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# Understanding Price Rigidity On The Internet: A Massive Quasi-Experimental Data Mining Approach

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# Understanding Price Rigidity On The Internet: A Massive Quasi-Experimental Data Mining Approach

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## ABSTRACT

This research is a three-essay dissertation for theory development and empirical research on price rigidity in e-commerce. *Price rigidity* involves prices that do not change with the regularity predicted by standard economic theory. The first essay is a case study exploring daily patterns of Internet pricing for the two major online bookstores, Amazon.com and Barnes and Noble.com at a micro-level analysis, informing our understanding of “*how rigid prices are on the Internet.*” The second essay proposes and evaluates an *Internet-based price rigidity model* to predict what variables can explain the observed empirical regularities and variations in price adjustment patterns of Internet-based retailers. Finally, the third essay investigates the practical importance of *price points* on the Internet and provides a rational choice explanation, based on “*rational inattention theory.*” I also provide additional commentary on a new empirical research approach called the *massive quasi-experimental data mining method*, which employs time-series data to examine price adjustment patterns and price rigidity on the Internet. Taken together, this research draws upon new theoretical perspectives that are largely new to the field of information systems (IS), but that offer rich opportunities for theory building and empirical research in settings that will be of high interdisciplinary interest. I believe that such interdisciplinary studies have the potential to provide a distinctive foundation for IS research and can also serve as a guide to research on other economic phenomena in e-commerce.