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Merchant Acceptance, Costs, and Perceptions of Retail Payments

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Retail Payments in Canada

Debit Cards (PIN based)

- **Most frequently used** card payment: 134 transactions p.c. worth \$6100 in 2007
- POS terminals: 603,250 or 23 for every 1,000 Canadians

Credit Cards

- **Highest valued** card payment: 75 transactions p.c. worth \$9000 in 2007
- Average Canadian has at least two credit cards

Cash

- 42 ATM withdrawals p.c. worth \$4225 (est.) in 2006
- Banknotes in circulation continue to grow, but remains stable with GDP

Outline

Part One

- Introduction
- The Merchant's Perspective
- Survey Objectives, Methodology & Highlights

Part Two

- Empirical Questions and Implications
- Conclusions

Introduction

- Empirical research tends to focus on the consumer choice at the POS
- Our 2004 survey of the public revealed consumer perceptions and payment habits
- The motivation behind our 2006 merchant survey is to understand the implications of payment acceptance

Merchants' Perspective

Why Accept?

- Consumer demand & competition
- Cost, speed, reliability, security

How to Accept?

- Financial institutions/acquirers provide depository services, payment processing and funds transfer

Implications

- Labour costs of cash
- Fixed and marginal costs of debit and credit cards
- Risk and float
- Rules and regulations

Survey Objectives

To better understand the merchant's perspective, the survey addressed:

1. Merchant acceptance and perceptions of retail payments
2. The share of transactions by cash, debit, and credit cards
3. The costs of acceptance

Survey Methodology

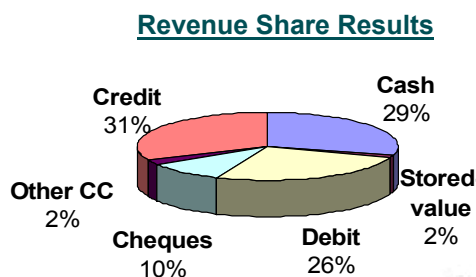
- Telephone survey of 500 retailers (+/-4.4% m.e.; 46% refusal rate)
- Sample stratified by employee size, region, sub sector
- Mostly small independent firms
- Annual sales revenue ranged from \$100k - \$100m+
- Annual number of transactions ranged from 10k - 10m+

Per Outlet Medians (2005)

1 POS terminals
8 employees
53 transactions per day
\$1,667 sales per day

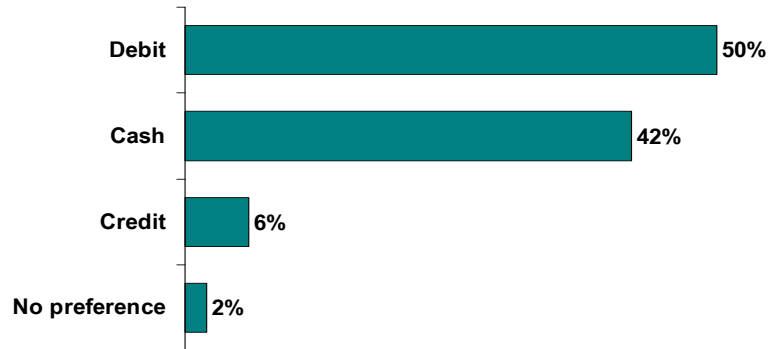
Survey Highlights -Acceptance

- 89% of retailers accept all 3 major means of payment
 - Smaller stores least likely to accept debit and credit
- Main barriers to acceptance include cost and lack of business case
- The value of cash, debit and credit card transactions are fairly equal by revenue share



Survey Highlights -Preferences

Q: Which method would you prefer customers use most often in your stores?



Survey Highlights -Perceptions

Survey Median Results Suggest:

- Credit cards most costly to process
- Debit cards least risky to accept
- Cash viewed as least costly to handle
- Debit cards and cash equally reliable in terms of ease and dependability at the point of sale

Survey Highlights -Costs

On average, merchants pay

- 2% per credit card transaction
- 12¢ per debit card transaction
- \$50 monthly to their financial institution / payment processor

Costs of cash not understood well

PART II

Research Motivation

Given the two-sided nature of payments, we ask:

1. What factors influence merchant perceptions and what do their preferences reveal?
2. Does the merchant have influence over payment outcomes once the decision to accept has been made?
3. What does it cost to accept a payment?

Factors Affecting Perceptions

- Average transaction value
- Sales volume & number of terminals
- Payment instrument shares
- Chain/independent
- Sector
- Region

Merchant Perceptions: Reliability, Risk and Cost

- Reliability
 - Cards more reliable than cash as average transaction value (ATV) and number of terminals increase
- Risk
 - Debit safer than cash and credit the larger the merchant size
- Costs
 - Cash more costly than debit as ATV and sales volume increase
 - Debit less costly than credit the higher the ATV

Merchant Preferences

- Debit cards are strong substitutes for cash in terms of reliability, risk and costs
- Large-scale merchants prefer electronic payments
- Merchant preferences vary with MOP usage

Payment Shares

- Payment shares vary by average transaction value and sector
 - A 10 % increase in average transaction value decreases cash shares by 1.8% and debit shares by 1.3%
- Consumers determine payment share by their choices

Debit and Credit Card Fees

- Payment providers tailor fees according to transaction value and sales volume
 - For debit:**
 - Low ATV, high sales-volume merchants pay lower debit card fees
 - For credit:**
 - A 10% increase in sales volume decreases credit card rates by 0.28%
 - High ATV merchants pay lower credit card fees

Per Transaction Costs

Cost Item	Base case for a \$ 36.5 transaction		
	Cash	Debit	Credit
Tender time	0.051	0.070	0.080
Deposit reconciliation time	0.033		
Deposit preparation time	0.033		
Deposit time at the bank	0.025		
Payment processing fees		0.120	0.730
Cash deposit fees	0.078		
Coin ordering	0.006		
Theft/counterfeit	0.025		
Charge backs			0.016
Float	0.006	0.001	0.001
Total	\$0.25	\$0.19	\$0.82

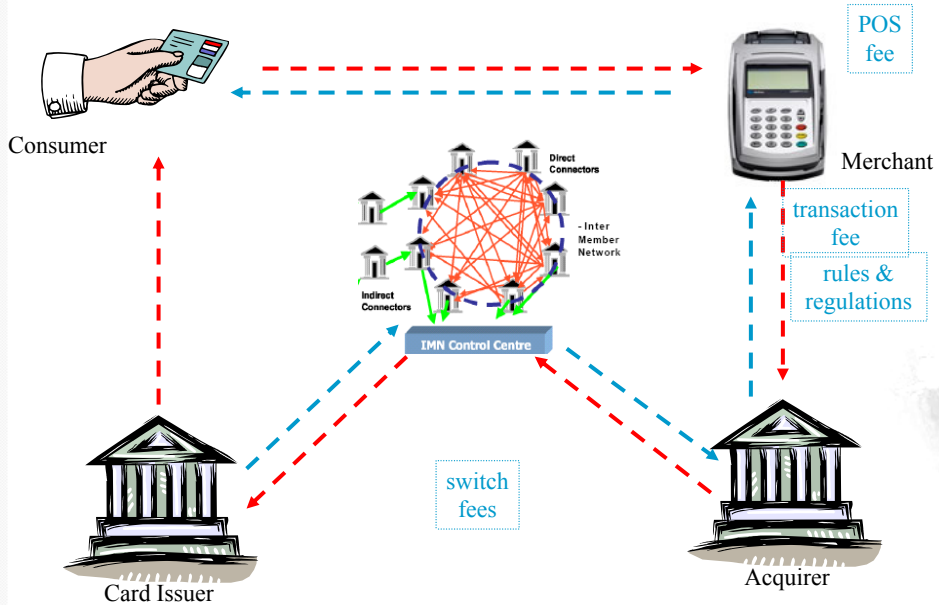
-Cash least costly at transactions \leq \$12, when debit fees are \$0.07

Conclusions

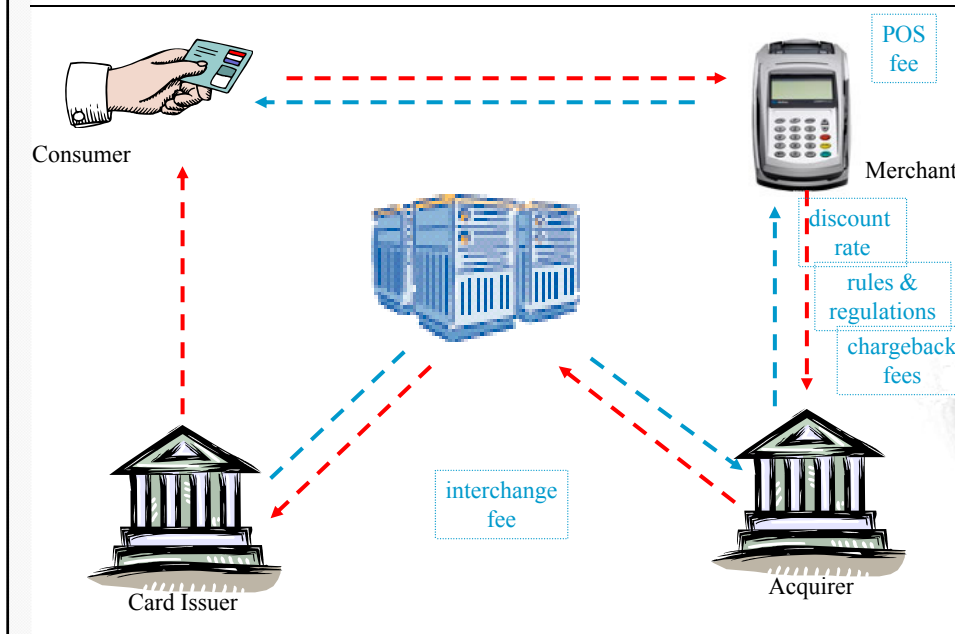
- Preferences and perceptions depend on ATV and size
- Merchant preferences vary with MOP usage
- Merchants have little influence over payment shares aside from initial acceptance
- Smaller merchants pay higher per-transaction fees for card payments
- Cash least costly at \$12 or less

Thank You.

POS Payment Flow - Debit Cards

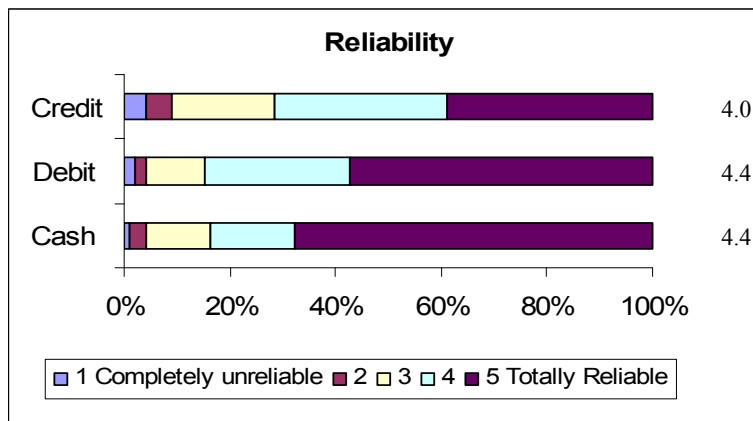


POS Payment Flow - Visa/MC



Survey Highlights -Reliability

Q: How would you rate in terms of ease and dependability at the POS?



Median Scores Out of 5:

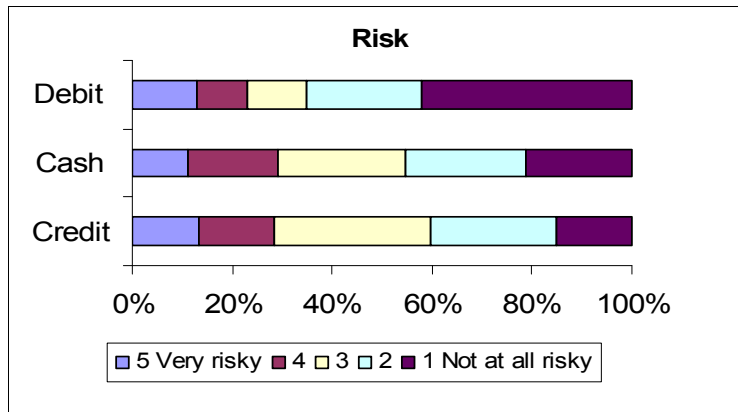
Cash: 4.4

Debit: 4.4

Credit: 4.0

Survey Highlights -Risk

Q: How would you rate in terms of counterfeiting, theft or fraud?



Median Scores Out of 5:

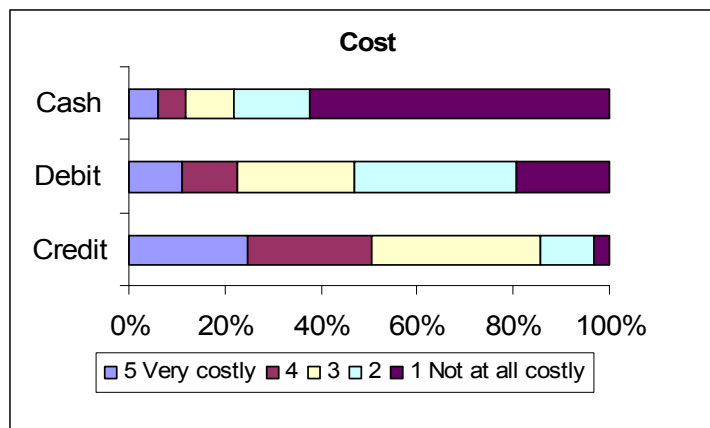
Cash: 2.7

Debit: 2.3

Credit: 2.8

Survey Highlights -Cost

Q: How would you rate in terms of cost of handling/processing?



Median Scores Out of 5:

Cash: 1.8

Debit: 2.6

Credit: 3.6