

## **Saving by Shopping:**

### **A Theory of Time Allocation and Evidence from Scanner Data**

#### **Abstract**

How often should households go shopping? This paper studies endogenous shopping behavior within a household production framework using novel retailer scanner data. The data provide transaction-level information linked to individual shoppers, allowing us to estimate the savings associated with more frequent shopping. We develop a model in which frequent shopping increases the likelihood of purchasing items on sale, while households optimally allocate time across shopping, labor, and leisure. Using this framework, we jointly estimate shopping costs and the elasticity of substitution between time and market goods. The estimated elasticity is substantially lower than one and values commonly assumed in macroeconomic models. Welfare analysis shows that changes in shopping-specific costs have modest effects, whereas increases in time costs that reduce overall available time lead to sizable welfare losses.