

Presidential Address

Forty Years of Price Transmission Research in the Food Industry: Insights, Challenges and Prospects

A Reply to H. Kinnucan, *Journal of Agricultural Economics* 70(3):874-879 May 2019
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I would like to thank Professor Kinnucan for highlighting the important role played by trade and technical change on the process of price transmission, and for the many useful remarks raised in his Comment on my Presidential Address. Perhaps I ought to begin by stating that rather than review the full set of implications of Gardener's model, the purpose of Section 2 in the Address was to debunk some commonly held misconceptions about price transmission. Pass-through and pass-back elasticities serve this purpose, although as Professor Kinnucan rightly sets out, they are only a subset of elasticities that the model delivers.

International trade is not explicit in Gardener's model, however it may be considered via the effect it imparts on the elasticity demand for the retail product and/or input supply. Thinking about the elasticities in this way provides a neat means of showing the effects of trade on the price transmission process for small importers and exporters, as Professor Kinnucan's simulation results amply demonstrate. This is unquestionably a valuable insight and I am grateful to Professor Kinnucan for pointing it out. More generally, it reminds us that price transmission is determined by structural parameters, and the temptation to ascribe low values of price transmission to imperfect competition, which so often is the case in the empirical literature, should be resisted since such values are consistent with the perfectly competitive outcome. Empirical estimates of price transmission are, in themselves, uninformative of the degree of competition in a market.

Taking explicit account of the way agricultural and marketing inputs are combined in the Gardener model via technical change offers additional elasticities of price transmission (see Miedema 1976, Kinnucan and Zhang, 2015). One striking aspect of this, which Professor Kinnucan's simulations reveal, is the markedly different effect that the two types of technical change impart on the price transmission process. That the omission of technical change conveys sizeable bias in bivariate regressions of price transmission is also worthy of note and here too I am grateful to Professor Kinnucan's comments.

On the causality issue, the clarification is welcome, as it is indeed useful. I do feel, however, that there is a bigger issue at play, namely the causal interpretation given to estimates of price transmission obtained from bivariate regressions, which still seems to be a surprisingly common feature in many empirical applications.

References

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Miedema, A.K. 'The farm-retail price ratio, the farmer's share and technical change', *American Journal of Agricultural Economics*, Vol. 58, (1976) pp. 750-756.