Overview: Credit Card Case

- Market Definition
  - Review
  - Market Participants
  - Pricing Discussion
- Other Issues in Case
  - Timing and Strategic Interaction
  - Market Power
  - ...

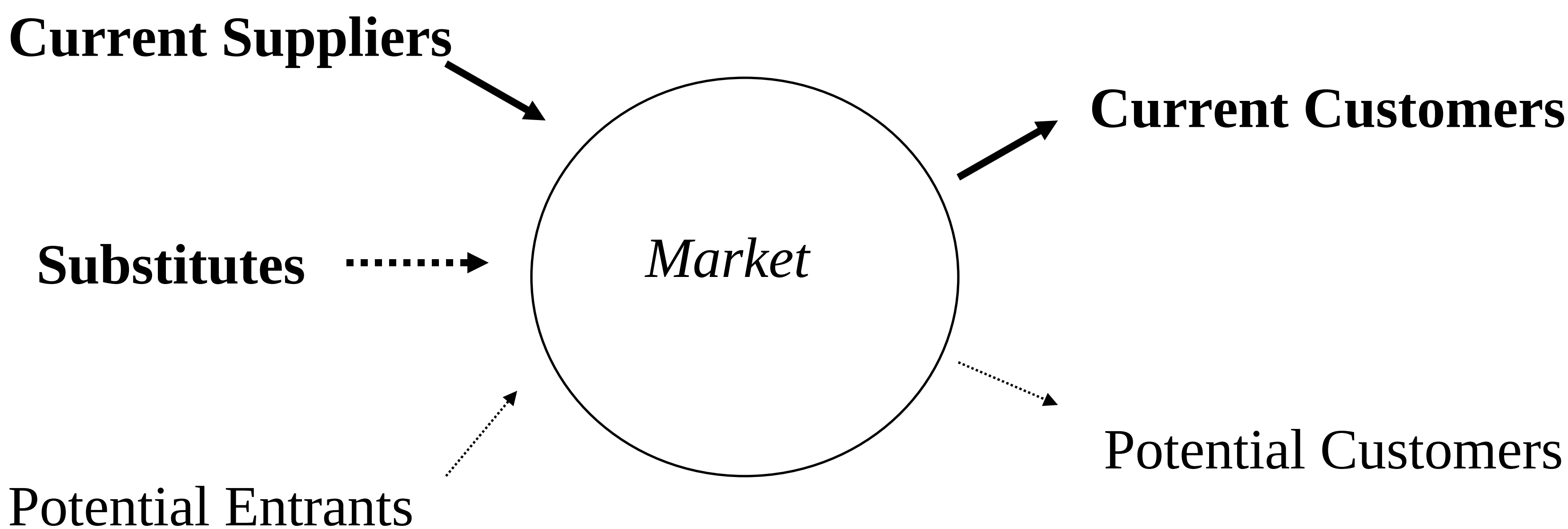
Market Definition : Review

- Definition : collection of buyers and sellers that, through actual or potential interactions, determine the price of a product

- Point of departure:
  `If I try to raise (lower) prices, where will current customers go (new customers come from)?'

- Remarks :
  - Always relative to a specific question
  - Important for business strategy, pricing, anti-trust

Market Definition

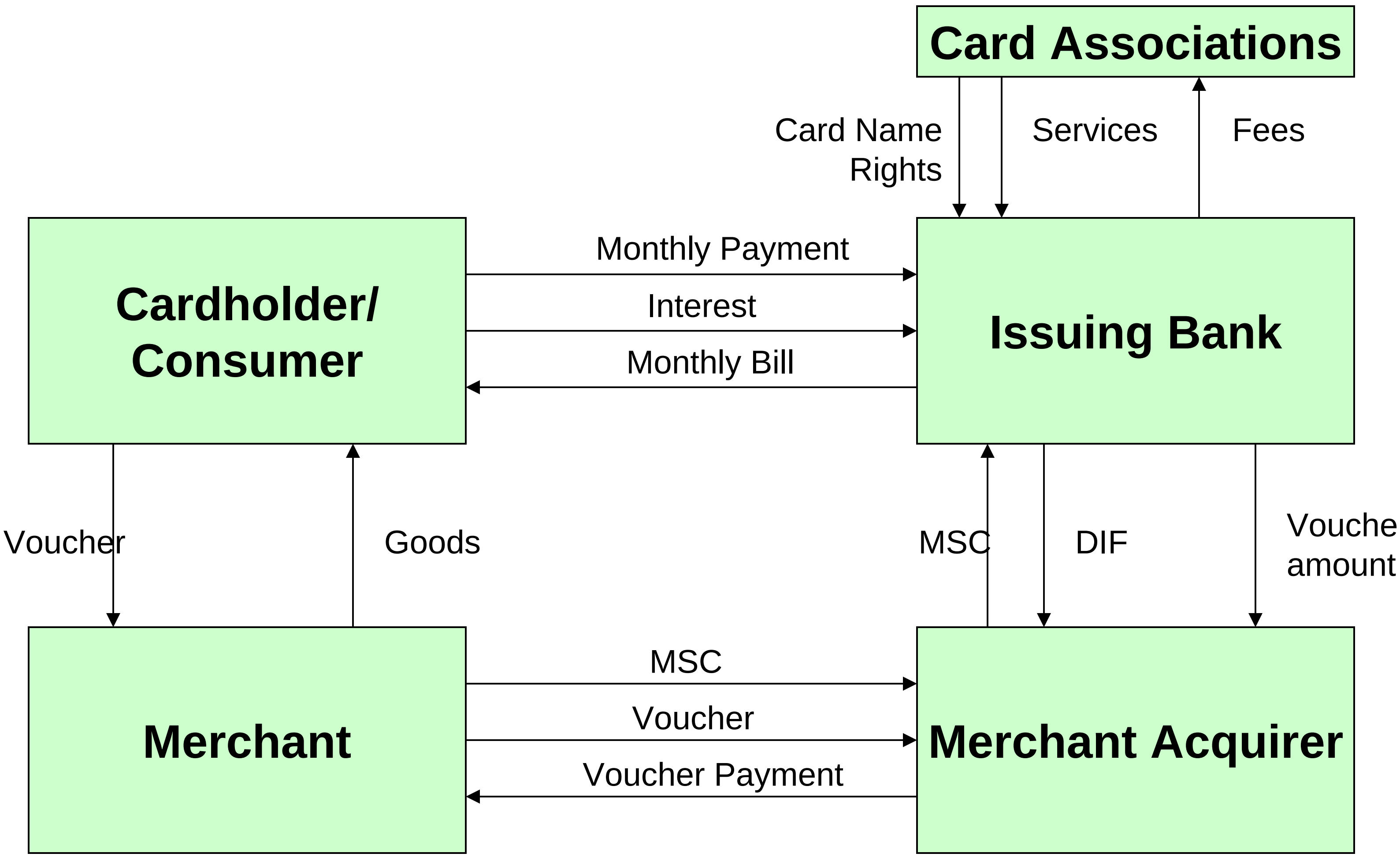


U.K. Credit Card Industry

- Who are the players?

- What are the issues?

UK Credit Card System



Source: Pricing for Profit, Exhibit 2

The Product 'Credit Card'

- Payment mechanism
  - safe
  - convenient (small, everywhere accepted, high limit, quick)
  - insurance (against theft, CDW, ...)
  - proof of ID
  - ...
- Grace period or "Float"
  - Remark: what is this worth to a consumer?
- Easy credit

Direct Substitutes

- Other banks that supply Visa and MasterCard
- Debit Card
- Charge Card (AmEx)
- Store cards
- Cheques
- Cash
- Other sources of credit

Longer-range Substitutes

- Potential Entrants
  - New credit cards
  - New payment systems (smart card)

- Note : Lecture 7 discusses network effects

Increasing the Interest Rate

- Increase income per customer but lose customers
- Relevant substitute : other banks (and to lesser extent other credit sources and no credit)
- Relevant customers are revolvers
- The customers you lose are those with the best alternative opportunities
  => you retain the higher risk customers.
  Key consideration : switching cost

- Note : Lecture 19 discusses adverse selection

Important Consumer Characteristics

- Consumption pattern
  - Transactors : pay balance every month
  - Revolvers : use credit continuously
  - Occasional credit users

- Level of credit risk
  - Low risk
  - High risk

Charging a Fixed Fee

- Increase in Income
  - Key question: is this the best way to raise income?

- Selective impact => Sorting => Good or Bad?
  - Lose least profitable customers? Will that increase profitability?
  - Make all segments profitable
  - Impact elsewhere?

- Note : Lecture 9 and 10 discuss pricing schemes

Profitability of Consumer Groups

	Avg. balance	Sales / card	Interest bearing balance	Interest Income	MSC income	Interest cost	Other cost	Net
Transactor (30%)	80	960	0	0	19.2	8	29.76	(18.56)
Occasional revolver (40%)	260	1080	120	32.19	21.6	26	33.48	(5.69)
Revolver (30%)	660	780	560	150.22	15.6	66	24.18	75.64

Profitability : Assumptions

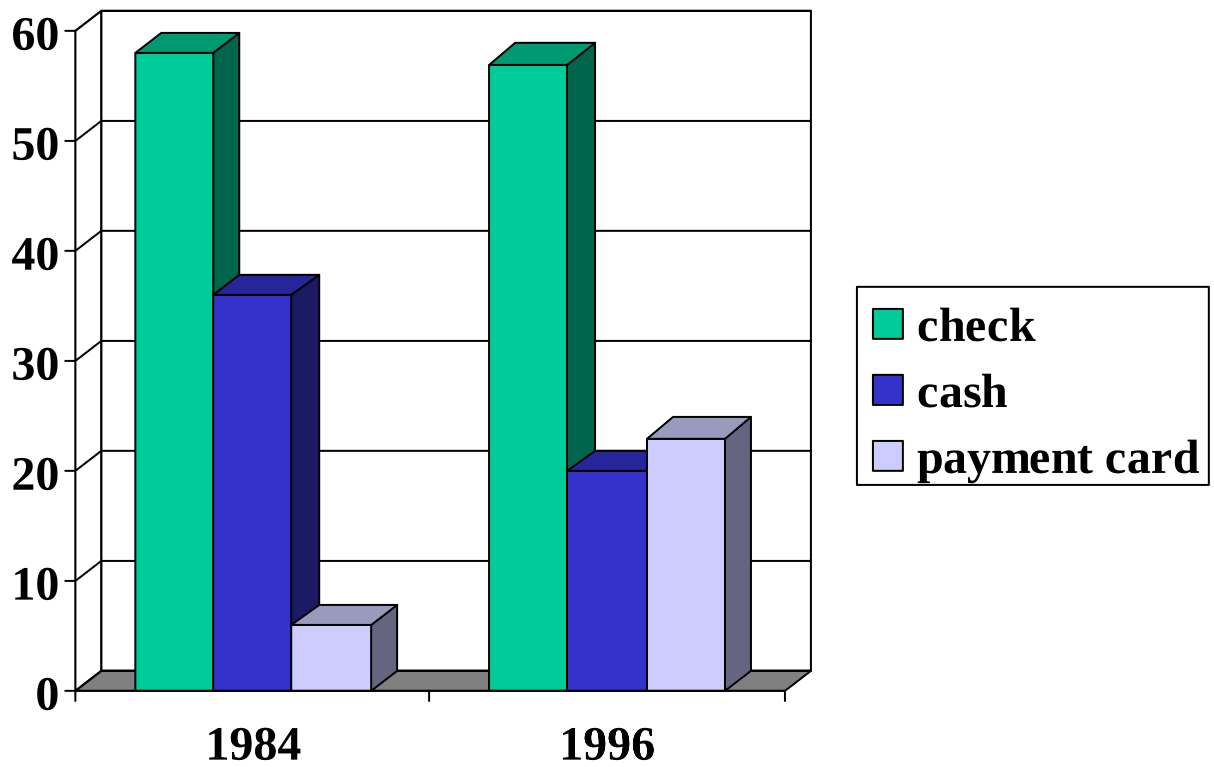
- APR : 26.8%
- Cost of Money : 10%
- MSC : 2% of sales
- Cost : 3.1% of sales (Exhibit 5)

- Note : Lecture 4 discusses economic costs

Measuring Substitutes

- Cross-price elasticity
- Correlation of Prices
- Correlation of Market Shares

Payment Mechanism Substitution



Evolution of $ volume shares of different payment mechanisms in US (in %)

Timing

- Should Barclays go first?
- Barclays payoffs :

Other Bank

		Move now	Wait until other moves
Barclays	Move now	+2	-4
	Wait until other moves	+10	-2

- Note : Lectures 12 and 13 discuss game theory and prisoner's dilemma

Further Issues

- System level and market power

- Market of retailers: Incentives in negotiating

- What happened in the U.K.?

System Level & Market Power

- What if Visa imposes the annual fee on all the issuers?
- Definition of market power (US DoJ):
  "ability of one or more firms profitably to maintain prices above competitive levels for a significant period of time"
- Does Barclays have market power? Visa? Visa and MasterCard?
- Note : Lectures 14 and 15 discuss collusion and anti-trust

Market of Retailers

MSC are negotiated by acquiring banks but get passed on to issuing banks

- Do these banks have the right incentives in negotiation? More or less, because they are also issuers.
- With specialized acquirers as in U.S, you need different system: MSC goes to acquirer (who now pays interchange fee)
- BUT, the acquirer still does not take into account the effect on the whole system. The choice of interchange fee is key to this.

- Note : Lectures 18 and 20 discuss incentives and externalities

What Happened in the U.K.?

- Feb '89 : Barclays considers an annual fee
- Aug '89 : Lloyds announces annual fee, Barclays waits
- Feb '90 : Annual fee takes effect; Lloyds estimates loss of 10% of its credit card customers
- Mar '90 : Lloyds estimates loss of 20% of its customers; Lloyds credit card profits down substantially relative to other banks
- Apr '90 : Barclays announces annual fee, to take effect in June
- During '91 : Midland and Natwest also introduce annual fees

Take Away Points

- Market Definition can be complex
  - be clear about the question
  - be clear about the product (function)
  - consider both supply and demand
- Economics is directly relevant to business decisions
  - economic cost
  - pricing
  - sorting
  - game theory

For Next Time

- Sugar Industry Case:
  - Study the case
  - No need to prepare answers to the questions in the case