How Effective Were the Financial Safety Nets in the Aftermath of Katrina?

This paper describes the U.S. financial system's response to the destruction caused by Hurricane Katrina and examines how financial safety nets helped meet consumers' needs in the aftermath of the storm. Overall, we find that consumers who hold deposit accounts at financial institutions are less vulnerable to financial disruptions than individuals who do not have either a checking or a savings account (the unbanked). The federal banking regulators' and financial institutions' responses to Hurricane Katrina, the financial vulnerability of unbanked families to this unexpected catastrophic event, and how the American Red Cross, FEMA, and the Gulf States' relief efforts supplied financial assistance to Katrina's victims are also addressed. Finally, we present several strategies that can be pursued to further safeguard the U.S. population and the financial community against extraordinary events.

Julia S. Cheney, Federal Reserve Bank of Philadelphia[1]
Sherrie L.W. Rhine, Federal Reserve Bank of New York[2]

Introduction

On August 29, 2005, Hurricane Katrina stormed through the Gulf Coast region, making its way across Louisiana, Mississippi, and Alabama; included in its path was the city of New Orleans.[3] The storm caused substantial devastation as levies were breached, submerging or washing away most homes, commercial businesses, communication networks, and other infrastructure in the lower lying sections of New Orleans and the nearby coastal region. As a consequence, 80 percent of New Orleans was flooded, and there was, at best, limited electricity and phone service across the region. Also in limited supply were necessities such as food, bottled water, and shelter. By late September, the Department of Homeland Security's Federal Emergency Management Agency (FEMA) had received requests for assistance from 1,356,539 families who were forced to relocate (Erikson, Tse & Wilgoren, 2005).

Much of the Gulf Coast's financial sector, including locally based banks, credit unions, and thrifts (hereafter, collectively referred to as financial institutions) suffered structural damage, and in some cases, facilities were completely destroyed. As a result, many Gulf Coast residents not only lacked basic necessities but also were without access to their financial accounts and the payment services provided by financial institutions.

In addition, use of card payment applications, such as credit, debit, prepaid, and electronic benefit transfer[4] cards, that require electronic connections to the payment system for authorization and processing was impaired by the lack of electricity and damage to the physical mechanisms, for example, automated teller machines (ATMs), personal computers, and merchant point-of-sale readers, used to initiate electronic transactions. Together, the weakened communication systems and structural damage presented many residents with significant hurdles when attempting to conduct simple financial transactions such as accessing funds, cashing checks, making purchases, or paying bills using any of these channels or the electronic payment applications they facilitate. As a consequence, many people in the region had to rely heavily on cash as their primary means of exchange.

Over the years, regulators and financial institutions have worked to establish and maintain back-up systems and contingency plans that have proven invaluable to ensuring the stability of the U.S. financial system, particularly regional financial markets, following an extraordinary event, such as the September 11, 2001, terrorist attacks and, more recently, Hurricane Katrina. Many of the lessons learned by the financial community as a result of the 2001 terrorist attacks were incorporated into regulators' and financial institutions' process of updating and further strengthening contingency and disaster recovery plans (Federal Reserve Board, 2003). They also led to revised guidance and examination procedures for business continuity planning (Federal Financial Institutions Examination Council, 2003).

These efforts by regulators meant that financial infrastructures and information technology systems were strengthened, extensive protocols were put into place, and back-up communications networks were built to safeguard against manmade and natural disasters. As a result, the U.S. financial system has extensive and well-communicated safeguards to help the financial industry and its regulators quickly restore financial services and liquidity to regions devastated by extraordinary events. The contingency and disaster recovery plans established by the Federal Reserve and regional financial institutions were activated during Hurricane Katrina.

This paper describes the U.S. financial system's response to the destruction caused by Hurricane Katrina and examines how financial safety nets helped meet consumers' needs in the aftermath of the storm. Overall, we find that consumers who hold deposit accounts at financial institutions are less vulnerable to financial disruptions than individuals who do not have either a checking or a savings account (the unbanked).

Response by Financial Regulators and Institutions

Federal bank, thrift, and credit union regulatory agencies[5] (the agencies) responded to the aftermath of Hurricane Katrina by taking immediate steps to ensure that the market had sufficient liquidity to meet consumers' and businesses' demands for cash in the absence of alternative electronic payment options. The Board of Governors of the Federal Reserve System (BOG), and particularly the Federal Reserve Bank of Atlanta,[6] activated contingency operations and procedures to provide currency and check services to the Gulf Coast region from alternative Federal Reserve locations.[7] To this end, the Federal Reserve Bank of Atlanta began armored car transports to the region as soon as the hurricane had passed, moved check clearing operations to Atlanta, and maintained the discount window to assist all depositories in meeting their liquidity needs.[8] At the same time, the National Credit Union Administration (NCUA) activated its disaster relief policy to improve market liquidity and provide credit relief for the region's credit unions. Under this policy, "the NCUA will, where necessary, encourage credit unions to make loans with special terms and reduced documentation to affected members; reschedule routine examinations of affected credit unions, if necessary; guarantee lines of credit for credit unions through the National Credit Union State Insurance Fund; and make loans to meet the liquidity needs of member credit unions through the Central Liquidity Facility."[9]

In addition, the Federal Deposit Insurance Corporation (FDIC) and the NCUA immediately began tracking and reporting on the operational status of financial institutions, monitoring the progress being made to bring these facilities back online. On September 12, 2005, the FDIC reported that it had been in contact with all 280 federally insured depository institutions in the Gulf Coast area and that 363 of a total of 5,054 branches were still out of service (Jackson and Miles, 2005). By October 18, 2005, the FDIC updated its information to show that the hurricane had affected 100 financial institutions with offices in the region and 182 of these institutions' branches remain closed, 50 percent less than reported as of September 12.[10]

Similarly, on September 7, the NCUA reported that the storm had affected 139 credit unions with a total of $3.4 billion in assets. Of these, 32 were nonoperational, representing less than 10 percent of the total assets. By September 16, the NCUA reported that all credit unions were operational and providing their members with access to their funds.[11]

While many financial institutions' locations were back in operation within days of the hurricane, there were also a significant number in hard hit areas that had been destroyed by the storm or that, even after several weeks, remained inaccessible. As a result, these banks' customers were forced to use alternative branch locations, completely different banks, or, perhaps, ATMs outside of their bank's network in order to conduct critical financial transactions such as getting cash from their accounts and cashing government benefits, disaster relief, or payroll checks. In support of these efforts, the agencies encouraged depository institutions to relax rules about providing services to noncustomers and nonmembers. For example, on August 31, 2005, the NCUA issued guidance that noted that credit unions are able to provide emergency financial services, such as check cashing and access to ATM networks, to nonmembers under certain conditions.[12]

In addition to encouraging financial institutions to provide services to noncustomers, the agencies also addressed ways to ease the financial strain on Gulf Coast residents. In conjunction with the Conference of State Bank Supervisors, the agencies released guidance on September 1, 2005, that asked "insured depository institutions to consider all reasonable and prudent steps to assist (with) customers' and credit union members' cash and financial needs in areas affected by Hurricane Katrina."[13] This communication listed a number of actions that were acceptable in providing financial relief for area residents, including:

- Waiving ATM fees for customers and noncustomers
- Increasing ATM daily cash withdrawal limits
- Easing restrictions on cashing out-of-state and noncustomer checks
- Waiving overdraft fees as a result of paycheck interruption
- Waiving early withdrawal penalties on time deposits
- Waiving availability restrictions on insurance checks
- Allowing loan customers to defer or skip some payments
- Waiving late fees for credit card and other loan balances because of interrupted mail service/delivery of billing statements or the

customer’s inability to access funds

- Easing credit card limits and credit terms for new loans
- Delaying delinquency notices to credit bureaus

On November 30, 2005, in a related FFIEC press release, these same agencies further encouraged depository institutions to continue working with borrowers affected by Hurricane Katrina, noting that “granting additional deferral periods for some borrowers in accordance with sound risk management practices may be appropriate given that the timing and amount of insurance payments, disaster payments, and other assistance may still be unknown.”[14]

As financial institutions began to service both their existing customers and noncustomers, it quickly became clear that verifying a consumer’s identity was often a significant hurdle. In the quick exodus from homes endangered by rising flood waters, many residents had lost or left without documents, such as a driver’s license, a Social Security card, and so forth, that are generally accepted by banks as proof of identification for the purposes of complying with the customer identification program (CIP) in the Bank Secrecy Act (BSA). In consultation with the Financial Crimes Enforcement Network (FinCEN) at the U.S. Treasury, the agencies encouraged depository institutions to make use of the flexibility in the act’s language. Specifically, the CIP allows for depository institutions to design a program that uses “documents, nondocumentary methods, or a combination to verify a customer’s identity.” Given the unusual circumstances in the post-hurricane Gulf Coast, the agencies suggested that depository institutions consider nondocumentary methods in certain situations and amend, as needed, its CIP.[15]

The agencies also noted that BSA regulations require financial institutions to obtain certain customer information prior to opening a new account: name, address, date of birth, and taxpayer identification number.[16] The regulations do not, however, require a financial institution to *verify* a customer’s identity prior to opening an account but, rather, within a “reasonable time” following the account opening.[17] Therefore, banks were granted flexibility under the statute to define a “reasonable time,” given the post-hurricane circumstances. However, simply cashing noncustomers’ checks is not considered “opening an account,” and financial institutions had discretion regarding the extent to which they provided this service to noncustomers and which documents they would require. Moreover, financial institutions receiving wire transfers under $3,000 for noncustomers are not required by law to verify the recipient’s identity, although many choose to do so as part of their standard practices. Alternatively, for amounts greater than $3,000, the agencies noted that financial institutions should “obtain and retain the name of the beneficiary, address, type of identification document reviewed and number of identification document, and taxpayer identification number.”[18]

The federal regulatory agencies’ responses and the contingency and disaster recovery plans put in place by financial institutions were effective in many ways.[19] Cash was being moved to the affected areas, regulatory agencies were encouraging institutions to relax rules about servicing noncustomers, and many forms of financial relief were being provided to the region’s residents. Additionally, a large majority of financial institutions had successfully shifted data systems and clearing and settlement operations to alternative locations. As a result of these financial safety nets, Gulf Coast residents who had formal banking relationships were able to immediately benefit from the practices instituted by the agencies and financial institutions.

Among those most affected by Katrina were individuals who fell outside the financial mainstream—the unbanked. Studies have consistently shown that the unbanked are most likely to have lower income, be a member of a minority group, and reside in a low- to moderate-income neighborhood. (Rhine and Greene, 2006; Hogarth and O’Donnell, 1997; Booz-Allen, 1997; and Caskey, 1997). An important question that arises is how unbanked families from the New Orleans inner city and the surrounding region were able to cope in the aftermath of Katrina. The financial circumstances and subsequent relief efforts provided to unbanked families is described in the next section.

Financial Vulnerability of Unbanked Families

Insights about the circumstances faced by families most vulnerable to the impact of Katrina are provided in a survey of evacuees in the Houston Astrodome shelter conducted by the Washington Post, Kaiser Family Foundation, and Harvard University (WKH).[20] The intent of the survey, conducted from September 10-12, 2005, was to cover the population hardest hit by the hurricane: those who did not make it out of the city in time, those who had to rely on government help to evacuate, and those who did not have access to alternative shelter on their own. Ninety-eight percent of those surveyed were from the greater New Orleans area. According to the survey, the majority of these evacuees were unbanked, had lower annual income, and were members of a minority group. Specifically, 74 percent reported a total before-tax income last year of less than $30,000.[21] Almost two-thirds of the respondents were unbanked, 95 percent were members of a minority group (of which 93 percent were black), and 72 percent did not own credit cards. A majority of these evacuees said they had remained in the hurricane region either because they lacked a way to get out (that is, no means of transportation) or because no lodging or shelter was available elsewhere.

In the wake of Katrina, finding access to needed check cashing and other financial services for unbanked evacuees was not easily accomplished. Without deposit accounts, unbanked individuals could not benefit from direct deposit of payroll or other sources of income, electronic bill payment, or cash from ATMs. Unbanked individuals could not easily cash checks they already held or retrieve paychecks owed to them by their employers. Moreover, mail service disruptions made it impossible to deliver Social Security or supplemental security income, private pensions, and child support or alimony payments to recipients not using direct deposit. As displaced residents, these evacuees no longer had permanent addresses, likely causing future delays in receiving income checks.

It is fairly common for unbanked or lower-income persons to obtain check cashing and other financial services from alternative providers of financial services, e.g., check cashers, money transmitters, and payday lenders,[22] among others (Rhine, Greene, and Toussaint-Comeau, 2006). These companies, however, faced property losses and limited or complete lack of electricity and phone lines, the same as other businesses in the Gulf Coast region. As a consequence, unbanked evacuees' ability to gain access to their funds was severely limited until after they had relocated. Even for the roughly 33 percent of lower-income "banked" evacuees described in the WKH study, any personal budget tightness, possibly coupled with no savings or line of credit to tap into, would have exacerbated their financial circumstances in the hurricane's aftermath.

Although the safety net succeeded in bringing financial stability to the areas traumatized by Katrina, individuals without established relationships in the financial mainstream remained especially vulnerable. In Katrina's wake, federal and state agencies and nonprofit organizations brought financial relief to those most affected by using an electronic means of funds disbursement: prepaid cards.[23] Prepaid cards are payment cards on which value has been pre-loaded. The prepaid card can be used for retail purchases and bill payment at merchants and other service providers that accept the network brand on the card. Additionally, the cards can be used to withdraw funds from ATMs in participating networks. Because prepaid card transactions are processed similarly to those for conventional debit and credit cards, they require an electronic connection to the payment network to function.

The potential to use prepaid cards as a method for distributing relief funds is of particular interest to this study for several reasons. First, branded prepaid cards are widely accepted in the marketplace and are often a convenient way for unbanked individuals to carry out their financial transactions. Second, making electronic transfers is less costly (roughly, an average of $0.20 per transfer) than writing checks (an average between $1.00 and $2.00 per check), making prepaid cards a more cost-effective way of delivering relief (Miller, 2004). Third, providing relief funds through prepaid cards can be safer than holding cash for recipients; can limit spending to pre-approved merchants, such as those selling food, clothing, or shelter; and can be less risky in terms of theft or fraud for the agencies and organizations distributing them. The next section describes the relief efforts undertaken by agencies and organizations for victims of Katrina.

Relief Efforts

The Gulf Coast states' electronic benefits transfer (EBT) programs,[24] the American Red Cross (Red Cross), and FEMA played important roles in providing financial relief to residents affected by Hurricane Katrina. The Food and Nutrition Service (FNS) administers the nutrition assistance programs of the U.S. Department of Agriculture (USDA). The cornerstone of the USDA's nutrition assistance is the food stamp program.[25] This program is delivered through EBT, an electronic system that allows recipients to authorize transfers of their government benefits from a federal account to a retailer's account to pay for products received.[26] Each state administers its EBT program to provide income assistance to families eligible for food stamps, Temporary Assistance for Needy Families (TANF), and other supplemental cash programs. These benefits are delivered to families through EBT cards that have been electronically loaded with the appropriate dollar value of benefits. Families make point-of-sale purchases for food and other necessities with EBT cards by electronically accessing the funds using a personal identification number (PIN).

The states of Louisiana, Mississippi, and Alabama used their existing EBT programs to help deliver food and cash assistance to residents of their respective states (ATM & Debit News, 2005). In Louisiana, for example, 300,000 EBT food stamp recipients obtained assistance through EBT. An additional 280,000 households in the hurricane region also received food and cash assistance with EBT cards. The USDA allowed a 30-day allotment of food assistance using existing EBT programs. This time limit was imposed to minimize the potential for fraud. Approximately 977,000 households were certified to receive EBT cards for disaster relief, and certification requirements were less stringent for disaster relief recipients. In particular, they were required only to show proof that they lived in a disaster area and did not need to submit income statements, documents necessary under the traditional food stamp program.

Prepaid cards were one of the ways in which the Red Cross and FEMA provided financial relief to evacuees, although with different levels of success. In conjunction with JP MorganChase and MasterCard International, the Red Cross's Katrina relief program distributed funds, totaling over $100 million as of September 14, 2005, to victims in several ways: by check, money order, direct deposit, and prepaid card. During this same period, the Red Cross distributed more than 300,000 prepaid cards, ranging in value from $360 to $1,565. Initially, the high demand for aid created distribution difficulties for the Red Cross (CardLine, 2005). By September 22, 2005, the organization was ordering an additional 100,000 prepaid cards daily to meet the demand for Red Cross aid (ATM & Debit News, 2005). Alternatively, FEMA's prepaid card program was discontinued after only a few days. As of September 13, 2005, FEMA had distributed over $819 million in relief funds, of which only $20.6 million were distributed in the form of approximately 10,000 prepaid cards, valued at $2,000 each (Breitkopf, 2005).

The increased distribution of prepaid cards by government and relief organizations is an important example not only of the general trend toward electronic payments but also of a lower-cost option than cutting and processing checks (Rhine and Su, 2005). Prepaid cards can be a particularly useful way to deliver financial assistance to lower-income and unbanked disaster victims. It also offers recipients a convenient and safe way to meet their financial needs. Although this experience demonstrates that prepaid cards can be deployed for emergency relief, several hurdles must be overcome before greater efficiencies and larger benefits can be gained.

Delivering Relief via Prepaid Cards: Challenges and Benefits

Structuring an effective emergency relief program using prepaid cards presents a variety of challenges to relief organizations and federal and state agencies. The first is establishing an applicant's eligibility in an emergency. Disaster victims may not have documents available to substantiate their identities or addresses, making it difficult to validate an applicant as a qualified recipient of relief funds. The second is limiting application fraud by screening out ineligible applicants or disallowing eligible recipients to apply more than once, avoiding opportunities for double dipping. Third is restricting card use to pre-approved types of purchases, such as food, clothing, or shelter, and rejecting attempts to purchase nonapproved items. Fourth is determining whether the prepaid card relief program should allow funds to be reloaded to the cards or whether funds should be restricted to the preloaded amount, after which the card becomes defunct. While "reloadability" offers a long-term solution, adding convenience for disaster relief victims and greater distribution efficiencies, it will likely require stronger customer identification protocols in order to limit the potential for illicit use. In disaster areas where residents may not have access to identification documents, reloadable prepaid relief cards may not be a feasible option unless identification requirements can be managed, making limited-use cards more practical. Fifth is the ability to electronically connect to the payment networks for authorizing and settling transactions. Again, in disaster areas, relying on electronic payments may be difficult when the availability of electricity is spotty or there is damage to ATMs or merchants' point-of-sale card readers. Each of these challenges requires the program's organizers to balance the need to quickly and efficiently get relief funds to those in disaster areas with the ability to do so in ways that control for fraud and other misuse (Tescher, 2005).

Despite these challenges, the potential benefits of a prepaid card relief program are many. Using these cards, organizations can quickly get financial relief into the hands of lower-income consumers who may not have checking or savings accounts. Electronic payment cards can be less costly and more easily transported and distributed than cash or checks by relief organizations and state agencies in disaster areas. In emergency situations, prepaid cards that are branded by a payment network are widely accepted at merchants such as grocery stores and hotels across the country. A prepaid card relief program can also help consumers carry out their immediate financial transactions without having to open a checking account until they are financially prepared to do so.

At the same time, prepaid card issuers and marketers currently face uncertainties related to the unsettled regulatory environment for prepaid cards (Cheney, 2005 and Furletti, 2004). There are a number of prepaid card business models at varying stages of development and consumer acceptance in the market. As a result, regulators have been hesitant to apply uniform regulations to these different types of prepaid card applications because such an action might be costly and might inhibit continued innovation in this emerging payments area.[27] To the extent that regulatory uncertainty hinders continued innovation in this payments category, there is some concern that it may limit the development of prepaid card applications whose functionality is particularly useful in disaster areas and for underserved consumer segments.

Strategies to Further Strengthen Financial Safeguards

The events following Katrina illuminated both strengths and weaknesses of current strategies to safeguard the U.S. population and financial system against natural and manmade disasters. The U.S. financial system has proven to be resilient in providing access to financial services and liquidity to many families and businesses affected by disasters. Even so, additional steps can be taken by the public and financial community to make the recovery from catastrophic events smoother, more efficient, and less stressful for those affected.

A major obstacle faced by many Katrina evacuees was not having adequate documentation of identity or residence. To better prepare for the unexpected, households and business owners should make personal identification, residential information, and banking and other financial documents easily accessible in the event there is a need for quick evacuation. To minimize problems associated with gaining access to personal funds and to ease the burden of transactions, households and business owners can use electronic payments and fund transfers where it makes sense to do so, such as depositing funds directly into an account, making bill payments electronically, and using ATMs to get cash.

Financial educators and counselors can also play an important role in helping consumers understand the costs and benefits associated with the wide variety of financial products and services in the marketplace. In particular, the trend toward electronic payments suggests that consumers would benefit from having a clearer understanding of how electronic fund transfers and payments work, specifically how transactions involving direct deposit, ATM and debit cards, and pre-funded cards are carried out. Financial education is expected to benefit both unbanked and banked persons. As an example, roughly 32 million of the 77 million baby boomers do not use direct deposit for reasons such as do not trust direct deposit, desire to personally make deposits at the financial institution, and have a preference for paper checks.[28] These consumers are more likely to adopt direct deposit if they understand how it works and have greater clarity concerning its safety and ease of use over paper checks.

One of the important lessons learned from Katrina is that individuals who held deposit accounts at financial institutions were less vulnerable to financial disruptions than individuals who were unbanked. Financial educators and counselors can use the Katrina experience to explain the financial soundness of putting funds into a checking or savings account at a financial institution. This experience can also serve to show the advantage of having a financial cushion against unexpected events. For example, evacuees who had savings funds were financially better positioned than individuals who did not when events caused them to have to relocate, find housing, and get another job. In addition, financial educators and counselors can use this event to explain how having a sound credit rating can also help make funds available when disaster strikes.

In the course of researching the financial system's response to Hurricane Katrina and the safety nets in place for disaster-area residents, we spoke to a number of leaders in the financial services industry who represented a cross-section of card issuers, payment processors, and payment consultants. These discussions helped us gain a better understanding of the practical issues faced by private-sector payment providers and brought to light several areas where further study may lead to more effective disaster recovery strategies for the financial services industry. We summarize several points here.

The CIP requirements under the Patriot Act become increasingly burdensome in disaster areas where, for a variety of reasons, affected residents do not have access to standard identification documents. This issue is exacerbated for lower-income consumers who may never have had traditional identification documents, such as a driver's license, or formal banking relationships to fall back on to verify their identities. Peter Schnall of Capital One emphasized that the Katrina experience highlighted a need for improved ways to identify individuals and verify their identities in disaster situations for all consumers, especially those operating outside the formal banking system.[29]

Another point raised by Schnall was that providing credit relief to disaster-area residents in the form of payment deferrals may have an unintended effect: Lenders may defer reporting delinquencies to credit reporting agencies, thereby complicating consumer credit risk analyses.[30] Therefore, lenders may need to consider disaster-area residents' payment performance differently in order to evaluate their repayment ability, for both existing customers and new loan prospects. A possible consequence of payment deferrals may be that lenders choose not to approve new or existing credit until they feel that this disaster-related effect has been appropriately captured in their lending models. Schnall suggested that lenders and researchers can use the Katrina experience to better understand the implications for consumer credit data and associated long-term consequences related to measuring consumer credit risk in disaster-area lending markets.

Another area noted for further study is a better understanding of the benefits and risks associated with sharing data on evacuees, including updated contact information, with financial institutions. With better access to such information, lenders would be able to initiate contact with relocated customers — instead of waiting for their customers to contact them — in order to speed the cancellation of payment cards lost in the disaster and the delivery of replacement or reissued payment cards to disaster victims at their new addresses. In so doing, lenders are able to limit the potential for fraud related to either lost payment cards or undeliverable reissued cards. Government and relief agencies can also benefit from access to consolidated data on evacuees in order to facilitate uninterrupted distribution of relief, benefits, and entitlements.[31]

Frank D'Angelo of Metavante Corporation pointed out that one way to improve the financial safety net, particularly for the unbanked, lies in better coordination of disaster planning and relief fund distribution among federal and state governments, relief agencies such as FEMA and the Red Cross, and the financial industry.[32] Electronic payment innovations, such as prepaid cards, are emerging as a more efficient way to distribute relief funds to disaster-area residents, although government and relief agencies still face challenges in structuring these programs. As described in Section 5, these challenges can relate to recipient eligibility, purchase authorization, fraud, fund reloadability, and infrastructure concerns. D'Angelo suggested that addressing these challenges and making related decisions about program design and card functionality would benefit from improved dialogue among government agencies and relief organizations that provide financial relief to victims in disaster situations and those in the financial services industry who specialize in issuing cards and processing payments.

Along these same lines, Bob Bucceri, an industry consultant with Chaddsford Planning Associates, noted that electronic benefit transfer cards worked well as a mechanism to provide disaster relief to Katrina victims because card holders had experience with the program, e.g., EBT card holders; the card issuer or distributor had sufficient resources to provide on-site training to relief recipients; and the infrastructure was sufficiently intact to provide access points for card holders to initiate transactions.[33] He suggested that federal and state governments and relief agencies as well as financial institutions and regulators should evaluate whether their current resources could be harnessed to meet these same criteria when developing strategies to quickly get relief funds to victims of manmade or natural disasters. By doing so, organizations are better positioned to leverage tools already in place to deliver liquidity and payment capabilities to citizens in disaster areas. At the same time, Bucceri stressed that it is critically important to define who is responsible for mobilizing these tools in an emergency, so that all aspects of a disaster-response plan can be effectively coordinated.

T. Jack Williams of Tier Technology echoed both D'Angelo's and Bucceri's comments, adding that increased attention should also be paid to converting benefits disbursements such as unemployment, pension, and child support payments from traditional paper checks to an electronic format.[34] He also noted that the distribution process used to execute these disbursements would benefit from standardization of file formats, across various state programs, so that, in emergencies, the process is the same, regardless of which states' residents are affected.

Conclusion

When disasters strike, whether manmade or natural, the financial safety nets work well to stabilize the financial system. At the same time, we find that these safeguards are better able to provide liquidity and relief for consumers who are already part of the financial mainstream than for those who are unbanked and operating outside of formal banking relationships. Strategies for improving the financial safety net have been presented as ways to help minimize the financial disruptions for disaster victims. Several of these strategies hinge on better ways to identify customers, improved coordination between government and relief agencies and the financial services industry, and increased use of electronic payment applications as delivery mechanisms.

At the same time, updating financial education curriculums to reflect lessons learned from Hurricane Katrina is an important step toward improving the public's understanding of the U.S. financial system's response to catastrophic events. Moreover, this education can help consumers make sound financial decisions, possibly encouraging more unbanked to join the financial mainstream and enjoy the benefits afforded by these safety nets. Hurricane Katrina demonstrated that the U.S. payment system's transition from paper-based to electronic formats provides benefits beyond just convenience for consumers. The inherent flexibilities are also critical factors in helping to build a more resilient financial services system that benefits all segments of our society.

Acknowledgements

The views expressed here are not necessarily those of the Reserve Banks of Philadelphia or New York or of the Federal Reserve System. The article was originally published in the Federal Reserve Bank of Philadelphia's *Payment Cards Center Discussion Paper Series*, January 2006.

References

ATM & Debit News. (2005, September 22). Katrina Opens Door for More Prepaid Debit Use, 6(34), SourceMedia, Inc., available at www.sourcemedia.com.

Booz-Allen and Hamilton Shugoll Research. (1997). Mandatory EFT Demographic Study, OMB #1510-00-68, U.S. Department of the Treasury. Washington, D.C.

Breitkopf, D. (2005, September 15). In Brief: FEMA Discontinues Relief-Card Program, *American Banker*.

Caskey, J.P. (1997). *Lower-Income Americans, Higher Cost Financial Services*, University of Wisconsin-Madison, School of Business: Filene Research Institute, Center for Credit Union Research.

Cardline. (2005, September 16). Red Cross Runs Out of Cards in Some Areas, 5 (37), SourceMedia, Inc., available at www.cardline.com.

Cheney, J.S. (2005). Payment Cards and the Unbanked: Prospects and Challenges, *Payment Card Center Discussion Paper*, July, p 13.

Erickson, M., A. Tse, and J. Wilgoren. (2005, October 2). Storm and Crisis: Katrina's Diaspora. *New York Times*, Section 1, Column 1: 24.

Federal Financial Institutions Examination Council. (2003, May). *Business Continuity Planning*, available at www.ffiec.gov/ffiecinfobase/html_pages/bcp_book_frame.htm .

Federal Reserve Board. (2003, April). Interagency Paper on Sound Practices to Strengthen the Resilience of the U.S. Financial System,
available at www.federalreserve.gov/boarddocs/press/bcreg/2003/20030408/attachment.pdf .

Furletti,M. (2004). Prepaid Card Markets and Regulation, *Payment Card Center Discussion Paper*, February, pp. 13-18.

Hogarth, J.M. and K.H. O'Donnell. (1997). Being Accountable: A Descriptive Study of Unbanked Households in the U.S. *Proceedings of the Association for Financial Counseling and Planning Education*, Phoenix, Arizona.

Jackson, W.D.and B.L. Miles. (2005, September 15). *Katrina's Wake: Restoring Financial Services*, Congressional Research Service Report for Congress, Washington, DC.

Miller, E. (2004) Payroll Debit Cards, *Proceedings from the conference on Stored Value: The Shape of Things to Come*, Pelorus Group, Atlantic City, New Jersey.

Rhine, S.L.W. and W.H. Greene. (2006). The Determinants of Being Unbanked for U.S. Immigrants, *Journal of Consumer Affairs*, 40 (1): 21-40.

Rhine, S.L.W., W.H. Greene, and M. Toussaint-Comeau. (2006). The Importance of Check-Cashing Businesses to the Unbanked: Racial/Ethnic Differences, *Review of Economics and Statistics*, 88 (1):146-157.

Rhine, S.L.W. and S. Su. (2005). "Stored Value Cards as an Electronic Payment for Unbanked Consumers, August, available at www.newyorkfed.org/regional/commdev.

Tescher, T. (2005, September 30). Lessons from Katrina on Prepaid Cards, *American Banker*, 170 (189).

Endnotes

[1] Industry Specialist, Payment Cards Center, Federal Reserve Bank of Philadelphia, Ten Independence Mall, Philadelphia, Pennsylvania, 19106, Phone: 215-574-6557, Fax: 215-574-7101, julia.cheney@phil.frb.org.

[2] Senior Economist, Office of Regional and Community Affairs, Federal Reserve Bank of New York, 33 Liberty Street, New York, NY 10045, Phone: 212-720-1621, Fax: 212-720-7841, sherrie.rhine@ny.frb.org .

[3] We recognize that Hurricane Katrina devastated many local communities besides New Orleans, including Biloxi, Mississippi; Gulfport, Louisiana; and the numerous smaller cities along the affected Gulf Coast region. In large part, references are made to New Orleans because of the substantial information available about Katrina's impact on that city.

[4] Originally, electronic benefit transfer (EBT) cards were designed as a means to distribute food stamp benefits, replacing paper food stamps with plastic cards. Today, efforts are underway to explore the use of EBT cards as a way to deliver additional types of benefits, including Temporary Assistance to Needy Families, child care assistance, child support payments, and the Women, Infants, and Children (WIC) program.

[5] These agencies include the Board of Governors of the Federal Reserve System (BOG); the Federal Deposit Insurance Corporation (FDIC); the National Credit Union Administration (NCUA); the Office of the Comptroller of the Currency (OCC); and the Office of Thrift Supervision (OTS).

[6] As one of 12 Reserve Banks, the Federal Reserve Bank of Atlanta operates six facilities in the Sixth Federal Reserve District, including the New Orleans Branch office.

[7] A detailed description of the Atlanta Fed's challenges and responses are provided in its Fourth Quarter 2005 issue of *Financial Update* at www.frbatlanta.org.

[8] Remarks by Governor Mark W. Olsen, at the Annual Economic Outlook Conference, Middle Tennessee State University, "Business Trends and Management Challenges for the Banking Industry," September 16, 2005. (www.federalreserve.gov/boarddocs/speeches/2005/20050916/default.htm)

[9] NCUA, "NCUA Activates Disaster Assistance in Response to Hurricane Katrina," news release, August 29, 2005.

[10] See the FDIC's website: www.fdic.gov/news/katrina/index.html .

[11]The NCUA noted that some credit unions may be operating out of back-up sites. (www.ncua.gov/news/press_releases/2005/NR05-0916.htm)

[12] NCUA, "Taskforce, Toll-Free Number Established to Address Credit Union Operations and Members Affected by Hurricane Katrina," press release, August 31, 2005. (www.ncua.gov/news/press_releases/2005/NR05-0831-2.htm)

[13] Federal Reserve Board, "Agencies Encourage Insured Depository Institutions to Assist Displaced Customers," joint press release, September 1, 2005.

[14] FFIEC, "Agencies Encourage Insured Depository Institutions to Continue Efforts to Meet the Financial Needs of Customers Recovering from the Aftermath of Hurricane Katrina," press release, November 30, 2005.

[15] Federal Reserve Board, "Agencies Encourage Insured Depository Institutions to Assist Displaced Customers," joint press release, September 1, 2005.
(www.federalreserve.gov/boarddocs/press/bcreg/205/20050901/default.htm)

[16] For most people, the taxpayer identification number is their Social Security number.

[17] Federal Reserve Board of Governors, "Statement on Supervisory Practices Regarding Financial Institutions and Borrowers Affected by Hurricane Katrina," September 15, 2005.

[18] Each of these areas was addressed in guidance titled "FAQs for Financial Institutions on the Bank Secrecy Act and Hurricane Katrina Victims," released by the agencies and FinCEN on September 9, 2005.

[19] Although this paper focuses on the actions taken by federal regulators, we acknowledge the importance of state banking regulatory agencies in promoting financial stability and regulatory compliance for state-chartered financial institutions and other state-licensed providers.

[20] Washington Post/Kaiser Family Foundation/Harvard University, *Survey of Hurricane Katrina Evacuees*, September 2005. (www.kff.org/newsmedia/upload/7401.pdf)

[21] The latest income information available for this region is drawn from the 2004 American Community Survey, U.S. Census Bureau. The median family income for the New Orleans area was $36,465. To be categorized as low income, family income must be less than 50 percent of the median family income for the metropolitan area (threshold of $18,233). Similarly, family income that is greater than 50 percent of the median family income for the area but less than 80 percent of the median family income for the area is defined as moderate income (threshold of $29,171).

[22] The clients of payday lenders are almost always individuals with a deposit account, suggesting that it is liquidity-constrained banked consumers who patronize payday lenders.

[23] In this paper, the term prepaid cards or branded prepaid cards (also called stored-value cards) refers to payment cards pre-loaded with value and branded with a payment network, such as Visa, MasterCard, American Express, and Discover, to allow for broad acceptance at locations accepting the network brand.

[24] For more information on the development of EBT programs and their migration from paper scrip to plastic cards, see "Assessing the Impact of Electronic Benefits Transfer on America's Communities and the U.S. Payment System," conference summary, Payment Cards Center, Federal Reserve Bank of Philadelphia, September 2004.

[25] For more information, go to www.fns.usda.gov/fns/about.htm.

[26] Details about EBT can be found at www.fns.usda.gov/fsp/ebt/.

[27] See "A Summary of the Roundtable Discussion on Stored-Value Cards and Other Prepaid Products," Federal Reserve Board. (www.federalreserve.gov/paymentsystems/storedvalue/default.htm)

[28] According to a study sponsored by the U.S. Department of the Treasury and the Federal Reserve Banks as part of their Go Direct campaign, 59 percent of Americans between 45 and 64 years of age use direct deposit. By comparison, 65 percent of those 65 years of age and older use direct deposit for Social Security and other funds. Because the study did not ask respondents whether they had a checking or a savings account, we are unable to

determine what proportion of the 32 million persons are unbanked and subsequently do not use direct deposit. See "Survey Reveals Baby Boomers Lag Seniors in Direct Deposit Usage," Press Release, December 27, 2005, www.fms.treas.gov/news/press/go_direct_poll.html.

[29] Schnall is executive vice president and chief credit officer at Capital One.

[30] For more information, see the section, "Past Due and Nonaccrual Reporting" in *Account and Regulatory Reporting Questions and Answers*, Federal Financial Institutions Examination Council. (www.ffiec.gov/katrina.htm#credit)

[31] FEMA maintains a database of contact information for those disaster victims who have applied for federal assistance, but privacy concerns have limited sharing individual records with private-sector entities.

[32] D'Angelo is president and chief operating officer of Metavante Corporation's Payment Solutions Group. As described on its website, Metavante, a wholly owned subsidiary of Marshall & Illsley Corporation, delivers banking and payment technologies to financial services firms and businesses worldwide.

[33] Bucceri is also a chairman emeritus of the Electronic Funds Transfer Association's EBT Industry Council.

[34] Williams is a senior vice president with Tier Technology.