

***B2B Faster Payments - Obstacles to Overcome  
to Achieve Business Support***

October 2019

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# ***B2B Faster Payments - Obstacles to Overcome to Achieve Business Support***

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# ***B2B Faster Payments - Obstacles to Overcome to Achieve Business Support***

## **Introduction<sup>1,2</sup>**

The topic of why businesses continue to use paper checks as their primary method of business to business (B2B) payments invariably initiates conversations about the many obstacles to adoption of electronic alternatives. Solutions for each of these obstacles have been proposed for more than 30 years with limited success as evidenced by the lack of adoption by businesses.<sup>3</sup> By focusing on each of the obstacles individually, the big picture has been missed. Given the failure of this approach to solve the individual obstacles and achieve broad adoption of electronic payments for B2B payments, perhaps it is time to consider the forest rather than the trees.

This paper addresses the overriding factors, the forest, that dictate business decisions about investments in payments and specifically in B2B payments. Unless these factors are successfully addressed, none of the solutions addressing the individual obstacles, the trees, merit business investment and therefore faster payments and FedNow<sup>4</sup> will fail to gain broad adoption for B2B payments.<sup>5</sup>

## **Background**

Other than not-for-profit businesses, the reason businesses exist is to make profits and that motivation controls every aspect of business decision making including decisions about payments. Therefore, when forecasting the future use of new payment types by businesses, one needs to first consider the economic impact of the transition from the

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<sup>1</sup> David Walker formerly the CEO of the Electronic Check Clearing House Organization founded Tiller Endeavors, LLC in 2017 with a focus on payments systems. For additional information about Tiller Endeavors, please visit [www.tillereendeavors.com](http://www.tillereendeavors.com).

<sup>2</sup> Faster Payments is a generic term for improved payments in the U.S. that are intended to be almost instantaneous, secure, initiated by anyone to anyone at any time with immediate availability.

<sup>3</sup> Nacha has created multiple options for business to business payments since the 1980s with limited business adoption.

<sup>4</sup> The Federal Reserve has announced it intends to offer a version of faster payments called FedNow.

<sup>5</sup> Businesses are likely to adopt receipt of consumer to business (C2B) credit push payments, such as FedNow, to reduce interchange fees. C2B payments are not addressed in this paper.

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existing payment type to the replacement payment type. This includes the potential cost savings once implemented but also the implementation costs and the likelihood that other business trading partners will implement compatible functions in a similar timeframe. Without suppliers to make payments to or businesses customers to receive payments from, little cost savings can be anticipated.

While the costs for businesses to transition from paper payments to faster payments are not quantified in this paper, they are significant. Examples of actions required for every business to initiate and/or receive faster payments are listed in the Exhibit at the end of this paper.

## **Return on Investment**

For the purpose of this paper “return on investment” (ROI) will be used as the net aggregate metric of all economic components (the forest). With an adequate, positive ROI, businesses will invest in transitioning to new, improved payment types. Without both a positive ROI and a predictable ROI, there is little-to-no incentive for businesses to make the requisite investments. In the absence of either, businesses will be slow to transition or worse, will never do so. Application of this economic axiom has been demonstrated many times over more than thirty years for credit push payments.<sup>6</sup> At the time of this writing, FedNow and other faster payments implementations in the U.S. are based exclusively on credit push payments.<sup>7</sup>

For every business, except those in the payments business, payments are overhead expenses and serve only to support the actual goods and services of those companies. When businesses make decisions about changing

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<sup>6</sup> See footnote #3.

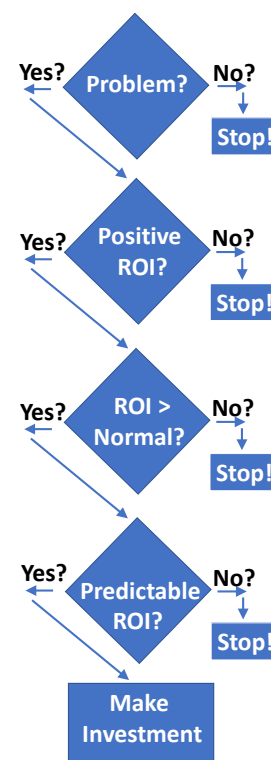
<sup>7</sup> The notable exception is the use of a payment request. A payment request can be used to request a credit push payment. This exception requiring both a request for payment and a credit push payment adds to the overall costs to implement and maintain credit push payments.

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payment types, there are some key questions to be considered including:

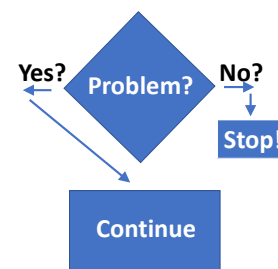
- 1) Is the investment necessary to fix a problem with an overhead function that otherwise prevents the business from conducting its normal profit producing functions?
- 2) Can an investment in an overhead function produce a positive ROI?<sup>8</sup>
  - a) If so, will the ROI equal or exceed the ROI from the business' normal profit producing goods and services? and
  - b) If so, can the ROI be predictably achieved?

This paper examines the likelihood of businesses transitioning most B2B, paper-based payments to faster payments. Specifically, examined are faster payments as envisioned by the Federal Reserve for its new real-time, FedNow payments and for other quasi-real-time faster payments offerings.



## Is the Investment Necessary to Fix an Overhead Problem?

It should be clear that businesses will spend money in order to support profit producing functions (e.g. goods and services). In the event of a failure of an overhead function that disrupts the performance of normal business activities, business will spend money to fix the problem. This raises the question of whether there is a problem with paper check payments that prevent businesses from conducting normal activities. The answer is self-evident given that businesses continue to use checks as their primary payment of choice.<sup>9</sup>



<sup>8</sup> For the purposes of this paper, ROI includes direct and indirect costs such as personnel time to perform the functions. For smaller businesses, staff time requirements may be a surrogate for a more formal ROI calculation.

<sup>9</sup> Phoenix-Hecht 2016 Treasury Management Monitor reported that of the almost 1,500 businesses that responded to its 2016 survey, midsize businesses used check payments 3.3 times more often than the next largest payment type and large businesses used check payments 1.4 times more often than the next largest payment option. The survey did not include small businesses whose use of check payments is thought to be even larger than midsize businesses.

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Additionally, check payments are now almost all electronic and are safer and more efficient than they have ever been. Since the full implementation of electronic check image exchange in 2011, a high percentage of checks clear the same day in which they are deposited<sup>10</sup>. Additional improvements are also available once the check payment is freed from its dependence on paper at its point of origination by using electronic debit originations. This transition from originating paper to originating electronic payments is anticipated to create significant value for business users.<sup>11</sup>

## **Potential Savings for Businesses**

The Federal Reserve estimated that in 2013 there were approximately 6.7 billion business to business (B2B) checks paid totaling \$17.2 trillion.<sup>12</sup> The Association of Financial Professionals (AFP) determined the cost savings between paper checks and ACH debits to be approximately \$4.32 per payment.<sup>13</sup> This difference totals a potential savings for businesses for B2B payments of \$28.9 billion per year ( $\$4.32 \times 6.7 \text{ billion} = \$28.9 \text{ billion/year}$ ). During the next decade, that would total more than a quarter trillion-dollar savings.

Therefore, the potential savings from the transition of all B2B payments from paper to electronic payments is significant and well worth the cost but only if a positive, predictable

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<sup>10</sup> Anecdotal information from various financial institutions after full implementation of check image exchange in 2011. Estimates range from a low of about 65% to a high of about 85% cleared same day as deposited when cleared through private sector providers.

<sup>11</sup> One option to consider is the use of Electronically Created Items (ECIs). For additional information about ECIs please visit <https://tillerendeavors.com/endeavors/>.

<sup>12</sup> Federal Reserve 2013 Payment Study.

<sup>13</sup> Association of Financial Professionals, 2015 AFP Payments Cost Benchmarking Survey reported the estimated mean cost to issue and receive a paper check was \$4.57 and the estimated cost to initiate and receive an ACH debit was \$.11 to \$.25 per transaction for a difference of approximately \$4.32 per transaction. The costs of an ACH debit is assumed to approximate the cost of other electronic payments.

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ROI per company can be achieved from the investment.

## **Options for Replacing Paper Payments with Electronic Payments**

The electronic options available today for B2B payments include ACH debits, ACH credits, Fedwire, debit card, credit card and variations of faster payments.

**ACH debits** are impractical for B2B payments primarily for two reasons. First the banking industry has been very successful in selling the use of debit blocks for ACH debits.<sup>14</sup> Currently, debit blocks are a key part of fraud prevention controls and if debit blocks were eliminated, new methods of limiting fraud would need to be created and implemented. To do otherwise would open businesses to substantial new risks. Second, ACH debits have a limited number of addenda records and cannot accommodate very large remittance data requirements such as required for medical payments. The maximum number of addenda records for ACH payments is 9,999 which is significant but insufficient for many medical payments. This limitation is important since more than 50% of medical payments in the U.S. are processed by one provider who reports that ACH has insufficient capacity to meet its remittance data requirements.<sup>15</sup> Thus, even if some businesses were to adopt ACH debt payments, the paper check would continue for many other payments, e.g. medical payments which would require the continued support of the paper check payment system well into the future.

**ACH credits** have been available for B2B payments for more than 30 years<sup>16</sup> and yet ACH

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<sup>14</sup> Debit blocks are used by businesses to prevent unauthorized, electronic charges against their bank accounts. Typically, businesses provide specific approval for selected electronic debits such as standing permission to post ACH debits to fund payroll. All other pre-authorized electronic debits are blocked from posting.

<sup>15</sup> Tom Dean, SVP GM B to B Payments Solutions, Change Healthcare was a panelist at the Federal Reserve's 2013 Electronic Payment Forum in Atlanta, Georgia. Mr. Dean reported that Change Healthcare's mail volume is 5% of the total U.S. mail volume to accommodate the large volume of remittance data. Mr. Dean reported that his company supported improvements to the check system that would allow the initiation and receipt of fully electronic payments through the existing electronic check payment system. At that time these were referred to as Electronic Payment Orders (EPOs). Since then, the Federal Reserve has renamed them Electronically Created Items (ECIs).

<sup>16</sup> See footnote #3.

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credits have enjoyed limited success as replacements for B2B paper checks. Stated more strongly, ACH credits have consistently failed the market adoption test for B2B payments. Numerous obstacles created this market failure and this paper does not delve into the individual obstacles<sup>17</sup> (the trees) but addresses those reasons in the aggregate, the forest, from the perspective of the ability to produce a positive, predictable ROI.

**Fedwire** is not designed to carry the immense amount of remittance data required for some B2B payments<sup>18</sup> and it is the most expensive of all payment options. Given that the volume of remittance data can be many multiples of the data volume required for payments, the volume capacity of Fedwire would likely need to be greatly expanded. Otherwise, capacity constraints could delay the delivery of other time sensitive, large value payments and adversely impact bank balances with the Federal Reserve. Given the value of Fedwire payments, this could potentially impact the entire U.S. economy. Thus, Fedwire is not suitable for most B2B payments.

**Debit card payments** are primarily used for consumer payments. While they are suitable for some business payments, debit card payments are designed to carry only a limited amount of data and do not adequately accommodate the larger data requirements of many B2B payments. Thus, debit card payments are not suitable for many B2B payments.

**Credit card transactions** are not payments but rather extensions of credit. Payments against credit card balances are not made at the time of the purchase of goods and services and are not generally made to pay for a specific purchase. Like debit card payments, credit card transactions are not designed to carry the amount of data required for B2B payments. Thus, credit card transactions are not suitable for many B2B payments.

**Faster payments**, as envisioned by most potential providers in the U.S. and across the

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<sup>17</sup> See Exhibit at the end of this paper.

<sup>18</sup> <https://www.onrr.gov/ReportPay/PDFDocs/fedwire.pdf>. United States Department of Interior Office of Natural Resources, Instructions and Examples of Fedwire Payments.

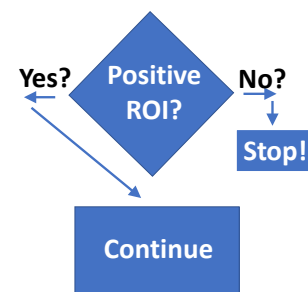


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globe, are credit push payments. Examples of other credit push payments are ACH credits and Fedwire, as described above. Additionally, real-time payments as envisioned by the Federal Reserve's newly announced FedNow will be only credit push payments.<sup>19</sup> For the purposes of this paper, faster payments and real-time payments are considered essentially the same as it relates to potential acceptance as replacements for paper check B2B payments. As credit push payments, real-time payments face the same obstacles as other existing credit push options and as described above for ACH credits and Fedwire and in the Exhibit at the end of this paper.

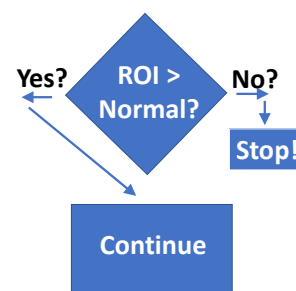
## **Will an Investment in Overhead Functions Produce a Positive ROI?**

If B2B paper payments were replaced with electronic payments, there is a multi-billion-dollar potential, aggregate, annual savings for businesses. Therefore, it would appear the aggregate financial savings for businesses is enough to justify the transition. However, the potential savings for each individual business would need to offset the cost of the transition<sup>20</sup> for that business and the ensuing business disruption in order to create a positive ROI for each business.



## **Will the ROI Exceed the ROI from Normal Goods and Services?**

This determination is simple once three elements are known: 1) the amount of the initial and ongoing investment that is required to make the transition, 2) the amount of expected savings from the transition and 3) the time it will take to fully implement with all trading partners for making and receiving payments. If the analysis using these elements results in a positive ROI, the investment is likely to be made.



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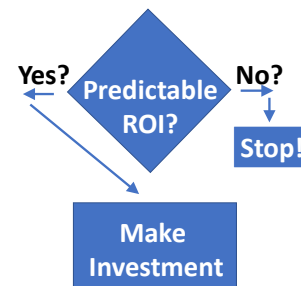
<sup>19</sup> Docket No. OP-1670, Federal Reserve Actions to Support Interbank Settlement of Faster Payments.

<sup>20</sup> See Exhibit at the end of this paper.

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## **Can an ROI be Predictably Achieved?**

If predictable, then businesses are likely to and should proceed with the investment. For publicly traded companies, if the ROI is expected to exceed the ROI from its normal goods and services, the business will likely make the investment. If achieving the ROI is unpredictable, it is less likely that businesses will proceed with the investment and especially in the presence of other investment alternatives with positive, predictable ROIs.



For a business to produce a positive ROI, it must make the investment and its trading partners must make similar investments in a similar time frame to eliminate all paper checks. The amount of the front-end investment will dictate the number of trading partners that are needed to create a positive return. The larger the investment, the larger the number of trading partners and the longer time requirement to break even.

The history of market acceptance failure may offer some insight into the likelihood that broad acceptance by businesses can be expected<sup>21</sup>. However, should limited acceptance be achieved, businesses that make the investment will do so with the expectation that only some of the potential savings will be achieved and that the new payments system will run in parallel with the traditional paper-based system. This is less than optimal.

In the choice between making an investment with an uncertain predictability of return and investing in normal goods and services with a predictable return, businesses are likely to stay the course and continue to primarily use checks for B2B payments. This is especially true in the absence of a requirement, such as a government mandate, to make the transition.

In the normal environment in which every business has its own, individual priorities and ROIs, it may be likely that the history of market failure of credit push payments for B2B

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<sup>21</sup> See footnote #3

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payments would be repeated and that a predictable ROI would not materialize for B2B payments. The uncertainty of a predictable return applies to all types of credit push payments; faster/real-time payments and FedNow payments.

If a predictable return cannot be achieved for B2B payments, and market adoption failure of credit push payments continues, another option is needed to replace the current paper-based originations.

## **Concluding Comments**

Businesses will embrace faster payments for B2B payments if the major obstacles (the forest) can be overcome. Economics dictate that businesses will invest in overhead activities, such as payments, when either, 1) failure of the overhead function is preventing normal business activities or 2) there is a legal requirement for them to do so, or 3) the return on the investment in the overhead activity will yield a greater, predictable return than is expected from normal goods and services. In the current environment:

- The electronic check image system works well for businesses and supports normal business activities that create profits from goods and services therefore there is no problem to be fixed, and
- There is no legal requirement for businesses to transition from check payments to faster/ real-time payments.

Broad acceptance of faster payments and FedNow for B2B payments can be achieved if:

- Businesses can expect to achieve a ***predictable*** financial return from an investment in the transition from paper checks to electronic, credit push payments that equals or exceeds the return from the business' normal goods and services, and
- Credit push payments can overcome its history of market failure and gain acceptance by businesses.

The industry is working hard to find solutions for each of the many, individual obstacles

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(the trees) and even if those obstacles can be overcome, without a ***predictable*** return (the forest) faster payments may not replace the use of paper checks for B2B payments and especially those payments with large remittance data requirements.

Failure to overcome these obstacles will likely result in, 1) the continued use of the paper check as the payment of choice for B2B payments and/or 2) the partial adoption of faster payments for B2B payments which will require the maintenance of two parallel payment systems; the new faster payments system and the existing check system. For either of these results, businesses will continue to need a practical solution such as Electronically Created Items (ECIs)<sup>22</sup> for B2B payments as a supplement to faster payments for other use cases.

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<sup>22</sup> For additional information about ECIs please visit <https://tillerendeavors.com/endeavors/>.

# ***B2B Faster Payments - Obstacles to Overcome to Achieve Business Support***

## **Exhibit**

Examples of actions required for every business to initiate faster payments are:

- Re-engineer its accounts payable system to initiate credit payments instead of/in addition to checks (debits)
- Modify its internal payment approval processes
- Re-engineer its payment tracking and reconciliation processes
- Re-engineer its fraud prevention, detection and resolution controls
- Reformat payment and related data into new standard formats, for example ISO 20022
- Create, maintain and monitor company directory profiles for every directory
- Implement network connection(s) with its financial institutions for payments and remittance data
- Implement network and software to support access to directories for beneficiary bank account information
- Implement application software to create real-time credit push payments
- Implement function to separate payment from remittance information
- Implement network interface and transmittal for remittance information directly through the payment system to the payment beneficiary
- Implement function to track any holdover payments not processed for any reason and design accounting entries to properly recognize the liability
- Implement function to verify bank/provider account balances in advance of initiating payment
- Requirements may vary when more than one provider is used

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Examples of actions required for every business to receive faster payments are:

- Implement software to receive payment receipt notification from bank/provider
- Implement software to receive remittance indirectly from payment party through the payment system
- Implement new functions to reconcile payments received with remittance information received
- Implement function to reject any payments received intended for other parties or payments not matching remittance information
- Implement function to verify bank account balances in advance of initiating a rejected payment to avoid overdrafting beneficiary's account
- Requirements may vary when more than one provider is used for receiving payments and for rejecting misdirected payments