

# Chicago Fed Letter

## Competitive Forces Shaping the Payments Environment: What's Next?—A conference summary

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Technological innovations have enabled numerous payment methods to proliferate in the market. As a result, payment providers have to address concerns about pricing, infrastructure, and regulatory standards. To discuss these and related issues, the Chicago Fed hosted its seventh payments conference on May 10–11, 2007.

Materials presented at the conference are available at [www.chicagofed.org/news\\_and\\_conferences/conferences\\_and\\_events/2007\\_payments\\_conference.cfm](http://www.chicagofed.org/news_and_conferences/conferences_and_events/2007_payments_conference.cfm).

As paper-based payments are increasingly replaced by electronic ones, consumer payment practices are shifting. Technological innovations have made it possible for consumers to make timely payments in a variety of venues. Also, tech-savvy consumers continue to demand more convenience, functionality, and customization from their payment method of choice. Merchants who have traditionally received the bulk of their payments via cash and checks have started to accept and encourage the use of electronic payments. Moreover, demographic trends play a role in the evolving payments landscape, as financial institutions increasingly compete over young adults, recent immigrants, and other consumers who have traditionally been underserved by the financial services industry.

A growing variety of new and traditional payment providers are competing for access to consumers' wallets. Retail outlets, mobile phone carriers, money transmitters, and other service providers have begun to forge strategic alliances with depository institutions to develop profitable and efficient payment products in order to attract and retain customers. In this *Chicago Fed Letter*, we summarize this year's conference, where the participants discussed many of the issues raised by this evolving and competitive payments environment.

### Consumer–merchant relationships and payment preferences

In his keynote address, Frank D'Angelo, Metavante, stated that technology perpetually drives payment innovations. However, whether these emerging payment options are widely adopted remains uncertain. The introduction of new payment channels presents challenges not only to payment providers but also to merchants and consumers. Merchants do not want to provide payment methods that consumers do not widely use, while consumers are not attracted to payment instruments that merchants do not widely accept. D'Angelo also noted that research surveys, as well as pilot tests, must be of sufficient size to assess the attractiveness of a payment instrument to consumers.

Separately, the conference's first panel examined competition among payment options by highlighting several recent surveys of consumer payment behavior. William McCracken, Synergistics Research Corporation, noted that consumers are the final arbiters of the success of emerging payment channels. Options that fail to satisfy certain requirements are quickly replaced with suitable alternatives. Merchants are motivated to cater to their most frequent customers' preferred payment options. Indeed, according to Gary Charboneau, WGC Associates LLC, a number of

consumers are loyal to their choice of payment methods and are willing to change merchants rather than change payment methods. Thus, highly profitable customers known as “best shoppers” tend to dictate which payment options will be offered. Merchants can nonetheless influence the adoption of specific payment channels by offering rewards and loyalty programs that steer customers toward channels that merchants prefer.

Ron Borzekowski, Board of Governors of the Federal Reserve System, provided a different perspective on consumer behavior. In his research, based on statistical modeling and extensive consumer surveys, he found that if a particular

payment technology, which has been slow to take off in the U.S. At the same time, some of the most influential products are created and brought to market by mobile payment start-up companies.

The second panel focused on the emergence of mobile payments in the U.S. Edward Kountz, JupiterResearch, noted that the original vision of mobile payments as conceived a decade ago was to place payment tokens in mobile phones that would be faster and more convenient than traditional magnetic stripe payment cards. This vision was stifled because of technological challenges; low consumer demand; and the lack of coordination among financial institutions,

need to collaborate to create an infrastructure that can serve a variety of competitors. Spencer White, AT&T, noted that market fragmentation is a potential challenge in the mobile payments arena, as multiple solutions are being developed by a variety of payment providers. If various mobile payment platforms are developed without industry cooperation, it might be difficult for any provider to develop reliable infrastructure and efficient strategies to achieve critical mass among consumers.

### The future of cash

As noted by several participants, there remains much uncertainty about the competitiveness of nascent technologies, such as mobile payments. There are clear advantages of cash that are difficult to mimic electronically. Consumers like cash in part because of its anonymity features. But from the merchant’s perspective, cash is expensive to handle and less secure than electronic means. The third panel covered how taxicab, vending, and gaming industries are, to different degrees, adopting electronic payments. Richard Porter, Federal Reserve Bank of Chicago, stated that cash was once the quickest way to transact business, but it is being usurped by fast and convenient electronic methods because of technological advances, such as radio-frequency-based media.

Norma Reyes, commissioner, Department of Consumer Services, City of Chicago, discussed the benefits and challenges of implementing payment card acceptance in Chicago taxicabs—a requirement for most city cabs. There are challenges related to educating drivers about not only the new payment technology but also the financial aspects of the transaction. Taxi drivers have responded unfavorably to the 5% fee levied on taxicab card payments. Conversely, Jim Turner, USA Technologies, argued that the large operators in the vending industry are willing to pay the fee associated with payment cards because the benefits of card payment acceptance outweigh the costs. Accepting card payments allows operators to increase prices with minimal drops in sales. Experience in the vending world and elsewhere

**Consumers, merchants, and financial institutions now face a shifting array of payment options, and nondepository institutions are increasing their participation in the provision of payments.**

merchant discouraged debit card usage, customers would turn to cash as an alternative.<sup>1</sup> If cash use was discouraged, check usage would increase, and consumers would also turn to credit cards as a substitute. Moreover, when credit cards were not accepted, consumers gravitated toward debit cards. Ronald Congemi, First Data Corporation, supported Borzekowski by citing the 2005 *STAR Consumer Usage Payment Study* in which consumers typically used two to four payment channels per month and switched back and forth among those channels. This requires financial institutions and merchants to determine how to balance consumer demand for a variety of payment options with the need to develop the most efficient and cost-effective payments infrastructure.

### Competition in nascent payment markets

A recent example of an innovative payment solution that is struggling to gain market acceptance is mobile payments—payments initiated and/or confirmed via a mobile device. Payment networks, financial institutions, and mobile carriers are collaborating and competing to further the development of mobile

mobile carriers, and payment networks. However, given demographic trends and the sizable demand for instantaneous communication among young adults, mobile payments are slowly emerging as a popular payment method for this important market segment.

Dion Lisle, Obopay Inc., described the experience of his small start-up company.<sup>2</sup> He noted that examples of successful person-to-person mobile payments in the U.S. today include “digital allowances” from parents to children and transfers among friends who share expenses. But as mobile payment technology gains consumer approval, merchant acceptance is equally vital.

Niki Manby, Visa USA, agreed that widespread merchant acceptance of mobile payments will be the tipping point that will lead to critical mass adoption. Manby provided evidence that U.S. consumers are ready to adopt mobile payments: 58% of consumers aged 18–42 are willing to switch banks in order to gain mobile payment capabilities.

In order for mobile payment platforms to succeed, networks, banks, merchants, wireless carriers, and payment processors

suggests that price increases are much less salient when made in electronic rather than cash form.

However, according to Michael Litton, Giesecke & Devrient, some industries, such as the gaming industry, face significant barriers to electronic payment adoption.<sup>3</sup> The \$90 billion gaming industry is eager to adopt electronic payments in order to improve the player experience and reduce the cost of processing cash and coins. But gaming regulators have warned of the risks inherent in making funds from deposit and credit accounts too easy for players to access electronically from the casino floor. Reyes reiterated that implementing new technology and infrastructure changes are challenges that every industry faces in the process of modernizing operations.

#### Retailers' involvement in payments

Payment innovations are not only occurring in cash-based industries; other industries are also changing the ways that consumers access the payments system. Retailers have provided financial services to their customers for decades, including check cashing, bill payment, and lines of credit. However, recently, some retailers have begun to compete more directly with financial institutions by expanding the range of financial services and payment options they offer. In turn, banks have begun to mirror retailers' business strategies and find ways to capitalize on consumers' everyday presence in retail locations. During the fourth panel, Tara Rice, Federal Reserve Bank of Chicago, noted that by offering their own payment options, retailers look to reduce cost through the potential processing of payments made by their customers and to increase revenue by offering customers additional products and services. To do this, retailers might directly offer payment services, albeit in limited fashion, or they might rely on partnerships with banks to enable the indirect provision of those services.

Steve Worthington, Monash University in Melbourne, Australia, explained that cooperative arrangements among retailers and banks emerge, even when

there is competitive pressure to serve consumers with similar payment options. Retailers in the United Kingdom and Australia have faced challenges related to developing both the acquiring and processing functions of payments. Retailers are hesitant to deviate from their core business competencies. Co-branding partnerships with financial institutions have worked to prevent this problem. But in most cases, retailers have only been successful in competing with banks on select products and are dependent on financial institutions to hold the core customer deposit relationships.

While banks do not have a similar dependency on retailers, they can gain advantages through strategic partnerships with merchants. Dave Martin, NCBS, commented that by partnering with retailers, banks can access customers who have limited need to make special trips to banks but who shop in stores weekly. On the other hand, retailers can offer their own variety of financial services to customers. For example, Wal-Mart partners with banks by renting store space for bank branches and also offers its own menu of financial services, such as check cashing, remittances, and bill payment, to cater to lower-income or unbanked consumers who find it beneficial to access financial services on shopping trips.

The growing number of individuals who are currently underserved by most banks and retailers has created an opportunity for niche firms in the payments system. Recent immigrants, lower-income families, and credit-challenged consumers might not have access to or feel comfortable in traditional financial institutions. Hamed Shahbazi, TIO Networks Corp., highlighted ways in which these consumers are able to pay bills, cash checks, and transfer funds through self-service kiosks in convenience stores, gas stations, and other retailers that they regularly visit. Self-service kiosks provide more payments functionality than store clerks can offer, given the limited experience and time that such clerks have to dedicate to providing payment solutions.

#### Reaching customers with remittances

In the retail cross-border remittance market, nondepository institutions make up 95% of the market. Demographic and immigration trends, coupled with payment innovations, have led to the exponential growth of this market. Globally, immigrant workers send over \$230 billion per year to family and friends in their home countries. In part because of the entry of new payment providers, prices for cross-border remittances have fallen by as much as 50% in recent years. During the final panel, Manuel Orozco, Inter-American Dialogue, stated that while the remittance market used to consist mainly of informal channels and money transmitters, today, depository institutions are starting to increase their market share. However, they face many challenges related to pricing, regulation, and risk mitigation.

Traditional money transmitters have developed successful business models that are difficult for financial institutions to imitate. Joseph Cachey III, Western Union, noted that his company currently has 17% of the remittance market worldwide. While Western Union's service is among the more expensive ways to send money, it provides significant value over the competition for certain

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types of transactions, especially for payments to remote locations. Western Union has found that the method of remittance payment—whether via cash, payment card, mobile phone, or Internet—is less important to consumers in an era of immediate data processing than the speed of delivery. Further, the global nature of the remittance market makes it very complex, and some banks and other firms may be averse to participating in unstable financial markets or complying with a complex array of international laws and regulations.

While these issues are challenging for financial institutions wishing to enter the business, some see remittances as a gateway product for attracting immigrant customers. James Maloney, Mitchell Bank, discussed his small community bank's strategy to provide cross-border remittance products. Depository institutions have difficulty competing with money transmitters on the basis of convenience, familiarity, or distribution network, but they can compete on price, transparency, and disclosure. Remittances, which are marginally profitable for Mitchell Bank, serve as a loss leader in attracting and retaining customers. Recent innovations, including the Federal Reserve's Direct to Mexico program, have further aided smaller banks by providing low-cost remittance solutions.

Mitchell Bank is not alone in its endeavors to reach immigrant consumers with remittances. Michael Frias, Federal

Deposit Insurance Corporation (FDIC), described a collaborative effort among 40 banks, regulators, community organizations, and the Mexican Consulate of Chicago to reach immigrant markets by providing remittances and other transactional products. Banks must strike a balance between the desire to serve immigrants and the need to satisfy stricter regulatory requirements in the post-9/11 environment. Nondepository institutions also face regulatory issues, but regulators have paid special attention to banks' strategies to serve immigrants. On the other hand, as regulators monitor concerns related to financing suspicious activity, the U.S. payments system might benefit from bringing immigrants into formal banking channels, where financial activities are more transparent.

### Conclusion

Michael Moskow, president and CEO, Federal Reserve Bank of Chicago, observed that the payments landscape in the U.S. has undergone significant change over the past several years. Consumers, merchants, and financial institutions now face a shifting array of payment options, and nondepository institutions are increasing their participation in the provision of payments, often competing directly with banks. In turn, these times of transition compel policymakers to revisit the efficacy of current payment laws and regulations. Federal Reserve Board Governor Randall Kroszner concurred with Moskow, saying that decades of

private sector investment have advanced the infrastructure of the payments system. While public sector involvement is important, regulators should not stifle innovation.

In concluding the conference, Sujit Chakravorti, Federal Reserve Bank of Chicago, noted the importance of consumer choice in driving electronic payments and reiterated the roles that shifting demographics, technological innovations, and regulatory concerns hold in an increasingly competitive payments environment. The United States' rapidly changing payments system requires varying levels of competition and cooperation among payments industry participants. These relationships among various players should in turn lead to accrued benefits related to convenience, access, security, and cost for the payments system as a whole.

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<sup>1</sup> R. Borzekowski and E. Kiser, 2006, "The choice at the checkout: Quantifying demand across payment instruments," Finance and Economics Discussion Series, Board of Governors of the Federal Reserve System, working paper, No. 2006-17, April.

<sup>2</sup> Obopay enables consumers to access funds held in bank accounts or payment cards via text message, mobile Internet browser, or a downloadable mobile payments application. See [www.obopay.com](http://www.obopay.com).

<sup>3</sup> Giesecke & Devrient is a leading supplier of banknote paper, banknote printing, currency automation systems, smart cards, and complex electronic payment system solutions. See [www.gi-de.com](http://www.gi-de.com).