The Evolving Landscape of Payments and Cybersecurity

by Meeoak Cho and Matt Davies

The financial services industry and the payments system are increasingly under attack—data breaches, malicious software ("malware"), social engineering, business email compromise (BEC)—and the list goes on.

One of the long-standing missions of the Federal Reserve has been to promote the safety, efficiency and accessibility of the U.S. payments system. In support of this mission, the Fed is working with the financial industry on improved, coordinated approaches for cybersecurity to ensure resilience in the face of cyberattack. We have made progress in fostering information sharing, convening the industry in pursuit of enhanced payments security and strengthening supervision of financial institutions in the area of cybersecurity.

Federal Reserve Financial Services: Information Sharing
To foster information sharing, the Fed has partnered with the Financial Services–Information Sharing and Analysis Center (FS-ISAC), an industry forum for collaboration on critical security threats facing the global financial services sector. Every financial institution with a FedLine connection can now use that connection to access FS-ISAC’s Weekly Risk Summary report at no additional cost. The report, designed for community institutions, delivers timely and actionable information on significant security threats for board and C-level personnel (CEO, CIO, CFO, etc.). The report provides a high-level summary of threats, identifies the risks to community institutions and suggests actions that may help remediate the risks.

The Secure Payments Task Force
In January 2015, the Fed released a paper titled "Strategies for Improving the U.S. Payments System" (SIPS). Of the five strategies outlined in the paper, the third focuses on security, indicating that the Fed will “work to reduce fraud risk and advance the safety, security and resiliency of the payment system.” The desired outcome of this strategy is that the security of the U.S. payment system remains very strong, public confidence remains high, and protections and incident response keep pace with the rapidly evolving threat landscape.

In pursuit of this strategy, the Fed established a Secure Payments Task Force (SPTF), which provides advice on payment security matters and determines areas of focus and priorities for future action to advance payment system safety, security and resiliency. The SPTF includes approximately 180 representatives from various industry segments, including large, medium and small financial institutions.

The SPTF has provided valuable input into the Fed’s financial services initiatives and activities in standards, data collection, outreach and research to align with and support industry efforts to reduce fraud risk and advance payment system security. The group advised the Fed in preparation for the next iteration of its triennial payments study, the release of which is anticipated late this year or early 2017, and that will include enhanced information on payments fraud. The SPTF was also instrumental in assisting with the development of the security com-
ponents of the Effectiveness Criteria established under the auspices of another Fed task force, the Faster Payments Task Force (FPTF), which was established to identify and assess alternative approaches for implementing safe, ubiquitous, faster payments capabilities in the U.S.

The SPTF has also launched three workgroups to explore different topics related to payments security: Payment Identity Management; Information Sharing for the Mitigation of Payment Risk/Fraud; and Data Protection. A fourth workgroup, Law and Regulation Coordination, is targeted for launch in third or fourth quarter 2016. Additionally, the SPTF launched a Standards Assessment Team to review relevant industry best practices to identify/document gaps and opportunities and develop a plan for Fed support of payment security standards.

Payment Security Standards

The Fed will also support the evolution and adoption of appropriate payment security standards, explore potential improvements to publicly available payment fraud data, conduct payment security research to inform industry and policy decisions, and share results with payment stakeholders. As part of this effort, the Fed will explore enhanced collaboration opportunities with government and industry partners to share threat information, enhance cyberthreat protections and support payment system resiliency.

Federal Reserve Banking Supervision and the Cybersecurity Assessment Tool

The Fed, as a supervisor of banks, collaborates with the Federal Financial Institutions Examination Council (FFIEC) to coordinate work on enhancing cybersecurity supervisory programs. In June 2015, the FFIEC released the Cybersecurity Assessment Tool (CAT). The CAT is consistent with principles outlined in the FFIEC Information Technology Examination Handbook as well as industry-accepted cybersecurity practices, such as the National Institute of Standards and Technology (NIST) Cybersecurity Framework. The tool is intended to help institutions identify their inherent risk and evaluate cybersecurity maturity. While the Fed considers completion of the CAT optional, financial institutions are strongly advised to complete a cybersecurity risk assessment using the CAT or other industry framework. Other regulators, such as the Texas Department of Banking, are requiring completion of the CAT.

In January 2016, the Fed, along with the FDIC and state banking agencies, implemented enhanced IT risk-based examination procedures for state-chartered financial institutions. The revised procedures are intended to improve consistency in the overall assessment and incorporate an evaluation of cybersecurity preparedness into the examination process. This evaluation includes an assessment of the CAT baseline maturity controls, which are requirements of the FFIEC IT Examination Handbook.

Preliminary reviews have found varying degrees of cybersecurity readiness across our supervised institutions. In cases where baseline requirements have not been achieved, regulators are also assessing management’s plans to address the deficiencies and applicable mitigating procedures. As Federal Reserve Bank of New York Executive Vice President Kevin Stiroh commented in April, “Supervisors are seeking to develop common principles to address cybersecurity issues and will work with other agencies to ensure that firms are dedicating resources and taking the appropriate actions to defend the operations that are critical to the financial services sector against cyberthreats.”

For more information about these events, email FIRM at Dallas_Fed_Firm@dal.frb.org.
Conclusion
Cyberthreats are continually evolving and increasing in sophistication, and the payments industry is, unfortunately, one of the primary targets. The Fed continues to make significant strides to facilitate information sharing, drive enhanced payments security and strengthen cybersecurity supervision programs in support of its overall mission to promote the safety, efficiency and accessibility of the U.S. payments system.

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NOTES
1 The paper and a wealth of information about the initiatives leading up to it and since its release can be found at www.fedpaymentsimprovement.org.
2 The members of the FFIEC are: the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corp. (FDIC), the National Credit Union Administration (NCUA), the Office of the Comptroller of the Currency (OCC), the Consumer Financial Protection Bureau (CFPB) and the State Liaison Committee.
3 From “Texas Department of Banking Industry Notice 2015-8.”

Additional Resources
- Texas Bankers Electronic Crimes Task Force
  - Corporate Account Takeover
  - Executive Leadership of Cybersecurity

- Federal Bureau of Investigation (FBI) InfraGard: a partnership between the FBI and the private sector; an association of persons who represent businesses, academic institutions, state and local law enforcement agencies, and other participants dedicated to sharing information and intelligence to prevent hostile acts against the U.S.
  - InfraGard North Texas
  - InfraGard Houston, including a Financial Services Special Interest Group (SIG)

- National Institute of Standards and Technology’s Computer Security Incident Handling Guide


- Annual FS-ISAC Cyber-Attack Against Payment Systems (CAPS) tabletop exercise: a simulated exercise that allows financial institutions to respond to a cyberattack scenario related to payment systems and test incident response preparedness.
  - September 2016 FS-ISAC CAP Exercises

- FFIEC Joint Statement: Cybersecurity of Interbank Messaging and Wholesale Payment Networks
Noteworthy Items

**Dallas Fed President Kaplan speaks in London on economic trends (April 29, 2016)**
Robert Kaplan spoke before the Official Monetary and Financial Institutions Forum in London in late April. He addressed the current economic conditions within and outside of the Eleventh District, as well as several trends affecting the U.S. and global economies, including demographics, globalization and high levels of debt to gross domestic product in developed economies. Kaplan indicated the outlook is positive for the U.S. economy, but highlighted some headwinds such as commodity overcapacities and the below-average U.S. labor force participation rate.

**Federal Reserve releases Federal Open Market Committee statement (May 18, 2016)**

**Dallas Fed First Vice President Holcomb to retire; search underway for successor (June 1, 2016)**
After 42 years of distinguished public service, Helen E. Holcomb is going to retire. A committee of Class B and C directors has been established to search both internally and externally for a successor. Dallas Fed CEO and President Robert Kaplan said that Holcomb “embodies our commitment to excellence and serves as a role model for our employees at all levels ... her knowledge, skill and insight will be sorely missed.”

**Federal Reserve Chair Yellen speaks in Philadelphia on current conditions and her outlook for the U.S. economy (June 6, 2016)**
Janet Yellen took stock of the economic recovery in the aftermath of the Great Recession and charted a course for continued growth and improvement. She noted that while the economy has made significant strides in putting people back to work, external factors are weighing heavily on U.S. growth potential. However, Yellen remained optimistic that innovation, rising wages and consumer spending will help keep the economic recovery on track.

**Dallas Fed President Kaplan speaks in New York on the role of monetary policy (June 23, 2016)**
Robert Kaplan spoke before the New York University Money Marketers in late June. He addressed the current economic conditions within and outside of the Eleventh District and highlighted economic headwinds abroad. Kaplan devoted much of his speech to identifying the role monetary policy plays in the economy, its strengths and its limitations. Finally, he offered some opportunities for fiscal policy to make an impact in positioning the U.S. economy for growth.

**Did You Know?**
The Board of Governors of the Federal Reserve System is a federal agency, while the 12 Federal Reserve District Banks are private organizations.