

[IZA News](#)[About IZA](#)[Organization Chart](#)[People](#)[Research](#)[Labor Policy](#)[Publications](#)[Discussion Papers](#)[Policy Papers](#)[Standpunkte](#)[Books](#)[Research Reports](#)[IZA Compact](#)[IZA in the Press](#)[Publication Record](#)[Journals](#)[Events](#)[IZA Prize / YLE Award](#)[Teaching](#)[Links / Resources](#)[Press](#)

IZA



Testing for IIA with the Hausman-McFadden Test

by Wim P. Vijverberg
(June 2011)

Abstract:

The Independence of Irrelevant Alternatives assumption inherent in multinomial logit models is most frequently tested with a Hausman-McFadden test. As is confirmed by many findings in the literature, this test sometimes produces negative outcomes, in contradiction of its asymptotic χ^2 distribution. This problem is caused by the use of an improper variance matrix and may lead to an invalid statistical inference even when the test value is positive. With a correct specification of the variance, the sampling distribution for small samples is indeed close to a χ^2 distribution.

Text: See [Discussion Paper No. 5826](#)



[Back](#)