Prepared Remarks

House Financial Services Committee Hearing on Mobile Payments

Subcommittee on Financial Institutions and Consumer Credit

"The Future of Money: How Mobile Payments Could Change Financial Services"

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In 2010, payments research teams from the Federal Reserve Banks of Atlanta and Boston collaborated to conduct an assessment of the state of and potential for the deployment of mobile *payment* options in the United States. Our interests were to determine the impact of mobile payments on existing and emerging payments businesses and to isolate potential risks to consumers and businesses who might choose to use mobile payment solutions. To conduct such an assessment, we invited most of the major players from all aspects of the emerging mobile payments industry to meet with us on a voluntary basis to discuss the opportunities, barriers, and challenges associated with implementing a successful mobile payments environment in the U.S. Attendees included major card brands, wireless operators, financial institutions, industry trade groups, retailers, software providers, processors, handset manufacturers, and suppliers of mobile security technology. Please note that this effort was not directed at mobile *banking*, which is the use of existing remote access web technology to access on line banking functions. Instead, we were focused on the use of mobile phone devices to institute payment transactions at the retail point-of-sale.

Over the course of seven meetings in 2010/2011, we not only gained great insight into the evolution of mobile payments in this country, but we were able to engage what became known as the industry Mobile Payments Work Group (MPWG) in isolating those key factors that must be met to ensure a successful and safe mobile payments offering in the United States.

These factors were based on global experience in the card world and the evolving mobile environment, as well as general knowledge of successful payments systems. The seven factors for success collectively set forth by this group include:

1. The proposed environment would be best defined by the concept of an "open mobile wallet." In essence, the group felt that success was not likely to evolve from a set of dramatically dissimilar proprietary initiatives. The open wallet would support the use of any number of payment credentials, just like the physical wallet does today.

2. The mobile infrastructure would likely be based on Near Field Communications (NFC) contactless technology resident in a smart phones and merchant terminals. Other technologies might exist in parallel, but NFC appeared to be the likely approach due to experiences overseas, evolving standards, and current technology investments by key players.

3. Ubiquitous platforms for mobile should leverage existing payment system rails (debit card, credit card, prepaid card), including the ACH network for non-card payments, and support new payment types that meet emerging needs. This implies the use of traditional clearing and settlement systems.

4. Some form of dynamic data authentication should be at the heart of a layered mobile payments security and fraud mitigation program. Dynamic data authentication involves such traits as one time passwords that negate or mitigate the issue of counterfeit credentials and identity theft. Such technologies are being used in chip and pin card solutions throughout the world today.

5. Standards would be designed, adopted, and complied with through an industry certification program to ensure both domestic and global interoperability. Standards are the key to interoperabilty, security, efficiency, and accuracy. The concept of creating a certification authority to ensure such an outcome would be attractive.

6. A better understanding of a regulatory oversight model should be proactively developed in concert with bank and non-bank regulators to clarify compliance responsibilities. Aspects of mobile payments may fall into areas of uncertainty as to which regulator has oversight. However, it appeared to the group that much of the mobile payment process will likely be regulated based on the payment instrument selected by the end user at the time of purchase.

7. Trusted Service Managers (TSMs) should oversee the provision of interoperable and shared security elements used in the mobile phone. TSMs are organizations that actually create and distribute the secure elements in the phone.

It should also be noted that the MPWG also discussed the potential need for an independent third party to help coordinate the activities of the diverse participants in the mobile payments world to achieve the above listed outcomes. They believed, however, that it was too early in the evolution to decide who such an entity might be or to fully define their responsibilities. Some members of the work group also cited a desire to create an industry "roadmap" that would clarify the nature and timing of future technology investment requirements to reach the desired end state. Once again, however, the group as a whole felt it was much too early to create such a roadmap. Instead, they noted that the results of many planned experiments and pilots, as well as emerging initiatives in other countries, would better inform a roadmap at a later date.

As the discussions of the group progressed, it was determined that the efforts of the group might best be captured and made public through the publishing of a "white paper." Ultimately, such a document was produced by the two Reserve Banks facilitating the effort (see "Mobile Payments in the United States: Mapping Out The Road Ahead", March 25, 2011, FRB Atlanta and FRB Boston). This document not only goes into significant depth on the aforementioned seven principles, but it also serves to define the concept of mobile payments, assess the state of the industry at the time of publication, describe alternative business and infrastructure models, explore the roles and responsibilities of various parties, set forth the potential opportunities and barriers to success of mobile payments, and to provide insight into the related issues of plastic card security technologies, i.e. chip-and-pin. This paper was widely distributed throughout the payments industry, presented at many conferences, and discussed in the trade press. In addition, the Reserve Banks sponsored a discussion of the paper with Federal regulators and law enforcement agencies in the first half of 2011.

Over the two plus years that the MPWG has met, most of the participants have engaged in one or more mobile payment pilot programs that will serve to "test" the validity of the success factors discussed above. It is important to note that the mobile payments industry is in a very early stage of development in this country, but the market is working properly to explore a variety of implementation alternatives and underlying technology solutions. For example, several partnerships have been formed, handset manufacturers are preparing to deploy phones with imbedded NFC chips, and retailers are acquiring new terminal technology capable of handling mobile payments.

In closing, in parallel with these important market activities, the MPWG continues to meet and is focusing on activities pertinent to achieving the success factors, such as ensuring that security models are well vetted. In addition, the group has been outspoken in asserting the need for a widespread education effort to inform businesses and the public of the characteristics, controls, and value of mobile payments and efforts are underway to fulfill this need.

United States House of Representatives
Committee on Financial Services

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