

Discussion

“To Surcharge or Not To Surcharge? A Two-Sided Market Perspective of the No-Surcharge Rule” N. Economides and D. Henriques

Özlem Bedre-Defolie

European School of Management and Technology (ESMT)

12 May 2011, Vienna

ECB-ONB Retail Payments Conference

Interesting and policy relevant questions:

- 1 When is it profitable for competing payment card networks to impose No-Surcharge-Rule (NSR) to their merchants, that is, banning member merchants from surcharging card payments?
- 2 When is it socially desirable to impose NSR on merchants?

Main Results

- 1 It is profitable to impose NSR if cardholders do not value much the number of member merchants of a card network, that is, when network externalities from merchants to cardholders are sufficiently low.
- 2 It is socially desirable to impose NSR when network externalities from merchants to cardholders are sufficiently low AND when merchants' market power is sufficiently high.

Policy implication: Social desirability of NSR depends on the competitiveness of merchant markets. Market-by-market NSR!

Intuition: Profitability of NSR

- NSR makes card membership demand less elastic to merchant fees.

Intuition: Profitability of NSR

- NSR makes card membership demand less elastic to merchant fees.
- This induces card networks to raise the total user fee, that is, the sum of the merchant fee and the average card membership fee.

Intuition: Profitability of NSR

- NSR makes card membership demand less elastic to merchant fees.
- This induces card networks to raise the total user fee, that is, the sum of the merchant fee and the average card membership fee.
- This also induces card networks to raise the merchant fee and lower the cardholder fee.

Intuition: Profitability of NSR

- NSR makes card membership demand less elastic to merchant fees.
- This induces card networks to raise the total user fee, that is, the sum of the merchant fee and the average card membership fee.
- This also induces card networks to raise the merchant fee and lower the cardholder fee.
 - Higher merchant fees reduce the number of merchants on the card networks.

Intuition: Profitability of NSR

- NSR makes card membership demand less elastic to merchant fees.
- This induces card networks to raise the total user fee, that is, the sum of the merchant fee and the average card membership fee.
- This also induces card networks to raise the merchant fee and lower the cardholder fee.
 - Higher merchant fees reduce the number of merchants on the card networks.
 - Less merchants on the networks reduce the consumers' value from card networks.

Intuition: Profitability of NSR

- NSR makes card membership demand less elastic to merchant fees.
- This induces card networks to raise the total user fee, that is, the sum of the merchant fee and the average card membership fee.
- This also induces card networks to raise the merchant fee and lower the cardholder fee.
 - Higher merchant fees reduce the number of merchants on the card networks.
 - Less merchants on the networks reduce the consumers' value from card networks.
 - Therefore, the networks lower cardholder fees to keep their network attractive for consumers.

Intuition: Profitability of NSR

- NSR makes card membership demand less elastic to merchant fees.
- This induces card networks to raise the total user fee, that is, the sum of the merchant fee and the average card membership fee.
- This also induces card networks to raise the merchant fee and lower the cardholder fee.
 - Higher merchant fees reduce the number of merchants on the card networks.
 - Less merchants on the networks reduce the consumers' value from card networks.
 - Therefore, the networks lower cardholder fees to keep their network attractive for consumers.
- When network externalities from merchants to cardholders are very high, NSR is unprofitable.

Intuition: Profitability of NSR

- NSR makes card membership demand less elastic to merchant fees.
- This induces card networks to raise the total user fee, that is, the sum of the merchant fee and the average card membership fee.
- This also induces card networks to raise the merchant fee and lower the cardholder fee.
 - Higher merchant fees reduce the number of merchants on the card networks.
 - Less merchants on the networks reduce the consumers' value from card networks.
 - Therefore, the networks lower cardholder fees to keep their network attractive for consumers.
- When network externalities from merchants to cardholders are very high, NSR is unprofitable.
 - The networks have to lower their cardholder fees too much to compensate the cardholders for the reduced card acceptance by merchants.

Intuition: Welfare Implications of NSR

- NSR raises merchant fees, so lowers merchants' card acceptance.

Intuition: Welfare Implications of NSR

- NSR raises merchant fees, so lowers merchants' card acceptance.
- NSR lowers cardholder fees, so increases the number of cardholders.

Intuition: Welfare Implications of NSR

- NSR raises merchant fees, so lowers merchants' card acceptance.
- NSR lowers cardholder fees, so increases the number of cardholders.
- NSR raises the equilibrium price in the goods market (?).

Intuition: Welfare Implications of NSR

- NSR raises merchant fees, so lowers merchants' card acceptance.
- NSR lowers cardholder fees, so increases the number of cardholders.
- NSR raises the equilibrium price in the goods market (?).
- NSR reduces the welfare if the network externalities from merchants to cardholders are very high and the merchants' have very low market power.

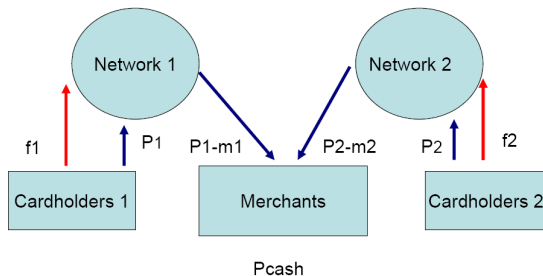
Intuition: Welfare Implications of NSR

- NSR raises merchant fees, so lowers merchants' card acceptance.
- NSR lowers cardholder fees, so increases the number of cardholders.
- NSR raises the equilibrium price in the goods market (?).
- NSR reduces the welfare if the network externalities from merchants to cardholders are very high and the merchants' have very low market power.
 - Lower merchant acceptance reduces the welfare when merchants generate high positive externalities to cardholders.

Intuition: Welfare Implications of NSR

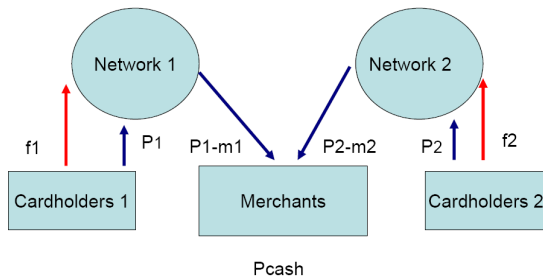
- NSR raises merchant fees, so lowers merchants' card acceptance.
- NSR lowers cardholder fees, so increases the number of cardholders.
- NSR raises the equilibrium price in the goods market (?).
- NSR reduces the welfare if the network externalities from merchants to cardholders are very high and the merchants' have very low market power.
 - Lower merchant acceptance reduces the welfare when merchants generate high positive externalities to cardholders.
 - More competitive merchants pass-through more (?) their increased cost of card acceptance due to NSR.

Setup



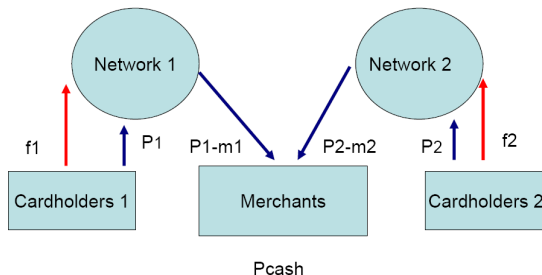
- Consumers single-home: pay f_i to hold card i .

Setup



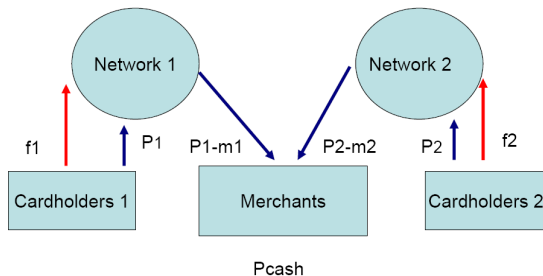
- Consumers single-home: pay f_i to hold card i .
- Merchants could multi-home: pay m_i and enjoy benefit b per card transaction.

Setup



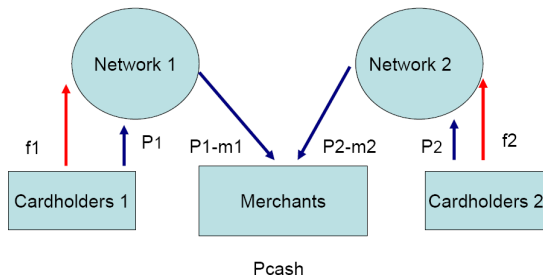
- Consumers single-home: pay f_i to hold card i .
- Merchants could multi-home: pay m_i and enjoy benefit b per card transaction.
- Merchants sell homogenous good, for which consumers are willing to pay v .

Setup



- Consumers single-home: pay f_i to hold card i .
- Merchants could multi-home: pay m_i and enjoy benefit b per card transaction.
- Merchants sell homogenous good, for which consumers are willing to pay v .
- $p_{cash} = \beta v$ regardless of NSR (?).

Setup



- Consumers single-home: pay f_i to hold card i .
- Merchants could multi-home: pay m_i and enjoy benefit b per card transaction.
- Merchants sell homogenous good, for which consumers are willing to pay v .
- $p_{cash} = \beta v$ regardless of NSR (?).
- $p_i = \beta v + (1 - \beta)(m_i - b) < p_{cash} = \beta v$ and $p_i^{NSR} = p_{cash} = \beta v$ (?).

Critical implications of your reduced form model

- NSR has no impact on the retail price for cash users, since $p_{cash} = \beta v$ regardless of NSR.

Critical implications of your reduced form model

- NSR has no impact on the retail price for cash users, since $p_{cash} = \beta v$ regardless of NSR.
 - This implies that under NSR merchants do not pass-through card acceptance costs to cash price. Why not?

Critical implications of your reduced form model

- NSR has no impact on the retail price for cash users, since $p_{cash} = \beta v$ regardless of NSR.
 - This implies that under NSR merchants do not pass-through card acceptance costs to cash price. Why not?
 - This prevents you from studying the implications of NSR on cash users.

Critical implications of your reduced form model

- NSR has no impact on the retail price for cash users, since $p_{cash} = \beta v$ regardless of NSR.
 - This implies that under NSR merchants do not pass-through card acceptance costs to cash price. Why not?
 - This prevents you from studying the implications of NSR on cash users.
- NSR *decreases* the retail price for card users, since $p_i = \beta v + (1 - \beta)(m_i - b) > p_{cash} = \beta v$ and $p_i^{NSR} = p_{cash} = \beta v$.

Critical implications of your reduced form model

- NSR has no impact on the retail price for cash users, since $p_{cash} = \beta v$ regardless of NSR.
 - This implies that under NSR merchants do not pass-through card acceptance costs to cash price. Why not?
 - This prevents you from studying the implications of NSR on cash users.
- NSR *decreases* the retail price for card users, since $p_i = \beta v + (1 - \beta)(m_i - b) > p_{cash} = \beta v$ and $p_i^{NSR} = p_{cash} = \beta v$.
 - Prices decrease even more when merchants have lower market power, β is lower. Why? Any evidence? or theory ?

Critical implications of your reduced form model

- NSR has no impact on the retail price for cash users, since $p_{cash} = \beta v$ regardless of NSR.
 - This implies that under NSR merchants do not pass-through card acceptance costs to cash price. Why not?
 - This prevents you from studying the implications of NSR on cash users.
- NSR *decreases* the retail price for card users, since $p_i = \beta v + (1 - \beta)(m_i - b) > p_{cash} = \beta v$ and $p_i^{NSR} = p_{cash} = \beta v$.
 - Prices decrease even more when merchants have lower market power, β is lower. Why? Any evidence? or theory ?
- NSR has no impact on the merchants' card acceptance condition. Why not?

- Two issues need to be distinguished:

- Two issues need to be distinguished:
 - Surcharging card usage: Price discrimination with respect to the type of payment.

- Two issues need to be distinguished:
 - Surcharging card usage: Price discrimination with respect to the type of payment.
 - Merchants' cost pass-through: Exists even under NSR.

- Two issues need to be distinguished:
 - Surcharging card usage: Price discrimination with respect to the type of payment.
 - Merchants' cost pass-through: Exists even under NSR.
- You assume that consumers know all prices before their card membership decisions and all cardholders pay by card at a POS.

- Two issues need to be distinguished:
 - Surcharging card usage: Price discrimination with respect to the type of payment.
 - Merchants' cost pass-through: Exists even under NSR.
- You assume that consumers know all prices before their card membership decisions and all cardholders pay by card at a POS.
 - But anecdotal evidence would suggest that surcharging card payments would steer cardholders to use cash at the POS.

- Two issues need to be distinguished:
 - Surcharging card usage: Price discrimination with respect to the type of payment.
 - Merchants' cost pass-through: Exists even under NSR.
- You assume that consumers know all prices before their card membership decisions and all cardholders pay by card at a POS.
 - But anecdotal evidence would suggest that surcharging card payments would steer cardholders to use cash at the POS.
 - Might be more realistic to assume that consumers do not know exact surcharges on card payments. But then?

- Two issues need to be distinguished:
 - Surcharging card usage: Price discrimination with respect to the type of payment.
 - Merchants' cost pass-through: Exists even under NSR.
- You assume that consumers know all prices before their card membership decisions and all cardholders pay by card at a POS.
 - But anecdotal evidence would suggest that surcharging card payments would steer cardholders to use cash at the POS.
 - Might be more realistic to assume that consumers do not know exact surcharges on card payments. But then?
- You assume that each merchant completes one transaction with each one of cardholders.

- Two issues need to be distinguished:
 - Surcharging card usage: Price discrimination with respect to the type of payment.
 - Merchants' cost pass-through: Exists even under NSR.
- You assume that consumers know all prices before their card membership decisions and all cardholders pay by card at a POS.
 - But anecdotal evidence would suggest that surcharging card payments would steer cardholders to use cash at the POS.
 - Might be more realistic to assume that consumers do not know exact surcharges on card payments. But then?
- You assume that each merchant completes one transaction with each one of cardholders.
 - Where does the merchant market power come from?

- Two issues need to be distinguished:
 - Surcharging card usage: Price discrimination with respect to the type of payment.
 - Merchants' cost pass-through: Exists even under NSR.
- You assume that consumers know all prices before their card membership decisions and all cardholders pay by card at a POS.
 - But anecdotal evidence would suggest that surcharging card payments would steer cardholders to use cash at the POS.
 - Might be more realistic to assume that consumers do not know exact surcharges on card payments. But then?
- You assume that each merchant completes one transaction with each one of cardholders.
 - Where does the merchant market power come from?
- Asymmetric equilibria of network competition?

- How are your results and framework compared to Gans and King's papers on No-Surcharge-Rule?

Other Questions

- How are your results and framework compared to Gans and King's papers on No-Surcharge-Rule?
- How would introducing a cost of surcharging affect the results?

Other Questions

- How are your results and framework compared to Gans and King's papers on No-Surcharge-Rule?
- How would introducing a cost of surcharging affect the results?
- Allowing merchants to surcharge would create uncertainty on prices of card payments.

Other Questions

- How are your results and framework compared to Gans and King's papers on No-Surcharge-Rule?
- How would introducing a cost of surcharging affect the results?
- Allowing merchants to surcharge would create uncertainty on prices of card payments.
 - How would this affect the welfare implications of NSR?