

Least absolute deviation (LAD) regression is an alternative to ordinary least squares (OLS) regression that has greater power for thick-tailed symmetric and asymmetric error distributions (Cade and Richards 1996).

LAD regression estimates the conditional median (a conditional 0.50 quantile) of a dependent variable given the independent variable(s) by minimizing sums of absolute deviations between observed and predicted values. LAD regression can be used anywhere OLS regression would be used but is often more desirable because it is less sensitive to outlying data points and is more efficient for skewed error distributions as well as some symmetric error distributions.

