

ONE HUNDRED FOURTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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MEMORANDUM

November 29, 2015

To: Subcommittee on Commerce, Manufacturing, and Trade Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: Hearing on “The Disrupter Series: Mobile Payments”

On Tuesday, December 1, 2015 at 10:15 a.m. in room 2322 of the Rayburn House Office Building, the Subcommittee on Commerce, Manufacturing, and Trade will hold a hearing titled “The Disrupter Series: Mobile Payments.”

I. BACKGROUND

Consumers have adopted mobile devices at an astounding rate—64 percent of American adults now own a smartphone, up from 35 percent in 2011.¹ Mobile payments, which are increasingly popular smartphone features, allow consumers to engage in seamless transactions, such as purchasing goods through a retailer, making charitable donations, and sending payment to another person.² Consumers typically do this through a browser on their mobile device, a downloadable application (“app”), or text messages.³ The payment amount may be applied to a

¹ Pew Research Center, *U.S. Smartphone Use in 2015* (Apr. 1, 2015) (online at www.pewinternet.org/2015/04/01/us-smartphone-use-in-2015/).

² *Paying Your Pals with Digital Options from Venmo to Facebook*, Washington Post (Nov. 12, 2015) (online at www.washingtonpost.com/business/technology/paying-your-pals-with-digital-options-from-venmo-to-facebook/2015/11/12/63a29acc-898b-11e5-bd91-d385b244482f_story.html).

³ *Id.*

consumer's phone bill (known as carrier billing), charged to a credit card, deducted from a prepaid card, or withdrawn directly from a bank account.⁴

Mobile payments are performed through several different technologies. Two common technologies in this area are near field communication (NFC) and peer-to-peer (P2P) transactions.⁵ NFC, most commonly associated with "tap-to-pay" systems, allows two-way communication between a chip and a payment terminal.⁶ These transactions occur in-person, usually with a consumer's phone making close contact with (or "tapping") a payment terminal at checkout.⁷ P2P transactions are transfers of funds between two people through a smartphone app and can be completed anywhere with Internet access.⁸

For consumers, mobile payments are a convenient way to pay for goods and services.⁹ In addition, carrier billing and prepaid mobile products offer consumers without bank accounts or credit cards a way to purchase the things they need when cash payments are not possible.¹⁰

II. CONSUMER PROTECTION ISSUES

A. Privacy and Security

Mobile payment services may collect more personal information from consumers than traditional payments, which raises concerns about privacy and data security.¹¹ General contact information, category of purchase, date, time, and location are all collected through a typical

⁴ Board of Governors of the Federal Reserve System, *Consumers and Mobile Financial Services 2015* (Mar. 2015) (online at federalreserve.gov/econresdata/consumers-and-mobile-financial-services-report-201503.pdf).

⁵ *Apple vs. Venmo: How Apple Pay Stacks Up Against P2P Payment Competition*, International Business Times (Nov. 12, 2015) (online at www.ibtimes.com/apple-vs-venmo-how-apple-pay-stacks-against-p2p-payment-competition-square-cash-2181788).

⁶ *Everything You Need to Know About NFC and Mobile Payments*, CNET (Sept. 9, 2014) (online at www.cnet.com/how-to/how-nfc-works-and-mobile-payments/).

⁷ *Id.*

⁸ *Apple, Banks in Talks on Mobile Person-to-Person Payment Service*, Wall Street Journal (Nov. 11, 2015) (online at www.wsj.com/articles/apple-in-talks-with-u-s-banks-to-develop-mobile-person-to-person-payment-service-1447274074).

⁹ *Id.*

¹⁰ *Id.*; Consumer Financial Protection Bureau, *Mobile Financial Services: A Summary of Comments from the Public on Opportunities, Challenges, and Risks for the Underserved* (Nov. 2015) (online at files.consumerfinance.gov/f/201511_cfpb_mobile-financial-services.pdf).

¹¹ Center for Democracy & Technology, *Mobile Payments Can Expose More Consumer Data and Weaken Privacy Laws* (Apr. 23, 2012) (online at cdt.org/blog/mobile-payments-can-expose-more-consumer-data-and-weaken-privacy-laws/).

credit card transaction. But mobile payment services may also track phone numbers, email addresses, and purchase history, which can be used to direct online advertising to consumers.¹²

The marketplace for mobile payments is vast, involving entities such as hardware manufacturers, operating systems developers, applications developers, data brokers, coupon and loyalty program administrators, payment card networks, advertising companies, and retailers and other merchants.¹³ Accordingly, mobile payment transactions can involve multiple vendors, including the mobile payment provider, mobile network operator, a third party provider of the app, and others.¹⁴ Each of these vendors can access a consumer's information and potentially use it in ways the consumer never intended, such as creating a detailed profile of the consumer that includes identifying information and purchase preferences.¹⁵

Mobile payment systems have the technological potential to be more secure than traditional payments.¹⁶ For example, instead of using the same card number for all charges, mobile payment systems leverage information about the consumer, location information, and security features on the mobile device to verify the purchaser's identity.¹⁷ In contrast to traditional credit card transactions, mobile payments allow for encryption along the entire chain of the transaction, known as end-to-end encryption.¹⁸ In addition, some mobile payment providers are utilizing "tokenization" for NFC transactions.¹⁹ With tokenization, a unique identifier embedded in a mobile device's chip is sent instead of full credit card information.²⁰ This method is intended to keep the buyer's personal information secure.²¹

Despite the potential for increased security, it is not clear which mobile payment platforms use reasonable security capabilities. Recent studies show that consumer concerns

¹² *Id.*

¹³ Federal Trade Commission, *Paper, Plastic...or Mobile? An FTC Workshop on Mobile Payments* (Mar. 2013) (online at ftc.gov/os/2013/03/130306mobilereport.pdf).

¹⁴ *Id.*

¹⁵ Chris Jay Hoofnagle, Jennifer M. Urban, Su Li, *Mobile Payments: Consumer Benefits & New Privacy Concerns* (Apr. 24, 2012)

¹⁶ *See* note 13.

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ Apple, Inc., *Apple Pay Security and Privacy Overview* (online at support.apple.com/en-us/HT203027) (accessed Nov. 18, 2015).

²⁰ *Id.*

²¹ *Id.*

about privacy and security are major reasons why some consumers have not yet adopted mobile payments.²²

B. Dispute Resolution and Transparency

Because mobile payments may be linked to several different funding sources, statutory protections regarding unauthorized charges will vary.²³ A fraudulent transaction on a debit card, for example, puts consumers at greater risk for liability.²⁴ Credit cards, in contrast, generally provide the strongest level of statutory protection by capping liability for unauthorized use at \$50.²⁵ Statutory protections for pre-paid debit cards are even weaker, and non-existent for mobile carrier billing.²⁶

The process for disputing charges made through mobile payments is unclear.²⁷ Because multiple parties may be involved in a transaction, it may not be clear to consumers who they should contact to resolve errors or dispute charges.²⁸

C. Mobile Cramming

Mobile cramming is the practice of fraudulently placing unauthorized charges on a consumer's bill for services they did not purchase.²⁹ As mobile payment systems gain popularity, carrier billing—in which a consumer charges a good or service to their mobile phone account instead of a credit or debit card—is a potential future avenue for cramming.³⁰ In a 2014 report, the Federal Trade Commission (FTC) underscored the need to develop best practices for this emerging payment method, particularly given carrier billing's usefulness in allowing

²² See e.g., note 5; Mobile Ecosystem Forum, *Global Mobile Money Report 2015* (online at www.mobileecosystemforum.com/solutions/global-mobile-money-initiative/global-mobile-money-report-2015/) (accessed Nov. 17, 2015).

²³ See Note 13.

²⁴ *Id.*

²⁵ *Id.*

²⁶ *Id.*

²⁷ Comments of National Consumer Law Center et al. to the Consumer Financial Protection Bureau on Request for Information Regarding Mobil Financial Services (Sept. 10, 2014).

²⁸ *Id.*

²⁹ Federal Communications Commission, *Cramming – Unauthorized Charges on Your Phone Bill* (May 12, 2015) (online at fcc.gov/guides/cramming-unauthorized-misleading-or-deceptive-charges-placed-your-telephone-bill).

³⁰ Federal Trade Commission, *Mobile Cramming: An FTC Staff Report* (July 2014) (online at ftc.gov/system/files/documents/reports/mobile-cramming-federal-trade-commission-staff-report-july-2014/140728mobilecramming.pdf).

consumers to make charitable donations and giving unbanked consumers an alternative to credit and debit cards.³¹

III. FEDERAL GOVERNMENT OVERSIGHT

The FTC has jurisdiction over many of the companies that participate in the mobile payments ecosystem.³² It has conducted studies and workshops on the topic of mobile payments. In a 2013 report on mobile payments, the FTC reiterated its privacy recommendations to increase consumer trust in this growing marketplace: (1) building privacy protections into the design of the products (known as privacy by design); (2) simplified choices for businesses and consumers with regard to collection, use, and disclosure of consumer information; and (3) greater transparency of information collection and use practices.³³

The Consumer Financial Protection Bureau (CFPB) also plays a role in the mobile financial products and services market.³⁴ In a 2014 Request for Information, the CFPB sought input on mobile point of sale payments that specifically targeted low-income and underserved consumers as well as the risks associated with charging goods and services to a mobile phone bill.³⁵ In a 2015 report summarizing the comments, the CFPB noted that consumers need more education about digital financial services and more confidence that appropriate consumer protections, including privacy and data security, are in place before mobile services can achieve the potential benefits for consumers.³⁶

The Federal Communications Commission (FCC) also shares some oversight responsibility with respect to mobile cramming. The FCC together with the FTC, the CFPB, and state attorneys general, have brought enforcement actions against the U.S.'s four major wireless carriers in the past two years for allowing third-party service providers to charge customers for ringtones, cellphone wallpaper, and premium text messages about sports scores, celebrity gossip, and daily horoscopes.³⁷

³¹ *Id.*

³² Federal Trade Commission, *Mobile Technology Issues* (online at www.ftc.gov/news-events/media-resources/mobile-technology) (accessed Nov. 18, 2015).

³³ See note 13; Federal Trade Commission, *Protecting Consumer Privacy in an Era of Rapid Change: Recommendations for Businesses and Policymakers* (Mar. 2012) (online at www.ftc.gov/sites/default/files/documents/reports/federal-trade-commission-report-protecting-consumer-privacy-era-rapid-change-recommendations/120326privacyreport.pdf).

³⁴ Consumer Financial Protection Bureau, *Request for Information Regarding the Use of Mobile Financial Systems by Consumers and Its Potential for Improving the Financial Lives of Economically Vulnerable Consumers* (Docket No.: CFPB-2014-0012).

³⁵ *Id.*

³⁶ Consumer Financial Protection Bureau, *Mobile Financial Services: A Summary of Comments from the Public on Opportunities, Challenges, and Risks for the Underserved* (Nov. 2015) (online at files.consumerfinance.gov/f/201511_cfpb_mobile-financial-services.pdf).

³⁷ See note 30.

In addition, other financial regulatory agencies, including the Federal Reserve System and the Federal Deposit Insurance Corporation (FDIC), have oversight obligations with regard to mobile payments.³⁸

IV. WITNESSES

The following witnesses have been invited to testify:

John Muller

Vice President for Global Payments Policy

PayPal

Sang W. Ahn

Chief Commercial Officer

U.S. Samsung Pay

Jessica Deckinger

Chief Marketing Officer

Merchant Customer Exchange

Sarah Jane Hughes

University Scholar and Fellow in Commercial Law

Maurer School of Law

Indiana University Bloomington

³⁸ Federal Reserve Bank of Boston and Federal Reserve Bank of Atlanta, *The U.S. Regulatory Landscape for Mobile Payments: Summary Report of Meeting Between Mobile Payments Industry Workgroup and Federal and State Regulators on April 24, 2012* (July 25, 2012).