



## **Payment System Improvement Public Consultation Paper December 13, 2013 Response**

BAI's mission is to provide research, education and information to the financial services industry. We do not engage in any lobbying or advocacy efforts but we participate actively in leading the dialog and debate on strategic issues of importance to the industry including payments. We appreciate the opportunity to provide feedback to the Federal Reserve Banks.

### *General*

#### **Q1. Are you in general agreement with the payment system gaps and opportunities identified above? Please explain, if desired.**

We agree with points made regarding gaps in and opportunities to improve the U.S. payment system, and with the general objective of moving to a faster, better, safer and more efficient end-to-end process. Digital technology can make all of this possible — especially if wielded on behalf of the industry in some concrete directions, rather than dissipating in the many. Transactions settled in real-time, with good funds, by trusted institutions with the same ubiquity, scalability, and integrity of today's payment rails are a common quest and inevitable outcome of digital processing technology available in the current century.

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

One additional key driver for change in the U.S. payment system that is not called out directly is the potential for reduced U.S. competitiveness globally as it falls behind other developed countries more focused on moving forward from the payments technology of the past century. This is particularly noticeable in B2B and small business payments venues, where more than half of all payments continue to be processed by paper checks. The problem escalates cross-border, where PayPal is a leading alternative to complex, expensive wire and funds transfer systems. U.S. companies attempting to expand into global markets can find themselves disadvantaged by inferior systems for paying, getting paid, and moving funds where and when they are most needed. This persistent and competitive need should be addressed.

Another additional consideration is vast challenge of reconciling and rationalizing the U.S. banking system with the transition from physical assets to digital ones. An important question is whether the U.S. can afford to support the costs of continuing to field the assets of its more than 14,000 regulated financial institutions.

Many smaller FIs do not have the cost structures to enable profitable debit card and payments operations. This was clearly evidenced in the initial phase of mobile banking adoption. Many of the smaller FIs rely on core solutions providers but the lag-time in deploying comparable services enabled the largest banks to enjoy advantages in adoption of new technology.

The third driver is the systemic lack of cooperation among industry participants and the failure in the U.S. to build consensus among members of the payments ecosystem on a variety of important issues.

BAI stands ready to assist in fostering and supporting the needed dialog and can act as a bridge between larger and smaller financial institutions and solutions providers to ensure that all perspectives are understood.

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

The outcomes professed in this paper are both appropriate and necessary: A collectively-derived set of improvements that produce ubiquitous, lower-cost, and secure payment choices that eliminate exposure of account credentials and achieve good-funds settlement in real-time. What is less obvious are the processes and timeframes for achieving these outcomes.

Achievement of the stated outcomes must be viewed in the context of an overall transition of the payment system to a more efficient, digital mode with appropriate mechanisms and timeframes to assure a practical and rational transition. This is not to say that banks should view current revenues as necessarily sustainable in perpetuity as simply some form of entitlement. But neither should they be hamstrung by artificial mandates of legacy regulations. They should have the opportunity to transition to new and different economic foundations for providing value to customer including the opportunity to research, craft and build-out new digital revenue.

Clearly, the banking industry is capable of supporting fundamental economic transformations. Check 21 was the result of enlightened leadership by the Fed to organize the payments ecosystem to facilitate and structurally support conversion of paper checks to electronically processed images. This achievement has resulted in significant reduction of check volumes in less than a decade and it was accomplished with minimal unproductive disruption to existing market participants. Further, the efforts addressed fundamental changes needed in a non-economic cost structure built around paper-based processing modes to the benefit of both payments providers and users.

By contrast, many of the proposed outcomes from this initiative would seem to affect top-line operations of financial institutions. They may necessitate the concomitant transition to new revenue models from these new, lower-cost business models with the accompanying competitive pressures and likely participation of new entrants to the business. Such new entrants have the benefit today of reduced regulatory compliance requirements, which can provide them with a significant cost advantage.

**i. What other outcomes should be pursued?**

Another principal outcome of an integrated, modernized-for-digital payments system should therefore be a master plan of sorts for how regulated financial institutions can navigate this transition, with the end objective being the ability for economically sound banks to participate in payment streams without undue threats to soundness and stability of their operations overall. An orderly transition to new operational paradigms requires detailed planning, constant monitoring, and close supervision in order to achieve the optimal results will be required.

There is also ample justification for a top-to-bottom review of banking regulations across all aspects of digital transacting. The assumption by many seems to be to simply adapt existing standards to new payment forms and modes, but in a number of ways, that limits payments to the legacy of the physical world, much of which is widely viewed as in need of change.

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

The U.S. is impacted by a highly politicized debate over the proper role of government in society overall; the role of the federal government in the economy in general and financial services in particular is no exception. As a result, the Fed's role in the payment system has become an issue that has been actively and regularly debated.

Our view is that self-governance by key industry participants is optimal. Ultimately, the Fed is a logical entity that has sufficient experience, breadth, resources, and authority to assume the role of facilitator. BAI supports a view that the most useful role for the Federal Reserve Banks is to facilitate discussions among payment system participants. Providing opportunity for key players in the payments space to interact and share ideas is needed and would have a good results. Although the Federal Reserve would continue to provide services to financial institutions, the evolution of the payment system should be inclusive and industry-led. BAI can play a constructive and valuable role in convening groups that represent a full cross-section of regulated financial institutions as well as many of the companies that service these FIs.

*Ubiquitous near-real-time payments*

**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 payments 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 the 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?**

There has been some movement toward these characteristics, but it has been slow even for legacy system participants. There are many examples that demonstrate how banks and other legacy payments providers experience difficulties fielding new technology that offers even rudimentary forms of the characteristics enumerated in the second outcome. Without some change, the banking industry is likely to fall even further behind the big, resource-rich and fast-moving digital participants. Therefore, it seems incumbent in this effort to acknowledge the limitations of bank-based capabilities in digital innovation, and focus on deciding how the contributions of other members of the emerging payments ecosystem can contribute to delivering this technology on an efficient and effective basis going forward.

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

These are the core components of the desired digital payment per se, but they seem to assume, rather than delineate, other essential features of a viable new payment system, including:

- Ability to scale to a global level
- Inherent features of transaction reporting and monitoring that enable and support exception handling and risk management
- Adjudication and syndication of risk, especially fraud, among participating parties, on a rational and equitable basis
- The ability to obtain and benefit from business supporting tools such as risk insurance, current exchange hedging, etc.
- The ability to provide certain user protections while preventing the use of digital payments to commit crimes
- Leveraging the access to extensive data about purchases in order to improve the buyer-seller interactions
- Creating in some non-payment-account form as 'digital IDs' for application to other use cases

In a number of these respects, near-real-time payment systems would seem to encourage adoption if they behaved more like some of the digital/virtual currencies now proliferating in the marketplace (e.g., bitcoin). These alternative currencies are likely to experience growing adoption if/as the kind of supporting infrastructure discussed here begins to appear in the marketplace. There is much to learn from these experiments in digital transacting, and we note that federal regulators are taking an open viewpoint to accepting these learnings. Such innovations need to be a part of policy discussions.

This raises the fundamental question — which BAI feels should be addressed in this process — of whether the creation of a national industry-led body convened by the Fed and other industry organizations should focus solely on banking industry participants or whether it should expand to include other critical participants in the payments ecosystem. Such sharing would seem to be a vital objective motivating the move to a near-real-time payments paradigm.

This is undoubtedly true with respect to security concerns: near-real-time transacting can reduce overly expensive aspects of the current payments paradigm; but what *new* risks will be introduced into the new system? It would seem logical that working together across the entire ecosystem would be a much better way to learn about those risks, and address them as proactively as possible, to the benefit of every participant.

**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 system. This option may require a new front-end mechanism or new rules that would provide near-teal-time confirmation of good funds and timely notification of payments to end users and their financial institutions.**

Some of the emerging P2P interfaces are beginning to address a more modern view of how digital users expect to make funds transfers. These new interfaces are simpler and less convoluted than the wire transfer systems used by banks and corporations today. We believe the existing interfaces for transfers evolved largely out of the need to manage risk and prevent unauthorized use, which has made them both expensive and hard to use.

We believe that many elements of funds transfers can now be dramatically impacted by near-real-time functionality that can remove much of the risk and costs in the legacy system. The resulting benefits would be tremendous, but the related collateral impacts could also be substantial including the ability to move large amounts of corporate funds around the world with fewer complications and expenses, and the opportunity begin winding down elaborate infrastructures. On the other hand, wire transfers constitute a very high margin business for many larger correspondent/money center banks, and rapid devolution of this business stream could create significant stresses for these banks, which could be unsettling for global operating partners and customers during any transition to more free-form digital alternatives.

- 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.**

The key aspect of this capability is facilitation of communicating payment information across multiple payment networks; this is even more complicated with the expectation of linking close-loop/limited-participation networks together. Payments standards and rules have largely evolved to become their own payment silos as they have sought to address a myriad of operational aspects that can go wrong with mostly paper-based, physical processes that result in exceptions. Judicious exception handling is one of the essential ingredients of credible payment networks; near-real-time transacting should significantly reduce the volume of errors and problems within transit of the payments data. But recognition of this data in existing formats by various networks as the endpoints of the transaction end-to-end could prove to be very complex: existing banking network rules have evolved to focus only on the specific exigencies and characteristics of a *particular* payment type, resulting in the payment silos that constrain connectivity and use within banks and among their customers.

Newer, limited-access networks, on the other hand, often have fewer rules. Thus, we do not see a move within 10 years to a universal payment mode riding interchangeably among a multitude of network at least for retail payments. We do foresee that these complications could be attenuated through the use of a digital 'ID'.

- c. Modifying the ACH to speed up settlement of 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.**

The ubiquity and industrial strength make ACH an attractive option for becoming a default digital network. But its batch nature of processing with slower than ideal clearing and settlement windows makes ACH a candidate for substantive rebuilding. The investment required would be considerable and likely not viable without a material change in the remuneration available today.

- d. Enhancing the debit card network to enable ubiquitous near-real-time payments**

The signature-debit card networks, which effectively ride the credit card rails, are not good candidates for a near-real-time payment option. Transactions for many issuers are not profitable now, and they are cleared and settled in about the same timeframes as ACH. PIN-debit is certainly a candidate for digital network capabilities, provided that there is improvement in merchant acceptance. As well, the PIN-debit option would need coordination and integration of more than a dozen EFT networks, and extension of FI interconnections, in order to provide the ubiquity called for. Further, many FIs cannot today process a real-time authorization. To achieve the desired ubiquity, solutions for bringing such banking participants into the digital realm would have to be developed.

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

It is conceivable that an entirely new ‘debit-oriented’ network could be fashioned in a vein similar to what we currently see in the proliferation of virtual currencies perhaps in the same way some prepaid payment products operate. That is, if the funds are deemed in some way as prepaid, and the risk of unauthorized receipt is handled, then the transit aspect of the payment can be highly flexible and ubiquitous in a virtual distribution and acceptance sense. Similarly, tokenized payments and/or digital IDs can be infinitely flexible, and accommodated by any network that can properly determine the authorization decision and the destination information for the payment.

**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?**

In some sense, the above functionality is possible with a credit-push type of payment. Risk is minimized by the payer designating the payee, rather than having the payee debit the payer’s account. Other options could mimic fully electronic options available overseas, electronic invoicing schemes and hybrid credit-debit schemes. It is also possible to view combinational payment platforms as a fully virtual, interchangeable payment facility that rides on top of existing open-loop or closed-loop payment networks.

**ii. 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?**

Providers benefit from knowing both the originator and destination of the payment either through entry of account information or prior registration and enrollment of accounts. Such capabilities mitigate most funding and transaction risk, leveraging tokenization and encryption capabilities. The end result will be much less costly and much more efficient payment alternatives potentially raising business issues in the short term, but rather easily accommodated by rules changes within an individual payment network. Again, though, accommodating cross-network acceptance — especially with limited-participation networks — could experience a host of rules changes and conflicts. And that would necessitate formation of a policy-making capability.

**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?**

It is our sense that settlement does not have to be near-real-time *per se*; the receiver of the funds needs only a valid authorization with a promise-to-pay from a sender or network that is trusted. Near-real-time settlement could greatly increase the risk and complexity of moving the funding value — and its intended function would not be enhanced except perhaps in the case of the biggest individual transactions. Thus, end-user funds availability and/or interbank settlement might need to be a service option for high-end retail and B2B transactions, but not required for most consumer-to-business transactions.

It is important to point out, though, that the hundreds of mobile wallets and related payment experiments in the marketplace today are piggybacking on the existing payment rail infrastructure, attendant business models for purchase fulfillment, and related product and delivery guarantees and make-good arrangements and commitments. These transaction features would necessarily need to transition over to any new payment paradigm in order to ensure that exceptions on consummating digital transactions are at least as efficaciously handled as they are for payments today.

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

From a business-side standpoint, B2B would be the easiest to accommodate — all parties are looking for ways to save extraneous costs and expedite commerce from the lack of automation today. P2P would be the most flexible, but systems today tend to work primarily within enrolled-account networks, and usually rely upon third parties to accommodate destinations outside of provider networks. P2B applications are the least regulated, but to the extent that origin and/or destination accounts are held by regulated financial institutions, over networks that have specific, legacy payment formats and composition, these payment modes might be more difficult to accommodate over the short term. POS payments, as we are learning with mobile payments, have innovation-resistant infrastructures and rely on acquiring processor-outsourced capabilities to such an extent that changes are often very costly and difficult to implement.

The most difficult venue of all, however, is online transacting. Outside of registered-account models accessed via one-time use of payment tokens, moving to near-real-time payments would severely test the largely card-based risk management systems operated by merchants and third parties. Yet with so much more fraud generated from online payment use, solving the funding and transaction risks for remote transacting would seem to have the biggest payoffs for near-real-time payments.

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

Continued tweaking of the legacy payment systems seems to work against the momentum to transition to a new payments paradigm. At some point, the diminishing returns of accommodating paper-based systems will not make business sense. A different approach could be to price the remaining checks to users in such a way as to disincent further use but recover the costs to other participants for as long as these legacy payment modes persist.

**Q8. How will near-real-time payments affect fraud issues that exist with today's payment system, if at all?**

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

Near-real-time payments can dramatically reduce funding risk, particularly if holds on account funding for authorizations are made by some suspension account mechanism at the time of authorization, and the automated exchange of payment information. Such centralization of the payment commitment within protected data centers would also reduce much of the transaction risk. If coupled with good funds models that operate similarly to PIN-debit, significant reductions in today's fraud, charge-backs and charge-offs are possible.

On the other hand, moving monetary values that quickly, without opportunities to do additional fraud checks can introduce the possibility of confiscation of funds before there is an opportunity to intervene. And other types of systematic incursions might accelerate in incidence and frequency. As a consequence, near-real-time transacting will likely require additional forms of verification, compensatory controls, and even multi-level, multi-factor authentication. It is also conceivable that transacting liability could wind up being tiered in terms of risk and cost, with fees to users who opt for less secure, or faster-settled transaction completions. Resolving this back-end infrastructure is another essential element of the transaction experience overall, and a new payments paradigm would necessarily have to provide for it in a sustainable way. If not funded by payment fees, then then it would need to be funded by new revenue models.

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

Today, mobile payments are mainly about the front-end device and experience for originating a funding commitment for a purchase or transfer of value. The majority of the mobile wallets in today's marketplace essentially ride on existing credit card rails, with growing use of debit and prepaid accounts for some limited-participation network offerings. So, from the buyer's perspective, there is little so far about the proposed new payment paradigm that moves the needle forward on choosing to pay via mobile.

Rather, improvement in the payment system overall directly impacts the acceptance of sellers for mobile payments; and without seller buy-in for investing in a mobile payment infrastructure, the buyer incentives are not expected to materialize in ways that persuade consumers to change their payment behaviors.

Merchants have been very outspoken about their reluctance to invest heavily in new payments technologies that do not address their long-standing complaints about the high costs and onerous rules of today's card and ACH payments. Ubiquitous, near-real-time payment options — if they reduce costs and expedite payment consummation at much lower levels of risk, fraud and exceptions — would certainly seem to address this need from the seller side.

Many merchants are beginning to explore how new, tablet checkout terminals could enhance their marketing and merchandizing experiences with the buyer. Mobile technology is already making this dimension of transacting transformational through location-based marketing, in-store comparison pricing checks, and real-time redemption of coupons, discounts and rewards at checkout. However, in this dimension of transacting in a new payments paradigm, the payment itself becomes much less of a driver of how and why a transaction is done with mobile technology. In fact, many new business models are emerging where the payment function is embedded and transparent in applications that drive the user experience with marketing functions. Therefore, ubiquitous, near-real-time payments wind up being a means of facilitating interactive, digital commerce, but not the purpose of or main driver for converting to mobile technology.

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

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

A movement to transparent, efficient digital payments where the payment functions ‘get out of the way’ of commerce would seem to be inevitable at this point. It might take many years for it to happen with respect to legacy payments, but once Pandora’s Box of digital and mobile technology gets opened, it may never again be closed. So, whether or not the legacy payment system and its primary providers choose to participate by providing the payment functionality as needed and desired, payment innovations will occur anyway. Then the resulting question becomes: will banks and their payment infrastructure partners be able to participate profitably in providing these new payment forms and modes, or simply watch a cannibalization of their legacy products and services from the sidelines? An even more important question also arises: how do banks and their partners participate profitably if the cost structure of digital payments is dramatically reduced and competition is enhanced as a result?

Such a ‘democratization’ of payments has profound implications on the efficacy of retail banking, for which payment revenues are such a critical factor. But to remain reliant upon the inefficiencies of physical-realm payment components — especially delays in execution and funding, and the attendant increase in risks that we have today from that — in order to sustain existing revenue models seems both imprudent and self-defeating. Rather, the industry needs to embrace both the inevitability and need for faster payments but on a basis, framework and timetable that avoids putting the existing payments business at risk.

By embracing this change, and the inevitable transformation of the business, banks and other legacy payment providers stand a much better chance of inclusion in new revenue models. Terms would be negotiated based on the value they can now contribute, rather than merely sacrificing the existing revenues in a slow, but steady cannibalization of their current payments revenues. So the real question becomes: can the Federal Reserve Banks facilitate dialog among the payment ecosystem participants that can work constructively together to define what new sources of value can and should be provided?

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

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

The limitations of many smaller banks and credit unions will significantly impact timing. Upgrading core services is a major challenge for larger banks. Investment resources in banks are available but impacted by heavy regulatory priorities. This means the industry is likely to require even more dependence on existing or new third parties. It is conceivable that many FIs will be relegated to providing core account authorization and funding capabilities as a primary mode of participation, augmented by expanding adjunct facilities for account holds and funds suspension to support good funds product models. This essential part of the ubiquitous, near-real-time structure for payments can evolve fairly quickly if banks are willing to partner with these old and new providers.

As well, there is embryonic potential for development of digital IDs as a new value-added function and basis for compensation. This means a new infrastructure has to be developed within banks as the primary ‘trusted parties’, and that will likely involve development and promulgation of sophisticated cloud-based systems to house this new infrastructure. But given the pace of this sort of technology evolution today, such an infrastructure is likely to be achievable within the 10 year timeframe of this initiative.

**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?**

Essentially, such a directory is the cornerstone of both cloud-based alternatives to today’s payments silos and the core infrastructure needed to support digital IDs. Whereas today, a given consumer would look to the banking industry as perhaps dozens of individuals based on the multiple accounts and any number of monolithic payment products used to access those accounts, in a realm of digital IDs based on unique personally identifying information (PII), a ‘master’ ID could be fashioned from which links to and uses of dozens of payment forms and modes can be authorized. Creation and maintenance of these IDs is almost certainly a sustainable competitive advantage for banks and other regulated FIs. Uses can expand well beyond payments to licenses, incorporations, property titles/transfers and a host of other applications, all of which could become new sources of revenue and income for trusted providers.

**ii. What is the feasibility of this suggestion?**

National IDs have long been a ‘third rail’ of the political culture for privacy, voting rights and other advocates, although the nation has lived somewhat successfully with state provided IDs such as drivers licenses, and international IDs, such as passports. And at an individual level, though, the realities of digital lifestyles and convenience are beginning to make inroads. As well, new generations of social network users are providing massive amounts of PII in unrestricted digital venues. The banking industry would benefit from advocacy that would position the banking industry in this role.

***Electronification***

**Q13. Some industry participants say that check use is an enduring part of the U.S. payments 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.)**
- ii. Please explain, if desired.**
- iii. 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: “but the year 2018, 95% of all noncash payments will be made via electronic means.”**
- iv. What is the appropriate target level and date?**

A simpler solution to the lingering problem of 15-20 billion paper checks still written each year and the preponderance of small business transactions still being made by this expensive payment form is to begin to charge users for the costs incurred with a planned transition period.

**Q14. 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.**

- i. To what extent are these efforts resulting in migration from checks to other payment types?**
- ii. What other barriers need to be addressed to accelerate migration of these payments?**
- iii. What other tactics, including incentives, will effectively persuade businesses and consumers to migrate to electronic payments?**
- iv. Which industry bodies should be responsible for developing and/or implementing these tactics?**

Few advances in electronic automation have made it materially easier for businesses to use them so continuing dependence on checks is no surprise. Many of the difficulties in automating business payments have to do with the formatting not just of payment information, but on the attendant invoicing, remittance and back-end reporting and accounting systems.

Mobile technology, digital IDs and other manifestations of digital transacting could enable the banking industry to make much more progress in serving the needs of small businesses, provided that the objective of moving funds securely and immediately wherever needed can be balanced with the ubiquitous need of these customers for opportunistic cash flow management. The end result is that despite legislation aimed at reducing these types of problems, overdraft fees on DDAs are rising again. The banking system has not made electronic payments cost-effective for many users. So it is not surprising to see slow adoption of online bill payment.

That said, most of the transactional systems are predicated on the assumption that consumers and small businesses always have necessary and sufficient funds predictably on-hand whenever payments are due or made, and imposes substantial penalties on customers when that funding is not immediately on-hand. This creates an opportunity for a fundamental re-thinking of the role of banking in both managing finances and enabling ubiquitous financial product. Until this systemic problem is addressed, full adoption and use of faster electronic payments cannot be assured.

### *Cross-border payments*

#### **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?**

The growing perception is that corporations are embracing the ISO 20022 solution, especially for cross-border payments. The corporate B2B sector of the economy needs electronification. While we expect that the business case for adoption of the standard will prove to be compelling, it is unclear how small businesses will use this solution.

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

Besides ensuring that products and services are there for smaller users, the digital payment system needs to account for all the other complicating factors in cross-border commerce. This is a major education effort for banks and it will become even more complex as payment options expand. It would be possible to design a global commerce resource infrastructure that arrays supporting products, services, and educational information around payment functions and options. In theory, this infrastructure could be provided by banks and even help leverage bank branch operations. Organizations such as BAI could be instrumental in facilitating this support.

**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?**
- ii. Which of these threats are not adequately being addressed?**
- iii. What operational or technology changes could be implemented to further mitigate cyber threats?**

The biggest missing component of this discussion is what to do about the weakest link in the security ‘chain’ — the human user of the payment system. For more than a decade, bankcard marketing has focused on insulating the cardholder from any damage related to fraudulent activities. In the process, we have absolved the cardholder from most, if not all, of the responsibilities for securing account credentials, personal payment devices, log-in credentials and communications components from encroachment and misuse. While obviously applicable for online purchasing and banking venues, the industry’s tendency to avoid involving the payment user in security responsibilities extends generally to any transaction venue.

There are many ways to start gradually changing the mindset of consumers and small businesses along with the rest of the payments ecosystem:

- Eliminating “zero liabilities” for cardholders
- Supporting PIN-debit for online and offline purchases over fraud-prone signature debit
- Getting banks involved in sharing online liabilities with merchants
- Ensuring security requirements for online and mobile banking transfers for businesses are at least as safe as when made in a branch
- Promoting best practices for PIN, password and log-in credentials
- Preventing further application of Card Not Present (CNP) designation to mobile transactions at POS (which are not NFC-enabled)
- Enhancing both EMV and NFC to eliminate card-emulation mode of transacting
- Exploring ways for banks to transition to ‘carrot-and-stick’ approaches to cardholders—both incenting/rewarding them to do ‘good’ things and disincenting them for excessive numbers of charge-backs, incidents of suspected ‘friendly-fraud’, etc.

From a network risk management standpoint, there are a number of improvements likely to be needed as volumes of near-real-time transactions and support messages grow. All of this will require unprecedented collaboration that can be facilitated by the Federal Reserve.

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

**i. How should this information be made available?**

It is not feasible for 14,000 banks and credit unions to tool up individually to fight fraud. A Fed-convened roadmap in collaboration with other key industry organizations to define and share best practices for security.

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

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

Improving the proposed card-emulation approach would be an important first step. For the longer term, a more proactive approach will be needed. The EMV protocol is nearly 20 years old, and was driven by existing business conditions that have changed. With most of the world moving to digital transacting, a new standard for digital interactions on mobile devices is clearly needed.

Historically, the industry has been reluctant to invest in new standards for security, partly because the growing volume of efforts already required by regulators absorbs most or all of the funds available. Current regulation is often based on looking back at problems that have already occurred. It is our hope that an industry-led approach could arise out of this initiative to shift the focus of investments to a future-oriented view of digital payments to the extent possible. This could encourage legacy payments providers to move more aggressively to think in forward-looking ways at their approaches to transaction security and network integrity, rather than applying band-aids to payment cards, paper checks, and other outdated payment modes.

**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?**

BAI is hopeful that this initiative will move forward to address these gaps and opportunities in digital payments and related transacting, and — in concert with industry groups like ours — convene a body comprised of all the key participants in the payments ecosystem. The first priority should be national policies and recommendations for fraud and risk mitigation, but the charter should expand to become an end-to-end assessment of all of these infrastructure components, defining collectively what to keep, what to kill, what to improve and what needs to be invented in order for the U.S. to be at the top echelon of payment marketplaces.