Improving theory and practice of consumer returns management

Guangzhi Shang, Department of Marketing
*gshang@business.fsu.edu; gshang.weebly.com*

Study 1: Optimal Retail Return Policies with Consumer Opportunism

❶ Wardrobe borrowers – Macy's
❷ Devil consumers – BestBuy
❸ 61.4% retailers experienced "opportunistic returns" (National Retail Federation 2011)

❶ Confirm the common expectation that more opportunism is bad in most situations.

❷ But it could increase profit when both extent and benefit of opportunism are high.
U-shaped relationship between extent of opportunism and profit in some cases.

❸ Deterring opportunistic consumers yields the best payoff when its fraction is small.

❹ Impact of the benefit of opportunism on profit is very nuanced: positive, zero, and negative.

Study 2: Improving Consumer Returns Forecasting with Transactional Data
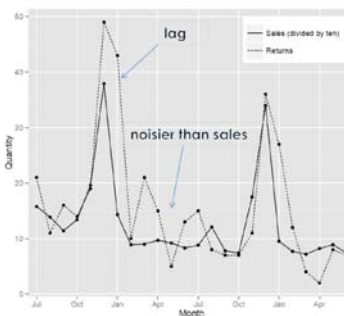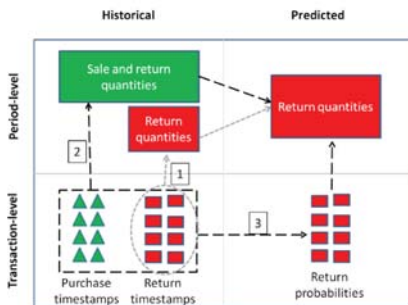
❶ Same starting point: purchase and return time stamps
Same end point: return quantities per period

❷ The proposed predict-aggregate route outperforms the benchmark aggregate-predict route, even with a very basic setup (implementable in Excel).

❸ Full specification outperforms ARIMA by 24.5% and lagged sales by 14.8%.

❹ Prediction at the transaction-level can incorporate product and consumer characteristics.

Study 3: Quantifying the Value of a Money-Back-Guarantee Policy

Return with MBG

$450

Not returnable

How much now?

Difficulties

❶ No variation of MBG poicy
❷ Constant full refund policy: estimate a purchase-return two-stage structural model; carry out counterfactual analysis
❸ Not feasible if purchase frequency is low (e.g. consumer electronics)

Endogeneity of MBG choice

❶ Unobservables that induce a seller to choose MBG is likely to only influence Auctions with MBG.
❷ Local endogeneity: IV methods yield biased estimates
❸ Generalized endogenous switching model

Baseline MBG value	5.163*
Shipping charge	-0.124**
Positive seller reviews	1.313**
Negative seller reviews	-1.914*

- **Feature 1:** MBG and no-MBG side by side for identical products
  The crucial variation that identifies MBG value
- **Feature 2:** Forward shipping for identical products varies widely
  Free to 20% of total price
- **Feature 3:** Auction price as a proxy for product valuation
- **Bonus Feature:** seller reputation affect perceived MBG value?

Not returnable

$400

Return with MBG

How much now?

Depends on both reputation and shipping charge. Given average reputation...

Forward shipping	Value of MBG	How much now?
free	$20.8	$420.8
$40	$15.7	$415.7
$80	$10.7	$410.7