

Pretesting for regressor exogeneity

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Hausman (1978) specification tests are often used to test for exogeneity of regressors in the linear instrumental variables model. We investigate the impact of a Hausman pretest on the finite sample null rejection probability and asymptotic size of a subsequent hypothesis test. The asymptotic size of the resulting two-stage test equals 1 for parameter spaces that are empirically relevant. This result is true even if weak instruments are excluded and the asymptotic results are well reflected in finite samples. The size distortion arises because the pretest is not very powerful. We discuss the possibility to size correct the two-stage test.