PAYMENT CARDS Center
FEDERAL RESERVE BANK OF PHILADELPHIA

A newsletter published by the Payment Cards Center, providing meaningful insights into developments in consumer credit and payments

Winter 2005

From the Director

Peter Burns, Vice President & Director

Welcome to this edition of *Update*, a publication of the Payment Cards Center highlighting recent activities. Also available on our website, *Update* complements the more complete set of information, including a complete list of the Center's papers, available at www.philadelphiafed.org/pcc.

The Philadelphia Fed established the Payment Cards Center five years ago as an initiative to develop insights into issues affecting consumer credit and payments. During this time, we have strived to create an agenda that both supports original research and stimulates dialogue among stakeholders. In this issue, we highlight several recent efforts intended to help inform debate on issues facing the industry and policymakers.

Since the Center's inception, more than 60 articles and papers have been written on a wide range of issues. This output consists of academic working papers, written by colleagues in the Bank's Research Department and affiliated visiting scholars; and discussion papers, which include more generally accessible analyses written by the Center's staff. This division of output between academic research and industry analysis meets the need for both strong theoretical study and a more descriptive examination of industry developments. While Research Department economists are drawn from academia, the Center's industry specialists have backgrounds in the financial services field. Our expectation that these different backgrounds and skills would complement each other has been confirmed and has resulted in close collaboration and mutual support.

In this issue, we focus on three recent discussion papers written by the Center's industry specialists. In the first, James McGrath examines industry developments and consumer adoption issues associated with online bill payments. He notes that while such payments are not significant today, trends suggest that online bill payments will grow rapidly in the years to come and will increasingly displace checks for many bill-paying applications.

In Julia Cheney's recent paper on identity theft, she asks the question: Do definitions still matter? In response, she differentiates four types of financial fraud that fall under the broad legal definition of identity theft. As she argues, there are important differences in the processes needed to identify, mitigate, and resolve these types of fraud, and indeed, definitions do matter in developing solutions.

The last paper highlighted, written by Mark Furletti, is "The Laws, Regulations, and Industry Practices That Protect Consumers Who Use Electronic Payment Systems: Policy Considerations." This is the third paper in a series that examines protections associated with the use of credit cards, debit

Mission Statement

The mission of the Payment Cards Center is to provide meaningful insights into developments in consumer credit and payments that are of interest not only to the Federal Reserve but also to the industry, other businesses, academia, policymakers, and the public at large. The Center carries out its mission through an agenda of research and analysis as well as forums and conferences that encourage dialogue incorporating industry, academic, and public-sector perspectives.

In This Issue:

cards, prepaid cards, and ACH e-checks at the point of sale. Among other things, this series contributes a unique analysis of the application of rules promulgated by private-sector payment networks and associations, along with the actual practices of individual banks in providing consumer protections.

As the Payment Cards Center's agenda has evolved over the past five years, we have found that one of our most effective tools in developing new insights has been our program of conferences. Over time, we have discovered that the critical success factor is getting the right people together to discuss and debate the right topics. Our challenge is to make sure we include subject matter experts from a variety of perspectives and to develop agendas that reflect key market issues.

In this issue, we highlight three conferences held over the summer. A summary of a fourth conference held in the fall in conjunction with the Bank's Research Department will be published in an upcoming issue of the Bank's *Business Review*.

The first of the three conferences described in more detail later was our June forum on "Federal Consumer Protection Regulation: Disclosures and Beyond." To discuss this very current topic, we brought together a relatively small group of subject experts from credit card banks, as well as attorneys, policymakers, economists, and legal scholars. While the opinions of the various individuals often differed, there was a somewhat surprising agreement on the nature of the problems posed by current disclosure requirements and a consensus that improving the process will, among other things, require clearer language and greater attention to where disclosure emphasis should lie.

The second conference focused on risk in electronic payments. Motivated in part by recent disclosures about compromised data and the attention given to identity theft and other forms of consumer fraud, the conference brought together some 100 participants for a day-and-a-half discussion of emerging risk challenges. Co-sponsored with the Electronic Funds Transfer Association, this event is another example of how the Center's agenda is shaped by industry participants. Subjects ranged from the legal and regulatory effects on payment risk management practices to emerging strategies to safeguard personal information maintained by various market participants. A common theme uncovered in several discussions was the critical role consumer confidence plays in adopting new payment mechanisms. The conference affirmed the benefits of developing higher levels of cooperation and commitment to mitigating risk in the changing environment of electronic payments.

The last conference covered in this issue is "Payment Cards and the Unbanked: Prospects and Challenges." This event benefited from a wide range of perspectives on how emerging electronic payment schemes might provide greater benefits to this consumer segment. Of the various product innovations discussed, prepaid cards were viewed as having significant potential for improving delivery of financial services to unbanked or underserved consumers. Discussions also raised several policy issues concerning the important role nonbank service providers are playing in these emerging markets, particularly in distribution functions.

I hope you enjoy reading about our papers and conferences and the other information in this issue of *Update*. I welcome your suggestions as to how the Center can better fulfill its mission and add value for all market participants. Thank you for your continued support.

PCC Industry Specialists Contribute New Research

James C. McGrath

Will Online Bill Payment Spell the Demise of Paper Checks?

In the discussion paper "Will Online Bill Payment Spell the Demise of Paper Checks?," James McGrath examines the evolution of online bill payment and considers the role played by increased consumer adoption of this channel in the decline of paper checks.

According to Federal Reserve research, since 2000, the number of checks has declined, on average, 4.3 percent annually. Moreover, in 2003, for the first time, total consumer electronic payments surpassed check payments. McGrath notes that the use of electronic payments such as credit and debit cards at the point of sale has generally contributed to the decline in check use. He examines the phenomenon of check replacement in the context of bill payments to better understand whether this substitution effect is also occurring here and to what extent.

McGrath reviews the online bill payment market in detail to highlight characteristics that are influencing the speed with which consumers adopt electronic payment mechanisms for bill payment. McGrath notes that online bill payment technology is developing along two paths: the biller-direct model and the consolidator model. In the biller-direct model, consumers visit billers' websites directly to pay a specific bill. In the consolidator model, typically offered by banks and other third parties as a one-stop-shop, consumers can instruct their bank to pay any number of bills. Each model has its own set of advantages and limitations, and for both, growth has been somewhat uneven.

In the future, McGrath expects the growth of online bill payment to be driven by "rapidly evolving technology, the many stakeholders, and the interplay between supply and demand factors." As evidence of technology's role, he points to the increasing use of broadband—to gain access to the Internet—as having done much to improve the speed with which transactions can be conducted and making the online bill payment process more convenient for consumers.

Consumers are not the only stakeholders in this market; others include billers, banks, payment card issuers, networks, and third-party application providers. McGrath asserts that the more these entities are able to coordinate the bill payment offering, making it simpler for all involved, greater efficiencies will be realized and will speed the reduction of checks in the bill payment process. He also suggests that to encourage continued consumer adoption of online bill payment, market participants must address supply-side impediments, including the cost to provide the service and the scale needed to improve cost structures, and demand-side impediments involving ease of use and safety concerns.

In summary, given current trends in online bill payment adoption, McGrath believes that if gains in technology and efficiencies continue and market participants address supply-side and demand-side impediments, check usage for generally recurring bill payments will continue to decline.

McGrath's paper was also highlighted in a recent *Electronic Payments Week* article titled "Online Bill Payment Connected to Check Decline."

Julia S. Cheney

Identity Theft: Do Definitions Still Matter?

In the discussion paper "Identity Theft: Do Definitions Still Matter?," Julia Cheney examines four types of fraud that fall under the legal definition of identity theft. Based on the definition of identity theft in the Identity Theft and Assumption Deterrence Act of 1998 and later confirmed in the Fair and Accurate Credit Transactions Act of 2003 (FACT Act), identity theft occurs whenever a "means of identification," i.e., a piece of identifying information such as a name, address, or payment card number, is compromised and used to perpetrate a crime. In the FACT Act, this definition is also the basis for triggering consumer rights and protections to assist victims in preventing identity theft and remedying its effects.

In her more nuanced analysis, Cheney delineates four subcategories of identity theft. By discussing the characteristics of each of these fraud types, she demonstrates that detection strategies, mitigation efforts, and victim responses will all require different actions, depending on the type of identity theft crime committed. In particular, several features, including the sort of data stolen, the type of account compromised, and the opportunity for financial gain, are key variations in the pattern of criminal behavior. The paper concludes by noting three areas that would benefit from more precise definitions and distinction among types of identity theft: measuring and monitoring the success of efforts to fight identity theft crime, educating consumers about the different risks and responses to this crime, and coordinating mitigation strategies across stakeholders and geographies.

Briefly, the four types of identity theft described in the paper are:

Fictitious identity fraud. This crime occurs when pieces of real data, from one or more consumers, are combined with made-up information to fabricate an identity that does not belong to any real person in order to create access to new credit. In most cases a completely new credit record is established and linked to the fabricated identity. A range of credit facilities are generally established under the fabricated identity before the borrower defaults on all. Typically, there is no consumer victim of this crime, but rather, lenders are faced with the associated financial loss.

Payment card fraud. This crime is committed when stolen payment cards or the account numbers (i.e., credit or debit card account numbers) of existing financial accounts are used to purchase goods and services. In this case, there is a consumer/victim, but industry experience and consumer protection regulations limit losses for these consumers.

Account takeover fraud. This crime happens when a thief establishes control over an existing financial account without the authority or knowledge of the legitimate account holder. Thieves attempt to steal the entire balance in a consumer's demand deposit account or access the full credit line associated with a consumer's credit account before the fraudulent activity can be detected. Account takeover fraud has the potential to victimize consumers more than payment fraud, although, as in the case with payment card fraud, existing federal regulations limit consumer liability for related fraudulent activity.

True name fraud. This crime is the wholesale assumption of another person's identity in an effort to gain access to new credit. Thieves steal personal information – such as name, address, and Social Security number – that allows them to use the victim's credit record when applying for new loans. This type of identity theft results in not only direct financial losses for its victims but also other damaging effects, such as a deterioration in credit scores, higher interest rates, and an inability to access new loans. In this case, the FACT Act provides important new rights and protections to consumers who become victims of this type of identity theft.

Each of these forms of identity theft presents different risk factors for victims and lenders, and they require nuanced strategies in response to these financial crimes. Cheney discusses how the variation in these crimes calls for differentiated responses by both consumers and lenders. She concludes by highlighting several areas where definitions do matter and greater differentiation among identity theft frauds would, in her opinion, aid efforts to develop effective solutions.

Cheney's paper was also highlighted in a recent Associated Press article titled "Identity theft ill-defined, often misunderstood; Some experts say lawmakers and firms misdirect antifraud energies, make consumers overly fearful."

Mark Furletti

The Laws, Regulations, and Industry Practices That Protect Consumers Who Use Electronic Payment Systems: Policy Considerations

"The Laws, Regulations, and Industry Practices That Protect Consumers Who Use Electronic Payment Systems: Policy Considerations" is the third in a series of research papers examining the laws, regulations, and voluntary industry practices aiding consumers who contest an electronic transaction as being fraudulent, erroneous, or the subject of a dispute with a merchant.

Furletti considers how the protections associated with four electronic payment products – credit cards, debit cards, prepaid cards, and ACH e-checks – addressed in the series' initial

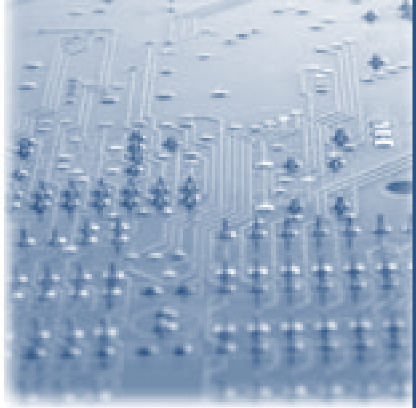
papers affect market participants. His analysis yields three conclusions: First, current protection mechanisms do not always work to encourage adoption of fraud-reduction practices. Second, existing protections represent a significant cost to banks, merchants, processors, and consumers. Third, federal protection regulation is not consistent across payment types, and while the rule-making approach may serve to foster market-driven innovation, it may also lead to consumer confusion.

Furletti poses an "ideal" system of fraud risk allocation that would encourage consumer usage of card products, provide all parties with incentives to exercise due care, and incorporate risk-sharing for any fraud-reduction scheme that provides a net benefit to the system as a whole. He argues that the current consumer protection framework has been very successful in meeting the first of these goals, but market-incentive structures are often in conflict with the remaining two goals. He concludes that the current protection mechanisms make it more difficult to encourage adoption of fraud-reduction schemes.

In addition, Furletti considers whether market participants are accurately assessing the costs to support the current system of consumer protections, especially those mandated by federal regulation. He notes consumer protection support costs include both direct fraud losses and processing costs, which are costs related to maintaining systems to facilitate interaction between the various parties to an electronic transaction and any respective reversal of that charge as a result of fraud, error, or dispute. While such cost information is limited, his analysis suggests that the amounts are significant business factors. Furletti argues that more explicit attention needs to be paid to the costs and benefits associated with such regulation.

In conclusion, Furletti describes the evolution of federal consumer protection regulation and how it has resulted in regulation that is piecemeal and varies by product. This approach may be seen as purposely limited in scope and supportive of market innovation, but it also results in a lack of consistency across electronic payment mechanisms. It allows consumer protections to target the attributes and risk factors associated with particular payment applications. At the same time, consumers face a matrix of consumer protections that depend on the type of payment application and how it is used, making it potentially confusing for consumers when trying to understand the protections provided by payment tools that have similar functional outcomes.

Furletti's series of papers addressing consumer protection are highlighted in a special section of the Center's website at www.philadelphiafed.org/pcc/series.html. (The first two papers in the series were co-written with Stephen Smith of the Bank's Legal Department.)



Payment Cards Center Gathers Experts in Philadelphia: 2005 Conferences

Federal Consumer Protection Regulation: Disclosures and Beyond

June 10, 2005

On June 10, 2005, the Payment Cards Center hosted a one-day symposium titled "Federal Consumer Protection Regulation: Disclosures and Beyond" that brought together credit card industry leaders, legal scholars, consumer advocates, economists, and federal regulators to discuss standardized credit card disclosures and other means of protecting credit card consumers. The symposium aimed to answer two basic questions: How can regulators and policymakers improve the current set of regulatory disclosures? And what other tools should regulators and policymakers consider using to protect consumers?

The Truth in Lending Act (TILA) and its implementing regulation, Regulation Z, marked the beginning of the federal government's involvement in protecting credit card consumers by way of disclosure. In his keynote address introducing the day's discussion, Thomas A. Durkin, a senior economist at the Board of Governors of the Federal Reserve System who has written extensively on the subject, described the act, its legislative history, contemporary sources of influence, and intended goals. Durkin led the subsequent discussion, which considered the act's successes and failures as the basis for protections afforded credit card users.

Following Durkin's analysis of TILA, panelists and participants addressed the symposium's central questions with recommendations that involved (1) making specific changes to current credit card disclosures, (2) improving the processes by which disclosures are implemented, (3) increasing reliance on technology for the purposes of making disclosures more useful and educating consumers, and (4) changing the "mix" of regulatory intervention in the industry.

One area where there seemed to be general agreement among participants was the sense that

Panel members for the session on "What Can Be Achieved with Standardized Disclosures?" Front Row L-R: Travis Plunkett, Consumer Federation of America; Ralph Rohner, Catholic University; and Thomas Durkin, Federal Reserve Board of Governors; Back Row L-R: Clinton Walker, Juniper Bank; L. Richard Fischer, Morrison & Foerster (panel moderator); and Scott Hildebrand, Capital One

Panel members for the session on "What Problems Are Best Solved with Alternatives to Disclosure?" Panel L-R: Todd Zywicki, George Mason University School of Law; Matthew Neels, MBNA; Oliver Ireland, Morrison & Foerster (panel moderator); Russell Schrader, Visa; and James Brown, University of Wisconsin

current regulatory disclosures were "bloated": too much information makes the disclosures themselves less informative for consumers. At the same time, there was less agreement about how to streamline the information included in disclosure notices. Participants considered how to improve the process of deciding what to disclose and how, with an emphasis on incorporating consumer feedback and testing in this process. Participants also generally agreed that flexible information technologies should play a more prominent role in the delivery of disclosures and other critical information needed by cardholders.

In conclusion, participants acknowledged that making substantive changes in federally mandated consumer protections will be both a technically and politically challenging exercise. At the same time, it was also argued that despite the many problems with disclosure practices, there are substantive benefits and ample opportunities for improvements in the way credit card consumers are informed about their rights and protections.

The conference summary details participant recommendations in each of the four broader categories. It is available on the Center's website, or a paper copy can be ordered.

Risky Business: Managing Electronic Payments in the 21st Century

June 20-21, 2005

On June 20-21, 2005, the Payment Cards Center in conjunction with the Electronic Funds Transfer Association (EFTA) hosted a day-and-a-half conference titled "Risky Business: Managing Electronic Payments in the 21st Century." Participants from the financial services and processing sectors, law enforcement, and academia, as well as policymakers gathered at the Federal Reserve Bank of Philadelphia to explore key topics associated with the challenge of effectively managing risk in a payments environment that is increasingly electronic.

L-R: H. Kurt Helwig, EFTA; Frank D'Angelo, Metavante Corporation; and Peter Burns, Payment Cards Center

Panel members for "Checks: How to Manage the Risk When the Paper Disappears" Seated L-R: Louise L. Roseman, Federal Reserve Board of Governors; Susan Robertson, Federal Reserve Bank of Atlanta; and Sydney Smith Hicks, VECTORsgi. Panel moderator Blake Prichard, Federal Reserve Bank of Philadelphia, is standing behind the group.

The conference sessions addressed a wide range of risk-related issues, including:

- regulatory environment for payments and data security;
- ways that payment electronification is influencing law enforcement;
- elimination of business silos as a condition for effective risk management;
- effect of identity theft on consumer adoption of electronic payments;
- changing risk environment with electronic check conversion;
- data protection strategies for financial institutions and nonbank processors that store and maintain consumers' personal information; and
- best practices for a secure electronic payments environment.

As each of these topics was addressed by the assembled participants, it became clear that much is being done to manage risk in a variety of ways and across a myriad of payment environments, including those that are electronic. Despite some proven successes in mitigating fraud, participants acknowledged that fine-tuning risk management strategy is a never-ending process and one that requires continued investment.

In particular, the financial services industry is keenly aware of fraud risks and the changing nature of these risks as payments migrate to electronic formats. Participants recognized that the fast-paced evolution of technologies, while presenting many benefits to the financial sector, arms thieves with new tools with which to commit fraud. Many acknowledged that fraud risk will never be completely eliminated; it will be a continuously evolving battle between enterprising thieves and ever more inventive strategies to anticipate and counter these attacks.

Moreover, participants agreed that risk in an electronic payments environment is not geographically constrained, and therefore, attention and coordination among several constituencies—financial services companies, law enforcement agencies, and consumers, among others—are needed to eliminate safe havens for electronic fraudsters anywhere in the world. Finally, many participants emphasized the important role that consumer trust plays in the adoption of electronic payment innovations. As such, many agreed, it is incumbent on all stakeholders to recognize the risks associated with losing this consumer confidence and to respond in kind.

The conference summary highlights additional insights from each topic's discussion. It is available on the Center's website, or a paper copy can be ordered.

Payment Cards and the Unbanked: Prospects and Challenges

July 13-14, 2005

On July 13-14, 2005, the Payment Cards Center hosted a two-day conference, "Payment Cards and the Unbanked: Prospects and Challenges," that brought together experts from the financial services industry and from the policymaking, community development, and academic communities to examine the products, services, and providers that are emerging to meet underserved consumers' financial needs. The wide range of experiences represented by the participants provided a unique framework for discussion of this topic.

L-R: Armen Khachadourian, formerly of JP Morgan Chase, and Doris M. Damm, ACCU Staffing Services

Michael S. Barr, of the University of Michigan Law School, provided the keynote address in which he explored the means by which the unbanked—who lack access to checking or savings accounts—and low-income consumers have traditionally conducted financial transactions and the costs they incur to do so. Also, he discussed the potential for greater participation by policymakers, industry leaders, and educators in creating a more effective and equitable financial services structure. Ultimately, Barr argued that new products and appropriate incentives could lead to substantive benefits, improving utility and efficiency for all market participants, particularly for those in traditionally underserved segments.

The conference was organized around four panel sessions. First, payroll cards were explored as a method of payment and account management for underserved consumers. In the discussion, several key themes emerged: the role of employers in payroll card distribution, the potential of payroll cards to replace traditional bank accounts, the importance of consumer education, and the implications of an unsettled regulatory environment.

The second panel considered several other new financial tools that have been developed to serve the particular needs of the underserved: prepaid approaches to traditional bank accounts. This session highlighted that the migration to electronic payment platforms and the expanding infrastructure supporting these platforms are contributing to changing economics. In addition, these trends are inspiring alternative delivery channels, new product development, and additional opportunities for both providers and the underserved end-users.

Third, a panel of payment innovators in the "nonbank" sector examined how technology, alternative delivery channels, and new payment tools are being used to build relationships with underserved consumers. The moderator of this session, T. Jack Williams of Tier Technology, argued that merchants are playing an increasingly important role in delivering financial services to underserved consumers and, in his

L-R: Jeanne M. Hogarth, Federal Reserve Board of Governors; Emery Kobor, United States Department of the Treasury; Gary Palmer, WildCard Systems; and Miguel Cintron, Bank of America

view, are seeing better results than banks in terms of consumer adoption and use of the services they provide. He attributed this success to merchants' knowing these customers and having built relationships with them over time.

Last, the director of the Payment Cards Center led a discussion of what was learned about this consumer market for financial services. In this closing session, participants identified three areas that require further study: the roles being played by banks and nonbanks, the need for consumer education, and the regulations governing these financial products and services.

The conference summary highlights additional insights from each panel discussion. It is available on the Center's website, or a paper copy can be ordered.

Payment Cards Center: New and Improved Bibliographic Search

The Payment Cards Center's electronic bibliography contains more than 700 citations in a database of articles related to consumer credit and payments.

Over the summer, the database was expanded to include abstracts and excerpts from papers. Given the increasing number of citations, a more flexible keyword search engine also adds further functionality to the database.

The Center maintains the bibliography as a source tool for researchers and industry experts looking to stay abreast of academic, regulatory, and industry output in their study of consumer payments.

PAYMENT CARDS
Center

FEDERAL RESERVE BANK OF PHILADELPHIA

Update

Payment Cards Center Newsletter

Federal Reserve Bank of Philadelphia
Ten Independence Mall
Philadelphia, PA 19106-1574
215-574-7110
215-574-7101 (fax)
www.philadelphiafed.org/pcc/

Peter Burns
Vice President and Director

Julia Cheney
Industry Specialist and Update Editor

The Payment Cards Center was established to serve as a source of knowledge and expertise on consumer credit and payments; this includes the study of credit cards, debit cards, smart cards, prepaid cards, and similar payment vehicles. Consumers' and businesses' evolving use of electronic payments to effect transactions in the economy has potential implications for the structure of the financial system, for the way that monetary policy affects the economy, and for the efficiency of the payments system.