



VIRTUAL WALLETS, REAL COMPLAINTS

How digital payment apps put consumers' cash at risk

An analysis of CFPB complaints

Virtual Wallets, Real Complaints

How Digital Payment Apps Put Consumers' Cash At Risk

An Analysis of CFPB Complaints

A U.S. PIRG Education Fund Report

June 2021

**Ed Mierzwinski, Teresa Murray, Mike Litt, U.S. PIRG Education Fund
Gideon Weissman, Frontier Group**

U.S. PIRG Education Fund thanks our donors for making this report possible.

The authors bear responsibility for any factual errors. Policy recommendations are those of U.S. PIRG Education Fund. The views expressed in this report are those of the authors and do not necessarily reflect the views of our funders or those who provided review.

© 2021 U.S. PIRG Education Fund. Some Rights Reserved. This work is licensed under a Creative Commons Attribution 4.0 International license. To view the terms of this license, visit creativecommons.org/licenses/by/4.0/.

With public debate around important issues often dominated by special interests pursuing their own narrow agendas, U.S. PIRG Education Fund offers an independent voice that works on behalf of the public interest. U.S. PIRG Education Fund, a 501(c)(3) organization, works to protect consumers and promote good government. We investigate problems, craft solutions, educate the public, and offer meaningful opportunities for civic participation.

Cover image: Paisit Teeraphatsakool via Shutterstock.

Table of Contents

Introduction	2
Digital wallet complaints are on the rise	2
Figure 1. Digital wallet complaints have increased sharply in 2021	3
Figure 2. Most digital wallet complaints involve account management, scams, or transaction issues	4
PayPal, Square and Coinbase are the most complained-about digital wallet companies•-	4
Table 1: Ten Most-Complained-About Companies	5
Coinbase and cryptocurrency complaints•-	6
Payment app websites warn consumers, but don't provide much help•-	6
Credit cards have stronger protections than debit cards. Apps have the least protection	8
Some payment apps have features of social networks, which may increase fraud threats	8
Recommendations for consumers and policymakers	9
Recommendations for consumers•-	9
Recommendations for policymakers•-	9
Appendix	10
Table A-1. Digital wallet complaints by state	10
Endnotes•-	11

Virtual wallets, real complaints:

How digital payment apps put consumers' cash at risk

Introduction

Consumers are increasingly using digital payment apps -- Venmo, Cash App and Zelle are a few -- for convenience. A 2020 Nerdwallet survey found that “[r]oughly 4 in 5 Americans (79%) use mobile payment apps.”¹ The apps were originally marketed as a way for friends to split expenses. However, the ease of opening peer-to-peer (P2P) accounts,² the ease of obtaining information about other users and a variety of ways to trick consumers have created new fraud risks to users.³

The use of payment apps has been driven higher over the last year, as the pandemic has also led more people to use “contactless” transactions, in which a consumer taps a phone or payment card to a payment terminal, rather than using cash.⁴

Digital app payments are generally “instantaneous” and the app companies generally take the position that transactions are not reversible.⁵ Customer

service for payment apps is minimal, sometimes lacking contact phone numbers or human interaction at all.⁶ In the absence of regulatory action, customer service improvements or security features appear to ratchet up only in response to reputational threats.

For example, despite complaints from privacy experts⁷ over the years, the Venmo app gave consumers the right to hide their friend lists only after President Joe Biden’s network of contacts, including his grandchildren and other family members, was exposed by an investigative reporting site.⁸ The default, however, is that the friend list is “public.”⁹

This report examines complaints to the Consumer Financial Protection Bureau since the CFPB began collecting them in the “mobile or digital wallet” category four years ago. The report also makes recommendations to consumers and to policymakers to help consumers keep their money safe.

“In April 2021, there were 970 digital wallet complaints — almost double the previous complaint peak in July 2020.”

Digital wallet complaints are on the rise

The CFPB received 9,277 complaints in the product category of “mobile or digital wallet” since it began accepting such complaints in 2017, through April of 2021.¹⁰ The CFPB includes complaints about peer-to-peer (P2P) payment apps in the digital wallet category.

Complaint volume has steadily increased over time. In the first year of accepting complaints, the CFPB received slightly more than 1,000 complaints about digital wallets. Over the year preceding April 2021,

the CFPB received more than 5,200 complaints. And in April 2021, there were 970 digital wallet complaints — almost double the previous complaint peak in July 2020.

The three most common complaints involving digital wallets are problems managing, opening or closing accounts; problems with fraud or scams; and problems with transactions (including unauthorized transactions).

Figure 1. Digital wallet complaints have increased sharply in 2021

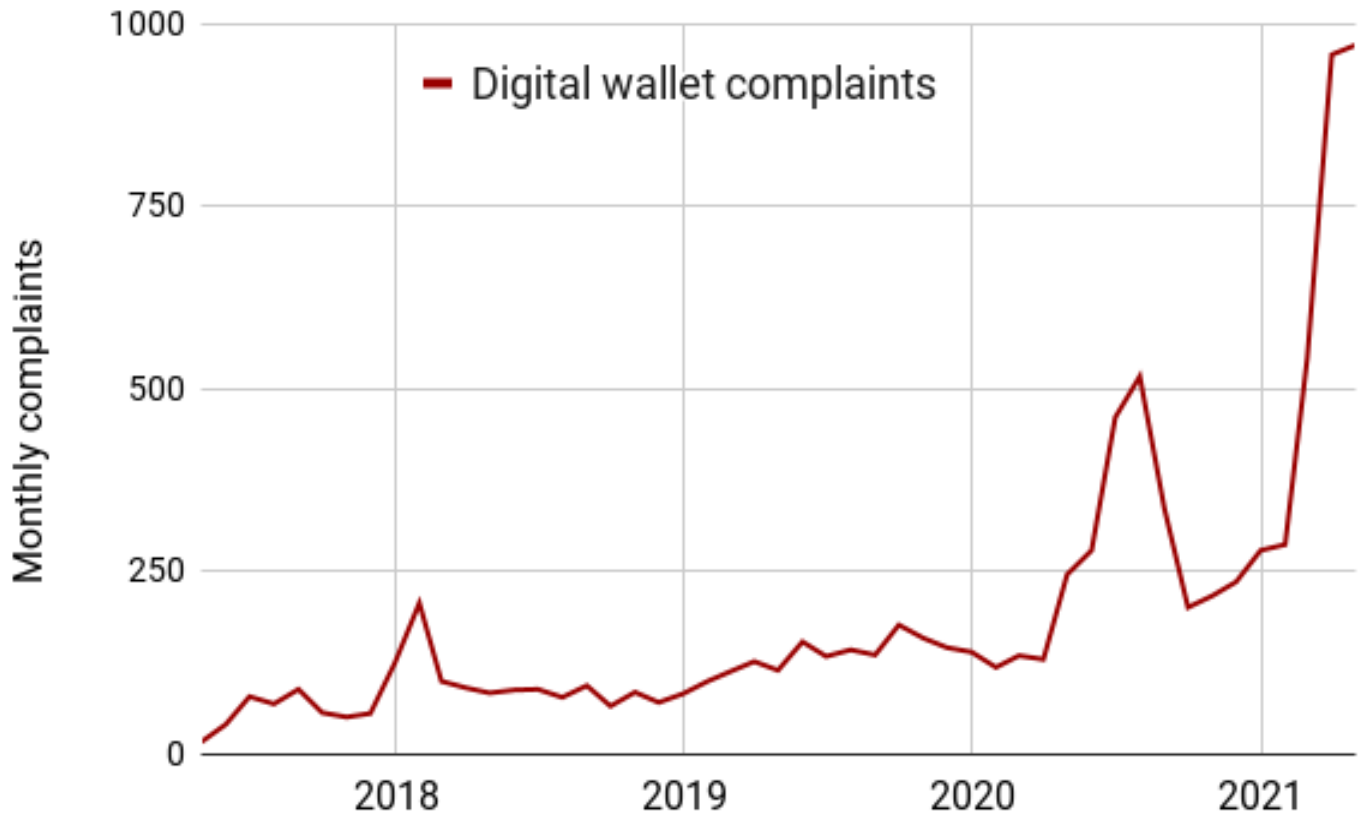
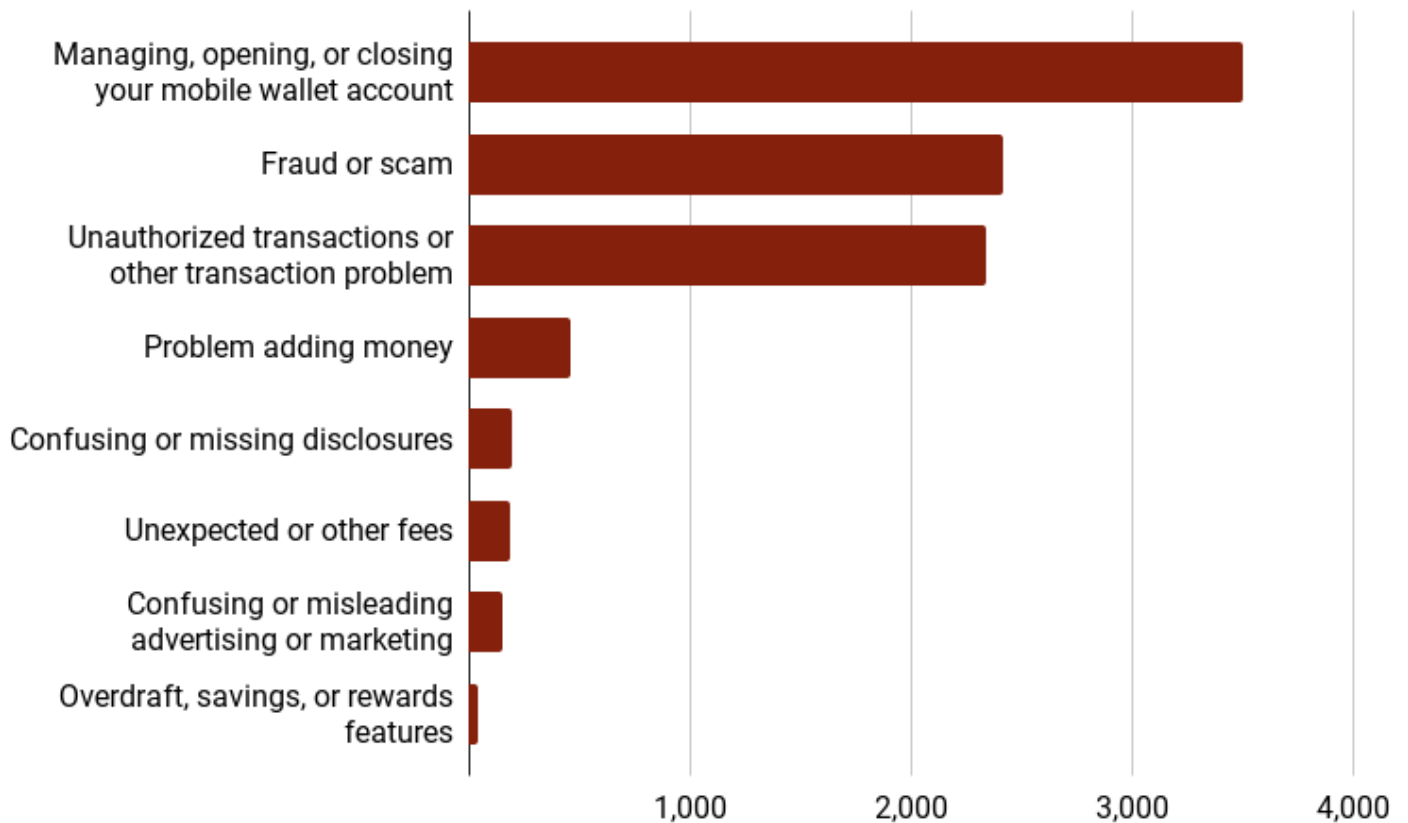


Figure 2. Most digital wallet complaints involve account management, scams, or transaction issues



Digital wallet complaints by issue area through April 2021

PayPal, Square and Coinbase are the most complained-about digital wallet companies

Three companies — PayPal (which also owns Venmo), Square¹¹ (which owns Cash App) and Coinbase — accounted for more than two-thirds of all digital wallet complaints through April 2021.

Other most-complained-about companies include PNC Bank, Chase, and Bank of America, (which along with several other big banks own Early Warning Systems, parent of Zelle, a leading P2P app). Ninety-percent of all complaints were about just 10 companies.

This report analyzes complaints regarding either those companies' digital wallet products, or third-party digital wallets accessing bank accounts.¹² (Note that some complaint narratives included in this report have been lightly edited for spelling and clarity.)

PayPal, which operates the PayPal service along with the digital wallet service Venmo, has been the subject of 4,431 digital complaints, more than three times the complaints of the second most-complained about digital wallet company. Among PayPal digital wallet complaints, the most common problem is “managing, opening, or closing your mobile wallet account.” Some of these complaints describe problems accessing funds. In the narrative published for one such complaint, which led to non-monetary relief, a consumer described problems closing their account and getting their money out: “PayPal has denied access to my account with funds in it and has been slow at ‘closing the account down.’ ... It’s almost been 2 months and I still do not have access to the funds.”¹³

Table 1: Ten Most-Complained-About Companies

Company	Digital wallet complaints	Top complained-about issue	Notes
PayPal	4,431	Managing, opening, or closing your mobile wallet account	Owns Venmo
Square	1,202	Unauthorized transactions or other transaction problem	Owns Cash App
Coinbase	755	Managing, opening, or closing your mobile wallet account	Platform for buying and selling cryptocurrency
PNC Bank	594	Problem adding money	A co-owner of Zelle app's parent Early Warning Systems
JPMorgan Chase	324	Fraud or scam	A co-owner of Zelle app's parent Early Warning Systems
Bank of America	262	Fraud or scam	A co-owner of Zelle app's parent Early Warning Systems
Synchrony Financial	224	Unauthorized transactions or other transaction problem	Issues PayPal Credit ¹⁴
Early Warning Services	212	Fraud or scam	Parent of Zelle
Wells Fargo	211	Fraud or scam	A co-owner of Zelle app's parent Early Warning Systems
Google Compare Credit Cards Inc.	138	Unauthorized transactions or other transaction problem	Some associated complaints contain mentions to Google's P2P app, Google Pay

PayPal complaints include complaints involving Venmo, a PayPal subsidiary. The term “Venmo” is mentioned in 7% of PayPal complaints that include a published consumer complaint narrative (and some complaints regarding Venmo may not mention the service by name). For complaints involving Venmo, the most complained-about issues are “unauthorized transactions or other transaction problems,” “fraud

or scam,” and “managing, opening, or closing your mobile wallet account.” In one complaint alleging a scam, which led to monetary relief, the consumer described being “scammed by a lady who tried to sell me a fake watch... Now, Venmo refuses to acknowledge the situation and says to file for a police report.”¹⁵

Complaint # 4145742 “In one complaint alleging a scam, which led to monetary relief, the consumer described being “scammed by a lady who tried to sell me a fake watch... Now, Venmo refuses to acknowledge the situation and says to file for a police report.”

Coinbase and cryptocurrency complaints

Coinbase, which provides a digital wallet service for buying and selling cryptocurrencies, has been the subject of 755 digital wallet complaints, third most in the Consumer Complaint Database. Coinbase has an additional 2,182 complaints under the product category “virtual currency,” more than any other company.¹⁶

Many Coinbase complaints mention specific cryptocurrencies. Among the Coinbase complaints published with associated complaint narratives in the digital wallet and virtual currency sub-products, 25%

contain the term “bitcoin”, 6% contain “ethereum” and 6% contain “litecoin.”

A number of Coinbase complaints allege problems attempting to retrieve money from the service. In one complaint, which led to monetary relief for the consumer, the consumer writes that “Coinbase has my bitcoin stuck in a ‘vault’ unable to be accessed by me.”¹⁷ Another consumer writes “I have been trying to withdraw my coins out of the vault, but they are stuck.”¹⁸

Payment app websites warn consumers, but don’t provide much help

Websites operated by the companies that run digital wallet services contain a variety of warnings about using their services. They warn against sending money to strangers, and remind consumers to be vigilant against scams and fraud. Yet they provide very little recourse for consumers who find themselves in such situations. This is demonstrated by the following excerpts from payment app websites:

At Cash App:

“Q: Is it safe to send money to people I don’t know?

A: No! Only send payments to people who you trust. [...]

Q: Can I dispute a purchase if I pay someone ahead of time?

A: Never pay someone who you don’t trust for something promised to you in the future (like a puppy from an upcoming litter or a lease on a new apartment). Most payments are instant and usually cannot be cancelled.”¹⁹

At Venmo:

“Remember: Outside of paying authorized merchants, Venmo is designed for payments between friends and people who trust each other. [...] In short:

- 1) Be careful. Don’t use Venmo to join a pyramid, cash wheel, money circle or other get rich quick scams
- 2) Don’t use Venmo to sell anything to strangers
- 3) Don’t use Venmo to buy anything from anyone you don’t know and trust.”²⁰

At Zelle:

“Zelle® is a fast, safe and easy way to send money to friends and family. It’s similar to cash. So you want to make sure you use it to pay only people you know and trust, like your roommate, your dad or your babysitter. Not people you don’t know, like that stranger on the internet selling suspiciously inexpensive puppies from a place you’ve never heard of.”²¹

Customer service frustration is a common feature of complaint narratives.²² Some consumers describe finding their account closed without explanation, and then being unable to fix their account or find out what happened; “Venmo closed my account for no reason and will not help me with getting it back up and going.”²³

According to one consumer who had problems with a failed transaction, Zelle has “no customer service department to call.”²⁴ A search of its website shows that it does have a “contact us” page.²⁵ However, Zelle

first encourages you to contact your own bank. It then lists support categories. Clicking on “Payments and Requests” brings up a sub-menu, which includes a “Failed Payment” tab. Clicking on that tab brings up information related to failed payments. At the bottom, it states: “Still need help? Complete the form and we will respond to you via email within 2 business days. If you need immediate assistance, call us at 1-844-428-8542. We are open from 10am -10pm ET, 7 days a week excluding Thanksgiving, Christmas Day, and New Year’s Day.”

Consumers are often tricked by phishing schemes into contacting scammers. Zelle provides the following advice; similar language is repeated on most other app sites:

“Fraudsters spoof calls and send emails that look like they are from your bank. Beware of clicking links in emails, and never provide any information over the phone if someone stating they’re from your bank calls you. Hang up and call your bank at the phone number listed on the back of your bank-issued debit/ATM card or on the bank’s official website if you must provide information over the phone.”²⁶

Complaints detail how scammers take advantage of consumers due to easy availability of usernames and phone numbers to take over accounts. “Somehow an individual was able to hack into my Cashapp account which was linked to my bank account and fraudulently transfer \$450 to themselves, also disable my phone notification so that I was unaware.”²⁷

The New York Times warns that, “Driving the surge [in fraud] is the apps’ ease of use.” Its story also describes how fraudsters take advantage of consumers, including by setting up fraudulent help lines to dupe consumers.²⁸

As Consumer Reports warns:

*The companies that provide P2P payment apps typically don’t return money sent to the wrong person either by accident or through a scam. They also recommend that you steer clear of transactions with strangers and all commercial enterprises. But you might not know that if you don’t comb through the long and detailed terms of service.*²⁹

Every app help page we reviewed gave information about how to avoid scams. The information is similar to the information bank sites give their customers.

Cash App reminds you that: “Cash App Support will never ask you to provide your sign-in code or PIN, and will never require you to send a payment, make a purchase, download any application for “remote access,” or complete a “test” transaction of any kind.”³⁰

The National Consumers League’s site fraud.org recommends that Cash App users:

*Increase security measures. Enable the Security Lock setting that requires your passcode when making a Cash App payment. Turning on notifications that alert you by text message or email will also help keep track of payments. Adding two-factor authentication to your email associated with your Cash App account will also help secure your account.*³¹

It’s good advice. Whatever app you use, you should take advantage of all of its privacy and security features.

Credit cards have stronger protections than debit cards. Apps have the least protection

Consumers should know that credit cards are regulated by different laws than debit cards connected to a bank account. The Truth In Lending Act and Fair Credit Billing Act grants you rights when you use a credit card that are stronger than your rights when you use a debit card (including with a payment app) under the Electronic Fund Transfer Act.³²

Although transactions with P2P apps are covered by the federal Electronic Fund Transfer Act (EFTA) and its Regulation E, the EFTA's protections may not always apply. While EFTA's protections shield P2P users from some unauthorized transactions, the protections don't extend to include payments induced by fraud.³³ Consumer-initiated transactions are exempt from the EFTA's definition of "unauthorized charge, even when they lead to fraud."³⁴

For consumers, it is generally safer to link apps to their credit card rather than to their bank account, as credit card payments are with the bank's money,

and the strict Truth In Lending Act and its Fair Credit Billing Act limits consumer liability.³⁵ However, apps will generally charge you for this greater piece of mind to cover merchant fees. Venmo, for example, has a 3% fee for sending funds from your credit card instead of your bank account. But Venmo has "no fee to send money to people using your Venmo balance, debit card, or bank account."³⁶ Other apps have similar consumer fees to offset card network fees that the app company must pay.³⁷

Because of these fees, many consumers will likely choose to link their P2P apps to a bank account. If possible, consumers should keep one separate bank account to link to P2P accounts, and should not link P2P accounts to primary bank accounts or accounts with a sizable balance.

Consumers with fewer or smaller transactions should consider paying the fee to fund their purchases via credit card.

Some payment apps have features of social networks, which may increase fraud threats

At least one service, Cash App, has promoted the use of the service through sweepstakes and, although its provenance is not clear, through such gimmicks as Cash App Friday,³⁸ which it calls "a social phenomenon-slash-corporate giveaway with a financial twist."³⁹ However, consumers should understand that using it as a social network may increase financial risks. Its parent, Square, was founded by social network impresario and Twitter CEO Jack Dorsey.⁴⁰

One big problem: Defaults on some apps may be set to the most public, not the most private, settings. For example, two years ago, leading privacy groups Mozilla Foundation and the Electronic Frontier Foundation warned consumers that Venmo's default settings encouraged disclosure of information that might help fraudsters:

While users do have an option to hide their transactions if they dig into Venmo's

*privacy settings, there is no way for users to hide their friend lists. That means that anyone can uncover who you pay regularly, creating a public record of your personal and professional community.*⁴¹

As the groups pointed out in an open letter to Venmo: "The list of people with whom you exchange money paints a startlingly clear picture of the people who live, date, and do business with you. Just as Venmo has given users newsfeed privacy settings, it must give them, at a minimum, equivalent friend list privacy settings."⁴²

Consumers, whether they use Venmo or other apps, should routinely audit their privacy and security settings and set them to the most restrictive setting. At Venmo, payments are public by default unless you change privacy settings.⁴³

Consumers should also use a new feature to set their Venmo friends' list itself to private. We took a look at recent changes to the app's support pages, apparently made only after the news site BuzzFeed identified President Biden's friends' list.⁴⁴

A Look at Venmo: June 2021 (Help Page "Adding and Removing Friends" now includes a new Friends List paragraph): "You have the option to hide your own friends list by adjusting the privacy of your account. This can be done in the "Settings" menu by selecting "Privacy" and tapping on the "Friends List" button. From

there you can select your desired privacy option (who can see your friends list)."⁴⁵

A Look Back at Venmo: June 2020 (Adding and Removing Friends): This "Friends List" paragraph did not exist on this page when we searched at Archive.org. We were unable to find it in any other section of the archived Venmo website.⁴⁶

When payment apps encourage sharing information, as a social network does, that may make it easier for scammers to trick consumers.

Recommendations for consumers and policymakers

As consumers grow increasingly reliant on payment apps, more and more consumers are running into problems that cost them money and time. This is clearly evidenced by the explosion of digital wallet consumer complaints in the CFPB's Consumer Complaint Database over the past year. Consumers can use the following tips to protect their money while using payment apps — but it will take policy changes to provide consumers with the real financial protection they need.

Recommendations for consumers

- Using a P2P app is like spending cash. Use it only for friends and others you both know and trust.
- Review and set all your app privacy settings to the most secure available options. Some apps make information about your transactions and your friends public by default.
- Use all available security settings, which differ by app. If you have the choice to turn on text notifications of transaction activity, use it. If you have the choice to use two-factor authentication, use it.
- If possible, keep one separate bank account to link to P2P accounts. Do not link P2P accounts to your primary account or one with a sizable balance.
- Remember, as noted above, to consider linking your app to a credit card, which is safer than using a debit card or bank account.
- If you are going to send money to a particular person for the first time through a P2P payment app, such as Venmo, for example, even to a person you know, you should ask the person to send a request for the money. There are so many accounts that are similar such as BobSmith and BobSmith02. The accounts can have photos, but the photos are so small, it's difficult to tell whether it's the correct person.
- Be aware that money received through an app can be taken away if the transaction involved a hacked or fraudulently accessed account. For example, if someone buys a used bicycle from you using a hacked app account, the transaction could later be reversed — meaning you, the seller, sold your bike for nothing.

Recommendations for policymakers

Consumers aren't well-protected when they use payment apps. Transactions with P2P apps are covered by the federal Electronic Fund Transfer Act (EFTA) and its Regulation E.⁴⁷ However, the EFTA's protections may not always apply. Consumer-initiated transactions are exempt from the EFTA's definition of "unauthorized charge."⁴⁸

Policymakers should strengthen consumer protections on payment apps:

- Ensure that consumers are protected when they are defrauded into sending money, even when the consumer "initiated the payment."
- Require app providers to investigate errors and fraud even when the consumer made the mistake or sent the money. This is an existing duty not being enforced.

Appendix

Table A-1. Digital wallet complaints by state

State	Digital wallet complaints	Most complained-about company (company complaints)
AK	10	Coinbase (5)
AL	73	PayPal (42)
AR	42	PayPal (20)
AZ	174	PayPal (74)
CA	1045	PayPal (464)
CO	132	PayPal (72)
CT	94	PayPal (54)
DC	55	PayPal (17)
DE	33	PayPal (16)
FL	606	PayPal (254)
GA	341	PayPal (140)
HI	12	PayPal (7)
IA	26	PayPal (14)
ID	25	PayPal (14)
IL	355	PayPal (134)
IN	108	PayPal (39)
KS	31	PayPal (14)
KY	76	PayPal (30)
LA	68	PayPal (21)
MA	170	PayPal (86)
MD	223	PayPal (85)
ME	18	PayPal (12)
MI	228	PayPal (73)
MN	85	PayPal (43)
MO	102	PayPal (47)

State	Digital wallet complaints	Most complained-about company (company complaints)
MS	49	PayPal (25)
MT	9	PayPal (4)
NC	248	PayPal (87)
ND	8	PayPal (5)
NE	14	PayPal (6)
NH	29	PayPal (12)
NJ	286	PayPal (103)
NM	32	PayPal (12)
NV	96	PayPal (52)
NY	624	PayPal (318)
OH	292	PayPal (110)
OK	49	PayPal (26)
OR	94	PayPal (47)
PA	395	PNC Bank (141)
RI	13	PayPal (5)
SC	76	PayPal (33)
SD	8	PayPal (6)
TN	101	PayPal (61)
TX	583	PayPal (237)
UT	45	PayPal (24)
VA	216	PayPal (89)
VT	9	Coinbase (3)
WA	158	PayPal (63)
WI	76	PayPal (32)
WV	21	PayPal (6)
WY	10	PayPal (5)

Endnotes

- 1 Erin El Issa, “Most Americans Go Mobile With Payment Apps — Here’s How They Roll,” 26 February 2020, available at <https://www.nerdwallet.com/article/banking/mobile-payment-app-survey>, last visited 15 June 2020.
- 2 For example, payment app account opening requirements are not generally subject to strict “Customer Identification Programs,” commonly known as “Know Your Customer” rules, that more-strictly-regulated banks must follow, FDIC, February 2021, available at <https://www.fdic.gov/news/financial-institution-letters/2021/fil21012b.pdf>, last visited 14 June 2021.
- 3 Nathaniel Popper, “When Your Last \$166 Vanishes: ‘Fast Fraud’ Surges on Payment Apps,” New York Times, 11 October 2020, available at <https://www.nytimes.com/2020/10/11/technology/fraud-payment-apps.html>, last visited 14 June 2021.
- 4 Nathaniel Lee, “The coronavirus pandemic has caused a surge in demand for contactless payments, accelerating the shift from cash to digital options,” CNBC, 3 December 2020, available at <https://www.cnbc.com/2020/12/03/covid-19-pandemic-accelerating-the-shift-from-cash-to-digital-payments.html>, last visited 14 June 2021.
- 5 “The moment you send a payment in Venmo, we send a request to your bank/card company to debit the funds and make them available to your friend. This means we cannot cancel a payment once it’s been initiated,” undated Venmo Help Page, available at <https://help.venmo.com/hc/en-us/articles/235170748-Payments-Requests-FAQ>, last visited 14 June 2021.
- 6 “Live phone support is generally not available at this time,” said the recorded message when Tom’s Guide called the number at 3 p.m. Eastern time on a Monday,” in Luke Wilson, “Cash App fraud up over 300% — what you need to know,” Tom’s Guide, 22 March 2021, available at <https://www.tomsguide.com/news/cash-app-fraud-up-over-300-what-you-need-to-know>, last visited 14 June 2021.
- 7 News Release, “EFF and Mozilla to Venmo: Clean Up Your Privacy Settings, Popular Payment App Reveals Sensitive Data by Default,” 28 August 2019, available at <https://www.eff.org/press/releases/eff-and-mozilla-venmo-clean-your-privacy-settings>, last visited 14 June 2021.
- 8 Ryan Mac and Katie Notopoulos, BuzzFeed, “Venmo Will Now Let You Hide Your Friend List Because We Found Biden’s Account,” 1 June 2021, available at <https://www.buzzfeednews.com/article/ryanmac/venmo-private-friends-list>, last visited 14 June 2021.
- 9 Mariella Moon, “Venmo now lets users hide their friends lists following Biden discovery But friends lists are still public by default,” 29 May 2021, available at <https://www.engadget.com/venmo-hide-friends-lists-154600508.html>, last visited 14 June 2021.
- 10 Based on complaints from: Consumer Financial Protection Bureau, Consumer Complaint Database, downloaded from <https://www.consumerfinance.gov/data-research/consumer-complaints/search/> on 19 May 2021, with date counter set to 4/1/2017--5/1/2021.
- 11 Square “(u)nlike most of its fintech rivals,” has been granted a bank charter. John Adams, “Square’s bank accounts lay groundwork for a super app,” American Banker, 25 May 2021, <https://www.americanbanker.com/payments/news/squares-bank-accounts-lay-groundwork-for-a-super-app>
- 12 Some banks may have their own “digital wallet” product, others may not.
- 13 Complaint #3919842
- 14 Fact Sheet, “Who issues PayPal Credit?,” PayPal, available at <https://www.paypal.com/us/smarthelp/article/who-issues-paypal-credit-faq4147>, last visited 15 June 2021.
- 15 Complaint #4145742
- 16 This report primarily examines complaints in the “mobile or digital wallet” sub-product under the CFPB’s “Money transfer or money service” product category, including Coinbase complaints in that sub-product. A future report will examine “Virtual currency” sub-product complaints in greater detail.
- 17 Complaint #3966975
- 18 Complaint #4104024
- 19 Cash App Help Page “Avoid Scams and Keep Your Money Safe with Cash App,” archived at <http://web.archive.org/web/20210613073233/https://cash.app/help/us/en-us/6482-recognize-scams>, last visited 13 June 2021.
- 20 Venmo Help Page, “Common Scams on Venmo,” available at <https://help.venmo.com/hc/en-us/articles/360048404533-Common-Scams-on-Venmo>, last visited 13 June 2021.
- 21 Zelle Help Page, “How to Pay it Safe with Zelle®,” available at <https://www.zellepay.com/pay-it-safe>, last visited 13 June 2021.
- 22 About half of all consumers who submit a complaint to the CFPB choose to make their complaint narrative story public. Before being made public, the CFPB removes any personal information from the narrative. These examples are printed verbatim, except for minor edits for spelling and clarity.
- 23 Complaint #4237782
- 24 Complaint #4278157
- 25 “Contact Us,” undated Zelle support page, available at <https://www.zellepay.com/support/contact>, last visited 14 June 2021.

26 Fact Sheet, “Resources & Tips for Safe Payments,” Zelle, undated, available at <https://www.zellepay.com/pay-it-safe/resources-and-tips>, last visited 14 June 2021.

27 Complaint #4210299

28 Nathaniel Popper, “When Your Last \$166 Vanishes: ‘Fast Fraud’ Surges on Payment Apps,” 11 October 2020, available at <https://www.nytimes.com/2020/10/11/technology/fraud-payment-apps.html>, last visited 14 June 2021.

29 Octavio Blanco, “Why P2P Payment Apps Aren’t as Safe as Credit Cards: Cash App, Venmo, and Zelle may be convenient, but they don’t offer fraud protection like Mastercard and Visa,” Consumer Reports, 8 January 2021, available at <https://www.consumerreports.org/digital-payments/p2p-payment-apps-arent-as-safe-as-credit-cards/>, last visited 13 June 2021.

30 CashApp Help Page “Avoid Scams and Keep Your Money Safe with Cash App,” available at <https://cash.app/help/us/en-us/6482-recognize-scams>, last visited 13 June 2021.

31 National Consumers League, “Special (email) Alert from NCL’s Fraud.org, Cash App scams on the rise,” 1 June 2021, available at https://fraud.org/cash_app_alert/, last visited 13 June 2021.

32 Gerri Detweiler, “5 Credit Laws You Really Want to Know About,” 24 February 2017, Credit.com, available at <https://www.credit.com/credit-law/credit-clout-credit-laws-on-your-side/>, last visited 14 June 2021.

33 Octavio Blanco, “Why P2P Payment Apps Aren’t as Safe as Credit Cards: CashApp, Venmo, and Zelle may be convenient, but they don’t offer fraud protection like Mastercard and Visa,” Consumer Reports, 8 January 2021, available at <https://www.consumerreports.org/digital-payments/p2p-payment-apps-arent-as-safe-as-credit-cards/>, last visited 13 June 2021.

34 Lauren Saunders, National Consumer Law Center, NCLC.org, Personal communication on file with the author.

35 Gerri Detweiler, “5 Credit Laws You Really Want to Know About,” 24 February 2017, Credit.com, available at <https://www.credit.com/credit-law/credit-clout-credit-laws-on-your-side/>, last visited 14 June 2021.

36 “Answers about Venmo account fees,” available at <https://venmo.com/resources/our-fees/>, last visited 14 June 2021.

37 “Cash App charges 3% of the transaction to send money via linked credit card. This is a fairly standard fee compared with other money transfer apps...” in Chanelle Bessette, “Cash App Money Transfer: What It Is, How to Use It,” Nerdwallet, 26 February 2021, available at <https://www.nerdwallet.com/article/banking/cash-app-review>, last visited 14 June 2021.

38 See FAQ “Does Cash App give away free money?” in Fact Sheet, “Avoid Scams and Keep Your Money Safe with Cash App,” undated, Cash App, available at <https://cash.app/help/us/en-us/6482-recognize-scams>, last visited 15 June 2021.

39 “Though they’d never tell their routing number to a stranger on the street, people don’t hesitate to post their \$cashtags on Twitter, data security be damned,” in Julia Glum, “Inside Cash App Friday, the Weekly Phenomenon Where People Ask for Money on Twitter (and Get it),” Money, 11 March 2020, available at <https://money.com/what-is-cash-app-friday/>, last visited 14 June 2021.

40 Julia Glum, “Inside Cash App Friday, the Weekly Phenomenon Where People Ask for Money on Twitter (and Get it),” Money, 11 March 2020, available at <https://money.com/what-is-cash-app-friday/>, last visited 14 June 2021.

41 News Release, “EFF and Mozilla to Venmo: Clean Up Your Privacy Settings, Popular Payment App Reveals Sensitive Data by Default,” 28 August 2019, available at <https://www.eff.org/press/releases/eff-and-mozilla-venmo-clean-your-privacy-settings>, last visited 14 June 2021.

42 Electronic Frontier Foundation and Mozilla, “Open Letter to Venmo,” 28 August 2019, available at <https://www.eff.org/document/open-letter-venmo>, last visited 14 June 2021.

43 Laura Woods, “Modern Money Etiquette: Should Venmo Transactions Be Private or Public?,” Yahoo Finance, 9 June 2021, available at <https://finance.yahoo.com/news/modern-money-etiquette-venmo-transactions-110014817.html>, last visited 14 June 2021.

44 Ryan Mac and Katie Notopoulos, BuzzFeed, “Venmo Will Now Let You Hide Your Friend List Because We Found Biden’s Account,” 1 June 2021, available at <https://www.buzzfeednews.com/article/ryanmac/venmo-private-friends-list>, last visited 14 June 2021.

45 Help Page, “Adding & Removing Friends,” No date, Venmo, available at <https://help.venmo.com/hc/en-us/articles/217532217-Adding-Removing-Friends->, last visited 15 June 2021.

46 Help Page, “Adding & Removing Friends,” archive view of 20 September 2020, Venmo, available at <https://web.archive.org/web/20200930091816/https://help.venmo.com/hc/en-us/articles/217532217-Adding-Removing-Friends->

47 Electronic Fund Transfers FAQs, CFPB, 4 June 2021, available at <https://www.consumerfinance.gov/compliance/compliance-resources/deposit-accounts-resources/electronic-fund-transfers/electronic-fund-transfers-faqs/>, last visited 14 June 2021.

48 Lauren Saunders, National Consumer Law Center, NCLC.org, Personal communication on file with the author.

