

Federal Reserve System
12 CFR Chapter 11
Docket No. OP – 1625
Potential Federal Reserve Actions to Support Interbank Settlement of Faster Payments

Response to the Federal Reserve Board’s Request for Input

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This is my response to the request by the Board of Governors of the Federal Reserve System (Board) for public input on potential actions that the Federal Reserve could take “to promote ubiquitous, safe, and efficient faster payments in the United States.” My response is based on professional experience managing both large-value (Fedwire) and small-value (ACH) payment systems; developing prices for a broad range of payment types; managing enterprise IT support for mission-critical transactions processing systems; advising central banks and international financial institutions on payment system matters; and, now, teaching Money and Banking at the college level. The teaching experience especially informs my response because of the insight it provides into young adults’ payment and money management practices and expectations.

My response has three main parts. The first fleshes out the context of the Board’s request by identifying four additional public policy considerations that have a bearing on what the Board terms “faster payments”: replacing the paper check with a new, modern means of payment that is both ubiquitous and versatile; managing and pricing the interbank clearing and settlement component of faster payments following the utility model; recognizing the Federal Reserve’s unique capability to serve as the nation’s banking clearinghouse; and achieving the public benefits associated with “narrow-payment bank” access to new central bank services. The second part presents a straight-through processing model that highlights the importance of immediate settlement of both the customer and interbank components of each faster-payments transaction. The third part responds to the specific questions posed by the Board.

1. Context

This section identifies and explains public policy considerations, in addition to those discussed in the Board’s public comment request, that are essential to achieving safe, efficient, and responsive faster payments services. These include: a) versatile and ubiquitous faster-payment services; b) the importance of utility pricing to cost-efficient end-user services; c) the Federal Reserve’s unique capability to serve as the national clearinghouse providing equitable access to all depository institutions; and d) the importance of providing interbank clearing and settlement services that appropriately support narrow-payment banks.

a) Versatile and Ubiquitous Faster-Payments Services. While the Board recognizes the importance of preserving the ubiquity which is a current feature of traditional methods of payment (check, ACH, debit and credit cards, etc.), it does not specify versatility as an equally important attribute to be preserved. All groups of economic actors – individuals, businesses, governments – value versatility that allows them to order individual transfers from their bank accounts for any purpose and to direct transfers to and receive transfers from any other party in any group. Check is the only method of payment that provides both the versatility and ubiquity allowing any-to-any transfers of bank deposits. Faster-payments services have the

potential to be the modern means of payment replacing the check, if care is taken to ensure that its attributes include both versatility and ubiquity.

Combining versatility and ubiquity greatly increases value to customers. While, as the Board notes, several traditional methods of payment are ubiquitous, only the check method of payment is both ubiquitous and versatile. Check is versatile and ubiquitous because it has a national clearing and settlement infrastructure that operationally connects all bank accounts and because the national clearing and settlement infrastructure supports a payment scheme (check) that allows any-to-any transfers. In this sense, check is the ideal method of payment, except for its lack of immediacy and finality. The Board's proposed actions should address the strategic challenge of combining immediacy and finality of payment with the versatility and ubiquity of the check.

b) Utility pricing and cost efficiency for the non-bank public. The Board's discussion of payment system efficiency focuses narrowly on technical efficiency, that is, on the cost of producing payment services, including new, faster payments services. While technical efficiency is a necessary consideration, it is not sufficient to address efficiency from the standpoint of the users of payment services; for end-users, efficiency is determined by the prices they are charged for services. Prices charged to end-users of payment services are a function of production costs and the market power that payment networks have over their customers.

Regarding production costs, banks shoulder a share of the cost of managing the payment scheme and infrastructure used to clear and settle a particular means of payment. Banks also bear the cost of internal deposit accounting and payment processing, as well as related back-end systems such as risk management, general ledger accounting, and the like. As deposit-taking and payment institutions, banks are information-intensive businesses with largely-fixed costs, implying economies of scale and scope that would result in lower marginal costs as transactions volumes increase. Accordingly, we should expect to see relatively low and declining prices for digital payments provided in a competitive banking environment. Counterintuitively, prices to end-users of many electronic and digital payment services are not low or declining. Rather, many electronic and digital means of payment, including debit and credit cards and now person-to-person and person-to-business digital "faster" payments, are based not only on recovery of production costs, but additionally on an *ad valorem* price component based on the amount of the payment.

Ad valorem pricing is the modern-day equivalent of non-par banking: the intended amount of payment is reduced by a percentage of the amount of the payment, unrelated to cost of production. *Ad valorem* pricing, while perhaps justified in the early days of card payment systems to induce participation in two-sided markets, has become a fixture of both mature card systems and newer, digital payment networks. It can be explained, at least in part, by monopoly or partial-monopoly control over payment systems that exhibit economies of scale and/or scope. *Ad valorem* pricing extracts very high returns, well above production cost, for use of payment infrastructure. Accordingly, ownership and control of the faster-payments infrastructure, or, alternatively, regulation of this infrastructure to control monopoly pricing, is an important public policy consideration.

The Board should assess the re-emergence of non-par banking in the guise of *ad valorem* pricing as it considers possible actions the Federal Reserve could take to support development of faster payments, particularly efficiency from the standpoint of end-users of faster-payments services. As discussed in the section below, Federal Reserve Bank operation and full-cost pricing of national payment infrastructure for traditional methods of payment, including check, ACH, and even Fedwire funds transfer has been decisive in preserving par clearing for these services. Historically, Federal Reserve Bank operation and

cost-based pricing of payment infrastructure, accompanied by fully transparent disclosure of costs, has been a preferred alternative to direct regulation of this infrastructure.¹

c) Federal Reserve role as national clearinghouse. The Federal Reserve System, operating through the 12 Federal Reserve Banks, has historically played a unique and key role in the nation's financial system by providing inter-bank clearing and settlement services. In fulfilling its role as national clearinghouse, the Federal Reserve has explicitly priced its inter-bank services based on production costs: Federal Reserve pricing is consistent with utility pricing.

The Federal Reserve System has a unique capability to unify the U.S. banking system because of the Reserve Banks' reserve account relationships with all depository institutions, and the Federal Reserve Board's rule-writing for payment, clearing, and settlement that applies to all depository institutions, large and small. As evidenced by this public request for comment on faster payments, the Board's rule-writing is transparent and inclusive of all stakeholders. Further, as evidenced by their Faster Payments Task Force initiative, the Reserve Banks' leadership of payment system improvement is collaborative, transparent, and inclusive. Moreover, the Reserve Banks have a decades-long track record of innovation and operational excellence in the inter-bank services they provide, ranging from physical cash to electronic funds transfers, undertaken in cooperation with the financial services industry.

Notwithstanding the Federal Reserve System's Congressional mandate to play an active operational role in the payment system, the Federal Reserve Banks' role as providers of interbank clearing and settlement operations for newer means of payment has diminished.² The Board's contemplated actions regarding faster payments should explicitly consider the prospective future implications for the operational viability of the Reserve Banks in clearing and settling digital payments, and their ability to carry out their role as leaders in payment system innovation. It's possible that the Reserve Banks are at a tipping point, in that not participating in clearing and settlement of faster payments will lead to their decline and irrelevance as clearinghouse operators.

To help mitigate the potential for monopolistic behavior associated with its *de jure* and *de facto* dominance of inter-bank clearing and settlement, the Federal Reserve operates and communicates in an open and transparent manner and is subject to Congressional and private audit. Moreover, as the Board notes in its request for comment, the introduction of a new payments service or major enhancements to an existing service must be consistent with the Federal Reserve's statutory obligations and the Board's own principles and criteria for expanding operationally. The Federal Reserve is the *only* entity providing national clearing and settlement services that has this degree of transparency. The transparency is especially relevant in terms of disclosure of detailed Federal Reserve operating costs, which provide the baseline against which actual production expenses, not only in total but also per transaction, can be measured.

The Board should carefully examine the potential adverse consequences of further Federal Reserve withdrawal from inter-bank clearing and settlement operations, which would directly result from a decision to withhold operational support for faster payments. These adverse consequences would include: continued fragmentation of the faster-payments marketplace; diminished accessibility to this marketplace by smaller depository institutions; likely need to rely more heavily on regulation to offset monopoly operators' monopoly advantage; and foregone opportunity to establish baseline operational performance and cost information that is complete, credible, and readily accessible to the public at large.

¹ Summers (2012), pp. 192-194.

² Summers (2012), Footnote 15, p. 202.

d) Support for narrow-payment banks.

My personal interactions with the young adults who are enrolled in my Money & Banking classes shows them to be discerning consumers of financial services, including payment services, but in somewhat non-traditional ways. These trend-setting users of financial services recognize the significance of their bank deposits as “authentic money,” and at the same time are inclined to value and trust innovative payment services provided by non-banks which do not directly use bank deposit money. The majority of my students rely more on non-traditional payment services and providers than they do on banks (which is not to say that their parents don’t rely on traditional, bank-centric payment services for making tuition payments!). Classroom discussions of ideal payment services reveal a desire for service features (immediate, mobile, instantly informative to both sender and receiver, safe) available primarily through non-bank providers, overlaid on their bank deposit accounts. Notably, many of my students are from smaller towns and rural areas, and they bank at community banks. Accordingly, broad geographic and ubiquitous access to the most modern means of payment is important to them.

Ideally, the Board’s contemplated actions to promote faster payments in the United States would provide means for non-bank innovators to draw closer to mainstream banking by combining their service suites with actual bank-like deposit accounts. This could be made possible by providing access to new Federal Reserve clearing and settlement services through what are now non-bank entities chartered as narrow-payment banks. There are, in general, good reasons for the Federal Reserve to facilitate appropriately structured narrow banking³. The economy would likely benefit from faster payments much more quickly if the Federal Reserve provided separate faster-payments clearing and settlement accounts to appropriately chartered narrow-payment banks.

The next section of these comments elaborates on the above idea by suggesting that the Board consider offering a choice of clearing and settlement accounts, one type of account relationship appealing to narrow-payment banks in particular. In doing so, the Board would collaborate with the Comptroller of the Currency to support the U.S. Department of the Treasury recommendation that special-purpose bank charters be designed to promote innovation.⁴

2. Model for Interbank Clearing, Settlement, and Liquidity Services

The discussion below first addresses the faster-payments interbank settlement model (deferred net settlement versus real-time gross settlement); secondly, elaborates a straight-through processing model of the end-to-end faster-payments process; and thirdly, proposes a settlement account structure that best supports not only efficient clearing and settlement operations but also continued private sector innovation in payment services. The stylized reference model builds on the model presented by the Board and suggests that new Federal Reserve account services could usefully provide two different options from which faster-payments service providers may choose.

a) Interbank settlement model. The basic premise of faster payments is instant or immediate finality for end-to-end transactions. Yet, deferred net settlement (DNS) of interbank settlement would slow down the interbank portion of the end-to-end faster-payments business process. The history of DNS in banking shows that this approach to settlement inevitably converges on real-time gross settlement as settlement arrangements attempt to approximate real-time settlement more and more closely by compressing settlement cycles. Faster-payments settlement should be forward-looking, embracing real-time settlement

³ See, for example, Pennacchi (2012).

⁴ U.S. Treasury (2018), p. 10.

throughout the business process, including settlement of customer transactions and the interbank component of these transactions.

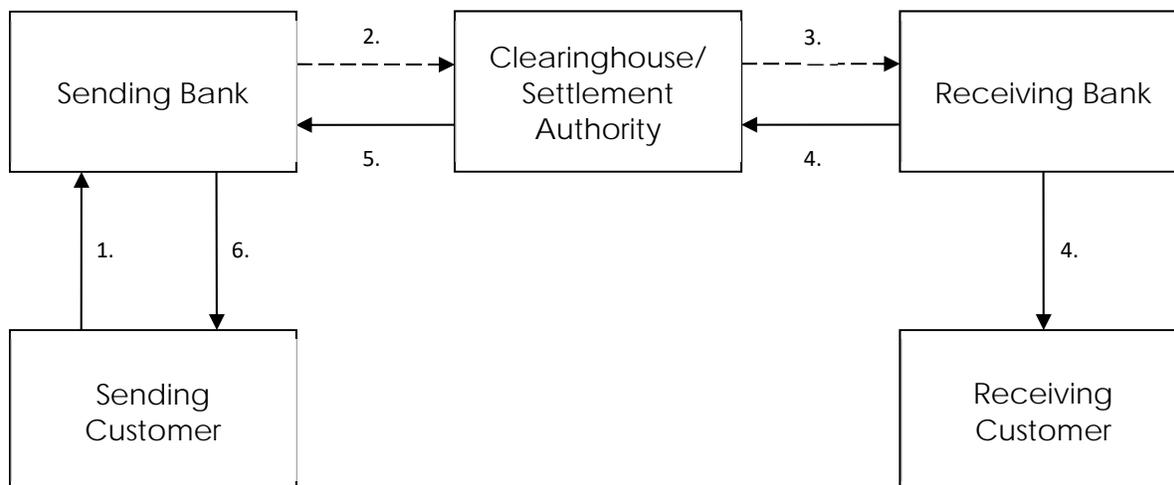
The Board's comparative analysis of the deferred net settlement (DNS) and real-time gross settlement (RTGS) models as applied to faster payments is well reasoned. On net, it seems clear that RTGS is the optimal model for interbank settlement of faster payments transactions. As the Board indicates, DNS for interbank transactions would add complexity for monitoring, collateral management, and interoperability. An additional public policy consideration in choosing which interbank settlement model to adopt concerns the public's confidence in their money balances during times of financial stress. This consideration arises when instant and immediate transfers of bank balances and confirming information becomes the norm. When immediate transfers of bank balances and confirming information is normative, receivers of funds will want to trust not only the bank holding their deposits, but also the bank from which funds are being transferred. Deferred net settlement between banks could erode public trust in the transfer process and thereby trust in the deposit money held in banks.

Hypothetically, but not unrealistically by design, all faster-payments orders originating through a sending bank rejected from a DNS arrangement due to the bank's financial condition would be dishonored. This bank's customers, even if they hold deposit balances sufficient to fund their payment orders, would receive immediate notice that their payment orders are not honored. Depending on the design of information flows, intended receivers may also be notified that funds transfers they expect are being dishonored. Such a situation could occur anytime 24x7x365, and if it occurred overnight or over a holiday, supervisory authorities would be challenged to intervene in an orderly manner. The Board's analysis of settlement models should take account of immediate signals the public will receive about the financial condition of banks once faster payments become normative, and the implications for public trust in the banking and payment system, especially during times of financial stress.

b) Business process model for faster payments. The Board describes the faster-payments business process as having three layers and illustrates this process with a figure (page 18). Operationally speaking, the end-to-end business process is defined not just by "layers," the approach adopted by the Board, but even more by its discrete operational components. In combination, these components provide a complete description of the "straight through processing" (STP) that is needed to achieve desired operational performance and efficiency. Accordingly, the faster-payments model is best described in terms of five or possibly six STP process components: sending-customer process; sending-bank process; clearing process; settlement process; receiving-bank process; and receiving-customer process. The STP approach helps crystalize important policy and design choices that need to be made, including the operational practicality of DNS versus RTGS, and is used as the basis for the business process model described and illustrated in the figure below. In the figure, movements of information (clearing) and funds (settlement) are illustrated using solid and dashed lines, respectively. The figure is supported by a list of primary steps in the STP clearing and settlement process.

It is immediately apparent from the figure that the faster-payments business process model is based on credit transfer. Clearing instructions and funds move together on an end-to-end round trip between the sender and receiver of payment. Credit transfer is essential for transaction processing which is instant or immediate because it simplifies process steps and eliminates uncertainty that clearing instructions cannot be acted on because the sender or the sender's bank is unable to settle: the first and only notification to the receiver is one of final payment, in that it includes not only clearing details (amount of transfer, origin of transfer, reference number and time of transfer, etc.) but also a settlement statement from his or her receiving bank.

Figure
Straight Through Processing Model for Faster Payments⁵



As shown in the figure, up to six parties have roles to play in complete end-to-end processing of a faster payment. These six parties include: sending customer; sending customer’s bank; clearinghouse; settlement authority (aka central bank); receiving customer’s bank; and receiving customer. The clearinghouse role, which principally involves processing of faster-payments instructions, can be played by a private organization which then relies on the central bank for final interbank settlement, or by the central bank. In the former case, the clearinghouse would provide the clearing functionality and serve as settlement agent for its sending- and receiving-bank customers, communicating settlement instructions to the central bank either on a deferred basis or in real time, depending on the settlement model. In the latter case, the central bank would provide both clearing and settlement services, much as is the case today when the Federal Reserve Banks clear and settle check, ACH, and Fedwire funds transfer payments.

As discussed earlier, real-time gross settlement (RTGS) is the appropriate design for interbank settlement of faster payments because interbank settlement is then aligned with instant or immediate end-to-end customer settlement. The process flow shown in the figure highlights the practical value of keeping faster-payments clearing and settlement information unified in an “immediate” end-to-end process. To do otherwise would mean separating clearing and settlement instructions for each payment, pending the clearing instructions, exporting the settlement instructions from the clearinghouse to the settlement authority for processing, and then returning confirmation of final interbank settlement from the settlement authority to the clearinghouse, at which point clearing instructions would be released to the receiving customer’s bank – this assuming no issues arise with respect to settlement mechanics. Building on and extending the RTGS process in use today by lodging interbank clearing and settlement in a national clearinghouse is by far the simpler, less risky, and the most cost effective approach to STP for faster payments.

⁵ The straight through processing model for faster payments presented here is derived from the immediate funds transfer clearing and settlement model presented in Summers (2012).

There are six main business process steps to straight-through processing of faster payments, assuming the Reserve Banks play the clearinghouse role, which, as noted, the Reserve Banks now perform for a range of paper and electronic methods of payment. A brief description of each processing step in the round trip STP process follows.

- 1) Sending customer initiates a faster-payments order using a software application that is authorized by his/her bank and that adheres to the bank's authentication and security procedures. Address information conforms to a national standard and is checked by the sending bank. Customer follows sending-bank terms for use of a transactions account including, for example, size limits on transfers.
- 2) Sending bank accepts the faster-payments order by: authenticating its customer; performing edits to ensure that required information is provided in the specified format; performing know-your-customer (KYC) and anti-money laundering (AML) checks; validating that the customer has sufficient deposits or credit capacity to fund the payment; etc. Once these steps are performed, the sending bank routes the payment order to the clearinghouse.
- 3) Clearinghouse/central bank settlement authority accepts the faster-payments order by: validating the correctness of clearing instructions, including the receiving-bank address (a step that implies reliance on a national directory); completeness of mandatory fields; validating that the sending-bank's settlement account has sufficient capacity to fund interbank settlement (offsetting debit and credit to sending- and receiving-bank settlement accounts); etc. Once these steps are performed, the clearinghouse routes the payment order with confirmation of interbank settlement to the receiving bank.
- 4) Receiving bank validates receiving customer account information and performs KYC and AML checks, credits the receiving customer's account, and simultaneously notifies the receiving customer and the clearinghouse that the payment has been credited (final settlement occurs at this point).
- 5) Clearinghouse notifies the sending bank that payment is complete.
- 6) Sending bank notifies sending customer that payment is complete.

The end-to-end STP round trip is instant or immediate. Practically speaking, the round trip process is intended to complete within seconds.

c) Interbank settlement accounts and liquidity services. It is assumed in the following discussion that the Board decides to adopt RTGS as the appropriate interbank settlement model for faster payments. Moreover, it is assumed that the rules and terms applying to use of Reserve Bank master accounts remain as they are today.

The Board's request for public comment envisions action to approve one type of settlement account for settlement of faster-payments transactions: either banks' master accounts (also referred to as primary settlement accounts) or a new type of account that is separate from the master account and that is established exclusively for faster payments. A somewhat different approach is suggested here, namely, that depository institutions be given a choice of settling faster-payments transactions under one or the other of the two types of accounts. The benefits of providing depository institutions with a choice include added flexibility in how they design their customer-interfacing services, and allowing for access to settlement services by narrow-payment banks.

Faster-payments settlement through master accounts would occur as it does today for the other types of Reserve Bank payment and financial services used by depository institutions. Presumably, faster-payments transactions would be assigned their own distinguishing type code, and final settlement would take place as soon as debit entries are made to the master account, as is the case today for Fedwire transactions. Moreover, account management rules and terms pertaining to funding and overdrafts in the master account, including overnight and intraday overdrafts, would apply to the faster-payments type code in the same or a similar manner as they apply to other, final transactions such as Fedwire transactions.

In contrast, a new account type that is set up exclusively for faster-payments settlement and that is managed separately from the master account would be dedicated to faster-payments settlement and would require that a positive balance be maintained at all times. Only faster-payments credits (payments received) and debits (payments sent) would be authorized for this account, except that intra-Fed transfers would be permitted, to allow for liquidity and possibly reserves management.⁶ That is, account balances would need to be sufficient at all times to settle originated faster payments, and procedures would be in place to either reject transfers that cannot be fully funded, or such transfers would be held (pending) at the account holder's request.⁷

Separate faster-payments settlement accounts would be, as the Board describes, more liquidity intensive. Accordingly, it is essential that 24x7x365 intra-Fed liquidity services be made available. Such services would necessarily include real-time account management services to allow account holders to monitor and manage their account positions continuously during the 24x7 banking day. Prospective users of these separate faster-payments settlement accounts will provide the Board with appropriate guidance regarding needed design features. One thing should be clear, however: Reserve Bank account management and liquidity services, whatever form they take, will require commensurate adaptations in Reserve Bank staffing that is responsive to a truly continuous and uninterrupted "banking day."

Finally, offering a choice of using a master account or a separate faster-payments settlement account will facilitate participation in the faster-payments marketplace by providers willing to follow banking rules and regulations as these apply to a specific and narrow range of services. Current providers, some of which are industry leaders but which are limited to offering faster payments on their internal books (discussed by the Board on pages 19-20), would be enabled to compete with banks as banks. That is, these nonbank providers might be able to acquire narrow-payment bank charters and thereby obtain access to use of separate faster-payments settlement accounts on the books of the Federal Reserve Banks. As noted earlier, the design of new Federal Reserve services may be a desirable, if not essential, ingredient to stimulating innovation and competition as envisioned by the U.S. Treasury.

⁶ More will not be said here about reserves management except that, presumably, depository institution transactions accounts accessible using faster payments services would be subject to reserve requirements in the same way that all "checkable deposits" are now subject to reserve requirements.

⁷ The particular rules and terms that the Federal Reserve might apply to separate faster payments settlement accounts may depend a lot on the terms under which sending banks offer faster-payments services to their customers. For example, a bank might choose to adopt terms of service for its sending customers that allow it to impose a short delay on processing faster-payments transactions that exceed a contracted threshold amount, thereby providing the bank with opportunity to fund unexpectedly large interbank settlements.

3. Responses to specific questions posed by the Board.

Below are my responses to the specific questions on which the Board is seeking feedback. The responses are provided in the order in which the questions are presented. My responses are deliberately short for questions that have already been addressed in the comments above.

Q.1. Yes, RTGS is the appropriate strategic foundation for interbank settlement of faster payments, for the reasons provided earlier.

Q.2. & 3. Yes, the Reserve Banks should develop and offer a 24x7x365 RTGS settlement service, for the reasons given above. Doing so will provide important public benefits by stimulating depository-institution (including narrow-payment bank) participation and innovation in the faster-payments market. Moreover, only the Reserve Banking system is capable of achieving the ubiquity needed for faster payments to grow into a truly national means of payment to replace the check.

a. Within ten years, demand will be driven by today's population of young adults, such as the students enrolled in my Money & Banking courses. They will drive consumer demand and business demand as they enter the business world.

b. The adjustment to a 24x7x365 payment and settlement environment is well on its way and inevitable. The Board's consideration of this behavioral and financial transformation should take account of the impacts not just on the private sector, but on Federal Reserve operations, as well (including interbank financial services, credit administration, and bank regulation).

c. The ideal timeline for implementing 24x7x365 Federal Reserve settlement services was yesterday! The Federal Reserve is a bit late, but not too late, and needs to move quickly to ensure that the faster-payments market does not balkanize.

d. Needed operational adjustments will be brought forward by operational specialists in banks and by other service providers. I would add in response to one of the Board's specific questions, however, that the flow of information from the Reserve Bank clearinghouse (see the Figure above) should never be "deferred"; rather, the Reserve Banks should provide settlement services that allow depository institutions to manage the flow of both clearing information and settlement entries, so that they can mold their faster-payments services to customers around the timing limitations they choose to adopt, if any.

e. As described above, the Federal Reserve Banks should offer a choice of settlement services, either through the master account or a separate faster-payments settlement account.

f. Directory, fraud prevention, AML, and similar services are essential to a fully functioning faster-payments settlement service. Such services should be based on national standards (directory) or regulatory requirements (AML).

g. Fraud prevention for faster payments is, in the end, a cooperative activity that requires joint participation both by the Reserve Banks providing settlement services and by depository institutions offering customer payments services. For example, the interbank settlement authority can provide useful, real-time information on patterns of STP activity to both sending and receiving banks. Cooperation such as this must be on-going. The Board's decision on the role played by the Reserve Banks as providers of faster-payments settlement services should take

account of the Reserve Banks' comparative advantage in establishing and maintaining long-term operational relationships with depository institutions of all types and sizes across the nation.

h. As ACH converges on real-time settlement, it is conceivable that ACH could benefit from faster-payments settlement services. (Note that ACH is a payment method which is itself striving for the RTGS ideal as its settlement windows are increasingly compressed.)

i. Faster-payments is a "game changer" and as such will require a substantial amount of industry and Federal Reserve involvement, likely through numerous task forces (and so perhaps ad hoc and of short duration).

Q.4. The Federal Reserve should develop liquidity tools. Existing rules and procedures would continue to apply in the case of settlement through Reserve Bank master accounts. New tools would be desirable in the case of settlement through separate faster-payments settlement accounts. Please see section 2. c) above for a fuller answer.

Q.5. While it is mainly up to the prospective users of Federal Reserve settlement accounts and liquidity services to provide input on details, it is worth stating again that these services should be envisioned as part of an end-to-end payments service, with the needs and expectations of end-user customers always in mind. This means, in part, that the Board should seek to understand the likely range of terms under which depository institutions would offer faster-payments services to their customers. Some of the service terms that are especially important to understand include: the likelihood of true 24x7x365 faster-payments service terms; whether the size of faster-payments transfers are likely to be subject to limits and, if so, whether such limits might vary depending on the time of day transfers are initiated; whether depository institutions are likely to offer overdraft protection on accounts subject to faster-payments transfers; how depository institutions will forecast their liquidity needs under the terms of the faster-payments services they offer; etc. The main point of this comment is that a fuller understanding of the underlying market for faster-payments services will better allow the Federal Reserve to understand and plan to support the liquidity needs of depository institutions.

Q.6. As discussed in sections 1. d) and 2. c) above, the Board's actions should not be based on a one-size-fits-all model; rather, the actions should be responsive to the needs of depository institution service providers that are very diverse in terms of their size, geographic location, customer base, charter type, and the like.

Q.7. The Federal Reserve's pursuing these two actions is not only helpful to achieving ubiquitous nationwide access to safe and efficient faster payments, it is essential. Faster payments will only evolve into a ubiquitous service accessible to all depository institutions, and thereby to the customers of all depository institutions, if the Federal Reserve plays its role as national clearinghouse. Moreover, as described in section 1. b) above, end-user customers will only experience true efficiency if the Federal Reserve Banks' clearinghouse role incorporates processing of both payment instructions (clearing role) and settlement entries -- this because the prices charged by the Reserve Banks to depository institutions are based on the actual cost of production, and these costs are publicly disclosed. Moreover, the many complex and sometimes contentious decisions that need to be made about operational standards, processing rules, and the like, would benefit from the Federal Reserve's impartial and comprehensive outreach to include all stakeholders, thereby building trust in and acceptance of the end product.

Q.8. Please see the discussion in section 2. c) above, suggesting that the Federal Reserve offer a choice between two different accounts, each governed by its own set of rules and procedures, for interbank settlement of faster-payments transactions.

Q.9. Please see section 1. d) above regarding the importance of providing access to Federal Reserve faster-payments settlement services, under separate faster-payments account arrangements, as a means of promoting innovation and quicker customer acceptance of faster payments.

Also, there is one other action the Board and Reserve Banks should consider to help their broader goals with respect to U.S. payment system development. Specifically, the Federal Reserve should consider re-branding the “real time at any time” payment service that it wishes to promote, in part by adopting a new name. While it may currently be true, as the Board states, that the term “faster payments” is broadly used in the domestic payment industry, this term is ambiguous and begs questions (faster than what?). This term, which originated with the U.K.’s Faster Payments Service over a decade ago, is on its way out. Please consider describing the “real time at any time” concept in operationally-meaningful language that the public can readily grasp, along the lines of “instant,” as adopted by the European Central Bank, or “immediate,” as used by Summers (2012).

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