Conclusions

This report demonstrates that structural change can be incorporated directly into a very general and powerful set of market models. Early empirical findings of competitive U.S. food markets based on this general theory stood in sharp contrast to findings of market power based on the traditional and restrictive assumptions of fixed-factor proportions. By accounting for structural change, we have shown that food market data closely support this general theory and result in further evidence of competitive U.S. food industries.

In this report, we equate trends in market variables with structural change. We found that the most intriguing type of trend is the type that changes direction unexpectedly. Unpredictable changes in trends fit Kinsey and Senauer's description of structural change in food consumption and Paul's explanation of industry reorganization. Yet, it is precisely their unpredictability that poses obstacles to statistical inference. A main motivation of this report is to provide inference on competition, and we have relied on recent advances in econometrics to exploit such trends in market variables and test whether seven U.S. food industries operate competitively within an environment of structural change.

Although market variables may be driven by unpredictable changes in trends, it is necessary that models constructed from them do not. Our finding that retail- and farm-price relationships derived from this general theory are cointegrated supports the theory, as well as the claim, that changing trends in food consumption alter the structure of food industries. It also suggests that such models can be used to test for market power despite the many permanent changes in U.S. food markets that may have occurred over time.

Our finding of mostly competitive U.S. food industries offers important explanations of why concentrated food industries may be competitive. Paul argues that unexpected downward trends in consumer demand motivate firms to specialize and seek vertical arrangements that serve to spread the risk of downward trends in revenues. Our finding of cointegrated retail- and farm-price relationships suggests that competitive industries will reorganize to spread the risk of uncertain downward trends in consumer demand.