

The Reappearing Check

Why the decline of paper finally slowed



In 2015, we made a bold prediction that flew in the face of conventional wisdom: After years of rapidly falling popularity, the paper check was about to experience a comeback – or at least, a leveling-off of its decades-long decline.

It was a risky position to take, given the dismal performance over a 20-year stretch for a payment method that was widely viewed as outdated. From a high-water mark of around 50 billion in the 1990s, the number of checks written per year in the U.S. had plummeted to fewer than 20 billion by 2013 as they were replaced by newer and faster technologies.

At that rate of decline, the check would have disappeared entirely by the year 2021, and there was little evidence that the pace was slowing. It had been almost the same each time the Federal Reserve Bank (Fed) released its official figures, dating back more than a dozen years.

Then in 2016, the new numbers from the Fed came in, and the results were stunning even to us. Past trends had pointed toward an expected 12-13 billion paper checks remaining in the U.S.; we had predicted a modest leveling-off to around 14-15

billion instead. The official total was 17.3 billion – our “bold” prediction actually hadn’t been bold enough. The decline of checks hadn’t just slowed down; it had nearly stopped.

What caused such an abrupt turn of fortune? In our 2015 series of white papers titled *The Disappearing Check*, we had predicted that a handful of key factors would lead to a slowdown in the check’s demise. Foremost among them were market saturation by existing technologies, access issues for some consumers, and sluggish adoption of replacements by small businesses in particular.

Was that what really happened? And will the trend hold, or is this just a brief respite before the check’s next big downturn? In other words, where is the check headed next? We’ll explore the answers to these questions and more in this follow-up to the discussion that we began two years ago.

Why do people switch away from checks?

This is the single most important thing to know if we want to understand the ups and downs of the paper check in America. But too often, that crucial piece of information is overlooked and dismissed with a soundbite: Checks are “old-fashioned” or “not cool,” and “younger people don’t like them” – and that’s that.

All of those soundbites may, in fact, be true. But they’re not *reasons* why people move away from checks, they’re labels applied after the fact.

To put it another way: No one ever paid a bill online instead of mailing a check simply because online billpay was newer. However, online billpay *IS* more convenient, less expensive to the consumer, and might offer perks like airline miles from using a credit card. That has nothing to do with being “newer” or “cooler” than a check, and everything to do with being better.

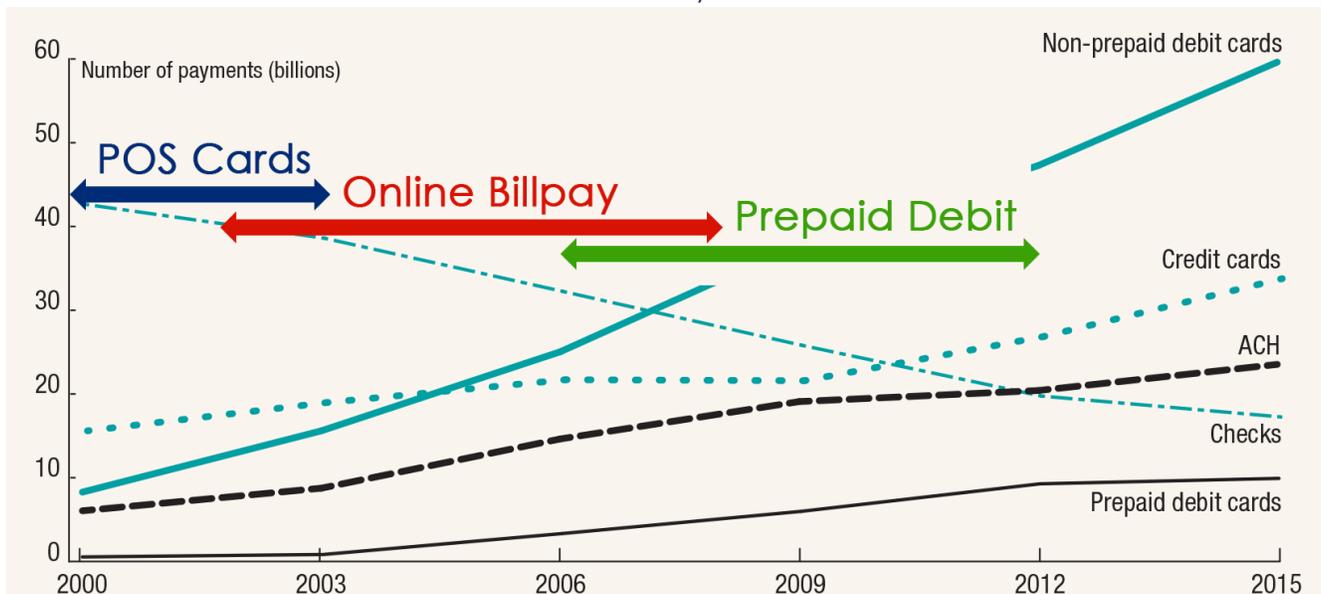
This was the bedrock principle of our 2015 projections – the shift away from checks is not

happening because of some general trend that drives consumers toward new technology by default. Rather, it is the sum total of billions of individual decisions in which someone considered paying with a check, considered an alternative form of payment, and decided the alternative was better.

In the presence of technology that out-competes it, the paper check will decline. In the absence of such technology, it will stay put. But the check, just like any way of doing things (whether in the payments business or anywhere else), does not go away just “because.”

Now the key to bringing the whole picture into perspective: It is very easy to imagine the demise of checks as the result of an absolute, external force, much like gravity, but that is a mistake. It’s a tempting explanation because they have been declining for so long at such a steady rate. In reality, though, the displacement of checks occurred because of a series of *four separate events which – by pure coincidence – were spread out almost exactly evenly over the past thirty years*, and which each attacked a different part of the check ecosystem.

Decline of Checks Since 2000 with timeline of key influencers



- *Direct deposit arrives in the 1980s and replaces payroll checks with ACH payments*
- *Point-of-sale card terminals gain widespread adoption in the 1990s and replace the check with credit and debit cards in retail settings*
- *Online billpay arrives in the early 2000s and replaces many C2B payments with card or ACH transactions*
- *Prepaid debit cards gain widespread adoption in the late 2000s and replace many B2C or G2C payments.*

... so what appears to be a slow, steady general trend of decline just happened to look that way thanks to an accident of timing. "Checks are old" became the go-to explanation, but "something better took over" is the more accurate one. And the one that also, it happens, sheds light on why checks suddenly, mysteriously stopped declining so fast recently:

Technology took the year off from attacking the check

At face value, this sounds absurd. "*Payments technology is developing faster than ever!*" you're likely thinking – and of course, it is.

But what have been the big headliners in payments lately? Apple Pay. Bitcoin. Chip-and-PIN cards. Smartwatches. Mobile wallets. Security issues of all shapes and sizes.

The one common theme: Virtually all of them are electronic payments technologies that affect other electronic payments tech. Card transactions competing with other card transactions. For all the record-setting progress that took place from 2013 through 2016, almost none of it directly impacted the paper check.

But what about all the other replacements for checks that already exist?

We just mentioned four landmark technologies that replaced paper checks, and all of them were very effective. However, they've each had at least 10 years to ramp up to their full potential. Most people who would benefit from them are already using them. They've replaced billions of checks permanently, but the land-rush phase of adoption is over, and their ongoing effect is more of a slow trickle.

The figures for other payment methods in the latest report from the Fed seem to bear out this theory.

- *ACH payments, which experienced rapid growth in the early 2000s during the rise of online billpay, regressed to a modest pace – slower than the average growth rate for all types of transactions, actually.*
- *Credit cards, as they usually do, moved in lockstep with payments as a whole. (They actually grew slightly faster in percentage terms, but part of this was making up for a big decline during the 2008 financial crisis.)*

- *Prepaid debit cards showed hardly any growth at all.*

- *The "big winner" – and, in fact, the only segment that grew faster than payments in general – was the ordinary debit card, which has become the dominant method for executing low dollar-value transactions of all kinds.*

Right now, what we're probably seeing is the "natural" rate of decline for the check – in other words, how fast people voluntarily switch to other payment methods without any compelling new technology being introduced.

But will it last?

You could say that checks dodged a bullet this time around – or more accurately, several bullets. On the surface, it appears that their life expectancy has greatly increased. At their previous rate of decline, they would have disappeared by the early 2020s; at the new rate, that takes place in the late 2030s instead.

That new outlook is the result of a precarious peace, however. Change happened all around the paper check in recent years, but not to it. It's far from certain that that state of affairs will continue indefinitely – in fact, it's downright unlikely.

The check is only safe until the next "great disruptor" arrives, and the further into the future we look, the more that becomes a question of "when" rather than "if." When the next new technology arrives, whatever form it may take, the check will probably go right back to the quick decline.

Is there a way we can tell when that new disruption will arrive, or what it will look like? Not precisely, but we can make some excellent guesses.

Who is still using checks, and why?

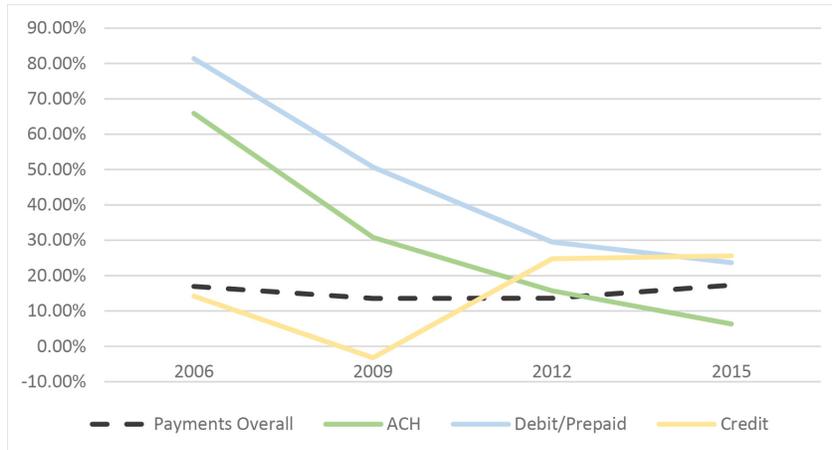
It's a common assumption that most checks are written by those who are simply unwilling to change their ways – which is true in a sense, because checks aren't exactly taking market share away from the newer payment methods. But who is still using them, and why?

The stereotype is that it's all old ladies and stubborn traditionalists who hang on to them for no reason other than force of habit. However, that's not the story the numbers tell. The answer, overwhelmingly, is small businesses.

As of the last Fed report in 2013, fully 88 percent of all check payments involved businesses on either the paying or the receiving end, with the bulk of those going to pay bills or invoices. Virtually every large company is set up to accept payments electronically – but most small businesses are not,

and the great majority of small businesses (91 percent) also pay their own bills by check at least some of the time, making it their first-choice payment method.

Growth of electronic payment methods compared to payments overall, 2006-15



We can hear the counterargument before it's even made: *Why wouldn't they use electronic payments? Everyone knows they're better!*

So why wouldn't they make the switch? Is it just because they're stupid? You can take that point of view if you'd like, but a more

rational explanation probably exists. What could possibly make the check more appealing than an ACH or card transaction?

For one thing, setting oneself up to receive online payments is usually neither free nor effortless. Once enabled, it may make things go more smoothly; however, below a certain critical threshold of transactions, it may not be worth the fixed cost to set up.

The percentage fee charged for processing credit-card payments is another commonly cited factor that limits adoption. Outside of the retail space, a day's work in many professions often involves a small number of high-value transactions. A fee of, say, \$20 (or potentially hundreds of dollars) for each payment makes the idea of cards a non-starter. These businesses also tend to fall into the same category as the ones we previously mentioned: Few transactions per day, and therefore little incentive to go to the trouble of setting up online payments.

One major bank that we spoke with had begun an outreach program to educate small businesses in particular about the benefits of using online payments to replace paper checks, and found the

majority were aware but uninterested.

The fact is, small businesses are less interested in ditching the check – not because they're stuck in the past, but because they don't find the alternatives appealing enough. We can call their behavior stubborn or unsophisticated, but the fact is, *to them*, the motivation just isn't there yet. And when attempting to influence their behavior, what matters *to them* is all that counts.

Alternatives to the paper check are readily available to nearly any small business that wants them. But what's available now isn't making them come rushing to the table. To wean small businesses off the check, the banks and the payments industry will have to actively bring it to them.

The next great disruptor, and why it won't come from Silicon Valley

We now have a pretty clear picture of the kind of technology that will start the next wave of disappearing checks. In fact, we can summarize it in one sentence: *It will be a way for small businesses to send online payments to anyone, and accept them from anyone, with 1) little or no setup required, and 2) no percentage fees.* It's as simple as that.

In fact, this type of technology largely exists; it's just not quite packaged for the small-business audience. Various mobile wallets and P2P-type services allow anyone to transfer money to anyone else using nothing more than an email address, and with little setup involved. If you've ever used PayPal, Venmo, or even Google Wallet, you've experienced it already. Electronically Created Items, or ECIs – known alternately as “digital checks” – serve a similar purpose, and several services have sprung up offering those, too.

Where each of the currently available check alternatives hits a wall, though, is in its price

structure. Almost invariably, the business model is to allow free small-value P2P transfers as a loss-leader, then generate revenue by charging a fee for business use. This fails the second part of the viability test; therefore, it will likely be held back from widespread adoption among small businesses until that is addressed.

When it comes to checks, P2P payments companies are essentially competing with free, and no one has yet discovered a way to turn that into a profitable matchup.

That begs the question: Why hasn't one of the big names mentioned above, or a hot new payments startup, created a P2P or ECI platform that's appealing to the small business market? If it were possible, surely they would have figured out how to make it happen.

And the surprising answer is that it may not be possible – at least for them.

Here we have arrived at another major reason why the remaining 17 billion checks are proving more difficult to uproot than the previous 33 billion. Silicon Valley has an incredible arsenal of technology at hand for a final assault on the last paper checks – *but a for-profit third-party service may be fundamentally incompatible with that goal.*

Phrased slightly differently, the check is an outlier in the payments world, in that generating profit from the transaction itself is not its main goal. Banks are willing to process check payments for free as a way to support their core business, which is attracting and retaining deposit accounts. A company that isn't a bank has no deposit accounts to fall back on; it has to generate transactional profits or starve. And when it comes to checks, those companies are essentially competing with free. No one – not a payments startup, or even Google for that matter – has yet discovered a way to turn that into a favorable matchup.

In this context, looking back over the past 30 years, it's not surprising that almost all of the things that have replaced checks have been bank-originated transactions with low or zero fees. Debit cards have taken over most of the check transactions by

number; ACH transfers have replaced the great majority of check payments by dollar value. Credit card payments for small-value transactions have provided the lone exception, but in the big picture, they still account for just a couple pennies out of every dollar that changes hands in America every year.

To summarize: There's a reason why all the new payments tech is essentially about cards competing with other cards. It's the only place where the competition is fair. Banks have an overwhelming advantage in the race to replace the paper check, and in fact have been the ones blowing away the field in that respect all along.

Silicon Valley may generate the technology and the ideas that lead to change in the payments business, but they probably won't be the ones who directly replace the 17 billion remaining checks. ***The next big decline in check volume will almost certainly come about because of a new service introduced not by a payments company, but by the banks themselves.***

Zelle, ECIs, and the check's new life expectancy

In June 2017, a coalition of banks and credit unions launched, to little fanfare, a new P2P service called Zelle. More than 30 financial institutions, including some of the majors, were participating at the start, with more expected to join. Zelle has been referred to, variously, as the banking industry's answer to PayPal; as a hopelessly late "me-too" entry into the crowded P2P space; or as a potential "Venmo killer." What's gone largely overlooked, though, is its potential to be the next "paper check killer."

Going back to our requirements for the next technology to replace checks, we said that it must satisfy two conditions: 1) It must be easy to set up

and use, and 2) It must be cheap or free. While Zelle may not have been launched with the express purpose of displacing the check, it is certainly a service that holds the potential to meet both of those prerequisites.

As mentioned earlier, plenty of non-bank P2P services exist, but tend to fail the second part of the viability test because of their need to turn a profit from transactions.

On the other hand, many banks had previously offered their own P2P money transfer services, but those had the opposite problem: They were a mishmash of disjointed systems that did not necessarily work well together. A customer using one bank's P2P system could not be guaranteed of his ability to send money to someone at a different bank. No one bank's platform could ever gain the critical mass of customers needed to make the process work seamlessly, so it failed the ease-of-use half of the viability test.

Speaking to Zelle specifically, it may or may not prove to be the great disruptor that sends checks on the downturn again. It remains to be seen for what purpose the banks intend to promote it. If they shape it in the likeness of a modern P2P payments company – that is, free to consumers, fee for businesses – then it will probably take a long time to displace many checks unless the fees are low indeed. On the other hand, if it's used in the mold of the check itself – a free service to retain account holders – then it could eventually replace many billions of paper checks by doing the same thing as them, only better.

Regardless of whether Zelle itself is "the" next check killer, it's important because it has laid out the framework for a successful challenge to this latest, more deeply entrenched set of check payments.

The disruption will occur whenever the banking industry decides to offer such a service, by the name Zelle or any other. Can we predict when it might

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occur, and how severe the decline would be? In our previous research, we had outlined several different scenarios for the check moving into the 2020s and 2030s. These included a “best-case” situation in which no disruptive technology arrived (the path we are on now); a middle-of-the-road situation stabilizing at about 7 billion checks per year (less than half of today’s total); and a “doomsday scenario” in which a disruptive technology for C2B and B2B billpay arrived, eventually taking the total down to a barely-sustainable 3 billion.

Make no mistake: A check-focused implementation of Zelle or a similar technology would represent the doomsday scenario, and would severely threaten the long-term viability of checks overall.

What about the timeline? Fortunately, the past disruptors to the check give us some great data to work with. Both of the most recent disruptions – online billpay and prepaid debit cards – looked to take about 2-3 years to gain enough momentum to get started, then did most of their damage in the following 5-6 years before leveling off as they reached full participation.

Therefore, even in the worst case (Zelle is immediately promoted as a check replacement and is adopted quickly), we could expect it would take about seven years for check volume to be reduced dramatically. More likely, it would be closer to a decade.

In either case, this is a bit of a unique situation because the industry holds all the cards. As we discussed earlier, it would be difficult for a non-bank P2P service to cut into check volume the way a bank-owned system could. So the clock will start ticking when the banking industry decides it starts ticking, and no one can force them to move. Given that we have so far seen no outward signs of that – and that far more than 30 banks and credit unions would need to join in order to make a Zelle-like platform into a category killer, which will also take time – we can project with confidence that the entire process probably will not play out until the late 2020s.

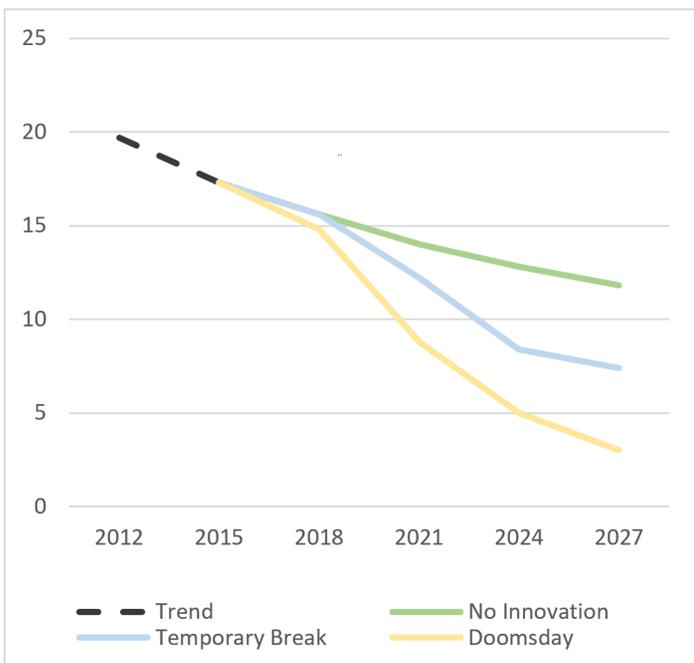
What about the other likely threat we identified – Electronically Created Items, or ECIs? For those unfamiliar with the concept, an ECI is an image of a check that is generated and exchanged like an ordinary check image, but with no original paper check ever existing. It’s been possible to create these items for some time, but they have existed in a legal gray area outside of the traditional check clearing system. Currently, they are accepted mainly through voluntary bilateral agreements between banks, which is to say they are far from viable as a mainstream payment method.

There are signs that this may be changing. In its latest proposal to update Reg CC – the set of rules that govern the check clearing process – the Federal Reserve Bank formally acknowledges the existence of ECIs for the first time, and sets out certain rules for liability in transactions involving them.

Importantly, though, ECIs will remain outside of the official check-clearing process even when the new update is enacted, and will continue to be exchanged by agreement. Additionally, in case of fraud or forgery, the various liability rules mostly

Future Check Volume Projections

current, moderate, and “doomsday” scenarios



place the burden on whoever accepted the ECI as a valid payment – in other words, “accept them at your own risk.”

Taken as a whole, the new regulations crystalize a picture in which the ECI has gained official recognition, but still as an experimental payment instrument that is a way off from acceptance in the mainstream.

In terms of timing, the new Reg CC updates are not scheduled to go into effect until 2018, so any move to include ECIs in the main clearing system would have to wait for the next update after that, which is likely several years away.

The ECI does remain a potential replacement for virtually any paper check – and importantly, a replacement that the banks would be more likely to offer for free than they would a P2P payment. However, we cannot envision a scenario in which they arrive any faster than a P2P system, and therefore our late-2020s prediction remains the case to beat.

It is conceivable that ECIs could be adopted earlier, by voluntary agreement, as a behind-the-scenes component of such a P2P system, but that would still leave the overall timeline for check replacement unaffected.

Conclusion

In conclusion, we hope that you take away the following from reading this document:

- 1. Checks have not declined because of any general market force; they have declined because specific replacements have come up that are better;***
- 2. We are currently in the midst of a lull, where no direct replacement for the check has been invented for about 10 years, and the decline of checks has flattened as a result;***
- 3. Small businesses represent the most prominent use cases of remaining checks that will be the most difficult to replace;***
- 4. A viable replacement for such checks must satisfy the following: 1) Easy to use and set up; and 2) Free or with a low flat fee, never a percentage fee;***
- 5. The technology for such a replacement already exists, but is likely a few years from adoption;***
- 6. The most likely scenario is for checks to remain stable in the short term, with a return to the decline in the early, or most likely the mid-2020s, as such technology matures.***

We hope that you have found this paper informative, and encourage you to contact us for any of your check processing needs.