

Federal Reserve Banks
Payment System Improvement - Public Consultation Paper

prepared by: Cathy Santoro

Title, Organization, Industry Segment: N/
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date of submission:

I received the Federal Reserve Banks' notification requesting input on the consultative paper, "Payment System Improvement – Public Consultation Paper"; and today (12/10/13), I am providing comments to this Federal Reserve Bank paper for your consideration. In addition, I also prepared one chart and a brief summary, both of which are attached to my comments, to provide a high-level visual overview of what I believe are gaps and opportunities in the existing payment system. My views and opinions are the result of my experience attained when I served in the following capacities: Wells Fargo Bank, N.A. – Vice President; MGM MIRAGE – Senior Vice President and Treasurer; and Walmart Stores, Inc. – Vice President Finance, Capital Markets & Assistant Treasurer.

Prior to my specific comments, I have the following general observations:

1. Payments move in highly interconnected global channels across a variety of networks and exchanges and between and among the world's banks and financial institution. Although this paper approaches the payment system from a U.S. perspective, I believe that it is important to address change to this payment system from a global perspective and to look at not only the form of payment but the substance and underlying transaction detail corresponding to the payment, as well. Efficiency of fund flow is critical; but equally important is the transaction detail itself to both internal and external reporting at the both the level of company and country, as reflected in vital indicator reports (GDP, employment, trade surplus/deficit). Timely access to the detailed payment information corresponding to the flow of funds can not only further the understanding of company or country growth and development in relation to that of other companies and countries but also aid in the setting of future strategy and priorities (financial and non-financial). In relation to these reporting aspects, I also think that this vision should consider the current accounting and regulatory framework given the importance to and inclusion of payment definitions and terminology in corporate reporting and financing transactions and impact changes to existing forms will have on said definitions and terminology. Finally, with many of the world's largest banks incorporated in the U.S. and expanding globally in a system in which not all institutions and banks are subject to U.S. regulatory requirements, I would be interested to understand if your vision, as expressed in this paper, incorporates these non-U.S. aspects and how global regulatory reform would need to evolve in a unified fashion so as to incorporate an expanded global payment system vision. Furthermore, the largest payment related volume, in terms of both dollars and number of transactions, is a function of settlement transactions that occur in both U.S. and non-U.S. exchange channels¹. These channels settle quadrillion's of dollars of transactions annually that are vital to global growth, moving demand to supply and bridging the physical gap between U.S. and non-U.S. financial markets. As such, I would also be interested to understand if your payment vision incorporates these liquidity channels given the importance of this element to the system and significant interconnectivities electronic exchanges have with existing legacy networks.

¹ DTCC, Euroclear, Clearstream

2. I believe that the end-to-end cash flow cycle and categories as reflected on the Statement of Cash Flows illustrate the many types of payments that, depending upon the size and scope of the entity, move through many channels, on a global basis, often crossing multiple borders before being recorded. For example, payroll and accounts payable as reflected in the operating section of the Statement of Cash Flows, are typically processed from separate accounts, which may be held at different banks in different countries, with each bank having distinct processing requirements. Furthermore, there may be multiple types of payments (ACH, check, wire) occurring within a single account, each payment type with its own unique reporting format requirements (NACHA file, positive pay, controlled disbursement). The degree of payment complexity can increase substantively in the case of multinationals and companies with vast geographic reach, often due to the fact that these companies must interact with non-U.S. banks or foreign subsidiaries of U.S. banks in the processing of core operating activities. Regardless of said technical complexity, though, accounting principles ultimately provide for uniformity across companies in the accounting treatment and reporting of payments, masking the complexity that often occurs in the reporting process². This payment type uniformity spans myriad industries, rating classifications and geography. Accordingly, I would be interested to understand if consideration has also been given to incorporating a company's interactive data reporting requirements specific to Edgar and XBRL and potential synergies that could be realized in regards to extending this reach for detailed data capture of these uniform payments for a multitude of key economic indicator reports. I believe that incorporating the mechanics of this end state reporting process that is already in place is an important consideration that could serve capture technological economies of scale and improve the timeliness and accuracy of critical economic reports.

3. This paper addresses forms of payments and accounts from a bank account perspective. However, all payments, with the exception of cash in circulation, move electronically as data and digits upon entering the payment system, regardless of payment form; and bank accounts are also simply a series of digits that moves electronically, as well. Accordingly, I believe that it would be helpful to look at accounts more generically³. In looking at accounts from this perspective, I believe that it will help to expand the payment vision and reach beyond the form of payment to the substance itself, which is simply an electronic movement of data, both financial and non-financial, through defined channels, and, in turn, enable the payment system to more broadly reflect the sources and uses of those interacting with the system on a real-time basis. In addition, generic accounts can address challenges specific to those in the non-banked population and allow this segment of the population, a large and growing percentage in many developing nations, to be reached efficiently and effectively. This can also serve to negate future costly bank infrastructure development and allow non-traditional providers⁴ to play a role in developing a payment system channel. I believe that a generic account framework can have global trade benefits as well. Global trade accounts, with unique identifiers, could allow for greater transparency into international trade, timely access to critical trade details and alleviate challenges posed by lack of developed bank infrastructure and financial markets in many developing nations. This form of account could be extended beyond the point of origin and receipt as addressed in this U.S. payment vision to incorporate the entire payment supply chain, including electronic purchase orders (EPO's), Letters of Credit, and in-transit shipment costs⁵.

² Reporting requirements can vary substantively in terms of both frequency and disclosure detail as a function of entity complexity and status

³ Bank or non-bank account with a unique identifier (i.e. mobile phone number)

⁴ Technology companies, insurance companies, logistics supply chain companies

⁵ Import duties, freight insurance, inland freight charges

4. The U.S. has more physical currency in circulation than any other country in the world and is the world's reserve currency. Not only is physical cash one of the most expensive forms of payment to maintain given the significant physical infrastructure in the cash cycle⁶, it is also subject to the greatest security risks given the multiple human touch points involved from point of sale to receipt and posting. Specific to cash being the fastest payment instrument, I believe that while cash may be immediate and certain at the point-of-sale, the time span from certainty at the point-of-sale to certainty as recorded in a bank account is typically much longer than any other form of payment. Many hours, or days, can transpire before physical cash received at the point-of-sale is received by the bank and memo posted to a bank account given the operational security and logistical delivery requirements that can often be complex, multi-faceted and costly depending upon the amount of physical cash that must be transported from point-of-sale to the bank. The lack of visibility into the physical cash received yet not recorded in the system can negate the opportunity to put this cash to immediate use as a corresponding account credit to offset that day's account debits, much like the net settlement process in transfer networks, leaving cash idle and impacting daylight overdraft requirements. I believe that migrating from a physical form of cash and coin to an electronic form of cash, retaining the unique identifier aspects of banknote serial numbers, can significantly reduce costs and risk in the system. This risk is often directly related to issues specific to counterfeit currency, money laundering and use of legal currency in illegal transactions. With that said, I believe that it is important that this payment vision incorporate changes to the form of physical cash and coin.

Specific comments:

General

Q1. As reflected in my general observations above, I believe that the payment system gaps include the scope being U.S. versus global, exclusion of electronic exchanges as a component in the end-to-end payment vision and the omission of physical cash as form of payment to be improved. As also referenced in my general observation comments above, I believe that it is important to look at accounts generically and to not only expand the type of account to generic accounts but to also extend the end-to-end data capture and reporting vision. I believe that it is important to include these elements in the vision so as to effectively close existing gaps and capture full potential of the system.

Q2. There are distinct differences in payment frequency type and method in non-U.S. countries. Furthermore, Basel III and both the LCR and NSFR ratios have defined specifications that can not only impact capital raising decisions by banks but also core operating decisions, which can impact liquidity and funds flow movement. With the increasing interconnectivity between and among U.S. and non-U.S. financial markets coupled with the role of technology in funds flow movement within the payment system channel, I believe global collaboration on a payment solution can allow for greater funds flow efficiencies and expand technological developments seamlessly through the global channel.

Ubiquitous near real-time payments

Q4.-6. Near real-time payment exists for certain forms of payment today. Wire transfers and credit card transactions settle in near real-time and include regulation specific to settlement processes that address overdraft risk. With that

⁶ Armored courier property and equipment, bank and Federal Reserve vault related property and equipment, company vault related property and equipment

said, I believe it is important to develop coordinated regulation specific to settlement liability in advance so as to mitigate said risks and introduction of more leverage in the system. I also believe that incorporating user approval and access requirements in advance of system access much like those already required for many electronic payment forms adds necessary layers of protection and allows for the introduction of ubiquity⁷. As such, I believe that it is important to coordinate with banks and financial institutions as well as equipment manufacturers⁸ in regards to this matter and to leverage existing technology platforms, legacy payment systems and account related concepts in existence today⁹. This coordination and leveraging can serve to generate cost synergies and more efficiently flow funds in a ubiquitous, near real-time form across the entire global payment system. Finally, I believe there is benefit in also modifying the ACH to speed up settlement, not only to capture benefits of near real-time specific to wire transfers, but, in large part, to mitigate liability risks specific to the ACH process. ACH files typically require credit approval, which, depending upon company size and complexity can be very large given the widespread use of the ACH payment form in payroll processing. Furthermore, these credit limits are typically stand-alone and do not have the benefit of offset against same day credits unlike daylight overdraft protection.

Q7. I believe there is benefit in working with the industry in regards to enabling electronic payment orders and that it is important to continue to take paper out of the system much like Check 21 and the conversion of paper checks to images at point of receipt. There are significant costs in maintaining paper payment systems as well as increased risk and liability of human error in handling and managing paper in the payment cycle. This paper increases as a result of paper based delivery and receiving statements and invoices. By aligning the enabling of fully electronic purchase orders with check migration, I believe that this mitigates risk of incurring cost for short-term change and lead to a fully electronic payment process in which the point of origin in the end-to-end cycle starts with the purchase order itself.

Q8. I believe that it will be important to address risks specific to cyber in near real-time payments and to ensure that the new system provides for appropriate audit trails, which can be tested and validated under rigorous internal control and Sarbanes-Oxley testing. Accordingly, I believe that it is critically important to ensure that industry collaboration in regards to the establishment of said standards and testing include audit and cyber experts.

Q9. I don't believe that a near real-time system results in pivotal change to mobile payments given that the change pertains to the electronic movement of data and digits, which is already a function of smart phone technology. Furthermore, the payment system not only moves vast amounts of data and digits electronically on a global basis today but also converts trillions of dollars of physical forms of payment to digital forms in near real-time¹⁰. I also believe there are parallels between the existing payment system and mobile payments in that a physical form (mobile phone, credit card, check) with a unique identifying account (mobile phone number, credit card number, bank account number) is used to move data and digits from the point of origin or sale to point of receipt.

⁷ Account specific details would be required at time of approval process with generic, unique identifier account provided post approval and pre-access.

⁸ ATM and kiosk manufacturers, retail POS

⁹ Subaccounting: could allow account holder to add additional accounts with approval and liability for all accounts held at the primary account holder level (concentrator level) and funds easily managed or transferred between and among accounts, including cross-border payments. ECR (earnings credit rate): could incorporate a credit on funds held in account that could be applied to future account related fees (overdraft, per item transfer fees). ZBA: could link other financial and non-financial accounts to primary account, with all credits and debits directly flowing to and from primary account, much like the concept used by companies in streamlining and managing a multitude of accounts all held under the same ownership and liability structure.

¹⁰ a physical credit card transaction is transformed to an electronic flow of credit or debit at the point of sale while a physical check transaction converted to ACH via check conversion is transformed to an electronic flow of funds at the point of sale

Q10. The U.S. capital markets, banks and electronic payment channels and exchanges are some of the most developed and advanced in the world, collectively moving more payments than any other non-U.S. country. Given the rapid, continuing advancements in technology, growing interconnectivity between and among global financial markets, and the widespread use of smart phones and corresponding lack of banking options in developing nations, I believe that getting behind payment system change, as opposed to in front of it, increases the risks of shadow banking and unregulated markets globally, and that the opportunity cost of the Federal Reserve Banks not taking any action to mitigate these risks along with those posed by idle cash and lack of access to timely and efficient data rises exponentially within the system.

Q12. Given the importance of account numbers and routing information in the electronic flow of funds and risk that an incorrect or outdated directory could have on said electronic transmission, I believe there is risk in creating a new, centralized directory of account numbers and routing information unless said directory has strict access and update requirements much like those pertaining to companies' electronic funds transfer or general ledger chart of accounts update policies

Q14. I believe that technology exists to address difficulties specific to the handling of remittance information. Furthermore, I believe that the costs to a business for check payments can significantly outweigh the costs of ACH. Much like banks have imposed requirements specific to the attachment of positive pay for disbursement accounts, I also believe that there can be a coordinated effort between banks and the Federal Reserve to impose a similar form of requirement in regards to the migration from check to ACH. Given that most companies already send ACH files to the bank for direct deposit of payroll, I believe that the technological challenges specific to trade payment check migration can be mitigated. At the same time, though, I believe that there is a need for advanced analysis in regards to the migration from check to ACH given the credit approval requirements specific to ACH and controlled disbursement files. In the absence of further change to ACH rules or development of alternative forms of electronic payment, ACH credit limits incurred in the migration to ACH must be weighed against the elimination of controlled disbursement credit limits in the migration from check.

Electronification

Q13. I believe that accelerating migration from checks to electronic payment methods should be a desired outcome for the U.S. payment system. Although I can appreciate the challenges of phasing out checks, there are significant efficiencies and cost savings to be gained within the system given the costs and requirements specific to checking services¹¹. As a result, companies continue to convert their business trade payments from check to ACH and, in many cases, now require employees to be paid via electronic only forms of payroll transmission (direct deposit via ACH, payroll card). Given the payment transmission requirements specific to certain types of U.S. government payments (SNAP) and increasing adoption of electronic payment and receipt for personal tax liability and refund, I believe that the Federal Reserve Banks' push to accelerate transition from check to electronic payment alternatives would align with actions previously and currently being taken and eliminate a significant portion of expense and risk within the system. This migration would better align the timing and movement of payments, mitigate the impacts of check float, which can improve cash forecasting, and reduce reconciliation challenges specific to outstanding checks and escheatment reporting requirements. With that being said, I would be interested to understand if consideration has been paid to enacting a requirement much like the actions taken by both the IRS and state government taxing

¹¹ Check service fees can include, but are not limited to, positive pay, controlled disbursement, returned item processing, check guarantee fees, per item fees specific to the number of checks cleared or deposited and individual state escheatment management and reporting. Depending upon the company and state, these fees can increase exponentially, both as a function of bank account fees and labor incurred in the escheatment reporting and account reconciliation processes.

authorities specific to the ways in which tax payments are required to be paid (EFTPS) that would stipulate a specified phasing out period for check payments. This measure could be coordinated in partnership with member banks and include target dates for completion and phase-out, much like the phase-in requirements specific to major pieces of regulatory reform (Basel III, OTC derivatives).

Q21. Payments transcend all aspects of society, varying only as a function of source/use and payment type (operating, investing, financing) and are a critical component of an economy. Accordingly, I believe that it is important to include a diverse cross-section of financial and non-financial stakeholders in developing this payment vision. These stakeholders would include, but are not limited to, companies in the technology, aerospace and defense, and logistics and automotive industries. In all instances, each industry competes globally, often within or as part of a global supply chain, must address the increasing threat of cyber and required need for security, while, at the same time, managing and moving ever increasing amounts of electronic data. I believe that by expanding the parties involved in the process, a greater cross-section and percentage of the payments flowing within the system are represented with the end result a U.S. payment vision that can transcend its borders, reflecting the needs of this country on a global basis.

APPENDIX: CHART COMMENTS (see APPENDIX: CHART)

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The U.S. payment system is comprised of distinct forms of payment: ACH, credit, wire, check, cash. There are distinct transmission requirements and means of transmission depending upon payment form. With the exception of cash and checks, payments are typically routed and transmitted in an electronic format from server to server with underlying bank account numbers and routing numbers serving as a key identifier in the transmission process. Cash and checks, on the other hand, are the two forms of payment that are transported physically, often via armored courier, before receipt and posting to a respective bank account¹, thus, converting the physical form of cash to an electronic form with amount reflected via memo posting to a bank account. Then, all bank account funds are electronic, which, when coupled with the book-entry settlement postings in the electronic exchanges², results in a global system that is comprised of a vast interconnected system of networks and servers moving data, digits and detail corresponding to these electronic funds from point of origin to receipt via unique identifying accounts³. [see box and green oval circles]. Despite the direct and frequent payment interaction of both the U.S. Government and Federal Reserve Banks with this system, I have segregated the Federal Reserve and U.S. Government from the box given the current limitations on the reach of Federal Reserve Bank policy and U.S. regulatory reform specific to flow of funds within the global system. However, as reflected by the blue oval circles, I believe that it is important to develop a U.S. payment system that is reflective of the global flow of funds. The world's largest companies, many of them U.S. and with global supply chains and multinational reach, interact with this global system on a daily basis. Furthermore, the U.S. economy, its capital markets and size of the investor base are the largest in the world. Accordingly, I believe that the U.S. payment vision can have exponential effect on the movement and flow of funds within the payment channels, which, in turn, can extend efficiencies far beyond U.S. borders. Given the growing interconnectivity between U.S. and non-U.S. banks/financial institutions and investors within the payment channels and the continued expansion of non-U.S. financial markets and sectors, I believe there is significant benefit to developing a payment vision that is reflective of this interconnectivity. Finally, as reflected in the linear elements of accounts, financial statements and public filings/reports, I believe that it is important to develop a payment vision that not only affords greater insights into global flow of funds movement but, at the same time, improves access to timely and accurate payment reporting details,. I believe that the current payment system does not fully capture the reporting power that can be gained by aligning the accounts within the end-to-end payment system. Gaining greater insights into key economic indicator reports and data becomes ever more critical in the evolving global economy with

¹ Physical check delivery is not required in those instances in which a company uses image cash letter, back office conversion or ACH check conversion, which converts the physical check to an electronic format

² DTC, Euroclear, Clearstream

³ Unlike routing numbers and Internet Protocol language with its corresponding standard network addressing and subnetting, the bank account numbering systems are not standardized across banks and financial institutions. Given the nature of nature of net settlement within the transfer networks and resulting impact on daylight and overdrafts coupled with the benefits of linking accounts to the reporting process, I believe there is benefit to account numbering standardization.

significant benefits to be gained from developing a system that focuses not only on the payment form and method of delivery but the root of the payment itself (source/use; type: operating, financing, investing) and corresponding detail⁴. This macro perspective not only allows for greater insights into the types of payments moving through the system but also the purpose for which said payments represent; and in doing so a better understanding of the changing nature of payments.

⁴ I believe that the U.S. Treasury's global LEI initiative is an important component of the U.S. payment vision that serves to attach corresponding detail to the quadrillion's of dollars of payments moving through the system.

APPENDIX: COMMENTS (see APPENDIX: CHART COMMENTS)

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