

by Anupam Majumdar, Rom Mascetti, Alessandro Mighetto, and Abby Karl, 6 October 2023

FedNow: Game Changer for U.S. Consumer Payments?

Introduction

The U.S. has the highest payment acceptance costs in the world despite being a large and mature fintech market (you can read our prior assessment of this topic here). This situation is ripe for disruption, the question is just when and how. Real-time A2A payments would appear to be the 'disruption how' given the ongoing development of real-time A2A clearing infrastructure.

FedNow, officially live in July of this year, is the latest A2A (bank account to bank account) clearing network built on modern, real-time infrastructure. FedNow is viewed by many as a potential catalyst for disrupting card scheme dominance in U.S. payments. However, as we explain in this article, clearing networks are just technology enablers, not disruptive products in and of themselves. Real disruption must come from products built and distributed to consumers, and here is where the uncertainty remains for the disruptive potential of U.S. A2A payments.

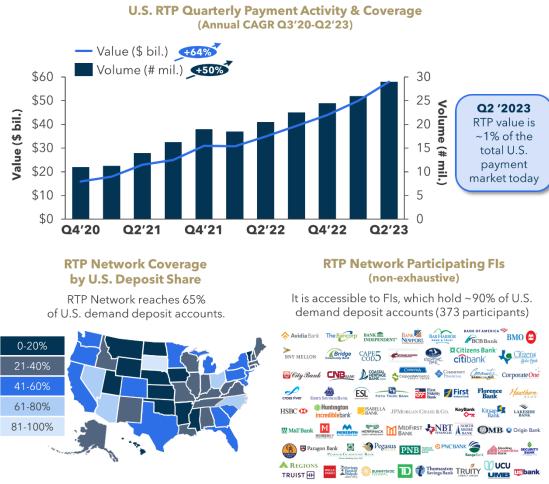
In this article, we take a closer look at FedNow in the context of consumer payments and examine what it will take to change the game for the U.S. consumer payments landscape.

What is FedNow Relative to Other U.S. A2A Initiatives?

FedNow, launched by the Federal Reserve, is an A2A payments clearing network that allows financial institutions to move electronic payments in real-time, offering businesses immediate access to funds, 24x7, 365 days a year. FedNow improves upon the inefficiencies present in the traditional U.S. ACH networks which are driven by periodic batch processing.



Figure 1: U.S. RTP Network Market Traction (non-exhaustive)



Sources: The Clearing House, Flagship Advisory Partners market observations © Flagship Advisory Partners, October 2023

Faster A2A payments networks are not new to the U.S. The Clearing House's RTP network, launched in 2017, was the U.S.'s first real-time A2A payments network. As illustrated in Figure 1, slow uptake among smaller banks and credit unions, coupled with the restricted range of use cases (i.e., RTP only enables push payments) have hindered RTP's impact (accounting for less than 1% of U.S. A2A payments today). Prior to RTP, NACHA introduced a 'same-day ACH' product. None of the A2A clearing infrastructure upgrades have disrupted card usage or even significantly cannibalized traditional ACH.



Figure 2: U.S. Faster A2A Payment Networks (non-exhaustive)

	FECNOLINIA PATRICIT	R T P	Wire Transfer	Same-Day ACH
Launch	Jul 2023	Nov 2017	Early 20 th century	Sep 2016
Ownership	The Federal Reserve	The Clearing The Federa House Reserve		NACHA
Participating Institution	Piloted by 120+ Fls	~400 Fls	Available to all Fls	Available to all Fls
Adoption as % of trad. ACH transactions	n/a	c.0.5%	c.0.5% ¹	c.2%
Payment Types	Push	Push	Push	Push & Pull
Availability of Service	24/7/365	24/7/365	Business days only	Business days only
Transaction Limit	\$500k	\$1 mil.	Depends on FI's set limits	\$1 mil.
Settlement Time	Instant funds available	Near real-time funds available	Available within 24 hours	Two hours to a business day
Avg. Cost per Participant / trx.	~\$0.045/trx. + \$25 monthly fee	\$0.045	\$0.922	\$0.052
C2C				
C2B				
B2C				
В2В				
	Little/	No Use	High	Use

¹ Average transaction size for non-interbank-wires is 10-100x traditional ACH; ² Pricing is up to 14K transactions/month Sources: Company websites, ACI Worldwide, Modern Treasury, The Clearing House, NACHA, The Federal Reserve, Flagship Advisory Partners research © Flagship Advisory Partners, October 2023

Clearing networks (U.S. faster networks summarized in Figure 2) serve as the foundational technology for A2A payments. Actual consumer use cases, such as consumer-to-merchant payments, must then be powered by products such as digital banking, fintech apps (e.g. CashApp), or forms of software-embedded payments. Supply of this consumer end product continues to lag in the U.S. market.

As illustrated in Figure 3, U.S. A2A bank services (i.e., via internet banking) are rather confusing, although Zelle has added focus. On average, U.S. banks have done a poor job delivering robust A2A use cases, leaving many consumers to use PayPal (Venmo) or CashApp for their P2P A2A payments. Cards and checks are still most frequently used for bill payments. Even the more successful consumer A2A products still often rely on traditional ACH for clearing, rather than RTP or the new FedNow.



Figure 3: Consumer A2A Payment Applications vs. Clearing Networks (non-exhaustive)

FRONT-END APPS

User-facing interfaces, software, or applications that consumers or businesses use to initiate and manage A2A payments (i.e., bank transfers)

CLEARING NETWORKS

Underlying infrastructure and systems that facilitate the actual movement and settlement of funds between different financial institutions when A2A payments are initiated

	CLEARING NETWORKS					
FRONT-END APP	ACH		Wire	RTP		FedNow
≰ Pay	✓		×	×		×
Żelle	✓		×	✓		×
PayPal / Venmo	✓		✓	✓		×
S Cash App	✓		✓	*		×
BANK PORTAL (web/mobile)	✓		✓	√		√
	US CONSUMER BANK PORTAL USE CASES Except for Zelle, bank use cases continue clearing via traditional ACH and wire transfer					
Bill-splitting	Native Żelle		Manual checks (bank write and send)		Domestic transfer	
Investment account funding/sweeping	Cross-border payments		Bill payments		Intra-bank transfer	
Less Common						More Common

Sources: Flagship Advisory Partners research and market observations © Flagship Advisory Partners, October 2023

Bank readiness is a challenge for payment networks in the U.S., given the ongoing fragmentation of an industry that includes c. 4,000 commercial banks and several thousand credit unions and savings and loans companies. RTP, launched six years ago, claims to currently reach 65% of U.S. bank deposit accounts (increasing to 90% if you count all *potentially* reached accounts via participating banks). There are reasons to believe that FedNow account readiness should move at a faster pace. For example, FedNow offers more elegant interbank settlement for member banks given the Fed's longstanding interbank settlement role.



Figure 4: U.S. Consumer Digital Payment Options (non-exhaustive)

		Credit Cards	Debit Cards ⁽¹⁾	Digital Wallets	A2A	BNPL
Characteristics —	Examples	WISA AMERICAN EXCRESS mastercard.	Pulse Debit Solutions DISCOVER Maestro	É Pay	Bank Portals Żelle	afterpay⊲> affirm Klarna.
	Share of POS trx. value (2022) (2)	40%	34%	12%	n/a	n/a
ج ا ا	Share of e-com trx. value (2022) (2)	30%	21%	32%	9%	5%
	In-Person Retail					
Cases	e/m-Commerce					
Use Ca	Subscription					
Common Use	Bill Pay					
S	Travel					
	P2P Transfers					
•	Little/No C	onsumer Use			High Consume	r Use

Are A2A Payments Disrupting U.S. C2B Payments? Why Not?

As illustrated in Figure 4, A2A payments, enabled via digital banking or wallets have struggled to gain relevance in a C2B payments landscape dominated by cards. There are four fundamental reasons for the persistence of cards in U.S. merchant payments, despite the high cost to merchants:

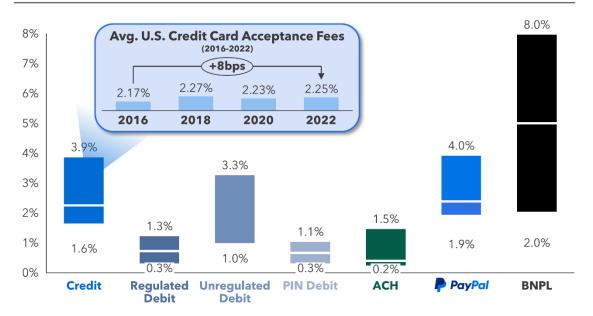
- 1. **Consumer demand:** Simply put, U.S. consumers love card payments because they are incentivized to do so via cashback/rewards from their issuing bank.
- 2. Reliability: Visa and Mastercard have spent decades building trust and dependability that payments will work.
- 3. **Speed:** The card networks quickly settle with merchants and enable consumers to see their transactions in near-real-time.
- 4. Lack of real alternatives: A2A and Buy-Now, Pay-Later (BNPL) have relatively low penetration and are not relevant for in-store transactions today while digital wallets (e.g., Apple Pay, Google Pay, PayPal, etc.) are primarily card-linked.



⁽¹⁾ Debit Card transaction value and use cases include pre-paid (2) Transaction value percentages do not add up to 100% (non-exhaustive list of US consumer payment methods) Sources: FIS Global Report, Flagship Advisory Partners research

[©] Flagship Advisory Partners, October 2023

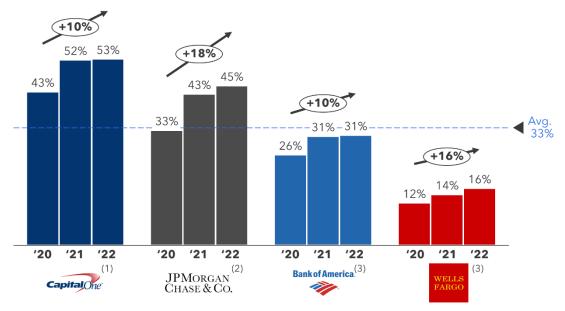
Figure 5: U.S. Consumer Payment Acceptance Cost Ranges & Growth in Credit Card Acceptance Fees (assumes \$100 transaction size)



Sources: The Nilson Report, PayPal, Visa, Mastercard, Flagship Advisory Partners research © Flagship Advisory Partners, October 2023

U.S. banks are mostly happy to support the persistence of cards as card interchange is the golden goose that keeps on laying. U.S. consumers love their credit card points and credit and U.S. banks love their interchange and card fee revenue. Figure 5 illustrates the relative cost of different consumer payment methods and how credit card acceptance costs have slowly increased since 2016. In Figure 6 we illustrate how these costs (primarily driven by interchange) make up a meaningful portion of issuer revenues today.

Figure 6: Gross Interchange Revenue Contribution for Select U.S. Issuers (est. % of 2020-2022 Net Revenue from interchange; CAGR 2020 - 2022)



Net Revenue from Credit Card BU | (2) Net Revenue from Consumer & Community Banking | (3) Net Revenue from Consumer Banking |

Sources: Company annual reports, Flagship market analysis © Flagship Advisory Partners, October 2023



CAGR 16-122 \$629 Żelle \$490 \$307 +50% (\$billion) \$187 \$55 **Consumer P2P Use Cases** 2016 2017 2018 2019 2020 2021 2022 **CAGR** 16-122 venmo \$159 +55% \$101 (\$billion) \$35 2016 2017 2018 2019 2020 2021 2022 **CAGR** '16-'22 **ACH P2P** \$488 \$401 **Transfer** \$349 \$251 \$209 \$160 (\$billion) \$114 2016 2017 2018 2019 2020 2021 2022 **CAGR ACH** 16-122 \$9.5 \$8.9 Consumer \$7.5 \$6.6 \$5.9 \$5.3 \$4.8 **Bill Pay** Other A2A & Check (\$trillion) 2016 2017 2018 2019 2020 2021 2022 **CAGR Est. Check** '16-'22 \$21.0 \$20.6 \$20.3 \$20.1 \$19.9 \$19.7 \$19.5 **Volume** (\$trillion) 2016 2017 2018 2019 2020 2021 2022

Figure 7: U.S. A2A and Check Volume Use Cases (select use cases, 2016-2022)

Sources: Company annual reports, NACHA, Flagship Advisory Partners research © Flagship Advisory Partners, October 2023

In summary, the status quo of reliance on cards persists in the U.S. because no one has created a superior A2A consumer value proposition and banks lack the incentive to cannibalize interchange. As illustrated in Figure 7, A2A payments have found most success in P2P payments use cases today, with Zelle and Venmo leading the way.

Realtime Clearing Has Proven Disruptive When Consumer Product Innovation is There

In other global markets, killer A2A propositions riding newly minted real-time bank clearing rails are disruptive. For example, in emerging markets like India and Brazil, governments' desire to reduce cash and achieve a leapfrog effect in digital payments led them to introduce modernized A2A payment networks. Such A2A networks were created with an "open access" participatory network which, in turn, allowed large tech companies, mega merchants, and fintechs to develop mobile payment apps that run on these networks.

In Figure 8 we illustrate the adoption curve of PIX in Brazil and UPI in India, two highly successful A2A real-time payment networks that have grown rapidly as a result of increasing participation and innovation from such front-end mobile apps.



Launch Launch Jul '16 Nov '20 **Others** Others **Paytm** C₂B B2B xíq 🏡 39% **App** Usage **Payment Use Cases** Split (May '23) (July '23) **G** Pay P2P 72 85 **Payment split** Payment split (by # of transactions in billions; CAGR '19-'22) (by # of transactions in billions; CAGR '19 -'22) +415% 62 **Others** 44 45 Withdrawals 42 10% 35 BOLETO Paper 14% 24 (non-cash) 19% **Pre-Paid Payments** 11% 15% **Cards** 19% Card 49% **Payments** 25% 49% 49% **Other Retail** 18% 24% 25% 29% **Electronic** 2022 2020

2019

Figure 8: Pix and UPI Performance Metrics

Sources: Banco Central do Brasil, NPCI, Flagship Advisory Partners research © Flagship Advisory Partners, October 2023

2021

2019

2020



2021

2022

Figure 9: U.S. Consumer A2A Adoption Roadblocks (non-exhaustive)

ROADBLOCK	COMMENTS
Displacing deeply in-grained consumer habits	 U.S. consumers are conditioned to reach for their card to make payments Consumer preference for cards tied to the attractive rewards and loyalty they receive from issuers Disruption requires creating an equally-simple payment experience with incentives for consumers to use A2A payments
Limited incentives for banks and FIs to adopt new A2A payments	 Financial institutions are in no hurry to disrupt U.S. card payments and kill the golden goose (traditional ACH network) Banks are indirectly incentivized by the traditional ACH network as late payments and delayed settlement allows banks to pocket fees and interest income float.
Conflicting bank priorities delaying implementation	 Banks are either spreading their bets across FedNow, RTP, and Zelle or waiting to see how they shake out. Some of the largest U.S. banks like Citi and Bank of America have yet to join the FedNow network, potentially delaying critical mass and widespread adoption.
Lack of a regulatory mandate	 The largest financial institutions lack the necessary influence to enforce a new payment system across the entire industry. E.g., the RTP network only reaches c.60% of U.S. transaction accounts despite being owned by the largest U.S. banks. A2A payments adoption is strongest in countries where regulators play a leading role and collaborate with financial institutions like Brazil and India.
Product and use case coverage in early stages	 Current real-time A2A use cases are limited to "push" payments (single payments). Venmo, Zelle, and Cash App have successfully digitized C2C money movement but have yet to generate any meaningful C2B volumes. FedNow provides fraud mitigating features and tools but, until fraud prevention hits a critical mass, banks, fintechs, and merchants will likely remain skeptical.

Source: Flagship Advisory Partners analysis © Flagship Advisory Partners, October 2023

Can FedNow Break the U.S. Status Quo?

There are many roadblocks to FedNow being a major force of disruption in the U.S., which we highlight in Figure 9. In addition to competing against cards, FedNow must first foster bank/processor adoption of its network and then the banks must innovate their consumer A2A products and use cases. Given the fragmentation, atrophy, and opposing economic incentives, it feels farfetched to assume banks will lead an A2A disruption. If not banks, then who could dive U.S. A2A disruption?

In Figure 10, we summarize our views on who could drive U.S. A2A payment disruption. Big Tech has some vested interest in bringing down payment acceptance costs, and the consumer platforms to drive use case innovation; thus it feels like Big Tech will certainly be an influence on any disruption. We also see fintech disrupters such as Square and Stripe as well as established APMs such as PayPal and Trustly as being relevant to a disruption story. While merchants must embrace A2A disruption for it to happen, we do not see them as the catalyst.



Figure 10: Potential U.S. Consumer A2A Payments Disruptors (non-exhaustive)

Key Actor	Representative Companies	Ability to Disrupt Cards	Commentary
Big Tech Companies	G ć amazon	HIGH	 High level of influence over consumers and merchants Incentive to reduce payment acceptance costs likely to offset their own fintech aspirations
Processors and Merchant Fintechs	Square stripe fiserv.	HIGH	 Drive acceptance, strong influence w/ merchants Processors control gates into banks Clear incentive towards opportunities that expand gross margins
3 Mega- Retailers	Walmart :: O TARGET Walgreens	MEDIUM	 Large, loyal customer bases that can materially move the needle on A2A adoption Highly profitable and able to potentially offer attractive consumer incentives to switch
Bank Consortiums	JPMORGAN CHASE & CO. Bankof America. EARLY WARNING	MEDIUM	 Large banks drive large majority of U.S. consumer payments today Track record of success with Zelle among consumers
Alternative 5 Payment Providers	PayPal affirm afterpay National Trustly	MEDIUM	 Established card alternatives for many U.S. consumers Incentive to promote lower-risk operating models (i.e., BNPLs looking to diversify credit risk)

Source: Flagship Advisory Partners analysis © Flagship Advisory Partners, October 2023

The acceptance (merchant) side of the disruption formula is not the roadblock. Clearly, merchants will steer customers to lower-cost payment options if they are viable. The roadblock comes from winning the consumer and changing their behavior. Technology companies such as Amazon, Square, and Apple would seem to hold the key to unlocking these consumers. But how do you incentivize an American consumer to abandon their beloved credit cards and points?

Conclusion

FedNow accelerates the potential for real-time A2A payment disruption in the U.S., offering another alternative to RTP for real-time bank clearing. The opportunity for C2B payment disruption is clear as U.S. cost of card payments is the highest in the world. There are many stepping stones to achieving A2A disruption, however. Firstly, bank accounts must be enabled for real-time A2A. Secondly, and most importantly, innovators must provide killer A2A apps with a clear incentive for consumers to use them. Thirdly, the merchant ecosystem must fall in line (which we view as the lowest hurdle). We see various technology companies as having the greatest potential to drive consumer innovation, but rather than one company soloing this outcome, we believe it will take several working in concert to drive real disruption.

Our best guess is that FedNow does not, in and of itself, significantly increase the disruption risk to cards in mainstream (retail) C2B payments. Clearing is just one, smaller piece of this complex A2A disruption puzzle.



However, we do expect FedNow to potentially accelerate check displacement in alternative C2B use cases such as bill payment. We also expect FedNow to have a greater impact on B2B payments, which we will cover in Part 2 of this series on U.S. A2A payments disruption in the coming weeks.

Please do not hesitate to contact Anupam Majumdar at <u>Anupam@FlagshipAP.com</u> or Rom Mascetti at <u>Rom@FlagshipAP.com</u> with comments or questions.

