



2020

Evaluating the Moral and Legal Considerations of Banning Cashless Businesses

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Meng, James, "Evaluating the Moral and Legal Considerations of Banning Cashless Businesses" (2020). *Social Impact Research Experience (SIRE)*. 88.
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Abstract

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Keywords

ban, cashless business, cashless payment, discrimination, economic inclusion, financial inclusion, public accommodations, disparate impact, disparate treatment, retail, restaurant, undue burden

Disciplines

Business | Business Administration, Management, and Operations | Business Law, Public Responsibility, and Ethics | Civil Rights and Discrimination

*Evaluating the Moral and Legal Considerations
of Banning Cashless Businesses*

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Abstract

Prior to 2019 in the United States, zero cities and only one state—Massachusetts—banned businesses from refusing cash payments. However, beginning in January 2019, countless cities and states began proposing or instituting bans on cashless businesses including New Jersey and Rhode Island, as well as Philadelphia, San Francisco, and New York City. Many lawmakers have joined this wave of bans under the perception that businesses refusing cash payments exclude and, by extension, discriminate against certain groups, including low-income or undocumented individuals. This paper examines the different rationale that can be applied to cashless business bans. Specifically, this research provides a legal overview to public accommodations and the standard for upholding a ban intended to prevent discrimination. The paper then goes on to apply an “Undue Burden Test” to cashless payment policies to identify whether accepting cash poses an undue burden to businesses. Utilizing existing scholarly research, news articles, and reports, this paper draws conclusions on the viability of cashless business bans and introduces potential responses to the burden accepting cash payments might cause.

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Introduction:

Over the past several decades, the nature of financial transactions has changed rapidly alongside new contactless technology advances. People are using credit and debit cards in high frequency, reducing the use and need for traditional cash. It is rare or even unimaginable to be pay in cash for a growing number of products and services, particularly relatively expensive items such as airline tickets, hotel stays, electronics, etc.

These changes have taken over all aspects of our transactions, including one of the most common and simple: paying for a meal. Several uncomfortable circumstances might arise in the future as consumers arrive at stores (with enough cash) expecting to purchase an item, only to be turned away by a store's policy of only accepting cashless payments. Yet, businesses increasingly turn to cashless systems and transactions for various reasons such as increasing efficiency and reducing the costs associated with handling cash.

Several cities and states have enacted bans against cashless businesses in response to this trend. Many lawmakers cite the fact that cashless businesses disadvantage the poor in their ban proposals. However, this issue has very little legal precedent and a blanket ban on cashless businesses would likely not stand at the highest level of court. Thus, this paper seeks to analyze whether there are any grounds, moral or legal, for which the state can require businesses to accept cash payments.

This paper will begin by outlining the context of cashless payment policies and their criticism in law, media, and scholarship. It will then analyze the nature of public accommodations to see how various discrimination claims have been applied in the past. I then apply an "Undue Burden Test" to show how government institutions could require businesses to

accept cash payments. The paper will end by briefly discussing how this financial responsibility could be divided.

Literature Review:

Legal Overview

There is currently no federal statute that mandates businesses accept cash as a form of payment. The “Legal tender” statute, Section 31 U.S.C. 5103, states: "United States coins and currency [including Federal Reserve notes and circulating notes of Federal Reserve Banks and national banks] are legal tender for all debts, public charges, taxes, and dues."¹ This is the closest widespread mandate of accepting cash as a form of payment, but it applies to paying off things like debts rather than paying for products or services. Thus, private businesses get to choose whether to accept cash or not, provided their systems do not conflict with any local or state laws.

The local and state laws that exist at the time of this paper’s writing include cashless businesses bans in Massachusetts and New Jersey, as well as in cities such as Philadelphia, San Francisco, and New York City. Massachusetts passed their ban in 1978 and is the only jurisdiction that did not pass their ban within the last several years.²

The rationale lawmakers’ used was the unintended exclusion of those who prefer or can only pay with cash. Policy directors viewed this consequence as essentially a form of discrimination against low-income people, homeless people, and undocumented people, among others.

¹ “Is It Legal for a Business in the United States to Refuse Cash as a Form of Payment?” The Federal Reserve System, July 21, 2020. https://www.federalreserve.gov/faqs/currency_12772.htm.

² Selyukh, Alina. “Cities And States Are Saying No To Cashless Shops.” NPR, February 6, 2020. <https://www.npr.org/2020/02/06/803003343/some-businesses-are-going-cashless-but-cities-are-pushing-back>.

These recent statutes make clear what types of businesses are required to accept cash as a form of payment. For example, Philadelphia passed its ordinance in February 2019 and its law exempts parking lots, Internet purveyors, retailers requiring membership and other select businesses from accepting cash while San Francisco's ban, passed in May 2019, applies to all brick-and-mortar retail businesses except mobile retail establishments like food trucks.³

Although there is clarity on what categories of businesses are banned from having cashless systems, there is still a lack of legal precedent on such bans. The bans that do exist have only been formed recently and represent an uncommon intervention by the government to stop the progress of technology.

Additionally, while there have been no challenges to these laws banning cashless payments, it is unclear how vigorously the cities and states in question enforce these laws. The typical punishment for violating cashless business bans is a fine. For example, in New York fines can take the form of \$1,000 for a first violation and \$1,500 for a second violation⁴. Particularly during the COVID-19 pandemic, many establishments switched to refusing cash payments. It is unclear at what frequency such establishments were fined.

Media and Scholarship Criticism

The main argument of mass media and political representatives alike is that cash is primarily used by lower-income and minority groups, meaning cashless stores would be inaccessible to these populations. This claim is backed by a host of statistics.

³ Erlanger, Samuel. A Cashless Economy: How to Protect the Low-Income. *Cardozo Law Review*, October 16, 2019. <http://cardozolawreview.com/a-cashless-economy-how-to-protect-the-low-income/>.

⁴ Kim, Jason J, and Mark R Vowell. "Cash or Credit? State and City Bans on Cashless Retailers Are on the Rise." *The National Law Review*, 5 June 2020, www.natlawreview.com/article/cash-or-credit-state-and-city-bans-cashless-retailers-are-rise.

First, in a 2017 survey, the FDIC found that 6.5% of American households were unbanked.⁵ A household is considered unbanked if no one in the household has a checking or savings account. The likelihood that a household is unbanked decreases as household income increases. It is estimated that 25.3% of households with income not exceeding \$20,000 are unbanked and therefore do not have credit or debit card access; this percent dips to 9.8% for households with between \$20,000-30,000 in income and decreases further to 7.8% when household income is between \$30,000-40,000.⁶

The 2017 FDIC survey also finds that 18.7% of U.S. households were underbanked, meaning “the household had an account at an insured institution but also obtained financial products or services outside of the banking system.”⁷ These households typically have either checking or savings accounts but used products and services from an alternative financial services (AFS) provider like payday loans, pawn shop loans, or check cashing. The Federal Reserve found that 56% of unbanked consumers’ transactions are made with cash, adding to the pool of households reliant on cash for transactions.⁸

This reliance on cash among low income groups follows from conclusions and data found in earlier years. In a 2018 Federal Reserve study, cash was represented in 30% of consumer transactions in the United States, which was higher than any other method of payment.⁹ The study goes on to break down the reliance on cash across income levels. It found that reliance is

⁵ Apaam et al. “FDIC National Survey of Unbanked and Underbanked Households.” Federal Deposit Insurance Corporation, October 2018. <https://www.fdic.gov/householdsurvey/2017/2017report.pdf>.

⁶ Shy, Oz. “Low-Income Consumers and Payment Choice.” Federal Reserve Bank of Atlanta, February 2020. <https://doi.org/10.29338/wp2019-11a>.

⁷ Apaam et al. “FDIC National Survey of Unbanked and Underbanked Households.”

⁸ Kumar, Raynil, and Shaun O'Brien. “2019 Findings from the Diary of Consumer Payment Choice.” Federal Reserve Bank of San Francisco, June 26, 2019. <https://www.frbsf.org/cash/publications/fed-notes/2019/june/2019-findings-from-the-diary-of-consumer-payment-choice>.

⁹ Kumar, Raynil, Tayeba Maktabi, and Shaun O'Brien. “2018 Findings from the Diary of Consumer Payment Choice.” Federal Reserve Bank of San Francisco, November 15, 2018. <https://www.frbsf.org/cash/publications/fed-notes/2018/november/2018-findings-from-the-diary-of-consumer-payment-choice/>.

significantly higher in lower-income households. Households with an income of \$50,000 or more use cash for around 25-30% of their transactions, but those numbers swell to 36% for households with an income between \$25,000 and \$49,999, and to 47% for households with an income below \$25,000.

Finally, minorities are disproportionately represented in groups reliant on cash and groups with inadequate access to banking services. The 2017 FDIC survey found that 16.9% of Black households and 14.0% of Hispanic households were unbanked compared to just 3.0% of White households.¹⁰ Furthermore, many of the areas with laws against cashless businesses have minority groups unbanked at rates above national averages. Data from the same FDIC survey indicates that 16.8% of Black households were unbanked in New York, slightly below national average, but 21.6% of Hispanic households in New York were unbanked, well over the national average. Unbanked rates for minorities were above national average in California for both groups, with 20.5% of Black households and 14.5% of Hispanic households being unbanked. One possible explanation of this is the growing wealth inequality of the biggest metropolitan areas.¹¹ Although the overall percent of households in the unbanked and underbanked categories is decreasing each year, there is still a stark disparity for minorities that has many claiming cashless businesses are participating in a form of racial discrimination.

Taking a step back, unbanked populations are often ineligible for credit cards as not having a bank account makes the credit payment process very difficult. One way that the unbanked or underbanked populations could then engage with cashless businesses is by purchasing prepaid cards or gift cards with cash, and then using those cards at cashless

¹⁰ Apaam et al. "FDIC National Survey of Unbanked and Underbanked Households."

¹¹ Badger, Emily, and Kevin Quealy. "Watch 4 Decades of Inequality Drive American Cities Apart." The New York Times, December 2, 2019. <https://www.nytimes.com/2019/12/02/upshot/wealth-poverty-divide-american-cities.html>.

businesses. However, this solution presents a tremendous burden on low-income groups or minorities for several reasons. In pursuing prepaid cards or gift cards to replace cash, individuals would be exposing themselves to another party's location, operating hours, and stock of prepaid or gift cards. Such a solution may still be inaccessible to vulnerable populations and at best would still present a massive convenience disadvantage. For example, if a consumer found an item they would like to purchase, but the store did not accept cash, they would have to at least leave the store, find a place selling gift cards, and return for their purchase.

This convenience disadvantage is irreducible, because vulnerable groups simply may not have the financial capability to expend their earnings on prepaid cards. If an individual was living paycheck to paycheck, they wouldn't be able to fork over large sums at the beginning of a period to load up their prepaid or gift cards. Indeed, this strong preference for cash is displayed by the fact that individuals with no credit or debit cards use cash for 86.9% of their payments, and prepaid cards for only 12.1% of their payments.¹²

A second argument for why cashless businesses should not be able to reject cash as a form of payment is consumer privacy. Proponents of bans on cashless businesses believe systems that eliminate cash payments eliminate the best option for consumers concerned with privacy and security. Digital or card transactions typically allow banks, stores, and providers like apps to follow consumers' habits.¹³ Additionally, noncash transactions can expose individuals to various kinds of fraud like identity theft.

¹² Shy, Oz. "Cashless Stores and Cash Users ." Federal Reserve Bank of Atlanta, May 2019. <https://www.frbatlanta.org/-/media/documents/research/publications/wp/2019/05/cashless-stores-and-cash-users.pdf>.

¹³ Kramer, Anna. "NYC Pushing Ahead With Cashless Retail Ban, Joining Neighbors." Bloomberg Law, June 10, 2019. <https://news.bloomberglaw.com/privacy-and-data-security/nyc-pushing-ahead-with-cashless-retail-ban-joining-neighbors>.

For the above reasons, many individuals do not trust stores, apps, and other platforms. This is confirmed by a consumer payment study which found that cash is considered the safest payment type for in-store purchases (credit card was selected as safest for online payments).¹⁴ These sentiments have remained consistent over several previous years of the study.

Finally, a shift towards solely cashless payments would create increased exposure to technical failures and an overdependence on external parties for transactions. Card and electronic payments rely on card networks, which can be subject to network disruptions, natural disasters, or cybersecurity threats.¹⁵ The magnitude of these risks may only become significant if cashless systems were adopted by most businesses, and the United States financial system is already exposed to these threats to a certain degree. However, proponents of cash argue that carrying cash on hand at stores mitigates the risk of prolonged inability to perform transactions if one of the above threats were to happen.

Similarly, businesses pursuing completely cashless systems would be completely vulnerable to card companies' fees. Card companies charge retail stores fees for each time a customer swipes their credit or debit card. There is a cap on the swipe fee that can be applied when the customer uses a debit card, but the fees for credit card swipes are currently unrestricted.¹⁶ Thus, when businesses choose to eliminate cash as a form of payment, there is little they can do to combat card companies from raising their fees. Indeed, card companies like Visa recognize this and have incentivized merchants through different reward programs to

¹⁴ "2018 U.S. Consumer Payment Study." TSYS, 2018. <https://www.tsys.com/2018uspaymentstudy/>.

¹⁵ Perkins, David. "Long Live Cash: The Potential Decline of Cash Usage and Related Implications." Congressional Research Service, May 10, 2019. <https://fas.org/sgp/crs/misc/R45716.pdf>.

¹⁶ Getter, Darryl. "Regulation of Debit Interchange Fees." Congressional Research Service, May 16, 2017. <https://fas.org/sgp/crs/misc/R41913.pdf>.

convert to cashless businesses.¹⁷ On the flip side, some businesses have tried to protect themselves by only accepting certain companies' cards, however this is unlikely to be a viable strategy when the store is already limiting its customers to cashless payments.

Concerns in Countries Beyond the United States

In other countries, policymakers face similar concerns. For example, Sweden has steadily reduced the cash in circulation, but it is afraid to go completely cashless for a few reasons. First, policymakers believe that certain demographics would need access to physical cash regardless of if most of the country adopted digital payment. In particular, people with disabilities (mental and physical), retirees, and refugees would struggle with cashless transactions.¹⁸ Second, Sweden officials worry that a completely cashless society would cause the central bank to lose control over the supply of cash. Such an outcome would present complications if there were ever server failures or threats from hackers.¹⁹ These Swedish concerns parallel the criticisms that have been made by United States media and lawmakers in regard to protecting vulnerable groups (low-income, minorities, immigrants) and ensuring secure payment systems.

Bank Accessibility Criticisms

Taking a step back, the broader banking industry has historically been criticized for its inaccessibility to certain groups. Under "Know Your Customer" and other regulatory standards that have been expanded since 2001, banks are required to verify the identity of customers by

¹⁷ Badger, Emily, and Kevin Quealy. "Watch 4 Decades of Inequality Drive American Cities Apart." The New York Times, December 2, 2019. <https://www.nytimes.com/2019/12/02/upshot/wealth-poverty-divide-american-cities.html>.

¹⁸ Browne, Ryan. "People in Sweden Barely Use Cash - and That's Sounding Alarm Bells for the Country's Central Bank." CNBC, May 3, 2018. <https://www.cnbc.com/2018/05/03/sweden-cashless-future-sounds-alarm-bells-for-the-central-bank.html>.

¹⁹ Alderman, Liz. "Sweden's Push to Get Rid of Cash Has Some Saying, 'Not So Fast!'" The New York Times, November 21, 2018. <https://www.nytimes.com/2018/11/21/business/sweden-cashless-society.html>.

collecting information ranging from name to birth date to address to Social Security number.²⁰ The extensive nature of questioning creates barriers and hesitations for numerous groups. For example, the requirement of a permanent address makes accounts inaccessible to the homeless. Similarly, questions about citizenship present a barrier for immigrant communities who lack faith in financial institutions.

Know Your Customer requirements make the prospect of opening a bank account inconvenient for numerous households. An FDIC survey conducted in 2017 showed that 28.2% of unbanked households do not have an account because “avoiding [the] bank gives more privacy.”²¹ Furthermore, approximately 14% of unbanked households cited identification, credit, or former bank account problems as reasons for unbanked status.

Taken a step further, even when banking services are accessible to vulnerable populations there are still barriers that make establishing and maintaining accounts difficult in practice. For example, there tend to be fewer branches available in communities of color and their services tend to be more expensive.²² This is because market forces have compelled banks to divide themselves into two categories to obtain maximum profit: one group of regulated banks that serve the needs of the wealthy and middle class, and another group that takes advantage of the needs of the poor by providing services in a fashion that is ultimately exploitative.²³ An example

²⁰ Siegel, Rachel. “Are You a U.S. Citizen? This Question Locked a Kansas Couple out of a Bank Account.” The Washington Post. WP Company, August 1, 2018. <https://www.washingtonpost.com/business/2018/08/01/are-you-us-citizen-this-question-locked-kansas-couple-out-bank-account/>.

²¹ Apaam et al. “FDIC National Survey of Unbanked and Underbanked Households.”

²² Florant et al. “The Case for Accelerating Financial Inclusion in Black Communities.” McKinsey & Company, February 25, 2020. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/the-case-for-accelerating-financial-inclusion-in-black-communities>.

²³ Baradaran, Mehrsa. “How the Poor Got Cut Out of Banking.” Emory Law Journal 62, no. 3 (March 11, 2012). <https://law.emory.edu/elj/content/volume-62/issue-3/articles/poor-cut-out-of-banking.html>.

of this entails opening accounts and providing services to vulnerable populations that they never needed or did not understand.²⁴

These situations have contributed to the top two reasons why unbanked households do not have bank accounts. According to the FDIC survey held in 2017, 52.7% of unbanked households cited “Do not have enough money to keep in an account” as a reason for not having a bank account.²⁵ This was followed by “Don’t trust banks” as the second-most common reason for not having an account.

These reasons and the paths leading up to these unfortunate situations for unbanked households is almost certainly influenced by past or present discrimination. However, there is little ground to hold banks culpable. The fact that banks see vulnerable groups as more risky prospects for accounts, thereby charging higher fees, is merely an unfortunate circumstance. Banks are not “in the wrong” for charging higher fees, and they have very few options beyond closing or denying an account if a client is unable to meet the minimum amount to keep the said account open.

Uniqueness of the Criticism of Cashless Businesses

Banking services can do little to change the circumstances that create the indirect discrimination experienced by unbanked households. But in shifting the frame back to the position of cashless businesses, there seems to be something unique about the exclusion that cashless businesses create.

Both banks and cashless businesses create indirect forms of exclusion when people cannot access their services. However, in the latter case, a customer usually has the financial

²⁴ Egan, Matt. “Wells Fargo Settles Allegations of Shady Sales Tactics against Navajo Nation.” Cable News Network, August 23, 2019. <https://www.cnn.com/2019/08/23/business/wells-fargo-navajo-nation-lawsuit-settlement/index.html>.

²⁵ Apaam et al. “FDIC National Survey of Unbanked and Underbanked Households.”

means of participating (i.e. they have the necessary amount of physical cash to afford a product or service). Unlike where unbanked households do not have enough money to keep an account open, the denied customer of the cashless business has all the resources to participate and is in a sense entitled to service because the business is supposed to be reasonably open to any customer who can pay.

Put another way, the distinction of cashless businesses is that they often operate within what is classified as a public accommodation. The reason a customer of a cashless business might be more entitled to service than a bank customer is because courts have concluded that banks are not places of public accommodation.²⁶ Meanwhile, the groups of businesses that have followed the “cashless-only” trend are ones traditionally considered to be public accommodations. Many restaurants and retail establishments are shifting towards cashless payment policies, but they still operate under the constraints of public accommodations.

The next section will explore the literature surrounding public accommodations, their distinctions, and whether public accommodations can be held to certain standards regarding the forms of payment they are willing to take.

Public Accommodations:

Defining Public Accommodations

“Public accommodations” have been defined in several ways across the legal landscape. The traditional definition provided by Title II of the Civil Rights Act of 1964 lists out what types of establishments are considered public accommodations, and thereby subjects these categories of establishments to antidiscrimination obligations. The categories include any establishment which provides lodging, any facility engaged in selling food, any place of exhibition or

²⁶ Akyar v. TD Bank, 18-CV-379 (VSB) (S.D.N.Y. Sep. 12, 2018)

entertainment, and any establishment located within or serving patrons of covered establishments.²⁷

States have expanded upon these explicit definitions since Title II was passed and have also gone on to define the term “public accommodations” in a general sense.²⁸ For example, Connecticut law defines a “place of public accommodation, resort, or amusement” as “any establishment that caters or offers its services, facilities, or goods to the general public.”²⁹

By the traditional definition, any hotel, restaurant, theater, or stadium is explicitly covered in public accommodation law, and these types of establishments make up most businesses considering moving to cashless systems. The general definitions that states use also help capture various cashless businesses under the category of public accommodation.

One important note about the Title II definition of public accommodations is that it exempts private clubs from antidiscrimination obligations. Private clubs are distinguished by being non-profit, selective in their membership, and working on behalf of and towards its members.³⁰ Thus, examples of private clubs could include private religious places, clubs with distinct memberships, non-commercial organizations. In contrast, a private club might become public the moment it engages in commercial services. This is a common characteristic used to defeat organization heads refusing service to individuals under the claim of operating as a private club.

²⁷ “Title II Of The Civil Rights Act (Public Accommodations).” The United States Department of Justice, October 11, 2016. <https://www.justice.gov/crt/title-ii-civil-rights-act-public-accommodations>.

²⁸ Sepper, Elizabeth, The Role of Religion in State Public Accommodations Laws (February 1, 2017). 60 St. Louis University Law Journal 631 (2016), Washington University in St. Louis Legal Studies Research Paper 17-02-03, Available at SSRN: <https://ssrn.com/abstract=2832866>.

²⁹ Norman-Eady, Sandra. “Discrimination.” Connecticut General Assembly, February 1, 2001. <https://www.cga.ct.gov/2001/rpt/2001-R-0145.htm>.

³⁰ Sepper, Elizabeth, The Role of Religion in State Public Accommodations Laws.

Protected Classes

After defining what constitutes a public accommodation, the next step in understanding the obligations of cashless businesses (and public accommodations more broadly) is identifying what groups are protected from discrimination in public accommodation environments. Public accommodation laws typically prohibit a business from discriminating in its provision of service on the basis of protected characteristics such as race, gender, religion, sexual orientation, or disability.³¹ Race, religion, and national origin are protected federally, while sex, sexual orientation, marital status, and other characteristics are frequently protected but often determined at the state level.³²

One important omission from protected classes is that of low-income groups. Public accommodations are not held liable for any form of discrimination towards low-income groups because naturally price is a discriminating characteristic of products and services. As mentioned, public accommodations are profit-seeking establishments. The nature of many public accommodations' business models is to cater luxury service offerings in order to charge higher prices. Therefore, certain public accommodations inevitably exclude low-income groups by charging high prices that low-income groups cannot afford. Therefore, discrimination standards could never be upheld if low-income groups were a protected class, because they are constantly prevented from buying items due to a lack of affordability.

³¹ Brody, David, and Sean Bickford. "Discriminatory Denial of Service." Lawyers Committee, January 2020. <https://lawyerscommittee.org/wp-content/uploads/2019/12/Online-Public-Accommodations-Report.pdf>.

³² Volokh, Eugene. "Can Businesses Refuse to Serve - or Employ - Trump Supporters?" The Washington Post. WP Company, November 26, 2016. <https://www.washingtonpost.com/news/volokh-conspiracy/wp/2016/11/25/can-businesses-refuse-to-serve-or-employ-trump-supporters/>.

Differences in Discrimination Cases

Finally, there are distinctions in the types of situations where protected classes face discrimination. Thus, it is important to distinguish these different types of discrimination that might occur within public accommodations. Public accommodations are supposed to be open to everyone, but there are different thresholds for openness. First, openness can occur in principal, where anyone can come inside, or anyone is eligible to participate. This set of openness is rather simple and most often businesses can easily meet this requirement. However, a second form of robust openness, where people have a genuine opportunity to partake in the services offered, is harder for businesses to adhere to and causes many of the indirect discrimination claims that become widely publicized.

These two types of openness, or rather their lack of openness, are described in law as disparate treatment and disparate impact. Discrimination in the form of disparate treatment occurs when “an employer, housing provider, or place of public accommodation treats people differently based on or because of a person's protected class.” Discrimination in the sense of disparate impact occurs when “an employer, housing provider, or place of public accommodation, enforces or applies a rule, policy, or procedure that disproportionately adversely impacts a particular protected class or protected classes.”³³

Disparate treatment is considered illegal regardless of the business justification in almost all cases. In the past, disparate treatment might have appeared as denial of service. However, today public accommodations would never tell customers that they will not serve them based on

³³ “Discrimination.” Colorado Civil Rights Division, 2020. <https://ccrd.colorado.gov/discrimination>.

something like race. Instead, disparate treatment might take the form of slow service, providing minorities fewer desirable tables or rooms, varying fees, etc.³⁴

Disparate impact, however, is illegal “only where an employer cannot demonstrate that the policy or practice serves a necessary business goal or where the plaintiff can demonstrate an alternate means to achieve such a demonstrated goal without the adverse effects.”³⁵

Successful Disparate Impact Claims and the Undue Burden Test

Public accommodation laws shield protected groups from disparate treatment, but rarely can come to their defense in cases of disparate impact. A unique exception to this is in the instance of disability. Disparate treatment is not what prevents people with disabilities (for example, someone with a wheelchair) from accessing public accommodations, as the managers of public accommodations do nothing differently in treating people with disabilities and certainly do not deny those with disabilities services based on their condition. Rather, someone with a wheelchair is disparately impacted by architectural designs that omit elevators, ramps, or any other form of vertical access, and therefore might have increased difficulty accessing the services of the public accommodation.

In response, the Americans with Disabilities Act (ADA) was created. The ADA relates to public accommodations in its Title III where it prohibits places of public accommodation from discriminating against those with disabilities by setting minimum standards for accessibility. These included altering the new construction of facilities, requiring public accommodations to

³⁴ Landsberg, Brian. Hamline University's School of Law's Journal of Public Law and Policy 36, no. 1 (2015). <https://digitalcommons.hamline.edu/cgi/viewcontent.cgi?article=1009&context=jplp>.

³⁵ Harper, Michael. “Confusion on the Court: Distinguishing Disparate Treatment from Disparate Impact in *Young v. UPS* and *EEOC v. Abercrombie & Fitch, Inc.*” *Boston University Law Review* 96 (June 2016).

remove barriers in existing buildings where it was possible without much expense, and making “reasonable modifications” in servicing those with disabilities.³⁶

Essentially, discrimination of any form was prohibited “unless the public entity can demonstrate that the required actions would result in a fundamental alteration or undue burden.” This statement has caused ongoing dissension on what qualifies as an undue burden, but in general the ADA serves as a precedent on how to deal with disparate impact matters: if addressing the disparate impact causes an undue burden on the establishment, then the establishment is not legally obligated to remedy the disparate impact. For the purposes of this paper, it can be called the “Undue Burden Test.”

The Case Against Cashless Businesses

The reason for discussing disparate impact towards those with disabilities, and what has allowed it to gain legal backing, is because it resembles the case faced by low-income groups engaging with cashless businesses. It was previously stated that low-income groups cannot qualify as protected classes, because they would always be met with price discrimination. However, the primary criticism of cashless businesses in their effect on low-income groups is about access, not willingness to pay. In both the instance of a person with a disability and a low-income customer of a cashless business, the individuals have the financial resources to be able to engage in the store’s services, however some sort of logistical part of the transaction makes it inaccessible in the end.

If a customer were to press charges against a cashless business for discrimination against low-income groups, it is unlikely it would be successful unless the business operates in a region with a ban already in place. This is because businesses could easily prove that having a cashless

³⁶ “An Overview of the Americans With Disabilities Act.” ADA National Network, 2017. <https://adata.org/factsheet/ADA-overview>.

system serves a legitimate interest, like preventing robberies or refining the transaction process to reduce costs and improve efficiency, to dismiss the claim of disparate impact.³⁷

However, in applying the “undue burden” standard from other disparate impact protections, it may be the case that accepting cash as a payment method would not create an undue burden on businesses. Similarly, it is possible that the goals of businesses in pursuing cashless systems can be achieved through other means. The next section of the paper will explore common reasons businesses cite for shifting towards cashless transactions, and the responses that may correspond with each.

Applying the Undue Burden Test:

This section will apply the Undue Burden Test to each of the most common reasons businesses state for shifting to cashless payment systems. Each subsection will provide contextualization of the reasoning from the business perspective, as well as various rebuttal points.

Reason 1: Business Operational Improvement

The first reason that businesses cite for going cashless is because of the expenses, both in dollars and time, associated with handling cash. The three main goals of switching to a cashless system therefore are to reduce expenses associated with accepting cash payments, to mitigate the risk of theft or robbery, and to improve the customer experience in wait time and satisfaction.

Operational Cost Reduction

The first reason is the most common, but potentially the most complex. Small and medium sized businesses reportedly pay tens of billions of dollars each year in expenses related

³⁷ Erlanger, Samuel. A Cashless Economy: How to Protect the Low-Income.

to cash.³⁸ These expenses come from handling and transporting cash, for example banks charge companies fees for processing coins and bills when they deposit cash. Furthermore, if cash is no longer a payment method, businesses have no need to pay employees to count cash payments, to provide customers with adequate cash back, and to manage the register balance. This allows employee count to be reduced (decreasing a fixed cost) or employee time to be reallocated more toward helping customers with individual needs. The idea of improving operations is common in businesses and has been implemented in other forms such as kiosk ordering, which reduces staff needed to take restaurant orders.

On top of eliminating cash handling expenses, getting rid of cash also helps improve transaction time. Sweetgreen, a restaurant chain that serves salads, found that its cashless locations allowed employees to perform 5 to 15 percent more transactions each hour.³⁹ For businesses that have many customers, this transaction efficiency could lead to significant revenue increases.

However, for every noticeable saving in handling cash is a potentially unnoticeable expense to relying on card payments. Going cashless will lead to certain cost savings, but that does not mean that cash is an expensive form of payment to accept. In fact, it may be the cheapest. Several studies analyzing the cost of different payment methods to merchants have found that cash is cheaper than all alternatives in most circumstances. The Bank of Canada conducted a study of over 500 merchants and found that cash was generally cheaper to accept

³⁸ Wagner, David. "Why More and More LA Businesses Won't Take Your Cash." Southern California Public Radio, April 4, 2018. <https://www.scpr.org/news/2018/04/04/82075/why-more-and-more-la-businesses-are-refusing-your/>.

³⁹ Dawson, Gloria. "At Sweetgreen, a Suitcase Full of Cash Won't Buy You Lunch." The New York Times, July 30, 2016. <https://www.nytimes.com/2016/07/31/business/where-a-suitcase-full-of-cash-wont-buy-you-lunch.html>.

than credit and debit cards.⁴⁰ The study found that cash was cheaper than credit cards at almost all rates, and that cash was cheaper than debit cards for any transaction less than \$12.60.

A separate 2011 study found that even when including costs like increased transaction time, employment costs, counterfeit costs, and fraud costs, cash was cheaper than debit. Cash cost retailers \$0.53 per \$100 of sales, compared to \$1.12 for signature debit and \$0.81 for PIN debit. The study did not include credit cards, but the inclusion of credit cards would likely not make a difference. This is because bans on cash most strongly impact low-income groups, who have been shown to greatly prefer debit to credit for transactions when cash is not an option.⁴¹

A final study incorporating credit cards found them to be more expensive forms of payment than both cash and debit. However, businesses do not act to encourage cash and debit payments because the price of doing so (for example, by creating separate price menus and discounts for these forms of payments) is large enough that it may offset the merchant cost reduction of increased cash and debit payments.⁴²

Mitigated Theft and Robbery Risk

By switching to a cashless system, businesses also claim that they can mitigate the risk of theft both internally by employees and externally by robbers. In the first case, sometimes employees are dishonest and take portions of cash that they are not entitled to across transactions they facilitate. The National Retail Federation found that in these situations, each dishonest employee on average costs a business \$1,203.⁴³ The median loss found in the study is \$700,

⁴⁰ Arango, Carlos, and Varya Taylor. "Merchants' Costs of Accepting Means of Payment: Is Cash ..." Bank of Canada, 2008. https://www.bankofcanada.ca/wp-content/uploads/2010/06/arango_taylor.pdf.

⁴¹ Levinger, Benjamin, and Michael Zabek. "Credit or Debit: How Do Lower-Income Consumers Pay?" Federal Reserve Bank of Boston, 2011. https://www.bostonfed.org/-/media/Documents/cb/PDF/Zabek_Levinger_credit_debit.pdf.

⁴² Briglevics, T., Shy, O. Why Don't Most Merchants Use Price Discounts to Steer Consumer Payment Choice?. *Rev Ind Organ* 44, 367–392 (2014). <https://doi.org/10.1007/s11151-014-9419-y>

⁴³ "2018 National Retail Security Survey." National Retail Federation, 2018. <https://nrf.com/research/national-retail-security-survey-2018>.

which might indicate that most internal theft happens on a small scale. Meanwhile, burglaries on average cost businesses \$1,989 and shoplifting cost businesses on average \$205 per incident.⁴⁴

While converting to card-only payments theoretically might reduce these incidental costs, there are also several other procedural ways that businesses could reduce costs of theft. They include having an employee greet each customer, positioning registers in the front of stores in complete visibility, using loss prevention technologies, and checking employees in and out of the store each day.⁴⁵ There are several other adjustments that businesses can make to procedure, and although these are likely to require some dedicated time from employees, this is a readily achievable adjustment that would not fundamentally change the course of an employee's responsibilities.

Increased Customer Satisfaction

Finally, cashless transactions can improve customer experience and satisfaction. However, this consequence of improved business operations is the least quantifiable. Cashless transactions take less time than transactions that involve cash, with the average wait time reduction being five to six seconds less per transaction.⁴⁶ This improved efficiency certainly can help generate more revenue, however its effect on customer satisfaction is weak and unclear. In this case, service quality and perceived wait time are two factors that may be equally influential in wait time satisfaction.⁴⁷

⁴⁴ Bressler, Martin. "The Impact of Crime on Business: A Model for Prevention, Detection & Remedy." Penn State University. *Journal of Management and Marketing Research*, January 2007. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.650.503>.

⁴⁵ Leinbach-Reyhle, Nicole. "New Report Identifies US Retailers Lose \$60 Billion a Year, Employee Theft Top Concern." *Forbes Magazine*, October 8, 2015. <https://www.forbes.com/sites/nicoleleinbachreyhle/2015/10/07/new-report-identifies-us-retailers-lose-60-billion-a-year-employee-theft-top-concern/>.

⁴⁶ Bylykbashi, Kaltrina. "Brands reap the benefits, as contactless payments become the mainstream." *Marketing Week*, February 11, 2015. <https://www.marketingweek.com/brands-reap-the-benefits-as-contactless-payments-become-the-mainstream>.

⁴⁷ Polas, Mohammad. "The Impact of Waiting Time towards Customers" Satisfaction in Fast Food Establishments: Evidence from Bangladesh." *IOSR Journal of Business and Management (IOSR-JBM)* 20.5 (2018): 11-21.

Although it is obvious that wait time can impact customer satisfaction, it is unclear at what threshold this effect begins to take place. Thus using “improved customer satisfaction” as a justification for changing business operations doesn’t make sense because, while there is unclear evidence that cashless transactions would lead to a better experience for select customers, there is definitive evidence that it would necessarily exclude and frustrate others.

Additionally, given the ambiguous brightline for how much wait time needs to be reduced to truly improve customer satisfaction, this rationale leaves open the door for a slippery slope where businesses can make unchecked changes to their operations in the pursuit customer satisfaction. Such thinking would be dangerous which is why the “customer satisfaction” reason is likely last cited by businesses making moves to cashless payment policies.

Reason 2: Employee and Consumer Considerations

The next set of reasons businesses might consider transitioning to cashless systems is because of employee or consumer safety. There are two dangers that might be resolved with cashless systems: dangers associated with theft or robbery and dangers associated with health, sanitation, and disease.

Theft and Robbery

Theft and robbery have previously been discussed and responded to for their financial consequences, however these activities also pose a threat to employee and consumer safety that cannot be adequately quantified. Still, there are numerous reasons why the potential safety created by cashless transactions does not warrant an exclusionary shift towards it.

First, robberies are the result of independent bad actors. Businesses that are unfortunate targets of robberies and theft have certainly been violated in a moral sense, however the potential

risk of being in this unfortunate circumstance is not reason to actively commit a separate immoral act of exclusion (eliminating cash payments).

Furthermore, cashless payment policies do not necessarily rid the risk of danger via robbery. A robber could still come without knowing there is no cash on hand. Upon identifying that there is no register with cash, robbers might turn to other forms of stealing from shoplifting to demands for employee or customer wallets. In particularly the latter case, it seems like it would be preferable to acquiesce to a robber's demand for cash from a register rather than from individuals as businesses would have insurance to cover damages from stolen cash or property.

Health and Sanitation

Secondly, consumers and employees alike might be more comfortable utilizing contactless payments to avoid contagious disease or other risks associated with inadequate sanitation. At the time of writing, small businesses have been adapting to the demands of the COVID-19 pandemic, and one adjustment many businesses have made is to stop accepting cash payments.⁴⁸ Upon reopening, individuals might prefer to conduct transactions from afar rather than exchange dirty or potentially contagious dollar bills. In some cases, businesses may be open and servicing customers, but might only take online orders, excluding any customer intending to pay with cash.

The first response is that these fears are irrational relative to other means of exposure. The COVID-19 virus can persist for three hours in the air, 24 hours on cardboard and far longer on hard surfaces like plastic and stainless steel (where virus was detected up to 72 hours after

⁴⁸ Smith, Erika. "Column: As Coronavirus Surges, More Stores Are Going Cashless. The Price Tag Is Racism." Los Angeles Times, June 27, 2020. <https://www.latimes.com/california/story/2020-06-27/coronavirus-cashless-business-racism-inequity-square>.

initial application).⁴⁹ Thus, the relative likelihood of transmission through exchanging banknotes is much lower than other touched objects. There are no known cases of COVID-19 transmission through banknotes or coins, and it is unclear if the likelihood of transmission through these means is significant at all when compared to transmission through physical closeness.

The COVID-19 virus survives longest on nonporous materials, so the plastic incorporated in debit and credit card terminals and PIN pads are likely greater transmitters than passing dollar bills. Thus, the concerns that people have about transmission through handling cash are nonunique at best and completely reversed at worst. Although the current pandemic will almost certainly accelerate consumer adoption of cashless payments, it does not necessarily entail cleaner transactions.

The second response to this situation considers the various other safety threats that consumers encounter in doing away with cash as a payment method. Using cards to pay exposes the consumer to cybersecurity risks. In 2019, about \$667 million was lost to impostor scams, and overall fraud losses totaled \$1.9 billion. Both these numbers represent around 30% increases from the previous year.⁵⁰ By demanding that customers use cards to pay, businesses are simply shifting several risks, that would otherwise be shared, solely onto the consumer. Without cards, business employees and consumers might be sharing a marginal risk of disease transmission, but with cards customers have significant information that can be exposed and increased risk of fraud.

⁴⁹ van Doremalen et al. "Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1" *New England Journal of Medicine*, May 14, 2020. <https://www.nejm.org/doi/full/10.1056/nejmc2004973>.

⁵⁰ Skiba, Katherine. "Consumer Fraud Complaints Hit Record High." AARP, January 23, 2020. <https://www.aarp.org/money/scams-fraud/info-2020/ftc-fraud-complaints-rise.html>.

This reasoning can also be applied to the previous category of theft and robbery danger. In the pursuit of protecting employees and consumers, businesses would be entirely shifting risks onto the consumer through cybersecurity exposure.

In this risk shifting argument, it does not make sense for a business to shift risks that would normally be shared onto the consumer party. Society should be wary to a trend of businesses focusing on gathering payment but then distancing itself from consumer risk caused by the required payment method.

Reason 3: Social Issues

It may be the case the businesses pursue cashless payment policies to support various social issues or “good causes.” Whereas the first reason dealt with improving the core business operations and the second reason focused on protecting groups engaging in transactions, this third reason chooses to pursue goals with no direct benefit to any party involved in the transaction.

The main social issue with incentive to deny cash would be environmentalism. The environmental argument for cashless payments over cash payments is that they do not require cutting trees to produce paper, nor do they require transportation and distribution, thereby polluting less. However, the fact that cashless payments are conducted digitally does not mean that they generate less carbon emissions. Making a debit or credit card involves plastic, water, and energy and in a 2009 study, the carbon emissions of one card were found to be the

equivalent of 13 banknotes.⁵¹ Additionally, governments and central banks have begun initiatives to recycle discarded cash, turning them into eco-friendly materials.⁵²

There is existing research that concludes cards to be more sustainable than cash by a set of different metrics, but the lack of conclusiveness means that eliminating cash should not be the priority action in striving towards environmental sustainability.

Indeed, even if businesses believe that a cashless system is more environmentally sustainable than one that accepts cash for payment, that is not a reason to impose methods and requirements on consumers. A company, by following this mindset, would be telling its customers to follow its method of helping the environment or else be denied service.

An example analogy of the above situation: imagine Amazon chose to pursue an environmental agenda and specifically wanted to reduce the waste of its stakeholders. Amazon could do this through a variety of means, such as only sourcing from environmental producers or advertising and subsidizing the purchase of recyclable products. Amazon could not, however, require that its customers own mainly recyclable products or not contribute above a certain amount of waste. This type of reasoning puts the onus on the consumer to be environmentally sustainable, rather than acting on behalf of the business to do the same.

Furthermore, there are many methods establishments could undertake to ensure environmental sustainability that do not involve eliminating cash. Many restaurants use paper straws and wooden utensils as a simple way to reduce plastic waste.⁵³ Still, even in banning

⁵¹ MacDonald, Jay. "What's the Carbon Footprint of Your Credit Card?" CreditCards.com, May 8, 2009. <https://www.creditcards.com/credit-card-news/carbon-footprint-credit-card-1276/>.

⁵² "Recycling Shredded Cash to Reduce the Fed's Environmental Impact." Federal Reserve Bank of San Francisco, April 22, 2016. <https://www.frbsf.org/our-district/about/sf-fed-blog/recycling-shredded-cash-reduce-fed-environmental-impact/>.

⁵³ Baetens, Melody. "Cashless Restaurants Are Easier on Owners, but Leave Some Customers Out." The Detroit News, April 4, 2019. <https://www.detroitnews.com/story/entertainment/dining/2019/04/04/cashless-restaurants-can-seem-elitist-philadelphia-detroit-newjersey-massachusetts/3271423002/>.

plastic straws, there are inadvertent effects. Shortly after banning plastic straws, one company found out it had unintentionally made it difficult for people with disabilities who relied on plastic straws to drink.⁵⁴ The company decided to revise its policy to maintain a reserve of plastic straws for people with disabilities or access issues. This example and the rationale of the end situation lends insight into how businesses should approach the decision of cash vs. cashless systems. Even if a cashless policy might produce some obvious benefit, the business should consider providing exceptions or accommodations for those that the policy disadvantages.

Finally, as a broad response to the strive towards bettering various social issues: eliminating cash may not be the right place and may only exacerbate the situations of disadvantaged people. This paper has broadly touched on the adverse impact that cashless businesses would have on poorer populations, but cashless businesses also have the potential to harm numerous more populations. When surveying 2,000 consumers, 17% of people indicated that they are unsure of or would be entirely unable to cope with a cashless society.⁵⁵ Potential groups of people affected include disabled people (or those with physical or mental health issues that would make using digital payments difficult), rural families and anyone who may be at risk of having their finances controlled by an abuser. These unfortunate circumstances are each connected to social issues that might take a step back with cashless businesses.

⁵⁴ Ganzler, Maisie. "The Other Side Of The Straw Ban, And Other Unintended Consequences Of Change." *Forbes Magazine*, September 21, 2018. <https://www.forbes.com/sites/maisieganzler/2018/09/19/unintended-consequences-of-change/>.

⁵⁵ "Access to Cash Review." *Access to Cash*, March 2019. <https://www.accesstocash.org.uk/media/1087/final-report-final-web.pdf>.

Responsibility of Financial Inclusion

After detailing the various reasons why accepting cash as a form of payment does not pose an “undue burden,” the final step of analysis involves identifying who the burden should be left to.

Currently, the financial burden of continuing to accept cash falls on the individual business, and any business that chooses to go cashless against their local law faces different fines.⁵⁶ This is the first way the responsibility of financial inclusion can be determined: by putting it entirely on individual businesses to manage. Governments that have passed bans can continue to intervene by simply adjusting fines higher until businesses are financially incentivized not to pursue cashless models.

Another way the burden of financial inclusion can be split is between businesses and the government. There are many models by which the government can intervene to ensure individuals have payment accessibility at public accommodations. When enforcing the American Disabilities Act, the government explored both tax credits and deductions. Currently, small businesses can take a tax credit of up to \$5,000 and a tax deduction of up to \$15,000 depending on the size of the expenditure related to access adaptations.⁵⁷ A similar credit or deduction system could be awarded for companies that pledge to keep cash on hand at their stores.

Alternatively, if the government gives up in its push for maintaining cash, there are still ways that it can help disadvantaged populations from being harmed. One initiative the government could undertake is subsidized debit cards. Giving free debit cards to low-income

⁵⁶ Hetrick, Christian. “It’s Official. Philadelphia Bans Cashless Stores with Carve-Outs for Some Businesses.” The Philadelphia Inquirer, February 28, 2019. <https://www.inquirer.com/business/philadelphia-cashless-store-ban-jim-kenney-amazon-20190228.html>.

⁵⁷ “Tax Incentives for Improving Accessibility.” Americans with Disabilities Act, September 1998. <https://www.ada.gov/archive/taxpack.pdf>.

individuals is fairly inexpensive, and this card could be funded by a commercial bank or a government-provided bank account.⁵⁸ In a Federal Reserve study, it was found that there was a 21.4% increase in consumer surplus for unbanked individuals when they gained access to debit cards, and a 29.3% increase if the debit cards were subsidized.⁵⁹ Thus, a subsidized card system would be helpful to unbanked populations, however it is still unclear how widely it would be adopted given one of the concerns low-income groups have with cards is transaction privacy.

Finally, the burden of financial inclusion could fall entirely on the government. Banking has in recent times become more concentrated, with the six largest United States banks holding almost 70 percent of the nation's assets, but in the past the United States provided basic financial services at local post offices.⁶⁰ This system helped provide stability for low-income groups and immigrant populations, but since has been discontinued. A reinstatement of a similar public banking option could be a solution until underserved groups are adequately integrated.

Conclusion

Bans on cashless businesses have increased in response to growing advancement and adoption of financial technology. Oftentimes technology is accepted for its ability to benefit the public, but much of the general public has pushed back on allowing fully cashless payment systems because of their potential to be indirectly discriminatory. Public accommodations like restaurants typically focus on being open in principal by not denying any individual service on the grounds of a characteristic like race. However, public accommodations have also been held accountable for robust openness, most notably in the instance of disabilities, when certain groups have disproportionate barriers to accessing an establishment's services. In applying the criteria

⁵⁸ Rogoff, Kenneth S. *The Curse of Cash*. Princeton, NJ: Princeton University Press, 2017.

⁵⁹ Shy, Oz. "Low-Income Consumers and Payment Choice."

⁶⁰ Baradaran, Mehrsa. *How the Other Half Banks*. Cambridge, MA: Harvard University Press., 2018.

and reasoning of previous successful disparate impact claims, this paper demonstrates how businesses can rationalize abstaining from cashless systems.

Bibliography

- “2018 National Retail Security Survey.” National Retail Federation, 2018.
<https://nrf.com/research/national-retail-security-survey-2018>.
- “2018 U.S. Consumer Payment Study.” TSYS, 2018.
<https://www.tsys.com/2018uspaymentstudy/>.
- “Access to Cash Review.” Access to Cash, March 2019.
<https://www.accesstocash.org.uk/media/1087/final-report-final-web.pdf>.
- Akyar v. TD Bank , 18-CV-379 (VSB) (S.D.N.Y. Sep. 12, 2018)
- Alderman, Liz. “Sweden's Push to Get Rid of Cash Has Some Saying, 'Not So Fast'.” The New York Times, November 21, 2018.
<https://www.nytimes.com/2018/11/21/business/sweden-cashless-society.html>.
- “An Overview of the Americans With Disabilities Act.” ADA National Network, 2017.
<https://adata.org/factsheet/ADA-overview>.
- Andriotis, AnnaMaria. “Visa Takes War on Cash to Restaurants.” The Wall Street Journal. Dow Jones & Company, July 12, 2017. <https://www.wsj.com/articles/visa-takes-war-on-cash-to-restaurants-1499853601>.
- Apaam, Gerald, Susan Burhouse, Karyen Chu, Keith Ernst, Kathryn Fritzdixon, Ryan Goodstein, and Alicia Lloro et al. “FDIC National Survey of Unbanked and Underbanked Households.” Federal Deposit Insurance Corporation, October 2018.
- Arango, Carlos, and Varya Taylor. “Merchants’ Costs of Accepting Means of Payment: Is Cash the Least Costly?” Bank of Canada, 2008. https://www.bankofcanada.ca/wp-content/uploads/2010/06/arango_taylor.pdf.
- Badger, Emily, and Kevin Quealy. “Watch 4 Decades of Inequality Drive American Cities Apart.” The New York Times, December 2, 2019.
<https://www.nytimes.com/2019/12/02/upshot/wealth-poverty-divide-american-cities.html>.
- Baetens, Melody. “Cashless Restaurants Are Easier on Owners, but Leave Some Customers Out.” The Detroit News, April 4, 2019.
<https://www.detroitnews.com/story/entertainment/dining/2019/04/04/cashless-restaurants-can-seem-elitist-philadelphia-detroit-newjersey-massachusetts/3271423002/>.
- Baradaran, Mehrsa. How the Poor Got Cut Out of Banking. *Emory Law Journal* 62, no. 3 (March 11, 2012).
- Baradaran, Mehrsa. *How the Other Half Banks*. Cambridge, MA: Harvard University Press., 2018.
- Bressler, Martin. “The Impact of Crime on Business: A Model for Prevention, Detection & Remedy.” Penn State University. *Journal of Management and Marketing Research*, January 2007. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.650.503>.

- Briglevics, T., Shy, O. Why Don't Most Merchants Use Price Discounts to Steer Consumer Payment Choice?. *Rev Ind Organ* 44, 367–392 (2014). <https://doi.org/10.1007/s11151-014-9419-y>
- Brody, David, and Sean Bickford. “Discriminatory Denial of Service.” Lawyers Committee, January 2020. <https://lawyerscommittee.org/wp-content/uploads/2019/12/Online-Public-Accommodations-Report.pdf>.
- Browne, Ryan. “People in Sweden Barely Use Cash - and That's Sounding Alarm Bells for the Country's Central Bank.” CNBC, May 3, 2018. <https://www.cnbc.com/2018/05/03/sweden-cashless-future-sounds-alarm-bells-for-the-central-bank.html>.
- Bylykbashi, Kaltrina. “Brands reap the benefits, as contactless payments become the mainstream.” *Marketing Week*, February 11, 2015. <https://www.marketingweek.com/brands-reap-the-benefits-as-contactless-payments-become-the-mainstream>.
- Dawson, Gloria. “At Sweetgreen, a Suitcase Full of Cash Won't Buy You Lunch.” *The New York Times*, July 30, 2016. <https://www.nytimes.com/2016/07/31/business/where-a-suitcase-full-of-cash-wont-buy-you-lunch.html>.
- “Discrimination.” Colorado Civil Rights Division, 2020. <https://ccrd.colorado.gov/discrimination>.
- Egan, Matt. “Wells Fargo Settles Allegations of Shady Sales Tactics against Navajo Nation.” Cable News Network, August 23, 2019. <https://www.cnn.com/2019/08/23/business/wells-fargo-navajo-nation-lawsuit-settlement/index.html>.
- Erlanger, Samuel. A Cashless Economy: How to Protect the Low-Income. *Cardozo Law Review*, October 16, 2019. <http://cardozolawreview.com/a-cashless-economy-how-to-protect-the-low-income/>.
- Florant, Aria, JP Julien, Shelley Stewart, Nina Yancy, and Jason Wright. “The Case for Accelerating Financial Inclusion in Black Communities.” McKinsey & Company, February 25, 2020. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/the-case-for-accelerating-financial-inclusion-in-black-communities>.
- Ganzler, Maisie. “The Other Side Of The Straw Ban, And Other Unintended Consequences Of Change.” *Forbes Magazine*, September 21, 2018. <https://www.forbes.com/sites/maisieganzler/2018/09/19/unintended-consequences-of-change/>.
- Getter, Darryl. “Regulation of Debit Interchange Fees.” Congressional Research Service, May 16, 2017. <https://fas.org/sgp/crs/misc/R41913.pdf>.
- Harper, Michael. “Confusion on the Court: Distinguishing Disparate Treatment from Disparate Impact in *Young v. UPS* and *EEOC v. Abercrombie & Fitch, Inc.*” *Boston University Law Review* 96 (June 2016).

- Hetrick, Christian. "It's Official. Philadelphia Bans Cashless Stores with Carve-Outs for Some Businesses." *The Philadelphia Inquirer*, February 28, 2019. <https://www.inquirer.com/business/philadelphia-cashless-store-ban-jim-kenney-amazon-20190228.html>.
- "Is It Legal for a Business in the United States to Refuse Cash as a Form of Payment?" *The Federal Reserve System*, July 21, 2020. https://www.federalreserve.gov/faqs/currency_12772.htm.
- Kim, Jason J, and Mark R Vowell. "Cash or Credit? State and City Bans on Cashless Retailers Are on the Rise." *The National Law Review*, 5 June 2020, www.natlawreview.com/article/cash-or-credit-state-and-city-bans-cashless-retailers-are-rise.
- Kramer, Anna. "NYC Pushing Ahead With Cashless Retail Ban, Joining Neighbors." *Bloomberg Law*, June 10, 2019. <https://news.bloomberglaw.com/privacy-and-data-security/nyc-pushing-ahead-with-cashless-retail-ban-joining-neighbors>.
- Kumar, Raynil, and Shaun O'Brien. "2019 Findings from the Diary of Consumer Payment Choice." *Federal Reserve Bank of San Francisco*, June 26, 2019. <https://www.frbsf.org/cash/publications/fed-notes/2019/june/2019-findings-from-the-diary-of-consumer-payment-choice/>.
- Kumar, Raynil, Tayeba Maktabi, and Shaun O'Brien. "2018 Findings from the Diary of Consumer Payment Choice." *Federal Reserve Bank of San Francisco*, November 15, 2018. <https://www.frbsf.org/cash/publications/fed-notes/2018/november/2018-findings-from-the-diary-of-consumer-payment-choice/>.
- Landsberg, Brian. *Hamline University's School of Law's Journal of Public Law and Policy* 36, no. 1 (2015). <https://digitalcommons.hamline.edu/cgi/viewcontent.cgi?article=1009&context=jplp>.
- Leinbach-Reyhle, Nicole. "New Report Identifies US Retailers Lose \$60 Billion a Year, Employee Theft Top Concern." *Forbes Magazine*, October 8, 2015. <https://www.forbes.com/sites/nicoleleinbachreyhle/2015/10/07/new-report-identifies-us-retailers-lose-60-billion-a-year-employee-theft-top-concern/>.
- Levinger, Benjamin, and Michael Zabek. "Credit or Debit: How Do Lower-Income Consumers Pay?" *Federal Reserve Bank of Boston*, 2011. https://www.bostonfed.org/-/media/Documents/cb/PDF/Zabek_Levinger_credit_debit.pdf.
- MacDonald, Jay. "What's the Carbon Footprint of Your Credit Card?" *CreditCards.com*, May 8, 2009. <https://www.creditcards.com/credit-card-news/carbon-footprint-credit-card-1276/>.
- Norman-Eady, Sandra. "Discrimination." *Connecticut General Assembly*, February 1, 2001. <https://www.cga.ct.gov/2001/rpt/2001-R-0145.htm>.
- Perkins, David. "Long Live Cash: The Potential Decline of Cash Usage and Related Implications." *Congressional Research Service*, May 10, 2019. <https://fas.org/sgp/crs/misc/R45716.pdf>.

- Polas, Mohammad. "The Impact of Waiting Time towards Customers" Satisfaction in Fast Food Establishments: Evidence from Bangladesh." *IOSR Journal of Business and Management (IOSR-JBM)* 20.5 (2018): 11-21.
- "Recycling Shredded Cash to Reduce the Fed's Environmental Impact." Federal Reserve Bank of San Francisco, April 22, 2016. <https://www.frbsf.org/our-district/about/sf-fed-blog/recycling-shredded-cash-reduce-fed-environmental-impact/>.
- Rogoff, Kenneth S. *The Curse of Cash*. Princeton, NJ: Princeton University Press, 2017.
- Selyukh, Alina. "Cities And States Are Saying No To Cashless Shops." NPR. NPR, February 6, 2020. <https://www.npr.org/2020/02/06/803003343/some-businesses-are-going-cashless-but-cities-are-pushing-back>.
- Sepper, Elizabeth, The Role of Religion in State Public Accommodations Laws (February 1, 2017). 60 *St. Louis University Law Journal* 631 (2016), Washington University in St. Louis Legal Studies Research Paper 17-02-03, Available at SSRN: <https://ssrn.com/abstract=2832866>
- Shy, Oz. "Cashless Stores and Cash Users ." Federal Reserve Bank of Atlanta, May 2019. <https://www.frbatlanta.org/-/media/documents/research/publications/wp/2019/05/cashless-stores-and-cash-users.pdf>.
- Shy, Oz. "Low-Income Consumers and Payment Choice." Federal Reserve Bank of Atlanta, February 2020. <https://www.frbatlanta.org/research/publications/wp/2020/02/20/low-income-consumers-and-payment-choice>.
- Siegel, Rachel. "Are You a U.S. Citizen?" This Question Locked a Kansas Couple out of a Bank Account." *The Washington Post*. WP Company, August 1, 2018. <https://www.washingtonpost.com/business/2018/08/01/are-you-us-citizen-this-question-locked-kansas-couple-out-bank-account/>.
- Skiba, Katherine. "Consumer Fraud Complaints Hit Record High." AARP, January 23, 2020. <https://www.aarp.org/money/scams-fraud/info-2020/ftc-fraud-complaints-rise.html>.
- Smith, Erika. "Column: As Coronavirus Surges, More Stores Are Going Cashless. The Price Tag Is Racism." *Los Angeles Times*, June 27, 2020. <https://www.latimes.com/california/story/2020-06-27/coronavirus-cashless-business-racism-inequity-square>.
- "Tax Incentives for Improving Accessibility." Americans with Disabilities Act, September 1998. <https://www.ada.gov/archive/taxpack.pdf>.
- "Title II Of The Civil Rights Act (Public Accommodations)." The United States Department of Justice, October 11, 2016. <https://www.justice.gov/crt/title-ii-civil-rights-act-public-accommodations>.
- van Doremalen, Neeltje, Trenton Bushmaker, Dylan Morris, Myndi Holbrook, Amandine Gamble, Brandi Williamson, Azaibi Tamin et al. "Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1: NEJM." *New England Journal of Medicine*, May 14, 2020. <https://www.nejm.org/doi/full/10.1056/nejmc2004973>.

Volokh, Eugene. "Can Businesses Refuse to Serve - or Employ - Trump Supporters?" The Washington Post. WP Company, November 26, 2016.

<https://www.washingtonpost.com/news/volokh-conspiracy/wp/2016/11/25/can-businesses-refuse-to-serve-or-employ-trump-supporters/>.

Wagner, David. "Why More and More LA Businesses Won't Take Your Cash." Southern California Public Radio, April 4, 2018.

<https://www.scpr.org/news/2018/04/04/82075/why-more-and-more-la-businesses-are-refusing-your/>.