics: An Introduction (Quantitative Applications in the Social Sciences)

John Fox

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#774606 in Books SAGE Publications, Inc 1991-08-14 1991-08-14Original language:EnglishPDF # 1 8.50 x .22 x 5.50l, .26 #File Name: 080393971X96 pages | File size: 74.Mb

John Fox : Regression Diagnostics: An Introduction (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 Regression Diagnostics: An Introduction (Quantitative Applications in the Social Sciences):

2 of 3 people found the following review helpful. Very obtuse and incompleteBy AbacusThis book, given its focus on

a narrow subject, is actually pretty long. 90 pages to cover regression diagnostic is a long slog. Yet, the author states that "because of space considerations... there is no treatment of [autocorrelation]." That is a huge gap as the independence of the residuals is one of the main assumptions of the linear regression model. The author admits that much when he describes the corresponding Gauss-Markov theorem on pg. 40. Throughout the book there were so many math notations that were undefined that I could not clearly understand what the author was conveying. For instance, on pg. 16 he talks about the Mellows stat associated with the terms C_p and p . Neither are clearly defined. I guess p is number of independent variables (a guess at best). But, I have no idea what C_p stands for. Later on page 24, he defines the h or hat value in a less than transparent way. On page 28, m is undefined. On pages 68, 87, and 89, NID is undefined. On page 89, V is undefined. Given that those terms play important roles in many equations throughout the book, I could not grasp their meaning. The narrative itself is often perplexing. For instance, on page 25, the author states: "... even if the errors have equal variances..., the residuals do not." Given that residuals and errors represent the same thing, this quote is not readily comprehensible. There are other somewhat confusing sentences within the book. Occasionally, I came across tests I knew and calculated long hand in Excel. Yet, as he described them I could hardly recognize them. This includes the Breusch and Pagan test and White test on pages 73, and 74. Two basic guides to overall econometrics do a good job of covering the entire subject including diagnostic tests in a far more transparent way. Those are: *Econometrics For Dummies* by Roberto Pedace and *A Guide to Econometrics - 4th Edition* by Peter Kennedy. 0 of 0 people found the following review helpful. Five Stars By Bob Gibson Very nice! 3 of 4 people found the following review helpful. Great condensed reference for diagnostic techniques By Alethephant This book is an ideal, comprehensive short reference for regression diagnostics that has most or all of the techniques in one place. John Fox is the current master guru of regression, and his writings are very authoritative. Very useful desk reference for the practicing statistician, but perhaps not totally accessible to the beginning learner.

With *Regression Diagnostics*, researchers now have an accessible explanation of the techniques needed for exploring problems that compromise a regression analysis and for determining whether certain assumptions appear reasonable. The book covers such topics as the problem of collinearity in multiple regression, dealing with outlying and influential data, non-normality of errors, non-constant error variance and the problems and opportunities presented by discrete data. In addition, sophisticated diagnostics based on maximum-likelihood methods, scores tests, and constructed variables are introduced.

About the Author John Fox is professor of sociology at McMaster University in Hamilton, Ontario, Canada. Fox earned a PhD in sociology from the University of Michigan in 1972, and prior to arriving at McMaster, he taught at the University of Alberta and at York University in Toronto, where he was cross-appointed in the sociology and mathematics and statistics departments and directed the university's statistical consulting service. He has delivered numerous lectures and workshops on statistical topics in North and South America, Europe, and Asia, at such places as the summer program of the Inter-University Consortium for Political and Social Research, the Oxford University Spring School in Quantitative Methods for Social Research, and the annual meetings of the American Sociological Association. Much of his recent work has been on formulating methods for visualizing complex statistical models and on developing software in the R statistical computing environment. He is the author and co-author of many articles, in such journals as *Sociological Methodology*, *Sociological Methods and Research*, *The Journal of the American Statistical Association*, *The Journal of Statistical Software*, *The Journal of Computational and Graphical Statistics*, *Statistical Science*, *Social Psychology Quarterly*, *The Canadian Journal of Sociology and Anthropology*, and *The Canadian Journal of Sociology*. He has written a number of other books, including *Regression Diagnostics* (SAGE, 1991), *Nonparametric Simple Regression* (SAGE, 2000), *Multiple and Generalized Nonparametric Regression* (SAGE, 2000), *A Mathematical Primer for Social Statistics* (SAGE, 2008), and, with Sanford Weisberg, *An R Companion to Applied Regression, Second Edition* (SAGE, 2010). Fox also edits the SAGE Quantitative Applications in the Social Sciences (QASS) monograph series.