## Economics Manuscript 3465 – The Author's Response to the Referee's Report

## *Title:* The Delimitation of Giffenity for The Wold-Juréen (1953) Utility Function Using Relative Prices: A Note

**REMARK 1:** The entirety of the referee's recommendations (regarding the present paper) pivots around the following (initial) statement by the referee, viz.,

"1. Pg. 5, Lemma 1, Proof. The paper is silent on the divisibility of x1 and x2. Thus, the strict inequalities imposed on x1 and x2 implies that each good MUST be purchased in amounts that admit a very small increment  $\epsilon$ near the boundaries."

In particular, the referee argues: (a) that the results reported in my paper are contingent upon my use of the assumption that one or both of the arguments in the Wold-Juréen (1953) utility function are perfectly divisible, and (b) that the results reported in my paper are vitiated if one or both of the arguments in the Wold-Juréen (1953) utility function are changed and treated as indivisible, lumpy, and/or discrete.

**REMARK 2:** In support of his argument, the referee suggests that I consult two documents, viz.,

- Mas-Colell, A., M.D. Whinston, and J.R. Green (1995), Microeconomic Theory (New York: Oxford University Press).
- Silberberg, E., and D.A. Walker (1984), "A modern analysis of Giffen's paradox," International Economic Review 25 (3), 687-694.

**REMARK 3:** When I consulted the paper by Silberberg and Walker (1984), I failed to find therein any reference to indivisible, lumpy, and/or discrete goods. However, with further digging, I did find two papers, which are likely central to the referee's argument, viz.,

- Garratt, R. (1997), "Indivisibilities, inferior goods and Giffen goods," Canadian Journal of Economics 30 (1), 246–251
- Garratt, R. (2005), "A tale of two cities and a Giffen good," Canadian Journal of Economics 38 (1), 49–56.

**REMARK 4:** That said, I do not support the referee's recommendation (that I change the assumption of divisibility to one of indivisibility) for to do so defeats the central purpose of my paper, and that is to provide a (new) precondition for Giffenity for the Wold-Juréen (1953) utility function "as is" -- a precondition which accords with a core tenet of microeconomics [viz., that economic decision-making is predicated on (changes in) relative prices]. This precondition is that the price of Good 1 be greater than or equal to the price of Good 2.

**REMARK 5:** Stated differently, I do not support the referee's recommendation (that I ought to change the assumption of divisibility to one of indivisibility): (a) because **my paper is designed to be an exploration of the Wold-Juréen (1953) utility function in its original form**, with reference to an arbitrary utility function, and (b) because **the arguments used in both of these two utility functions are perfectly divisible.** For more details, please revisit:

- Cook, P. (1972), "A 'one-line' proof of the Slutsky equation," American Economic Review 62, 139.
- Weber, C.E. (1997), "The case of a Giffen good: Comment," Journal of Economic Education 28, 36-44.
- Wold, H., and L. Juréen (1953), Demand Analysis: A Study in Econometrics (New York: Wiley).

**REMARK 6:** My closing responses to the referee's recommendation are four fold ...

- **R1:** The referee's comments or recommendations do not in any way negate the validity and value of the findings reported in my original paper.
- **R2:** To satisfy the referee's recommendations, I would have to prepare a second and a completely-separate paper on Giffenity for **a modified form** of the Wold-Juréen (1953) utility function. [Note: **This modified form would require that I change the traditional (of the original) assumption about divisibility to the non-traditional assumption, indivisibility**].
- **R3:** My original paper remains a viable, a self-contained, and a valuable contribution "as is".
- **R4:** But that is not to say that a second and a completely-separate paper based on the referee's recommendations is worth considering. But I wish to proceed one step (or one paper) at a time.