

# Chicago Fed Letter

## What is the role of public authorities in retail payment systems?

by Wilko Bolt, senior economist, De Nederlandsche Bank, Santiago Carbó-Valverde, professor, University of Granada, Sujit Chakravorti, senior economist, Sergio Gorjón, senior payment systems expert, Bank of Spain, and Francisco Rodríguez Fernández, professor, University of Granada

On June 21–22, 2010, the Chicago Fed and the University of Granada co-sponsored a conference that brought together policymakers, academics, and industry practitioners to discuss evolving retail payment systems and the role of public authorities, with several panels focusing on the Single Euro Payments Area.

For more information on the Conference on Payment Markets: Theory, Evidence, and Policy, see [www.chicagofed.org/webpages/events/2010/granada\\_payment\\_markets.cfm](http://www.chicagofed.org/webpages/events/2010/granada_payment_markets.cfm).

**Over** the past two decades, market participants in the developed economies have rapidly adopted electronic payments. In some cases, acceptance of payment cards (i.e., credit, debit, and prepaid cards) has been mandated by public authorities; in others, merchants have chosen to accept only cards for payment. To explore the role of public authorities in retail payment systems and related matters, the Federal Reserve Bank of Chicago and the University of Granada convened a conference featuring four academic panels, three public policy panels (focusing on the Single Euro Payments Area, or SEPA), and five lectures by payment system researchers and a Spanish industry participant. In this *Chicago Fed Letter*, we summarize the keynote addresses and policy panels.<sup>1</sup>

### Effects of new regulation on payments

At the start of the conference, Charles Kahn, University of Illinois at Urbana-Champaign, stated that wholesale payment systems weathered the recent financial crisis extremely well and retail payment systems were barely affected. Even so, a flurry of new legislation affecting payments has been enacted.

Kahn discussed two recent U.S. congressional acts that directly affect U.S. retail payment systems. First, the Credit Card Accountability, Responsibility, and

Disclosure (CARD) Act increases cardholder rights by altering certain practices; e.g., the act restricts arbitrary rate increases, over-the-limit fees, and promotion of cards to “vulnerable” individuals, such as those with little experience with financial products. Kahn argued that the act will increase the cost or reduce the availability of consumer credit. Second, a section of Title 10 of the Dodd-Frank Wall Street Reform and Consumer Protection Act grants the Federal Reserve the authority to set interchange fee rules on debit and prepaid cards subject to certain guidelines.<sup>2</sup> Interchange fees are per debit (or credit) transaction fees paid by the merchant’s financial institution to the card issuer. Kahn argued that there will be greater restrictions on financial institutions in the name of consumer protection and that these will accelerate the move of new retail payment arrangements away from traditional providers.

Next, Sujit Chakravorti, Federal Reserve Bank of Chicago, discussed the underlying economics of the fee structure of retail payments.<sup>3</sup> His main conclusions from reviewing the payment card literature are the following. First, an asymmetric fee structure for consumers and merchants may be necessary to achieve optimal usage of a given payment instrument. Second, “business stealing” among merchants may lead to higher

than optimal interchange fees set by networks. Third, economists generally agree that society benefits when merchants are able to adjust their prices to account for cost differences, such as those related to a consumer's choice of payment instrument. However, there are instances when merchants may charge more than the fees they pay to their payment providers. Fourth, increasing competition among card networks or card issuers does not necessarily improve the

developed by the Consumer Payments Research Center at the Federal Reserve Bank of Boston and implemented by the RAND Corporation in its *American Life Panel*. About 85% of the 1,010 households surveyed use debit cards and 71% use online banking, while only 8% use mobile banking. Unlike other surveys, this one asks consumers about their payment choice in different contexts, such as remote bill payment, online purchases, and retail point of sale. Rysman noted

on transaction costs without rewards. The interchange fee should reflect cost differentials between store credit cards and financial institution credit cards. Given the "user pays" principle, any rewards should be paid for by card users, not merchants.

### Single Euro Payments Area

All three policy panels focused on the opportunities and challenges of SEPA, which covers all 16 European countries currently in the euro area, 322 million inhabitants, and 54.8 billion electronic payment transactions.<sup>4</sup> There are another 16 European countries not in the euro area that are also part of the SEPA initiative.<sup>5</sup> The SEPA initiative will create a single set of euro payment instruments, including credit transfers, direct debits, and card payments; efficient processing infrastructures for euro payments; common technical standards and business practices; a harmonized legal basis; and new customer services. The aim of SEPA is to strengthen European integration by establishing a single market for retail payments. Having a single market for all euro payments should increase competition and innovation, resulting in greater choice in services for end-users.

The first panel provided an update on SEPA; discussed the impact of competition and cooperation on payment services; and outlined the public sector's role in the operation, design, and oversight of the retail payment system. This panel featured Santiago Carbó-Valverde, University of Granada and Federal Reserve Bank of Chicago (moderator); Pierre Petit, European Central Bank; Javier Palmero Zurdo, European Commission, DG Market; Imfried Schwimann, European Commission, DG Competition; and Gerard Hartsink, ABN Amro and European Payments Council.

Carbó-Valverde noted that making a cross-border euro direct debit or credit transfer remains challenging within the euro area. Petit agreed that European retail payment infrastructure remains fragmented, and he welcomed the European Commission's suggestion to impose a specific end date for full migration to SEPA credit transfers and SEPA direct debits.

Palmero noted that, while the SEPA credit transfer (SCT) scheme was launched

## There still remains considerable debate among policymakers and economists on what constitutes efficient fee structures for payment instruments.

balance of consumer and merchant fees. Fifth, only a few academic models consider the trade-offs between usage of these cards by those who do not need to avail themselves of credit extensions and the additional cost to support a credit-based system. Other issues that have received little attention, Chakravorti said, include honor-all-cards rules that require merchants to accept a card from a given network regardless of issuer or type of card, the potential impact of reduced fee income on innovation, and the integration of fraud mitigation costs into consumer and merchant fees.

In his dinner address, Agustín Márquez, Spanish Confederation of Savings Banks, discussed three challenges facing the European payments industry given recent and upcoming regulatory changes. First, consumers and merchants lack clear incentives to reduce their reliance on cash. Second, it remains difficult to determine optimal interchange fees that not only incorporate the costs to provide services but also account for the benefits to end-users. Third, European integration of retail payments is not complete, and many challenges remain.

### Patterns of payment instrument choice

Marc Rysman, Boston University, discussed a new U.S. consumer payment choice data set and new econometric techniques that test simultaneously for payment instrument adoption and usage. The *Survey of Consumer Payment Choice* was

that the results indicate no single payment instrument is preferred across all types of transactions.

In his keynote address, David Humphrey, Florida State University, contrasted past and current reward programs and discussed their impact on merchant and consumer payment behavior. As far back as the 1890s, green stamps were given to consumers by merchants to increase consumer loyalty. The green stamp program was most successful from the 1930s until the 1960s: About 60% of U.S. households collected stamps during this period. In one year in the 1960s, the total value of these stamps was estimated to be \$825 million. However, stamp rewards suffered a near death when the market became fully saturated—once all merchants offered stamps, none had a competitive advantage—and merchants faced strong pressures to cut costs during the recessions in the 1970s.

Humphrey argued that U.S. credit card rewards have reached a similar saturation point as green stamps did earlier in the United States, although the cost structure is different. Green stamps were provided by merchants, while card rewards are generally provided by the card issuers. For merchants today, card acceptance has become a defensive measure rather than an opportunity to increase sales. In most countries, merchant fees are stable or increasing rather than decreasing with volume growth. Humphrey argued that interchange fees should be capped based

on January 2008, only 7.5% of all credit transfers were executed in a single SCT format as of April 2010.<sup>6</sup> Since the SEPA direct debit scheme was launched only in February 2009, it is still too early to assess actual migration. Palmero emphasized that several recent developments, including coordination among end-users, regulators, and payment providers, are likely to increase the adoption of SEPA-based payment instruments. In addition, the newly formed SEPA council,

(moderator). This panel discussed current developments in the European cards industry. Bolt framed the discussion around consumer payment habits, surcharges on payment cards, benefits and costs of SEPA, and technological innovation.

Olbrich argued that the implementation of SEPA, along with the financial crisis, has significantly impacted the European payment card landscape. He said MasterCard needs to develop

Innovations are necessary to meet the changing demands of consumers and retailers, Nicholds said. He then talked about Visa's plans to increase its investment in mobile payments, given consumers' growing dependence on mobile phones. However, concerns about the security of transactions using mobile devices need to be addressed before the benefits of this platform can be fully realized.

Weiderstrand noted that IKEA pays 100 million euro per year in card fees. Across Europe, IKEA is confronted with large differences in card fees. These fees are rarely negotiable because there is little competition in cross-border acquiring. Weiderstrand expressed the hope that SEPA will increase competition among acquirers, resulting in lower merchant payment card fees across Europe. Standardization of payment terminals with full EMV<sup>7</sup> application would lead to further cost savings. The main drawback of SEPA from IKEA's point of view is that the company will need to make significant and costly changes to its information technology infrastructure to comply with the new standards.

Weiderstrand said his company would prefer not to impose surcharges for

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consisting of key stakeholders and regulators, should improve adoption rates.

Schwimann discussed the role of multi-lateral interchange fees (MIFs) for payment cards and direct debits. In July 2009, the European Commission adopted a new methodology to calculate cross-border MIFs, called the merchant indifference test. Schwimann described this test as the fee at which the value of transactional benefits (such as the avoidance of cash handling costs) that card usage generates for merchants equals the merchant fee. Lower MIFs are expected to increase competition among acquirers (banks that convert payment card receipts into bank deposits for merchants). MIFs do not currently apply to European direct debit transactions.

Hartsink stressed that the benefits of SEPA payment services would accrue to customers only if they migrated from domestic instruments to SEPA instruments. While European banks have made substantial progress in migrating to SEPA instruments, he said the progress made by public administrations, corporate entities, retailers, and small and medium enterprises has been limited. He also pointed out that some countries may incur higher costs from direct debit as SEPA advances and that different pricing structures will make adoption more challenging for some.

The second panel featured Luke Olbrich, MasterCard Europe; Jeremy Nicholds, Visa Europe; Martin Weiderstrand, IKEA; and Wilko Bolt, De Nederlandsche Bank

products that satisfy changing consumer preferences and meet the new economic and regulatory environment. On the issuing side, SEPA has allowed MasterCard to be a local debit provider in virtually every European country. On the acquiring side, SEPA has fostered greater competition among acquirers, increasing choice in payment card services for retailers.

Consumers have become more security and price sensitive because of the financial crisis. According to Olbrich, MasterCard research shows that enhanced security and reward programs, along with wider merchant acceptance of debit cards, may encourage consumers to use debit cards instead of cash. Through its "surviving a week without cash" research, MasterCard found that heavy debit card users only used cash when they had no other choice or when they had to pay a surcharge for using other payment instruments.

Nicholds concurred with Olbrich that consumer payment behavior is changing because of the financial crisis. Today, consumers are more sensitive to payment fees and surcharges. Nicholds argued that the ability to impose a surcharge does not benefit consumers and retailers. In countries where the practice is allowed, few retailers choose to do it. Furthermore, if not done carefully, surcharging may reduce card usage. Nicholds noted that card usage has benefited retailers and will continue to be a main driver for additional sales, particularly for Internet purchases.

Charles L. Evans, *President*; Daniel G. Sullivan, *Executive Vice President and Director of Research*; David Marshall, *Senior Vice President, financial markets group*; Daniel Aaronson, *Vice President, microeconomic policy research*; Jonas D. M. Fisher, *Vice President, macroeconomic policy research*; Richard Heckinger, *Assistant Vice President, markets team*; Anna Paulson, *Vice President, finance team*; William A. Testa, *Vice President, regional programs, and Economics Editor*; Helen O'D. Koshy and Han Y. Choi, *Editors*; Rita Molloy and Julia Baker, *Production Editors*; Sheila A. Mangler, *Editorial Assistant*.

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credit card payments and then pass on these revenues to consumers. However, IKEA has found surcharges to be very effective in the UK to steer consumers away from credit cards toward debit cards. Since 2004, IKEA has been applying a fixed surcharge of 70 pence sterling on a credit card transaction and returning these revenues to consumers via lower prices for designated products. Weiderstrand stated that debit card use in IKEA stores increased from 40% of all transactions in 2004 to 55% in 2009, while credit card use decreased from 40% to 25%.

The last policy panel featured Javier Santamaría, Banco Santander and European Payments Council; José Carlos Cuevas, Alstom Spain and European Association of Corporate Treasurers; Manuel Varela, DG Treasury and Financial Policy, Spanish Ministry of Economy; and Sergio Gorjón, Bank of Spain (moderator). Each institution represented

on this panel has a key role to play in Spain's migration to SEPA. Santamaría explained that the SEPA project is now at a critical stage in Spain. Huge investments have been made by the payment providers with little tangible return. To ensure a positive outcome, he said, the stakeholders must be willing to actively collaborate and to increase trust between the public and private sectors.

Cuevas described what he considered to be the main obstacles for a smooth transition to SEPA. These obstacles included the present uncertainty about an end date for full transition to SEPA standards and the allegedly inferior service levels of Pan-European direct debit products.

Finally, Varela acknowledged the importance of the public sector as a major driving force in the realization of SEPA benefits. While the Spanish government has made considerable efforts to promote SEPA, he acknowledged that

further actions may be necessary to help raise SEPA awareness at the local and regional levels and encourage early migration, particularly given the difficult economic climate.

## Conclusion

Three major themes emerged from this conference. First, despite increasing usage of electronic payments, cash usage remains high in Europe. Well-designed incentives may be required to change payment behavior of consumers and merchants. Second, the implementation of SEPA should decrease processing costs and lower payment fees for end-users, although challenges remain regarding competition and coordination across national borders. And third, more research is needed on the underlying economic forces of retail payment systems to support the development of sound economic and regulatory policies.

<sup>1</sup> The papers for the academic sessions can be found at [www.ugr.es/~payment\\_market/ProgrammePAPERS.html](http://www.ugr.es/~payment_market/ProgrammePAPERS.html).

<sup>2</sup> Another part of the Dodd-Frank Act also increases the ability of merchants to price differentiate between different types of payment instruments.

<sup>3</sup> Chakravorti's address was based on Wilko Bolt and Sujit Chakravorti, 2011, "Digitization of retail payments," in *Oxford Handbook on the Digital Economy*, Martin Peitz and Joel

Waldfoegel (eds.), New York and Oxford, UK: Oxford University Press, forthcoming.

<sup>4</sup> These figures were compiled from the European Central Bank Statistical Data Warehouse, available at <http://sdw.ecb.europa.eu/>. For a list of the 16 euro area countries, see [www.ecb.int/euro/intro/html/map.en.html](http://www.ecb.int/euro/intro/html/map.en.html).

<sup>5</sup> If transactions in these 16 countries occur in euro, SEPA payment instruments must

be used. For a list of all 32 countries that will use these instruments for transactions in euro, see [www.ecb.europa.eu/paym/sepa/about/countries/html/index.en.html](http://www.ecb.europa.eu/paym/sepa/about/countries/html/index.en.html).

<sup>6</sup> Currently, there are many national standards for credit transfer message formats within the euro area. Such diversity in formats complicates transfers denominated in euro.

<sup>7</sup> EMV is a global standard for credit and debit cards using chip card technology.