Name: Neal Gafter
Organization: Cryptofrog LLC
Industry Segment: Emerging Payments Provider

General

1. Are you in general agreement with the payment system gaps and opportunities identified in the "Payment System Improvement Public Consultation Paper"? Please explain, if desired.

No. It is not clear that more (rather than less) involvement of the Federal Reserve in the payments space is beneficial. Much of what holds back advances in payment technology is overregulation, including a patchwork of laws regarding money transmission. The best solution to this overregulation would be a single set of Federal laws that preempts state law.

1i. What other gaps or opportunities not mentioned in the paper could be addressed to make improvements to the U.S. payment system?

2. Are you in general agreement with the desired outcomes for payment system improvements over the next 10 years? Please explain, if desired.

No. Regarding outcome 5, it is not clear to me that the Federal Reserve should play a significant role in addressing the other goals.

2i. What other outcomes should be pursued?

Simplification of the regulatory landscape for money service businesses and money transmission in a way that would enable small innovative businesses to compete on a level playing field with large established businesses (e.g. banks and the Federal Reserve itself).

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

See 1i.

Ubiquitous near-real-time payments

4. 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.

4i. Which of these perspectives is more accurate, and why?

Neither. I believe the best approach is to simplify the regulatory landscape to that innovative payment systems can emerge as an alternative to existing authorities, industry groups, and payment services.

4ii. What other perspective(s) should be considered?

Cryptocurrencies such as Bitcoin appear to be a promising approach undermined by existing authorities, industry groups, stakeholders, and a complex patchwork of inconsistent and inconsistently applied legislation. The legal and legislative landscape should be modified to encourage rather than interfere with the development of this industry.

5. 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

5i. Do you agree that these are important features of a U.S. near real-time system? Please explain, if desired.

Yes.

5ii. What other characteristics or features are important for a U.S. near real-time system?

The transaction costs should be set by the market rather than imposed on participants by any central authority. Payment between sender and recipient should not require interaction with a central authority (decentralized). Payment should be capable of being sent in an irreversible way to reduce the cost of payment fraud. The use of an electronic payment system should not expose any more financial information to third parties than the participants elect to expose.

6. 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.
e. Implementing an entirely new payment system with the features described in the second desired outcome above.

6i. 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?

e

6ii. What are the likely pros and cons or costs and benefits of each option? What rule or regulation changes are needed to implement faster payments within existing payment processing channels?

It isn't clear to me that building on existing payment processing channels is the most effective way to accomplish the goals. The only benefit that they offer is their already wide reach. But there are other things with a similarly wide reach such as the internet. That is why I recommend developing - or allowing to develop - alternatives such as cryptocurrencies.

6iii. 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?

The whole process should be near-real-time.

6iv. Which payment scenarios are most and least suitable for near real-time payments? (B2B, P2P, P2B, POS, etc.)

Scenarios in which goods are ordered on one day but received by the purchaser at some time later. Such scenarios should be capable of being handled using near-real-time mechanisms or, if participants elect so, through an escrow agent agreed upon by the parties, where funds are released when delivery is complete.

7. 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. Which of these perspectives do you agree with, and why?

no comment

8. How will near-real-time payments affect fraud issues that exist with today's payment systems, if at all?

If near-real-time payments are irreversible (which they should be), then the possibility of payment fraud is reduced but the possibility of fraud from vendors (e.g. not shipping a product) is increased. The latter is easier to police and correct, so the overall cost to the economy is lower. Moreover, the payment system should allow for a participant-selected escrow agent who is capable of controlling when the funds become available. That will enable the development of a market for trusted escrow agents that compete to lower the cost of their service, enabling participants to decide how much of their transaction costs they are willing to pay to protect against fraud.

8i. Will near-real-time payments create new fraud risks? If yes, please elaborate on those risks.

Yes. See answer to 8, above.

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

To a great extent.

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

It depends on whether the government authorities continue to interfere with the development of alternatives. If they get out of the way I believe we will see a very valuable new industry emerge. If they continue to interfere we will likely see a very valuable new industry emerge only outside the USA.

10i. What is the cost, including the opportunity cost, of not implementing faster payments in the United States?

If the regulatory landscape permits it, they will be implemented outside the Fed.

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

It isn't clear to me that a solution to the problems posed is best solved by the existing industry.

11i. What is the likely timeframe for any such modernization?

See 11.

12. 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.

12i. What are the merits and drawbacks of this suggestion?

A centralized solution is a huge drawback, as it raises issues of trust, privacy, and a central point of failure. Recent experience with cryptocurrencies have demonstrated that low-cost solutions exist without the centralized component.

12ii. What is the feasibility of this suggestion?

See 12i.

Electronification

13. 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.

13i. 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.) Please explain, if desired.

No.

13ii. 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." If Yes, what is the appropriate target lever and date?

No

14. Business-to-business payments have remained largely paper-based due to difficulties with handling remittance information. Consumer bill payments also are heavily paper-based due to the lack of comfort some consumers have with electronic alternatives. In addition, many small businesses have not adopted ACH for recurring payments due to technical challenges and/or cost constraints. The payment industry has multiple efforts underway to address these issues.

14i. To what extent are these efforts resulting in migration from checks to other payment types?

I don't have the statistics at hand.

14ii. What other barriers need to be addressed to accelerate migration of these payments?

14iii. What other tactics, including incentives, will effectively persuade businesses and consumers to migrate to electronic payments?

Lower costs and all of the advantages discussed earlier. Those who are happy using existing techniques such as paper checks should be able to continue doing so.

14iv. Which industry bodies should be responsible for developing and/or implementing these tactics?

All industry bodies should aim to lower their costs.

Cross-border Payments

15. 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?

16. 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?

Simplify the regulatory landscape for the development of alternative payment systems.

Safety

17. 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.

17i. Among the issues listed above, or others, what are the key threats to payment system security today and in the future?

I am most concerned about "the security of software and devices used by end users to access payment systems", as there are fair solutions to most of the other problems. Secure, dedicated devices to aid in the use of cryptocurrencies, such as http://www.bitcointrezor.com/ (ideally in a credit-card form factor) would help with this issue.

17ii. Which of these threats are not adequately being addressed?

See 17i

17iii. What operational or technology changes could be implemented to further mitigate cyber threats?

See 17i

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

18i. How should this information be made available?

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

Bitcoin or other distributed cryptocurrency

19i. What are the obstacles to the adoption of security-related payment standards?

A complex regulatory landscape including separate AML and money transmission laws in different states.

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

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