Response: Tim Radway, W. Capra Consulting Group

Q1. Are you in general agreement with the payment system gaps and opportunities identified above?

Yes

For Item 6, mobile is more of a modality than a funding source. Mobile more defines a user experience online or in a store. If a real time ACH system were defined, it could be used in a mobile app. Item 7 is true to a point. For those businesses who identify a business need to switch from a legacy system, due to cost or fuction, will adapt.

Q1i. What other gaps or opportunities not mentioned in the paper could be addressed to make improvements to the U.S. payment system?

A gap not addressed is the economic and fraud impacts created by not having real time authorization. The true economic cost of getting to real time authorization needs to be addressed concurrently.

Q2. Are you in general agreement with the desired outcomes for payment system improvements over the next 10 years?

Yes

Q3. In what ways should the Federal Reserve Banks help improve the payment system as an operator, leader and/or catalyst?

The Federal Reserve Banks should provide oversight and help lead a push towards standards. From a merchant perspective, a standard would help lend credibility to any sort of mass change in infrastructure without fear that the "wrong" solution may have been selected.

Q4. In discussions with industry participants, some have stated that implementing a system for near-real-time payments with the features described in the second desired outcome (ubiquitous participation; sender doesn't need to know the bank account number of the recipient; confirmation of good funds is made at the initiation of the payment; sender and receiver receive timely notification that the payment has been made; funds debited from the payer and made available in near real time to the payee) will require coordinated action by a public authority or industry group. Others have stated that current payment services are evolving toward this outcome and no special action by a public authority or industry group is required.

i. Which of these perspectives is more accurate, and why?

Current payment services should continue to evolve toward this outcome. However the Fed should provide guidelines/oversight/participation through NACHA for ensuring the data security of any participants.

ii. What other perspective(s) should be considered?

Additionally, looking at near-real-time, while a step in the right direction, does not help certain merchants. Realistically, a gas station or QSR needs an actual real-time solution to ACH. Realistically, even immediate approval of fund availabilty (similar to current credit/debit) and continued actual receipt of funds into a merchant account would be more acceptable.

- Q5. The second desired outcome articulates features that are desirable for a near-real-time payments system. They include:
- a. Ubiquitous participation
- b. Sender doesn't need to know the bank account number of the recipient
- c. Confirmation of good funds is made at the initiation of the payment
- d. Sender and receiver receive timely notification that the payment has been made
- e. Funds debited from the payer and made available in near-real time to the payee
- i. Do you agree that these are important features of a U.S. near-real-time system?

## Yes

These are all important features, but they need to be priortized. B,C, and D are critical. A is desirable but not required and E would be a vast improvement.

ii. What other characteristics or features are important for a U.S. near-real-time system?

Data security, standards that will enable or push to ubiquity, and no bank account information should be required.

- Q6. Near-real-time payments with the features described in the second desired outcome could be provided several different ways, including but not limited to:
  - a. Creating a separate wire transfer-like system for near-real-time payments that leverages the relevant processes, features, and infrastructure already established for existing wire transfer systems. This option may require a new front-end mechanism or new rules that would provide near-real-time confirmation of good funds and timely notification of payments to end users and their financial institutions.
  - b. Linking together existing limited-participation networks so that a sender in one network could make a payment to a receiver in another network seamlessly. This option may require common standards and rules and a centralized directory for routing payments across networks.
  - c. Modifying the ACH to speed up settlement. This option may require a new front-end mechanism or new network rules that would provide near-real-time confirmation of good funds and timely notification of payments to end users and their financial institutions. Payments would be settled periodically during the day.
  - d. Enhancing the debit card networks to enable ubiquitous near-real-time payments. Implementing an entirely new payment system with the features described in the second desired outcome above.
- i. What would be the most effective way for the U.S. payment system to deliver ubiquitous near-real-time payments, including options that are not listed above?

C is closest to a desired end state, and A is a potential route to achieving C.

ii. What are the likely pros and cons or costs and benefits of each option?

D adds costs due to branding/existing debit network costs, therefore those associated costs would be a part of this option as well.

iii. Is it sufficient for a solution to be limited to near-real-time authorization and confirmation that good funds are on their way, or must end-user funds availability and/or interbank settlement take place in near-real time as well?

"Near" real-time is not sufficient for introduction. The goal should be real time authorization and settlement. Pay at pump or dirve thru would be two excellent challenge use cases for the requirement to be defined as ACTUAL real time authorization.

iv. Which payment scenarios are most and least suitable for near real-time payments? (B2B, P2P, P2B, POS, etc.)

It depends on existing relationships between parties in B2B and P2B payment scenarios. For P2B and POS "near" real time authorization is not suitable.

- Q7. Some industry participants have said that efforts to make check payments easier to use, such as by enabling fully electronic payment orders and/or by speeding up electronic check return information, will incrementally benefit the payment system. Others argue the resources needed to implement these efforts will delay a shift to near-real-time payments, which will ultimately be more beneficial to the payment system.
  - i. Which of these perspectives do you agree with and why?
    If similar resources would be working on both of these improvements, we would agree that the focus needs to be on working towards further improvement and definition of an improved, cost effective real time payment system.
- Q8. How will near-real-time payments affect fraud issues that exist with today's payment systems, if at all? Will near-real-time payments create new fraud risks?

If properly implemented, fraud should be reduced and enhance both the merchant and FI ability to manage risk.

i. Will near-real-time payments create new fraud risks?

Yes

The associated risks would be verifying that the account holder/payor is correctly identified. Other risks would evolve with any new system or solution as can be seen historically.

Q9. To what extent would a ubiquitous near real-time system bring about pivotal change to mobile payments?

A secure, low cost, real time system for ACH would become the default payment type for mobile systems/wallets and would further adoption from both the merchant and consumer point of view for adoption.

Q10. What would be the implication if the industry and/or the Federal Reserve Banks do not take any action to implement faster payments?

We will fall further behind other countries that have implemented real time payments. Additionally, consumer confidence will be lacking if the industry and the Fed do not take action.

Q11. To what extent will the industry need to modernize core processing and other backend systems to support near-real-time payments?

They will need to use industry standards and significantly upgrade technology to align with the technology available in the market.

- i. What is the likely timeframe for any such modernization?
   This is difficult to forecast without pinpointing an exact solution. That being said, large scale or full scale implementations are a massive undertaking with many contingencies.
- Q12. Some industry participants suggest that a new, centralized directory containing account numbers and routing information for businesses and/or consumers, to which every bank and other service providers are linked, will enable more electronic payments. A sender using this directory would not need to know the account or routing information of the receiver.
- i. What are the merits and drawbacks of this suggestion?
  Banks will be reticent to give up this information and lose ownership of their customers. Additionally, who "owns" the directory? How is information updated and kept secure?
- ii. What is the feasibility of this suggestion? Very low
- Q13. Some industry participants say that check use is an enduring part of the U.S. payment system and that moving away from checks more aggressively would be too disruptive for certain end users.
- i. Is accelerated migration from checks to electronic payment methods a high priority desired outcome for the U.S. payment system? (Accelerated means faster than the current trend of gradual migration.)

  Yes

If real time payment is a desired end state, then accelerated migration should be a priority.

ii. If yes, should the Federal Reserve Banks establish a target for the percent of noncash payments to be initiated via electronic means, by a specific date? For example: "By the year 2018, 95% of all noncash payments will be made via electronic means."

An analysis needs to be conducted to determine current ratios across different segmentations are. Once this analysis determines the current use levels, then appropriat targets can be sent.

Q15. To what extent would the broader adoption of the XML-based ISO 20022 payment message standards in the United States facilitate electronification of business payments and/or cross-border payments?

Standardization of banks across the world will facilitate more rapid transfer of funds. This will also lend to greater security.

Q16. What strategies and tactics do you think will help move the industry toward desired outcome four - consumers and businesses have greater choice in making convenient, cost-effective, and timely cross-border payments?

Always offer dynamic currency conversion. Remove foreign transaction fees and reduce fees with the adoption of a standard.

Q17. Payment security encompasses a broad range of issues including authentication of the parties involved in the transaction, the security of payment databases, the security of software and devices used by end users to access payment systems, and security of the infrastructure carrying payment messages.

- i. Among the issues listed above, or others, what are the key threats to payment system security today and in the future? Authentication is the key issue, and secondarily the systems used to initiate and process transactions is vital to system security.
- ii. Which of these threats are not adequately being addressed? There will be ongoing attempts to hack and steal card/payment data.
- iii. What operational or technology changes could be implemented to further mitigate cyber threats? Authentication is critical to the future use and evolution of any system. Point to point encryption, multi factor verification and authentication data can also be beneficial. However, the more security imposed, the further away the industry is from real time a transaction.

Q18. What type of information on threat awareness and incident response activities would be useful for the industry?

Making this information available to the general public rapidly, or an online forum to make people aware of threats would help the industry and consumers more rapidly respond.

Q19. What future payment standards would materially improve payment security?

The discussed real time payment standard could improve payment security across all payment types. i. What are the obstacles to the adoption of security-related payment standards? There is a lack of ROI in implementing mmost security related standards.

Q20. What collaborative actions should the Federal Reserve Banks take with the industry to promote the security of the payment system from end to end?

The Fed cannot be a decision maker in the industry. They should collaborate with the industry to host forums and other such events to aid in a ongoing discussion towards setting a standard.

Q21. Please share any additional perspectives on U.S. payment system improvements.

Improving the ACH networks will be the best option towards achieving real time payments. This will take collaboration between NACHA, Financial Institutions, and the industry to ensure a better overall standard that can offer an excellent solution.