

# A framework for analyzing the effects of regulation on payment systems

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## Disclaimer

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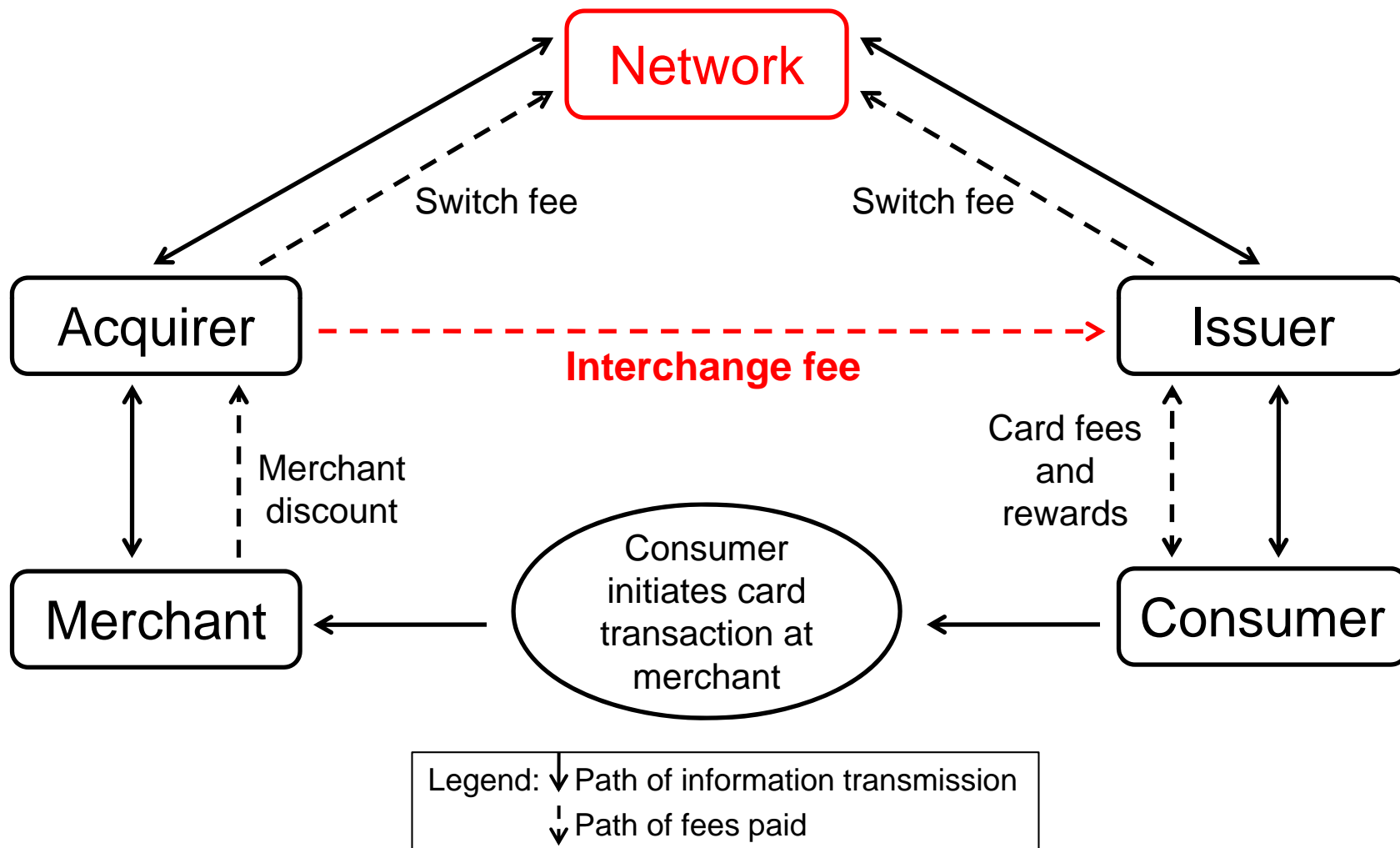
# Incentives of many parties matter



- Many different parties
  - End users
  - Banks
  - Other intermediaries
- Making many different decisions
  - Payment choice
  - Pricing
  - Product offerings and features
  - Fraud avoidance and mitigation activities
  - Investments
- Facing different incentives

Regulation can affect incentives and responses of various parties in different ways

# Debit cards and Regulation II



# Signature and PIN debit



- Two primary forms of authentication for debit card transactions
  - Signature/dual-message
  - PIN/single-message
- Prior to Reg II,

	Volume (billions)	Value (\$, billions)	Average IF (\$)	Average IF (%)	Average fraud loss (bps)
Signature	22.5	836.5	0.56	1.53	13
PIN	13.9	554.9	0.23	0.58	3

Source: 2009 Interchange Revenue, Covered Issuer Cost, and Covered Issuer and Merchant Fraud Loss Related to Debit Card Transactions (Board of Governors of the Federal Reserve System)

# Interchange fees under Reg II



- Covered issuers are permitted to receive interchange fees up to 21 cents + 5 bps
  - Applies to issuers with consolidated assets > \$10 billion
  - Implies interchange fee of 23 cents on \$40 transaction
  - Allows additional 1 cent under fraud-prevention adjustment
- Limitation on fees applies equally to:
  - All covered issuers
  - All types of transactions (e.g., card-present vs. card-not-present)
  - All forms of authentication (e.g., signature vs. PIN)
- Question: What are the potential implications of the common treatment of signature and PIN for \_\_\_\_\_ ?

# Incentives related to sig vs. PIN

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- Issuer: Promote sig or PIN
  - Interchange revenue
  - Costs
  - Other margins for adjustment
- Consumer: Choose sig or PIN
  - Fees (and perks)
  - Convenience
  - Security and liability
  - Merchant acceptance

# Incentives related to sig vs. PIN

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- Acquirer: Pass-through and blending of fees
  - Responsiveness of merchants
- Merchant: Accept and encourage sig or PIN
  - Current acceptance practice
  - Cost of acceptance
  - Cost of transactions
  - Convenience
  - Security and liability
  - Consumer demand

# Other examples

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- Network choice
- Payment method
- Network structure and rules
- New technologies