# payments system research briefing

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### Banks Re-enter the P2P Payments Fray: With Mobile, Will this Time Be Different?

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hen you think of mobile payments, likely one of the many "Pay" apps comes to mind. Scan a QR code to purchase your morning coffee. Use your thumbprint to pay for a new pair of running shoes. But these consumer-to-business payments are only a part of the mobile payments story. Each year, Americans make about 1 billion person-to-person (P2P) payments-those used to split a dinner tab, pay a portion of the rent or repay a friend for concert tickets. Many of those are in the form of cash and checks; some are electronic. While nonbanks have been the most prominent providers of electronic P2P payments for some time, banks have tried for decades to offer them as well-with varying degrees of success. With the mobile P2P payments market estimated to reach \$174 billion annually by 2019, banks are re-entering the ring to take on P2P payments (PayPal 2016a). This Briefing reflects on P2P payments, reviews the fits and starts of bank offerings and considers whether this time, with mobile, the outcome for banks will be different.

#### Round 1: The Early Days (Late 1990s— Early 2000s)

Although mobile devices have raised the profile of electronic payments, electronic P2P payments have existed for

nearly 20 years. Electronic P2P payments first arose to address a need created by online auction websites such as eBay, which enabled virtual strangers to conduct transactions with the click of a mouse. While the act of "winning" an item on such websites seemed instantaneous, the payment was anything but. More often than not, the payment portion of the transaction was completed with a paper check through the U.S. mail. And because the parties typically did not know each other, there were risks with regard to certainty of good funds and product quality. Nonbanks were among the first to jump into the fray of solving these problems. Banks, either solo or through joint ventures with nonbanks, introduced their own solutions later.

In 1998, PayPal began facilitating electronic P2P payments by allowing individuals to use either their checking account or a debit or credit card to make safer, simpler and faster payments online and for free.<sup>1</sup> The PayPal model grew in part through viral marketing. PayPal paid each new customer \$10 and also paid a \$10 referral fee to each individual who sent a new customer their way. Back in 1999, PayPal estimated that between \$6 million and \$8 million in online P2P payments flowed through its system each day.

In 2000, Wells Fargo Bank entered into a joint venture with eBay to offer Billpoint, an electronic P2P payment method available only to eBay sellers. At the time, Wells Fargo was the seventh largest bank, and eBay had 10 million registered users. Billpoint was a free service that enabled eBay's buyers to use a credit card for eBay transactions without exposing the buyer's or seller's account information. Just a few months after launching, eBay bought Wells Fargo's stake in Billpoint and instituted transaction fees of 35 cents per sale and 3.5 percent of the total. If the transaction was less than \$10, a flat fee of 35 cents applied.

That same year, Bank One rolled out eMoneyMail, the first service to enable consumers to make online P2P payments using only the recipient's email address, regardless of where the recipient banked. Citibank followed by launching c2it, a new P2P service in partnership with AOL. Similar to PayPal, both eMoneyMail and c2it enabled payment from a sender's checking account or from a debit or credit card. Depending on the service, the payment recipient could have the funds credited to a checking account, a Visa debit or credit card, or, in the case of eMoneyMail, a check sent via the mail. Unlike PayPal, Bank One charged \$1 to send each eMoneyMail transactionif the recipient wanted to be paid by check through the mail, the payment recipient would be charged \$1 as well. Citibank followed suit, charging \$2 for each c2it transaction, with a minimum transaction amount of \$5 and a maximum of \$500 per day.

Within six months of launching, Bank One shuttered eMoneyMail due to an unacceptably high rate of fraud. In 2001, Citibank made c2it free in a bid to attract the online auction market, which was dominated by PayPal. Still, use of c2it remained lackluster: just 1 percent of P2P customers surveyed used c2it compared with 33 percent who used PayPal (Litan). Similarly, Billpoint's first quarter 2002 regulatory filings revealed that while 70 percent of eBay auctions accepted PayPal, only 27 percent accepted Billpoint. In 2002, eBay shuttered Billpoint and purchased PayPal (Jackson).<sup>2</sup> By 2003, Citi had shuttered c2it as well.

While a few banks were focused on capturing a share of the online auction market, the New York Cash Exchange (NYCE), an interbank network connecting the ATMs of various financial institutions in the United States and Canada, announced in March 2002 that it would begin promoting a real-time P2P payment product using its payments infrastructure (ATM Marketplace). Customers at NYCE member banks could use an ATM/debit card number associated with the recipient's account to pay from a multitude of devices including PCs, ATMs, virtual response units and personal digital assistants (think Palm Pilots). NYCE anticipated that by the end of summer 2002, its nearly 2,200 members would be certified to acquire real-time transactions. However, the service never formally launched in the United States. Among the sticking points were consumer concerns about the security of sharing ATM or debit card information.

Though banks made several attempts on their own and with others to compete in the online P2P payments space, pricing tactics, fraud, and security issues made it challenging. Round 1 in the P2P payments fray went to PayPal.

#### Round 2: The Current State (Mid-2000s—2016)

Much has changed since the early days of online P2P payments. Electronic portals and payments are now commonplace. In 2013, 84 percent of U.S. households owned a computer and 73 percent of those households had an internet connection (Rainie and Cohn). Now, 97 percent of U.S. adults have a mobile phone, 77 percent of mobile phones are internetenabled and 43 percent of mobile phone owners use mobile banking (Board of Governors of the Federal Reserve System 2016). Technology is changing the ways consumers access financial services and make payments. In 2015, more than \$379 billion in online P2P payments were made and nearly 70 million Americans made mobile P2P payments (Adams). PayPal, which became a standalone company again in July 2015, remains one of the more recognizable P2P payment providers. In 2015, PayPal had 192 million active users and 4.9 billion transactions valued at nearly \$282 billion, \$66 billion of which were made on a mobile device (PayPal 2016b). However, several other nonbanks and banks have emerged and the differences in the services they offer have narrowed.

#### Nonbank P2P providers

Venmo, Facebook Messenger, Square Cash and Google Wallet are among other nonbank providers of electronic P2P payments. Venmo, which happens to be a PayPal subsidiary, is a free social payment platform whose prime demographic is millennials. Venmo enables P2P payments in a social context through a mobile app or within Venmo's website. Venmo users link their accounts to either a bank account or a debit or credit card and can then transfer funds to their contacts.<sup>3</sup> The recipient can either maintain a "Venmo balance" or use the app or Venmo website to transfer funds to a bank account,

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which usually takes one to two business days depending on the bank. Venmo has become PayPal's fastest-growing service: in the first three quarters of 2016, Venmo processed \$12.1 billion in transactions, up from roughly \$7.9 billion over the same time frame in 2015 (Rao).

Similar to Venmo, Facebook Messenger also enables free P2P payments in a social environment—in this case, among Facebook Messenger's more than 1 billion active monthly users—by linking either a MasterCard or Visa debit card to a Facebook account (Facebook). To send P2P payments, users simply tap a dollar icon below a conversation and type the amount they want to send. They then tap a "Pay" button to initiate the transaction. When the recipients open Messenger, they simply have to accept the payment and wait for it to deposit to their bank account, which can take up to three business days.

The Square Cash P2P payment platform enables its users to transfer funds directly from or to a bank by linking a U.S.-issued American Express, Discover, MasterCard or Visa debit or credit card to their Square Cash account. Debit card transactions are free, but senders are charged a 3 percent transaction fee for credit card transactions. To facilitate P2P payments, Square Cash uses email, the Square Cash app, "Cashtags" (internet links), or the "Nearby" feature, which uses Bluetooth. According to Square, most Square Cash payments deposit instantly, but some may take one to two business days depending on the bank.

Recently, Google re-launched its Google Wallet as a mobile P2P payments app. Google Wallet transactions are free when users send money directly from their bank accounts or their Wallet balance. A 2.9 percent transaction fee is assessed for payments made via debit or credit cards. Funds may take up to three business days to appear in the recipient's bank account. However, transfers to a debit card take up to 24 hours but typically complete within minutes.

Other nonbank providers work with banks to facilitate their electronic P2P services. For example, Dwolla and Fiserv's Popmoney both provide P2P payments integration solutions for financial institutions.<sup>4</sup> Dwolla provides a back-end solution that enables mobile payment platforms and facilitates real-time transfers. mFoundry, a subsidiary of FIS, is among those that have partnered with Dwolla to enable financial institutions to offer P2P payments within mobile banking apps. Similarly, Popmoney enables more than 2,400 financial institutions to offer P2P payments to their online and mobile banking customers.

#### **Bank P2P providers**

Although nonbank providers dominated electronic P2P payments in the past, more financial institutions are creating their own P2P payment platforms. In 2011, for example, Bank of America, JP Morgan Chase and Wells Fargo came together to create clearXchange, a platform for electronic P2P payments using the automated clearinghouse (ACH) for settlement. Other banks, including Capital One, US Bank, FirstBank and Frost Bank, have since joined. ClearXchange allows anyone with a U.S. bank account to either send or receive money directly through the mobile and online services of participating banks for free using only the recipient's email address or phone number. Recipients of payments generally have access to funds within five business days (clearXchange). More than 100 million online customers and 70 million mobile banking customers in the United States have access to clearXchange's P2P payment platform through their banks.

In October 2015, clearXchange was acquired by Early Warning, a provider of real-time payments, authentication and risk mitigation solutions. The acquisition offers clearXchange customers the potential for real-time payments as well as additional assurance that their P2P payments are secure. In 2016, Bank of America, US Bank, JPMorgan Chase and Wells Fargo began actively processing real-time transactions through Early Warning's clearXchange network. Customers at these banks are now able to send eligible real-time P2P payments to one another, with funds made available for use by the recipient within minutes (but no later than the next business day).

Round 2 in the P2P payments fray is harder to call. While the differences between P2P payment products offered by banks and nonbanks are fewer today than in the past, services offered by nonbanks may yet hold some slight edge. Nonbank services offer users the most options for payment method senders can draw from available funds, a bank account or a debit or credit card. Nonbank services also offer more choice in how payments can be initiated—by email, mobile, social media, link or Bluetooth. Additionally, for the moment, nonbank services have the advantage of being able to access

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funds instantly without having to maintain an account with a particular bank. But, when it comes to trust, if average transaction size can be taken as an indicator, banks may have an advantage: consumers currently send \$227 on average from bank P2P services compared with \$130 from nonbank services (Moeser). Furthermore, in clearXchange, nonbanks now face a much fiercer bank competitor than in the past.

#### Round 3: The Future (2017 and beyond)

While nonbanks have a perceived edge for the moment, the future may be more competitive. Several developments suggest the differences between services provided by banks and nonbanks will continue to narrow. First, nonbanks like PayPal, Venmo and Google Wallet will soon face increased compliance requirements. Partially in recognition of nonbanks' growing significance within mobile P2P payments, the Consumer Financial Protection Bureau (CFPB) made clear in its final ruling on Electronic Fund Transfers (Regulation E) that the definition of prepaid includes certain digital and mobile wallets that serve as a funding source for P2P payments. For the time being, the impact of the amendments is that by Oct. 1, 2018, providers of digital and mobile wallets that offer this function will have to comply with disclosure requirements as outlined in Regulation E. In the short term, this will require additional work for nonbanks offering or planning to offer P2P services. However, in the long term, CFPB oversight may be beneficial in enhancing consumer trust in the P2P payment services nonbanks offer.

Second, the Office of the Comptroller of the Currency announced it intends to design standards for granting national, limited-purpose bank charters to financial technology (fintech) companies that offer banking products and services.<sup>5</sup> These potential charters would compel fintechs to comply with the same safety and soundness, fair access and fair treatment of customers standards that all federally chartered institutions must meet. These charters also could offer assurance for customers that the products and services fintechs provide are on par with those provided by banks.

Third, the P2P payment services offered by banks participating in the clearXchange network are becoming a closer substitute for the services offered by nonbanks. Each bank in the clearXchange network operates as an independent provider of P2P services and has its own brand name—JPMorgan Chase QuickPay, Wells Fargo SurePay, Capital One P2P Payments, US Bank Send Money, FirstBank Person to Person Transfers and Frost Bank Send Money. This year, clearXchange will rebrand its service as Zelle, which is intended to connote speed, agility and elegance. The goal is for users to understand that—just as they can with PayPal, Venmo and others—they can transact with anyone who is also a user of Zelle.

Fourth, the card networks have struck deals with bank and nonbank P2P payments providers that will expand their reach and ability to offer real-time payments. Visa already has programs in place with Popmoney and with Square. And in August 2016, clearXchange announced partnerships with both Visa and MasterCard that will allow their customers to use their Visa and MasterCard debit cards to send and receive P2P payments in real time for free (Noto).<sup>6</sup> Real-time payments using the MasterCard Send platform are expected to be available early this year. In addition, PayPal reached agreements with Visa and MasterCard recently to remove fees from card payments to online merchants: these agreements also will benefit PayPal's and Venmo's P2P services, enabling their users to instantly access funds.

Round 3 for banks and nonbanks is too early to call. The impending changes seem to suggest that the short-term outcome may be a draw. Greater regulation of nonbanks may level the playing field with banks for both compliance and consumer trust. The rebranding of the clearXchange network will offer participating banks similar name recognition as nonbanks. Collaborations with card networks will enhance the speed of access to funds for P2P services offered by both banks and nonbanks for millions of customers who opt to use network-branded debit cards. As the differences between bank and nonbank P2P services begin to erode, consumers will likely benefit from more choices among payment methods, providers, and ways to initiate payments as well as faster access to funds. However, without the ability to pay anyone, regardless of the service provider, consumers may decide that adopting the services of multiple providers simply isn't worth the inconvenience.

#### Conclusion

Over the past 20 years, banks have entered the P2P fray with varying degrees of success. Nonbanks have managed to provide services that offer choice of funding method, choice in how payments can be initiated and choice in real-time access to funds. However, banks are poised to be more competitive as clearXchange expands and rebrands. The creation of a network of banks with a common brand and the ability to make payments in real time suggests that bank-provided services may soon go toe-to-toe with nonbank-provided services. In the short term, consumers may benefit from better choices among the P2P payment services offered by banks and nonbanks. Long term, however, whether this time will be different may depend not only on the ability get consumers to adopt a service, but also the ability to pay anyone, regardless of the service they use.

#### **Endnotes**

<sup>1</sup>P2P payments funded with a credit card are assessed a 2.9 percent transaction fee.

<sup>2</sup>eBay completed acquisition of PayPal in October 2002. <sup>3</sup>P2P payments funded with a credit card are assessed a 3 percent transaction fee. Venmo limits users' weekly spending to \$299.99. The limit can be increased to \$2,999.99 by verifying identity by either adding a Facebook account to the Venmo account or adding a ZIP code, last four digits of a Social Security number and birthdate.

<sup>4</sup>Popmoney is owned by Fiserv, a provider of technology

solutions to banks, thrifts, credit unions, securities processing organizations, insurance companies, leasing and finance companies, and retailers.

<sup>5</sup>On Dec. 2, 2016, the Office of the Comptroller of Currency announced it would move forward with considering applications from fintech companies to become special purpose charter national banks.

<sup>6</sup>Visa has issued more than 200 million debit cards and MasterCard Send reaches more than 97 percent of all U.S. debit card accounts.

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## payments system research

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