Remarks on Central Bank Intervention on Interchange Fee Setting in Mexico.

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by

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Introduction

- Why has Banco de Mexico intervened in Interchange Fee (IF) setting?

- How has it intervened?

- Outcome of intervention on:

    ✓ Market performance.

    ✓ Translation of IF to Merchant Discount Rates (MDR)

    ✓ Ceiling on IF for debit card transactions.

- Some lessons.

Why has Banco de Mexico intervened

- Banco de Mexico has legal responsibility:

  - ✓ Promote efficient payment systems.
  - ✓ Regulate commissions including IF.

- Evidence of market problems:

  - ✓ Limited network development.
  - ✓ Relatively few cards and very few POS.
  - ✓ Limited usage of cards at POS, particularly of debit cards.
  - ✓ Debit cards used at ATM almost exclusively.
  - ✓ High concentration on both issuing and acquiring markets (same banks dominant on both sides).
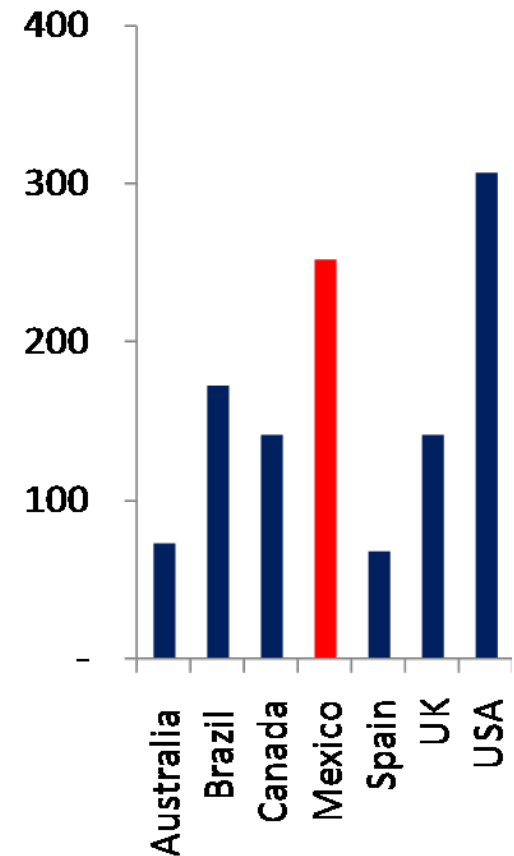
Why has Banco de Mexico intervened

Number of cards per inhabitant 2005
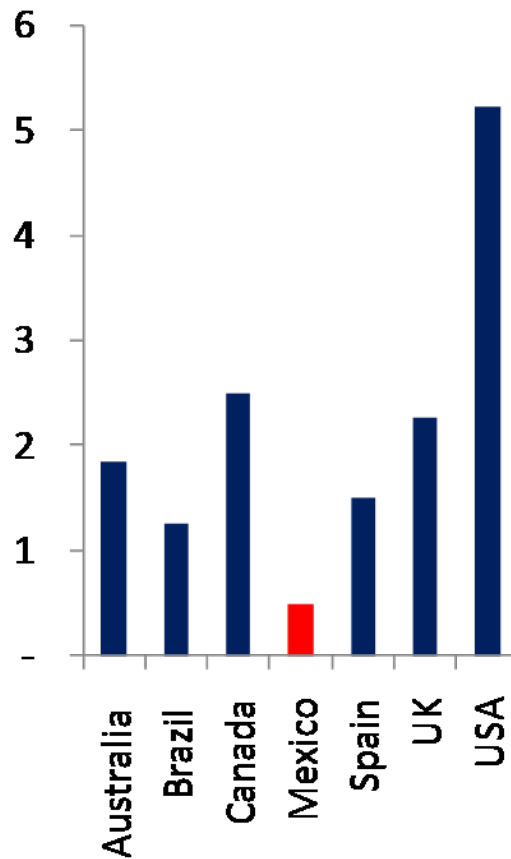
Number of POS per million inhabitants 2005 (Thousands)
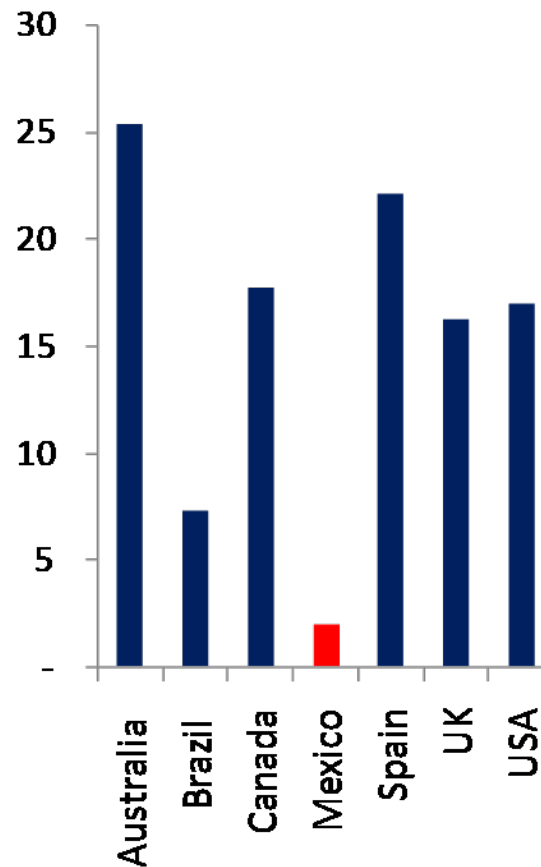
Number of cards per POS 2005

Why has Banco de Mexico intervened

- Institutional arrangements for IF:
  - ➢ Set by the Association of Mexican Banks (ABM), limited role of card associations.
  - ➢ Multilateral.
  - ➢ Same IF schedule for Visa and MasterCard.
  - ➢ Set in a non transparent manner.
  - ➢ Schedule had not changed in a long time.
  - ➢ Same for credit and debit: against debit card usage.
  - ➢ Schedules based on volume of sales: against small merchants.
  - ➢ Non banks do not participate on any side of the card market.
- MDR set freely by acquirers.

How has BM intervened

- **Transparency**:
  - ➢ BM makes public IF and MDR.
- **Eliminating restrictions to participation:**
  - ➢ Balance transfer for credit card payments is allowed.
  - ➢ HCR: merchants may accept only credit, debit cards or both.
- **Interchange fees (IF):**
  - ➢ The IF has not been directly regulated.
  - ➢ BM has pressed on the ABM to adopt a more transparent mechanism for IF determination and to reduce IF.
  - ➢ Schedule should be based on business type to promote small merchants entry.
  - ➢ IF for Debit has to be lower than for credit.
  - ➢ Set a ceiling on debit transactions IF.

How has BM intervened

- In 2006 & 2008 ABM has set IF schedules based on this mechanism.
  - Balancing approach to find a reference IF (RIF) :

$$\frac{R_I + a - C_I}{R_I + a} = \frac{R_A - a - C_A}{R_A - a}$$

  R_i, & C_i = per transaction revenue & costs (issuers and acquirers)
 a = average interchange income (expense) per transaction.
  - Adjust around RIF to get IF schedule for 22 merchant categories.
  - The process was followed separately for debit and credit.
  - Ceiling on debit IF income of 13.5 pesos per transaction.
- RIF decreases whenever :

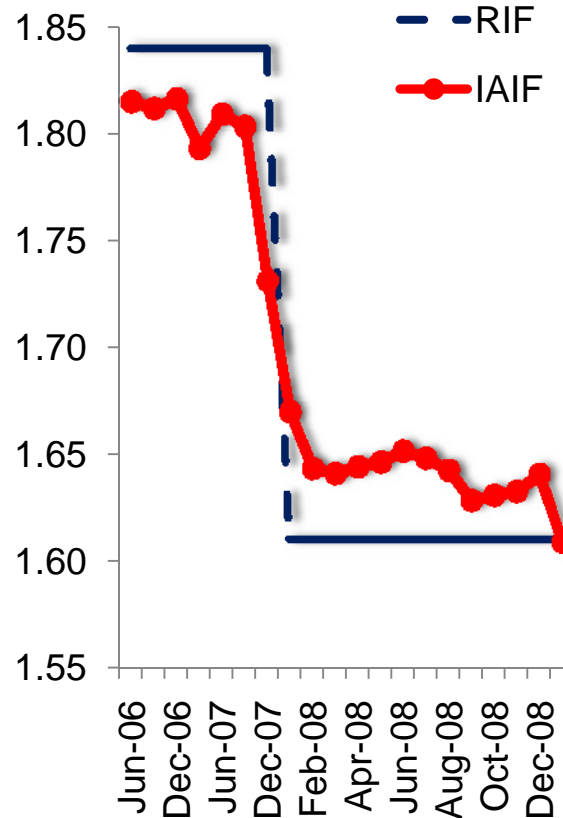|	Issuer	Acquirer
Cost	Diminishes	Increases
Revenue	Increases	Diminishes

- The Mechanism distributes rents, no costs.
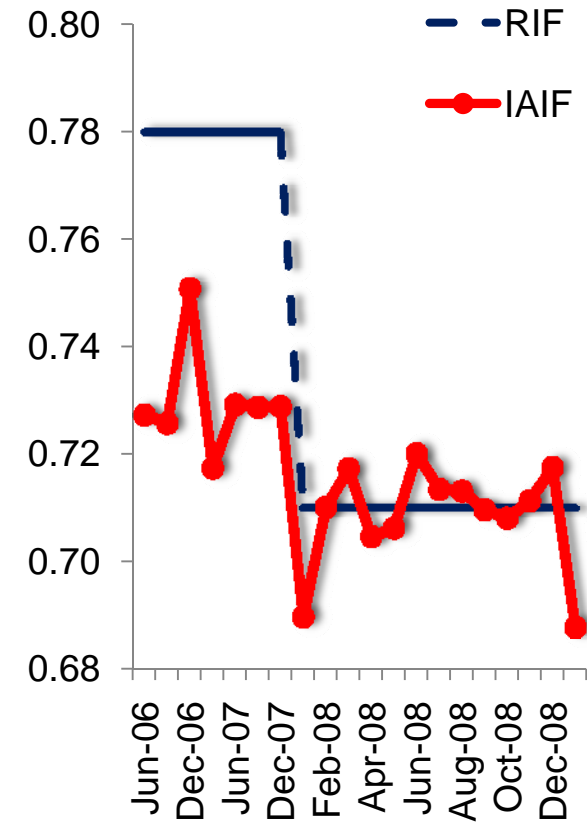- Network growth is not optimized: static model.
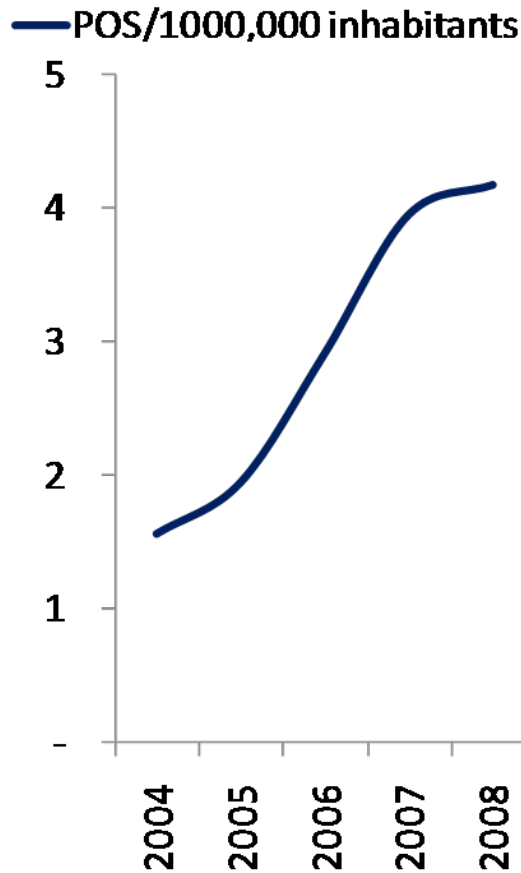
Market Outcome
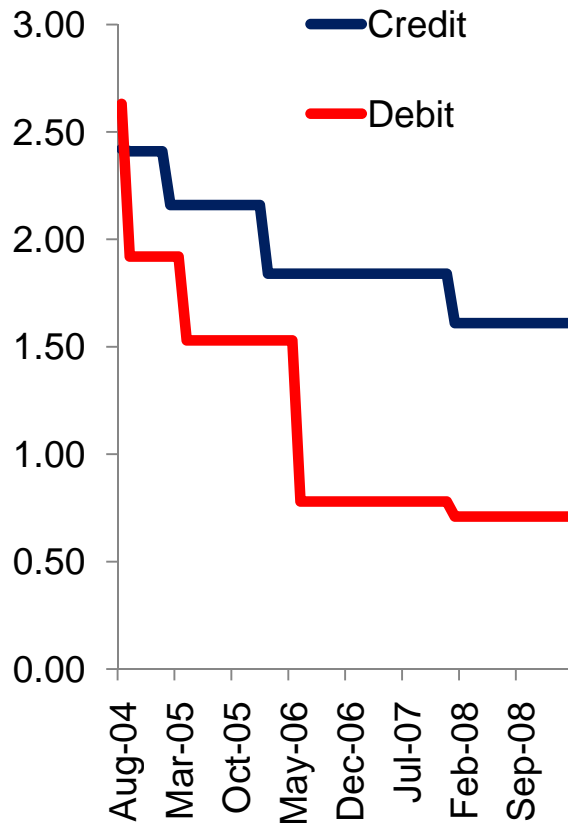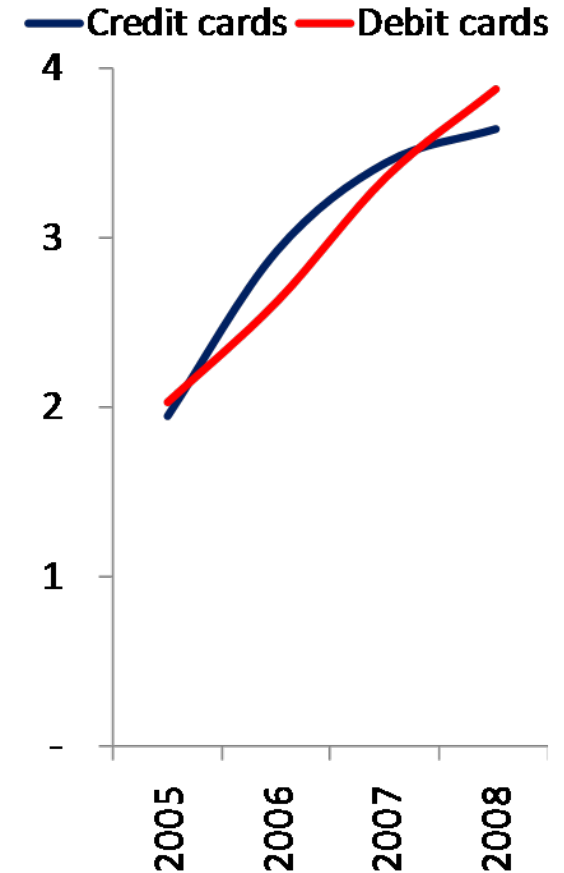
Market Outcome

Number of cards per inhabitant
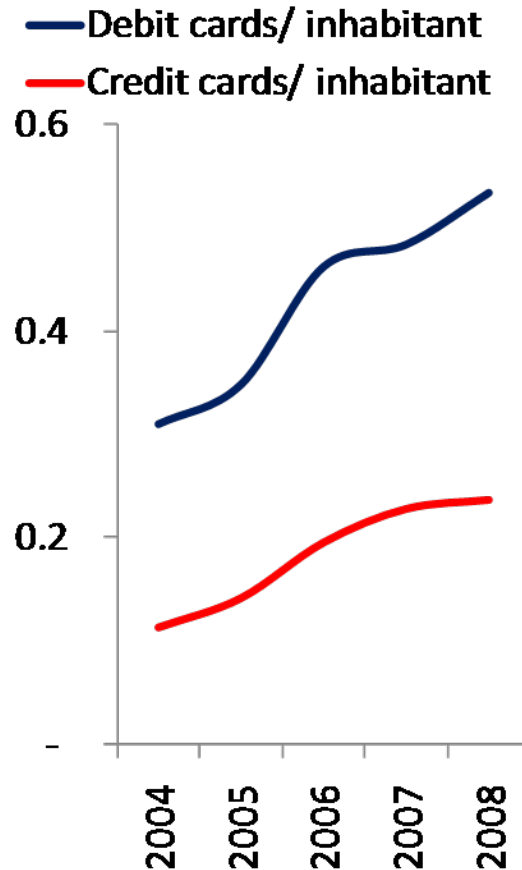
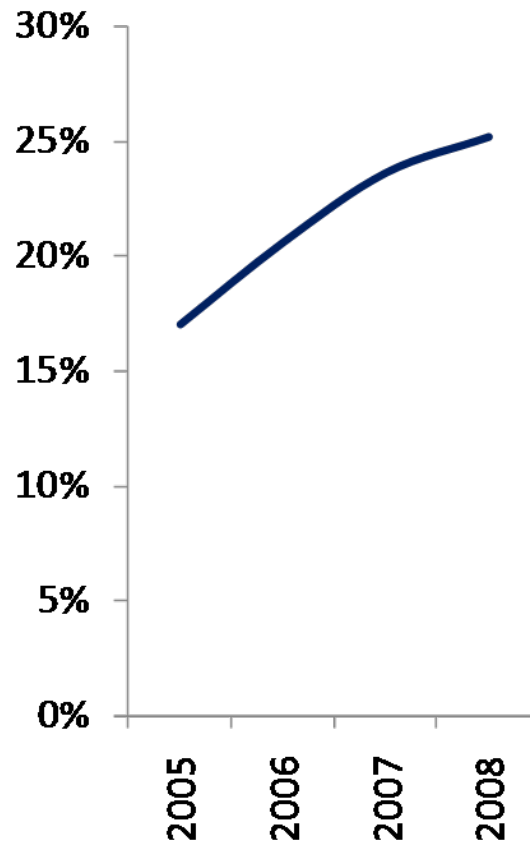### POS per million inhabitants (Thousands of POS)

Number of card transactions in POS per inhabitant

Market Outcome

Debit card transactions in POS
/Total debit card transactions

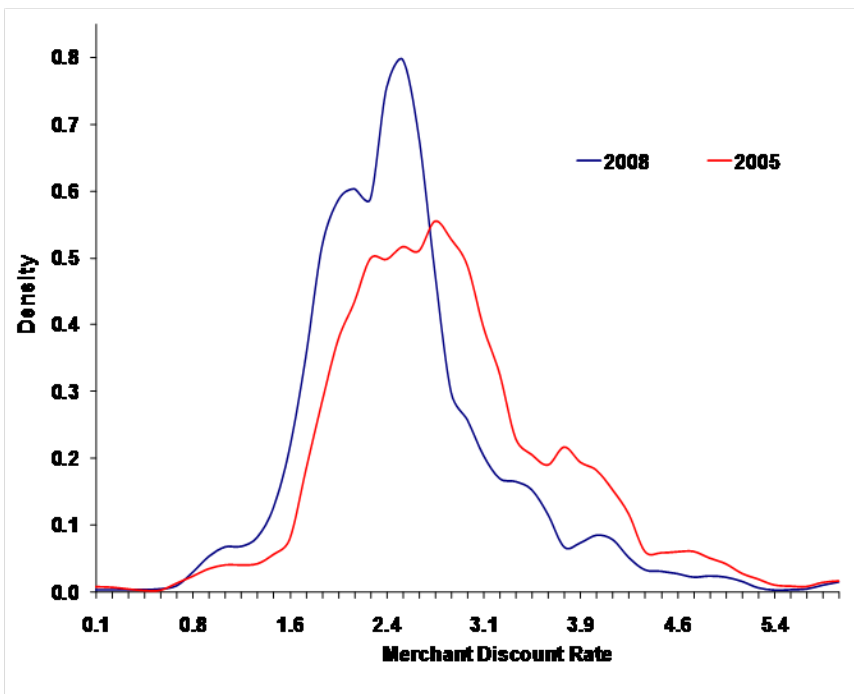

Concentration in
banking system

Concepts	Payment cards				POS terminals	
	Credit		Debit			
	2002	2008	2002	2008	2002	2008
Number of banks	12	21	15	24	8	17
Market share-2 largest banks (%)	65	52	66	48	55	49
Market share-4 largest banks (%)	89	76	91	75	85	78
Herfindahl Index	2,570	1,782	1,700	1,675	2,113	1,766

IF Transmission to MDR

- There has been a significant merchant discount rates reduction.

- Sample of over a 1000 firms that accept cards: MDR mean has fallen 35 bp and 59 bp for credit and debit, respectively, so has variance.
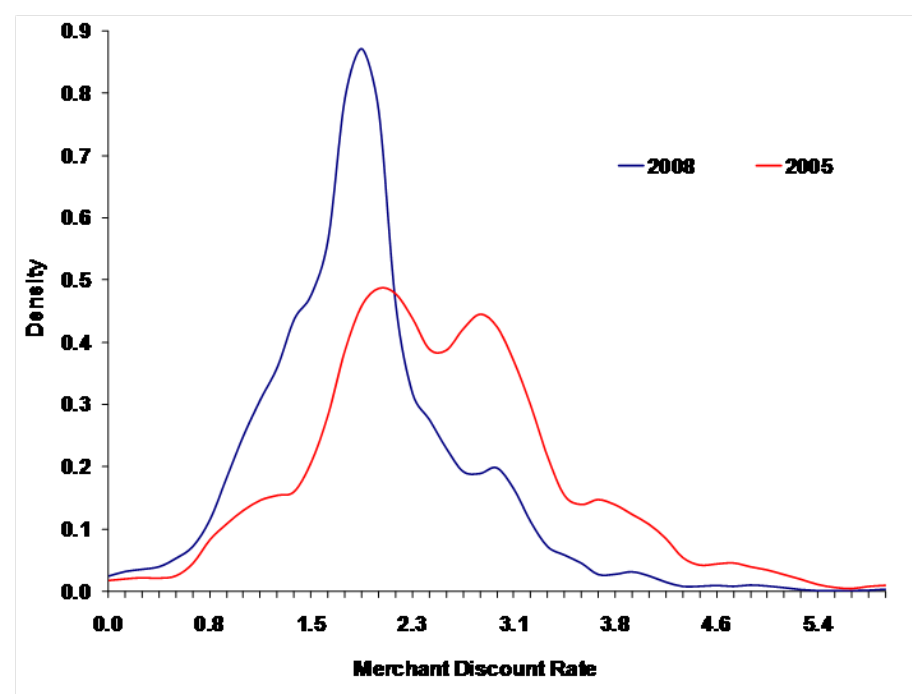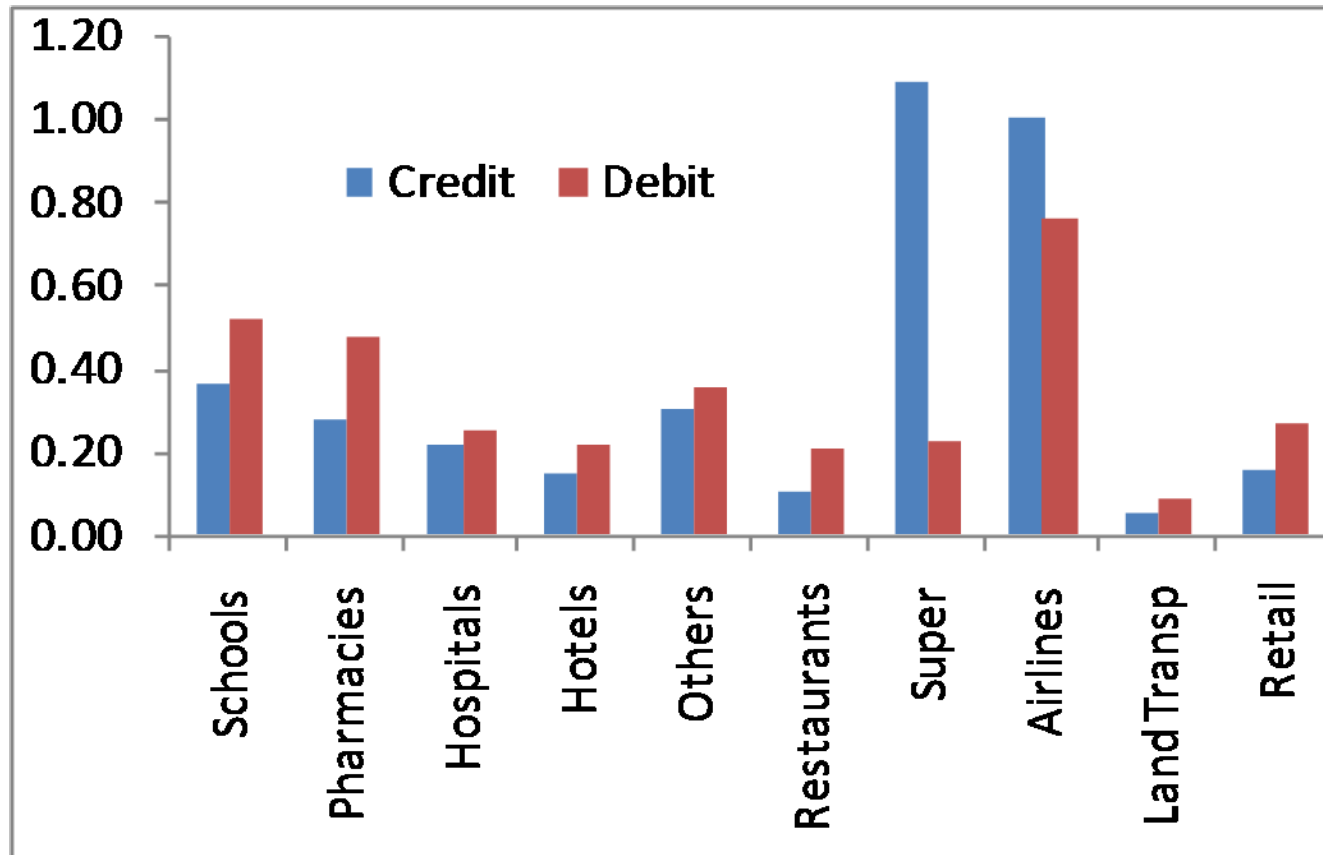
Credit Card

Merchant Discount Rates

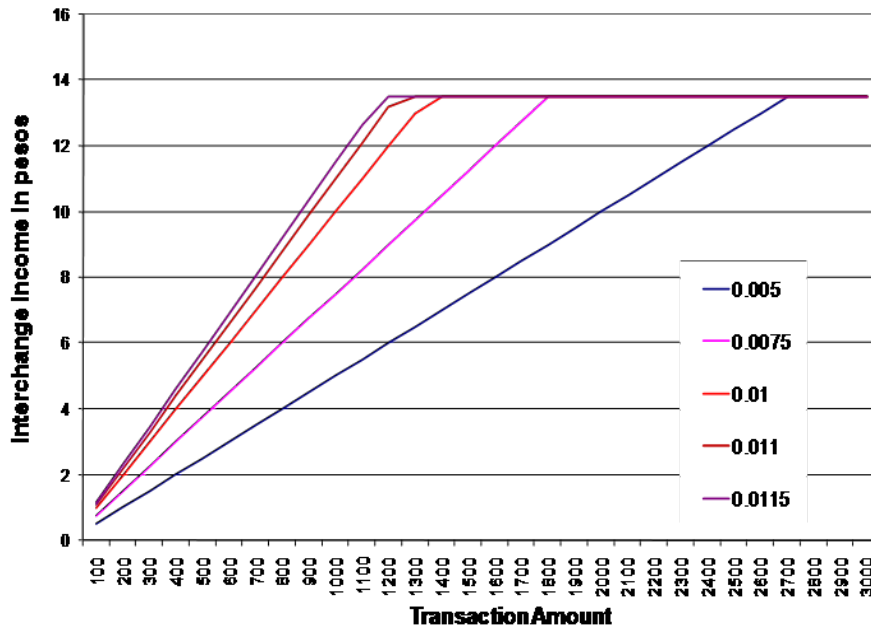Debit Card

Merchant Discount Rates

IF Transmission to MDR

- Pass-through Index defined by : $PI_i = \dfrac{\left(MDR_i^{2008} - MDR_i^{2005}\right)}{\left(IF_i^{2008} - IF_i^{2005}\right)}$

- Partial transmission; greater in debit.
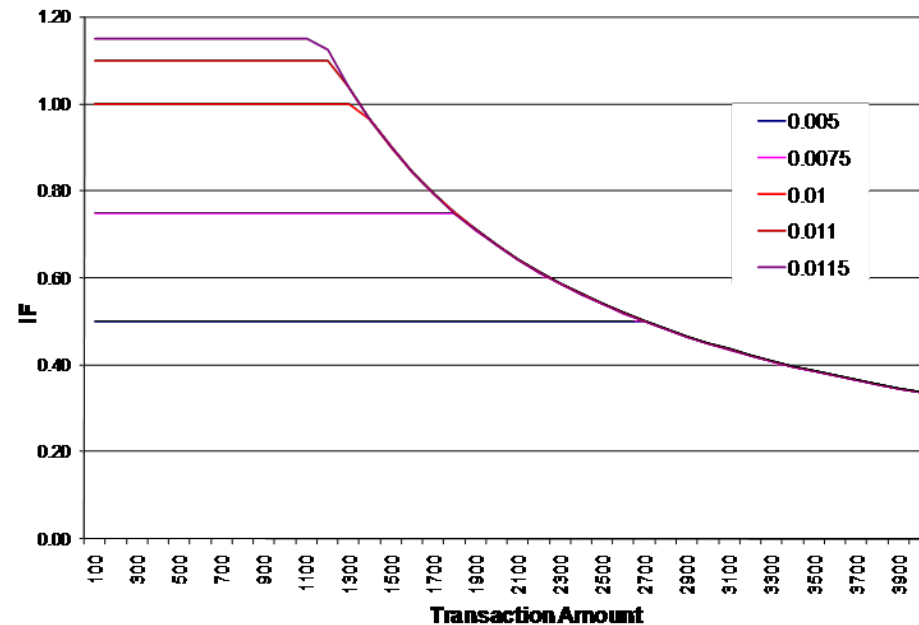
- Transmission is positively related to concentration.

Ceiling on IF on Debit Card Transactions

■ A Ceiling was set in debit cards IF because costs do not seem to be related to transactions' amount:

  ✓ No financing costs nor payment risks.

  ✓ No benefits (loyalty points) for consumers.

 ✓ Several countries have set fixed fees for debit.

Interchange Income

Effect of ceiling over effective IF

- Ceiling on IF should be translated to MDR to generate benefits.
- All merchant categories are affected by ceiling in debit.
- The ceiling has not been translated to MDR:
  - Correlation between MDR and nominal IF: 0.72
  - Correlation between MDR and actual IF: 0.44
- Acquirers are the main beneficiaries from ceiling, not merchants.
- Is the ceiling efficient (from a Ramsey price perspective)?

Proportion of transactions number affected by ceiling in debit

Lessons
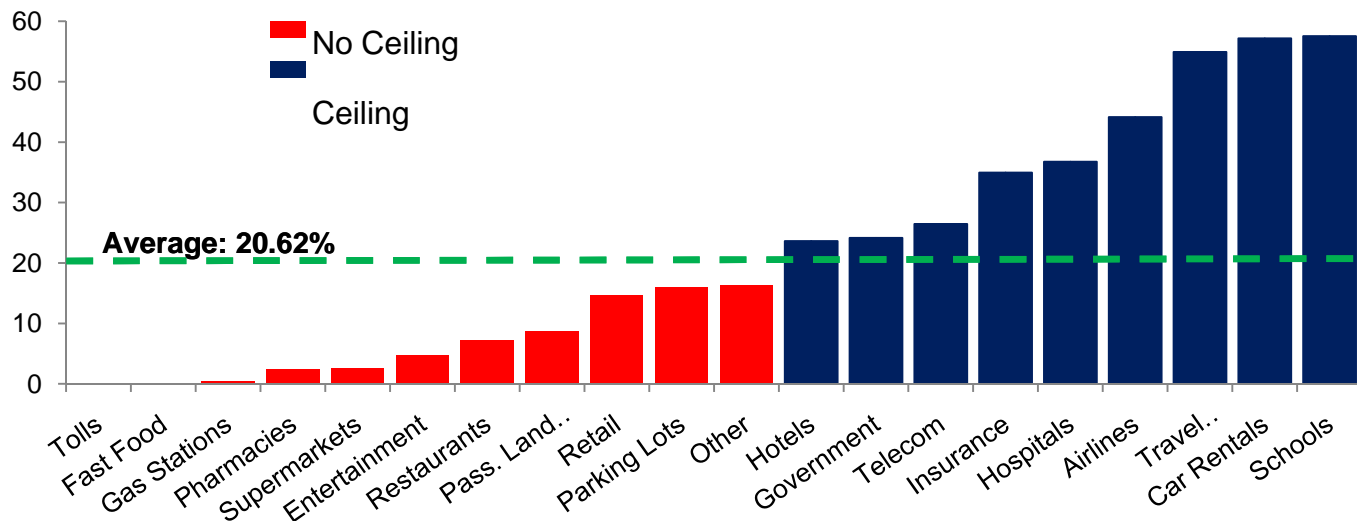
- IF reductions in Mexico have been successful:

  - ➤ Infrastructure has grown: cards and particularly POS.

  - ➤ Transactions at POS have increased.

  - ➤ Debit card is more used now to pay at POS.

- Moral suasion and regulatory threat have worked.

- Setting IF schedule based on merchant categories works better than basing it on sales volume.

- It is necessary to improve IF translation to MDR.

- IF ceiling on debit card transactions has not been translated to MDRs.

- Need to build information mechanisms to assess that banks are complying with the agreements.