Quality Adjustment and Hedonics: A Unified Approach

Revised March 13, 2019.

Erwin Diewert,¹ Discussion Paper 19-01, Vancouver School of Economics, University of British Columbia, Vancouver, B.C., Canada, V6T 1L4.

Abstract

The paper takes a consumer demand perspective to the problem of adjusting product prices for quality change. The various approaches to the problem of quality adjustment can be seen as special cases of the general framework. The special cases include the use of inflation adjusted carry forward and carry backward prices, the use of hedonic regressions and the estimation of Hicksian reservation prices.

Keywords

Quality adjustment, hedonic regressions, reservation prices, consumer theory, time product dummy regressions, scanner data.

JEL Classification Numbers

C43, C81, E31.

¹ W. Erwin Diewert: Vancouver School of Economics, University of British Columbia, Vancouver B.C., Canada, V6T 1Z1 and the School of Economics, UNSW Sydney, NSW 2052, Australia (<u>erwin.diewert@ubc.ca</u>). The author thanks Jan de Haan, Adam Gorajek and Chihiro Shimizu for helpful comments, Jerry Hausman, and Mick Silver for helpful discussions over the years and he gratefully acknowledges the financial support of a SSHRC grant.