Discussion of the article by W.Bolt and H.Schmiedel "SEPA, Efficiency and Payment Card Competition"

Jean-Charles ROCHET
Toulouse School of Economics

Conference on Retail Payments, ECB, May 2009

What the paper does (1)

First theoretical analysis of potential effects of SEPA

Very timely paper, right on the topic of the conference

Builds on Bolt and Chakravorti (2008), one of the first papers that study substitution possibilities between cash, debit cards and credit cards (also related to Rochet and Wright , 2008)

Benchmark (pre SEPA segmentation):

•One country (A) with only debit cards and cash

•One country (B) with only credit cards and cash.

What the paper does (2)

•Debit cards (A) allow retailers to save on cash holding cost and allow consumers to avoid carrying cash (at the risk of being mugged).

•Credit cards (B) do the same but also allow trade to take place even if consumers are illiquid (credit functionality). This entails higher processing costs (monitoring credit worthiness) but also default costs.

Two integration scenarios are compared with benchmark (pre SEPA segmentation):

•The credit card network takes over in the two countries

•The two networks compete for the integrated market.

The mechanics of the model (1)

•Retailers are heterogeneous: they differ in the surplus they get from consumer purchases. Merchant discounts selected by networks determine the number of retailers who accept cards.

•Consumers are identical: they get a fixed surplus per purchase and they always pay by card whenever they can (different from the previous literature on Interchange Fees that focuses on the incentives for card usage by cardholders).

A a consequence networks choose maximum cardholder fee that consumers are ready to accept. This maximum fee is proportional to merchant acceptance.
Pricing decisions of networks are complex, due to indirect externalities (two-sided market).

The mechanics of the model (2)

•Integration allows cardholders to use their cards abroad, which increases trade volume and reduces unit processing costs (economies of scale).

•However if a unique network survives (monopoly case) it extracts all consumer surplus. Economies of scale benefit merchants of country B (credit card country). Merchants of country A may benefit or not (they pay more but the quality of service increases).

•In the case of two competing networks, the authors make two simplifying assumptions: all consumers hold both cards (complete multi-homing) while retailers accept at most one card (no multi-homing). They solve for the Bertrand equilibrium between networks and use numerical simulations to study the impact of integration.

THE MAIN RESULTS

Numerical simulations suggest that scenario 2 (integration that preserves competition) only has beneficial effects:

- Fees decrease (both for cardholders and retailers).
- Merchant acceptance of cards increases (both for credit and debit)

However competition does not lead to socially optimal fee structure (classical in two sided markets)

The authors conclude that SEPA will be beneficial provided it does not lead to excessive market power by card networks.

MY COMMENTS(1)

- Very clever model, that captures many features of the European payment card industry in an elegant way. Most results are plausible: e.g. integration is good if it does not lead to monopolization.

- However, authors should clarify what their model brings in terms of new insights.

- More importantly, they could introduce more scenarios, e.g. competing debit networks

MY COMMENTS(2)

Several features of the model are strange and should be discussed more. For example the two cards provide payment safety but in very different ways:

•The risk of being mugged vanishes (increases social welfare)

• By contrast Default Risk (which is exogenous) is entirely taken by banks (which may generate Moral Hazard). This is a bit weird.

Similarly the simplifying assumptions that retailers accept at most one type of card and that all consumers hold both cards are very restrictive. Could the authors examine the robustness of their results when these assumption are relaxed?

MY COMMENTS(3)

Finally the most important debate underlying SEPA is only addressed indirectly.

Two business models currently compete for providing consumer credit in Europe:
•credit cards (controlled by international credit card networks)
•vs debit cards+bank provided credit (controlled by the banks).

In my opinion, the main questions underlying SEPA are :
•Which of these business models will survive?
•Will new business models emerge?

Maybe this model could be developed further to allow a discussion of this issue.