

2020

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Recommended Citation

Edward R. Morrison, Belisa Pang & Antoine Uettwiller, *Race and Bankruptcy: Explaining Racial Disparities in Consumer Bankruptcy*, 63 J. L. & ECON. 269 (2020).

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Race and Bankruptcy: Explaining Racial Disparities in Consumer Bankruptcy

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Abstract

African American bankruptcy filers select Chapter 13 far more often than other debtors, who opt instead for Chapter 7, which has higher success rates and lower attorneys' fees. Prior scholarship blames racial discrimination by attorneys. We propose an alternative explanation: Chapter 13 offers benefits, including retention of cars and driver's licenses, that are more valuable to African American debtors because of relatively long commutes. We study a 2011 policy change in Chicago, which seized cars and suspended licenses of consumers with large traffic-related debts. The policy produced a large increase in Chapter 13 filings, especially by African Americans. Two mechanisms explain the disparate racial impact: African Americans were more likely to have traffic debts and incurred greater costs from car seizures and license suspension due to relatively long commutes. When we match African Americans to other debtors with similar commutes, we find no racial difference in Chapter 13 filing propensities.

1. Introduction

Among those who file for bankruptcy, African Americans are substantially more likely to select Chapter 13 over Chapter 7 when compared with white debtors. This has been documented in prior scholarship such as Braucher, Cohen, and Lawless (2012) and has been the subject of media coverage in the *New York Times* (Bernard 2012; also see Kiel 2017) and ProPublica Illinois (Sanchez and Kam-bhampati 2018). This apparent racial sorting into Chapter 13 is worrisome be-

We are grateful to the Bankruptcy Courts for the Northern District of Illinois, Northern District of Georgia, and Middle District of Tennessee and to the City of Chicago for providing data for this project. We thank the editor and referee, Matthew Bruckner, Anthony Casey, Alexander Evans, Arpit Gupta, Thomas (Zach) Horton, Olatunde Johnson, Angela Littwin, Anup Malani, Justin McCrary, Joshua Mitts, Eric Talley, and workshop participants at Columbia University, the University of California Hastings College of the Law, the University of Southern California, Washington University in St. Louis, the 2019 American Law and Economics Association meeting, and the 2018 Conference on Empirical Legal Studies for helpful comments.

[*Journal of Law and Economics*, vol. 63 (May 2020)]

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cause a Chapter 13 filing is substantially more costly, more time consuming, and less likely to discharge debts than a Chapter 7 filing, as we have discussed elsewhere (Morrison and Uettwiller 2017). Attorneys' fees are more than twice as expensive (\$2,600 instead of \$1,000), payments to unsecured creditors are substantially larger (because some Chapter 13 trustees demand minimum recoveries to the creditors), a Chapter 13 plan takes 3 to 5 years to complete (Chapter 7 cases complete within about 4 months), and around two-thirds of Chapter 13 cases terminate without a discharge of debts (this happens in less than 4 percent of Chapter 7 cases). A commonly cited reason for using Chapter 13 instead of Chapter 7 is to shelter assets that would otherwise be liquidated in Chapter 7. Chapter 13 allows a consumer to discharge debt by giving up future income (all disposable income earned over a 3–5-year period); Chapter 7 allows the consumer to discharge debt by giving up assets, such as cars and houses. Chapter 13 is, therefore, often described as a device for “saving your home,” as argued by White and Zhu (2010). Yet this commonly cited explanation for preferring Chapter 13 seems implausible for the vast majority of filings by African Americans, most of whom have few or no assets vulnerable to liquidation in Chapter 7. A more plausible explanation for these patterns is racial discrimination by bankruptcy attorneys, who may be more likely to steer African Americans into Chapter 13 than their white counterparts. Braucher, Cohen, and Lawless (2012) present experimental evidence consistent with this hypothesis.

This paper tests an alternative hypothesis: In some areas of the United States, financially distressed African Americans are more likely to benefit from Chapter 13 than other consumers. A Chapter 13 filing not only allows consumers to retain assets but also forces the return of assets that have been seized. These assets include physical property, such as cars and homes, and government permits, such as driver's licenses. These benefits are generally unavailable in Chapter 7, as discussed in detail in Section 2. The benefits of Chapter 13 could be more valuable to African Americans than to other debtors for at least two reasons: First, African Americans may be more likely to accumulate and default on debts that entitle creditors to seize assets that cannot be sheltered in Chapter 7. Second, African Americans may face higher costs of asset seizure. Using data from Chicago and supporting evidence from other major cities, we show in this paper that both reasons are important determinants of Chapter 13 filing decisions by African Americans and explain much of the difference in filing rates between African Americans and other debtors.

We study a natural experiment in Chicago. When Rahm Emanuel took office as mayor in 2011, he announced a policy that increased city enforcement of outstanding traffic and parking debts. Chicago identified drivers with large accumulated debts and commenced proceedings to seize their vehicles and suspend their licenses. The Emanuel policy had a much larger effect in African American neighborhoods than other areas. The city identified substantially more drivers (per capita) with large accumulated debts and issued substantially more license suspension notices (per capita) in predominantly African American zip codes

than in other zip codes. This caused an increase in Chapter 13 filings throughout the city, with a much larger increase among African Americans, even though Chapter 7 filings were declining. Indeed, Chicago-area attorneys specifically advertised Chapter 13 as a solution for consumers facing license suspensions and vehicle seizures due to unpaid traffic debts.¹ Among consumers who filed for bankruptcy, the probability of choosing Chapter 13 (instead of Chapter 7) increased across all races, but the increase was 10 percentage points larger among African Americans. Among car-owning consumers who chose Chapter 13, the share of filings by African Americans had been declining prior to the Emanuel policy. After the policy was rolled out, the African American share reversed trend and increased from 42 percent in 2011 to 55 percent in 2015.

These findings show that African Americans were more likely to accumulate city debt, were more likely to be targeted by city enforcement efforts, and consequently were more likely to file Chapter 13 bankruptcy cases in response to the Emanuel policy compared with consumers from other racial groups. The Emanuel policy thus produced a racial disparity that has been attributed to steering by bankruptcy attorneys. We find additional evidence indicating that African Americans experienced higher costs, on average, from vehicle seizure and license suspension. When we control for the number of license suspensions per zip code, for example, we continue to find a larger increase in Chapter 13 filings in African American zip codes, which indicates a greater sensitivity to license suspensions. Consistent with this interpretation, the post-Emanuel-policy increase in Chapter 13 filings is largest in African American zip codes with relatively long commutes to work (defined by the percentage of residents commuting more than 45 minutes). By contrast, in zip codes with short commutes, we see little or no difference between African American and non-African American zip codes. These findings suggest that the differential response to the Emanuel policy—with African Americans filing Chapter 13 cases at higher rates than other consumers—is attributable in part to differences in the value of retaining automobiles. On average, African Americans may have longer commutes to work and live in areas that are farther from schools, medical services, and supermarkets. We test this hypothesis by matching African American bankruptcy filers to non-African American filers on the basis of consumer characteristics, including estimated distance to work and debt to the City of Chicago. Within this matched sample, we cannot reject the null hypothesis that there are no racial differences in the probability of choosing Chapter 13 after the Emanuel policy was implemented.

We conclude that observed racial disparities in bankruptcy are attributable, in

¹ Websites for leading Chicago-area firms included such statements as “Stop Chicago Tickets. Eliminate All Penalties & Fees. Get Your License Back. The state will suspend your driver’s license for unpaid Chicago parking tickets. A DebtStoppers bankruptcy plan can wipe out all parking ticket debt and get your license re-instated immediately” (DebtStoppers.com, Stop Believing Debt Is “Normal” [<https://web.archive.org/web/20140208010235/https://www.debtstoppers.com/>]); “Chapter 13 Can Be the Solution (1 Payment) . . . Lawsuits & License Suspension & Parking Tickets” (Law Offices of Peter Francis Geraci, Chapter 13 Bankruptcy [<https://web.archive.org/web/20111205044445/http://www.infotapes.com/webB/Chapter13.htm>]); see also Siegel (2013).

large part, to underlying differences in the background characteristics (especially commuting times) of African American and other consumers. African Americans are more likely, on average, to experience debt enforcement actions, including seizure of a car or driver's license. African Americans are also more likely, on average, to need that car or license for commuting to work.

We explore alternative explanations for our findings, including the possibility that the postpolicy increase in Chapter 13 filings is attributable to liquidity constraints faced by African American consumers, not to a desire to recover seized vehicles or suspended driver's licenses. Bankruptcy attorneys' fees generally must be paid up front when a consumer files for Chapter 7 but can be paid in installments during a Chapter 13 case. When Chicago identified drivers with large outstanding debts and commenced collection efforts, drivers may have preferred Chapter 13 because it has lower up-front costs. We show that liquidity constraints cannot explain the post-Emanuel-policy increase in Chapter 13 filings among African Americans. First, our regressions include individual-level controls that account for available liquidity (such as monthly income, assets, and secured debt). More importantly, we study the response to the Emanuel policy among consumers who were represented by a pro bono law firm that charges no legal fees, the Legal Assistance Foundation (LAF). We find a sharp post-Emanuel-policy increase in both the number and the proportion of Chapter 13 filings at the LAF. We view this as strong evidence that liquidity constraints, although important to the filing decision generally, are not driving our findings. Instead, the post-Emanuel-policy increase is more plausibly driven by consumers' efforts to recover vehicles and licenses. Consistent with this conclusion is evidence that, regardless of race, we see a sharp post-Emanuel-policy increase in the proportion of Chapter 13 cases in which the debtor was cited for driving without a license during the 12 months preceding the bankruptcy filing.

Our findings indicate that discrimination by attorneys is, at most, a partial cause of observed racial disparities in bankruptcy. In our data, we observe the same racial disparities observed in prior work. However, when we include controls for the consumer's zip code (reflecting driving distance) and debt to the City of Chicago, the racial disparity shrinks by 50 percent. When we include attorney fixed effects, which account for the fact that some attorneys steer all clients to Chapter 13 regardless of race, the racial disparity becomes less than a tenth of its original size (with at most a 2-percentage-point difference in the probability of choosing Chapter 13 over Chapter 7).

Although this paper is motivated by racial disparities in consumer bankruptcy, it has implications for the design of bankruptcy law and public finance. First, our findings indicate that, although we see racial disparities in bankruptcy, Chapter 13 is used as theory predicts: debtors—particularly the working poor—use it to retain assets for which the costs of ownership (through a Chapter 13 repayment plan) are lower than the costs of substitutes (such as renting comparable assets) and that would be lost in Chapter 7, as discussed in Li and Sarte (2006) and White and Zhu (2010). In response to the Emanuel policy, debtors filed Chapter 13

cases to recover their cars and licenses because there are inadequate substitutes for debtors with long commutes and limited access to alternative modes of transportation, and those assets are difficult or impossible to recover through Chapter 7. The racial disparity is driven primarily by nonbankruptcy policies (such as the City of Chicago's ticket enforcement), not by attorney discrimination. Second, our findings indicate that the Emanuel policy triggered an increase in Chapter 13 filings, especially by African Americans, because the Bankruptcy Code permits the discharge of fees and fines only in Chapter 13, not in Chapter 7; the city's lax enforcement policy allowed residents to accumulate debts that could not be managed without a bankruptcy filing; and there is no statute of limitations applicable to fines arising from traffic debts. Reforms along any one of these dimensions would have a substantial effect on the propensity to file for Chapter 13.

Our paper contributes to the literature on racial discrimination in bankruptcy courts, summarized by the American Bankruptcy Institute (2019). We also contribute to a large literature in sociology and (to a lesser extent) economics that explores the extent to which distance to work or amenities (such as supermarkets) is greater for the poor, especially African Americans. A persistent theme in this spatial-mismatch literature is that African American households face substantial disadvantages in commuting to work, as discussed in O'Regan and Quigley (1999) and Kneebone and Holmes (2015).²

This paper is organized as follows. Section 2 presents background on bankruptcy law and prior research on the relationship between commuting distance and race. We also describe the natural experiment presented by the Emanuel policy. Section 3 presents our data and summary statistics. We present our results in Section 4. The concluding Sections 5 and 6 assess the implications of our findings for the attorney-steering hypothesis and for policy more generally.

2. Background: Bankruptcy Law and Chicago Policy

2.1. Bankruptcy Law

The US Bankruptcy Code offers two primary options for distressed consumers seeking to discharge their debts. One is Chapter 7, which offers the consumer a discharge of most debts if she agrees to liquidate nonexempt assets and distribute the proceeds to creditors. Every state exempts certain assets, which the consumer can keep even after debts are discharged. In Illinois, for example, an unmarried consumer can exempt up to \$15,000 of home equity, \$2,400 of the value of a motor vehicle, and \$4,000 of any personal property (exemption limits double for married couples who file a joint bankruptcy petition). The latter amount can be applied to the motor vehicle, which allows the consumer to exempt up to \$6,400 of the vehicle's value. Thus, if the consumer owns a car that is worth less than \$6,400 (the exemption limit), and there is no lien on the car, the consumer

² For example, Andersson et al. (2018) find that a recently unemployed consumer is more likely to find new employment if she lives closer to available jobs, and the effect is substantially larger for African Americans and those living in high-poverty areas.

can keep the vehicle even after her debts are discharged in Chapter 7. If the car is worth more than the exemption limit, it is sold and the exempt value is distributed to the consumer. If the car has a lien on it, it is sold, the proceeds are paid to the secured creditor, and any excess is paid to the consumer, up to the exemption limit.

The other option for a distressed consumer is Chapter 13, which offers a discharge if she distributes all of her disposable income to creditors for 3–5 years (3 years if she has sufficiently low income). The Chapter 13 discharge is broader than the one offered by Chapter 7. For example, Chapter 13 discharges civil fines, such as traffic and parking debts, something not possible in Chapter 7. A consumer who files for Chapter 13 can also retain all of her assets. If a creditor (including a government agency) has seized an asset, the consumer can demand its return in most states.³ Although all assets—exempt or nonexempt—are retained, it still matters whether the assets are exempt. The value of nonexempt assets determines, in part, the minimum payoff that the consumer must distribute to creditors during the repayment period.⁴

The principal advantage of Chapter 13 is, therefore, the ability to retain assets. Prior scholarship, such as White and Zhu (2010), focuses on the ability to retain a home, but retaining a vehicle may be just as important. In addition, a consumer can retain nonconventional property such as a driver's license if it was seized on account of unpaid debts. Thus, for a car owner, Chapter 13 has three distinct advantages relative to Chapter 7: retention of the vehicle, recovery of a suspended license, and discharge of debts arising from parking and traffic fines.⁵

The principal disadvantages of Chapter 13 are its cost and success rate. Relative to Chapter 7, it is substantially more expensive (Morrison and Uettwiller 2017). Attorneys' fees average about \$1,000 in Chapter 7 but \$2,600 in Chapter 13 (with a very large standard deviation). In addition, consumers often must pay substantially more to creditors (over the course of a 3–5-year repayment period) in Chapter 13 than in Chapter 7. Although it costs more than Chapter 7, Chapter

³ There is some disagreement among courts whether the government must return an impounded vehicle. The majority of courts that have considered the question, though, hold that the government must do so. See *In re Fulton*, 926 F.3d 916 (7th Cir. 2019), cert. granted sub nom. *City of Chicago v. Fulton*, 140 S. Ct. 680 (December 18, 2019).

⁴ In practice, however, this minimum-payoff floor is unlikely to be binding because of the requirement that the consumer pay all of her disposable income. Elsewhere, we provide more background on Chapter 13 and the ways it differs from Chapter 7 (Morrison and Uettwiller 2017).

⁵ Technically, it may be possible to recover a suspended driver's license by filing for Chapter 7, which would discharge other debts, thereby freeing up cash to pay parking and traffic fines. This strategy would be feasible only for debtors with sufficient cash flow to pay the fines. Because the average debt owed to the City of Chicago is over \$1,000 among Chapter 13 filers and about 40 percent of these filers have income below 150 percent of the poverty line, this strategy seems infeasible for a large proportion of Chapter 13 filers. To be sure, given much higher attorneys' fees in a Chapter 13 case, this strategy would be attractive if the City of Chicago offered sufficiently generous repayment plans allowing consumers to pay debts slowly over time. In 2019, under Mayor Lori Lightfoot, the city introduced new repayment plans and announced that it had "stopped suspending driver's licenses where the violations involved are non-driving violations such as parking tickets, city sticker tickets, or license plate expiration tickets" (City of Chicago, Suspended License, Booting, Ticketing and Towing Reforms [<https://www.chicago.gov/city/en/sites/newstartchicago/home/suspended-license--booting--ticketing-and-towing-reforms.html>])).

13 is less likely to yield a discharge of debt. A debtor fails to receive a discharge in two-thirds of Chapter 13 cases but in less than 3 percent of Chapter 7 cases, as discussed in Greene, Patel, and Porter (2017). For a car owner, then, Chapter 13 is a high-cost bankruptcy option with a low expected success rate.

2.2. *The Chicago Policy*

Rahm Emanuel became Chicago's mayor in May 2011. In October of that year, he issued a press release announcing that "his administration will implement a new aggressive approach to improve collections owed to the city, including millions of dollars in unpaid parking tickets, unpaid fees, fines and penalties. The reforms are anticipated to bring in up to an additional \$33 million in collections in 2012" (City of Chicago 2011). The press release explains that, in the past, billing and collection were fragmented across several city departments. The new policy would, among other things, "improve collections by consolidating debt types for individuals who owe for more than one type. [The mayor] will also call for contracted collection agencies to increase rates to recover \$5 million in debts. For example, there is one Chicagoan who owes \$87,000 in parking tickets on four different license plates that go back to 2005, \$70,000 on one plate alone. This case is now in the hands of a city law firm" (City of Chicago 2011).

The process for enforcing parking and traffic debt in Chicago has several stages (as described by City of Chicago 2018).⁶ A driver first receives a notice of violation after the city detects a parking or traffic violation. If the driver does not contest the violation within 21 days, she receives a notice of determination, which represents a debt to the city. The debt must be paid by a specified deadline; if it is not, the debt is doubled and the driver is sent a notice of final determination, which may add fines and penalties to the original debt. When a driver accumulates three or more final determinations (or if two determinations are at least a year old), the city sends a notice of seizure, which alerts the driver that the city will boot and impound her car if she does not pay the debt within 21 days. The car is impounded by the city until it receives payment of the outstanding debt, plus towing and daily storage fees. If the vehicle is not redeemed within 15 days, the city can sell or destroy it. When a driver accumulates final determinations for at least 10 parking tickets or five automated-camera violations, the city sends a notice of impending driver's license suspension (DLS). If the driver does not pay outstanding debts, the city alerts the State of Illinois that it should suspend the driver's license. The license remains suspended until the city alerts the state that the outstanding debt has been paid.

There are, therefore, two principal tools by which the city enforces parking and traffic debt: vehicle seizures and license suspensions. Through Freedom of Information Act (FOIA) requests, we obtained zip-code-level data on total parking and traffic debt, number of seizure notices, and number of DLS notices. A single

⁶ In 2019, the city announced modifications to these stages. See City of Chicago, Suspended License, Booting, Ticketing and Towing Reforms (<https://www.chicago.gov/city/en/sites/newstartchicago/home/suspended-license--booting--ticketing-and-towing-reforms.html>).

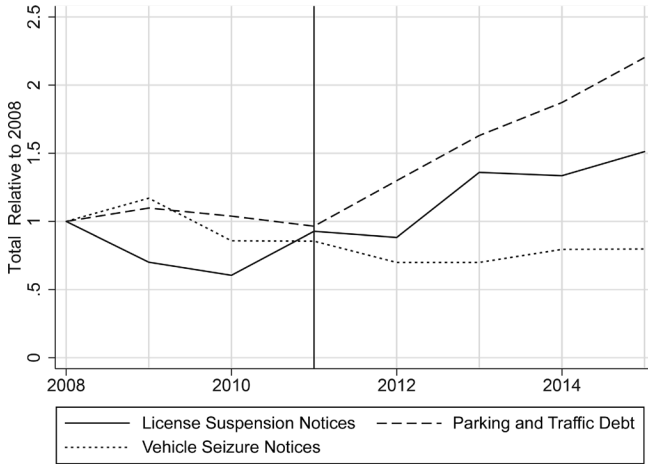


Figure 1. Chicago enforcement policy, 2008–15

driver can (and often does) receive multiple notices. Because our data count all notices, not just the first notice, it measures the intensity with which Chicago communicated the threat of vehicle seizure or DLS.⁷ Figure 1 plots our FOIA data by year. There is a sharp change in trend for DLS notices, which had been declining prior to 2011. The seizure trend remains relatively flat. It appears, then, that the city’s policy primarily operated along the dimension of license suspensions. The trend in DLS notices is mirrored in total debt in Figure 1, which shows a sharp increase after 2011. As we show in the Online Appendix, it appears that, beginning in 2011, the city began collecting long-overdue debts (especially tickets issued more than 7 years earlier) and increased ticket prices (see Figure OA7).⁸

3. Data

Our primary data set includes information about consumer bankruptcy filings in Chicago from 2008 through 2016. We link two data sources. One is the Federal Judicial Center Integrated Database (IDB), which includes information about the consumer’s address (zip code), capital structure (values of real and personal property and secured and unsecured debt), and case characteristics, such as filing date and outcome. The other data source is the Case Management/Electronic

⁷ For example, a driver receives additional driver’s license suspension (DLS) notices after the first notice if she incurs new tickets or fines. The city renotifies the driver that her license is subject to impending suspension. We reran the analysis using data that count only the first DLS notice. We find comparable results, as Figure OA1 of the Online Appendix shows. Figure OA1 shows a spike in first-time DLS notices during 2013, which is studied in Kessler (2020). This spike is less apparent in Figure 1, where we plot the total number of notices, not just first-time notices. This suggests that the Emanuel policy not only increased license suspensions but also increased the number of additional notices. The increase in additional notices is so large that it obscures the spike during 2013.

⁸ Figure OA7 uses ticket-level data obtained by ProPublica via a Freedom of Information Act request. The data are publicly available; see ProPublica Data Store, City of Chicago Parking and Camera Ticket Data (<https://www.propublica.org/datastore/dataset/chicago-parking-ticket-data>).

Case Files Document Filing System for the Bankruptcy Court for the Northern District of Illinois, which encompasses Cook County and nearby counties. We downloaded and scraped every petition for every Chapter 7 and 13 case filed from 2008 through 2016. For Chapter 13 cases, we also scraped the docket sheets, proofs of claim filed by the City of Chicago, Bankruptcy Noticing Center certificates of notice (providing a list of creditors), and proposed repayment plans. Using these data, we can identify the name and address of each debtor, the debtor's occupation and work address, whether any debt was owed to the City of Chicago, and whether the city took steps to seize the debtor's car or suspend her license.

We link these bankruptcy data to several data sets, including monthly zip-code-level data on traffic and parking enforcement in Chicago, census data on racial composition and commuting times by census tract and zip-code tabulation area, and Food and Drug Administration (FDA) data on food deserts, defined as census tracts in which at least a third of the tract's population resides more than a half mile from a supermarket or large grocery store.⁹

Finally, we impute the race of bankruptcy filers on the basis of their names and addresses. Data on race by surname is available from the 2000 census; race by first name is available from an Office of the Comptroller of the Currency database, drawn from mortgage applications and assembled by Tzioumis (2018); race by census tract is available from the 2010 census. We combine these sources, applying the same algorithm recommended by the Consumer Financial Protection Bureau (2014), to estimate the probability that a person in our data is African American. We identify a person as African American if our algorithm predicts a probability greater than 70 percent (our results do not change if we use a higher cutoff).¹⁰

Table 1 summarizes our data, showing that Chapter 13 filings account for about a third of cases. African Americans account for about 40 percent of Chapter 13 filings but less than 20 percent of Chapter 7 filings. Relative to Chapter 7 filers, Chapter 13 debtors have higher incomes, are more likely to own cars, and are more likely to have secured debt.

We begin by documenting the correlation between distance, race, and bankruptcy in Chicago. Table 2 stratifies zip codes by distance from work and supermarkets. Distant from work is defined as the percentage of zip-code residents who travel more than 45 minutes to work. Distant from supermarkets (food desert) is defined as the percentage of residents who live at least 1 mile from a supermarket. We rank zip codes by the percentage of residents who either travel at least 45 minutes to work or live in a food desert. Table 2 reports means for each quintile of this distance ranking.

Chapter 13's share of bankruptcy filings increases nearly monotonically as we move from the first to fifth quintile, consistent with the hypothesis that Chapter

⁹ The Food and Drug Administration (FDA) provides an alternate definition, identifying tracts in which over a third of the population resides more than a mile from a supermarket or large grocery store. These definitions apply only to nonrural tracts. For rural tracts, which are not relevant to this paper, the FDA uses a longer travel time (for example, 10 miles) to identify food deserts.

¹⁰ Our results are similar, but weaker and less precisely estimated, when we impute race solely on the basis of first and last name.

Table 1
Summary Statistics

	Mean	SD
Chapter 13 cases ($N = 154,620$):		
% African American	40.51	
Assets (\$)	107,214	459,858
Debt (\$)	150,654	899,061
Secured debt (among those with this debt) (\$)	134,442	982,443
% Real estate owner	44.44	
% Car owner	82.74	
% With secured debt	80.80	
Monthly income (\$)	3,605	14,421
Monthly expenses (\$)	2,892	4,488
% Below 200% of the poverty line	37.92	
Chapter 7 cases ($N = 286,666$):		
% African American	17.93	
Assets (\$)	108,136	233,903
Debt (\$)	209,036	5,569,225
Secured debt (among those with this debt) (\$)	177,894	286,662
% Real estate owner	45.17	
% Car owner	75.39	
% With secured debt	68.30	
Monthly income (\$)	2,809	6,937
Monthly expenses (\$)	3,210	59,066
% Below 200% of the poverty line	50.07	

13 tends to be more attractive to financially distressed consumers when they live in places where cars are likely an important means of accessing work and amenities. Table 2 also shows that African Americans are much more likely to live in zip codes with high distance rankings. This is consistent with the hypothesis that African Americans are more likely to live in zip codes where cars are likely an important means of transportation and, as a result, are more likely to file for Chapter 13 when they become financially distressed. This phenomenon—the correlation of distance, race, and Chapter 13 filing rates—can be observed in other cities, such as Atlanta and Memphis, which have been the focus of academic and media reports because African Americans account for a disproportionate share of Chapter 13 filings relative to Chapter 7 in these cities. This is illustrated by Tables OA4 and OA5 in the Online Appendix.

4. Evidence from the Policy Change

We hypothesize that African American bankruptcy filers are, on average, more likely to file a Chapter 13 petition than other debtors because they are more likely to accumulate and default on debts that permit creditors to seize assets that cannot be sheltered in Chapter 7 and because they face higher costs from seizure of those assets. We test these hypotheses using the Emanuel policy, which triggered a sudden increase in DLS notices, as shown in Figure 1. Although the process

Table 2
Commuting Distance and Bankruptcy Filing Rates

Distance Quintile	% Distant or in Food Desert	% Distant	% in Food Desert	% African American	% Chapter 13	Chapter 13 Filings per Thousand	Median Income
1	11.86 (2.57)	11.76 (2.61)	.12 (.66)	.64 (1.65)	12.04 (8.21)	.40 (.35)	52.61 (5.24)
2	23.31 (3.24)	21.46 (5.47)	2.10 (5.15)	7.98 (19.03)	17.88 (10.17)	1.08 (1.38)	54.69 (5.77)
3	38.90 (5.96)	26.94 (7.91)	15.14 (12.44)	13.10 (20.57)	24.61 (11.14)	1.53 (1.23)	49.27 (9.53)
4	60.62 (6.81)	22.56 (10.40)	48.06 (10.99)	26.78 (32.99)	28.39 (14.45)	2.47 (2.29)	47.87 (10.37)
5	86.60 (10.30)	23.89 (9.32)	81.85 (14.22)	39.06 (35.56)	32.72 (15.85)	3.19 (2.68)	40.88 (9.04)

Note. The distance measure is a commute to work of more than 45 minutes. $N = 212$.

for suspending a license is mechanical, as described in Section 2, the policy had a much larger impact on African American drivers. This is shown in Figure 2, which plots debt owed to the City of Chicago and DLS notices per capita for zip codes in Cook County. A zip code is deemed predominantly African American if African Americans account for at least 50 percent of its population; the remaining zip codes are defined as “other.” Figure 2 shows that, among African American zip codes, per capita DLS notices roughly tripled after the Emanuel policy commenced in 2011. The increase is smaller (but still substantial) in other zip codes: DLS notices roughly doubled during the years following the Emanuel policy.¹¹

We view the Emanuel policy as a shock to the probability that drivers, especially African Americans, would have their licenses suspended by the city government. Licenses are assets that can be protected through a Chapter 13 filing (and can be recovered, if already seized) but not through Chapter 7. We hypothesize that the policy caused an increase in Chapter 13 filings by African Americans relative to other races. We also hypothesize that DLS notices were more costly, on average, for African Americans than other drivers because African Americans rely more heavily on cars for commuting.¹²

¹¹ We observe a comparable pattern when we count only the number of first DLS notices per capita, as Figure OA2 in the Online Appendix shows.

¹² Although we focus on DLS notices, we cannot rule out the possibility that they are correlated with other enforcement decisions, such as ticketing and vehicle seizures, that may vary by race and induce greater demand for Chapter 13 among African Americans than other drivers. Whether the rise in total DLS notices documented here is indicative of an increase in license suspensions, vehicle seizures, or ticketing that would lead to suspension or seizure, the effect on drivers is the same: they become at risk for losing assets (cars, licenses) that are needed for commuting. Our hypothesis is that, whatever the mechanism, the Emanuel policy imposed relatively higher costs on African Americans relative to other races and that these higher costs explain the increase in Chapter 13 filings among African Americans relative to other drivers after Emanuel took office.

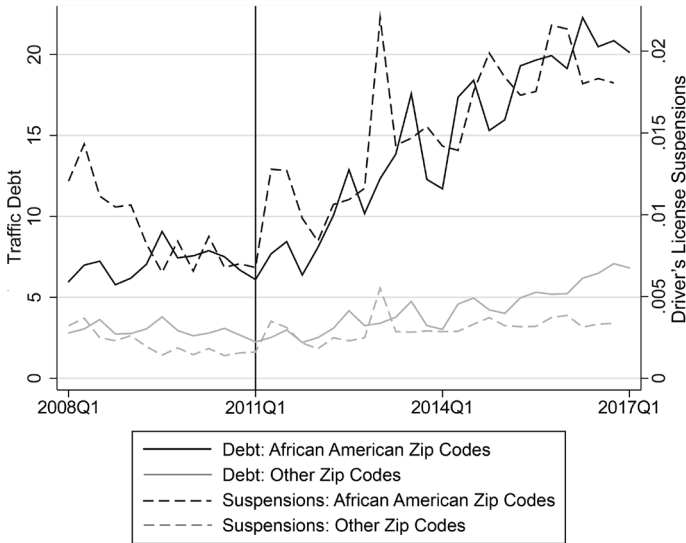


Figure 2. Traffic debt and license suspensions per capita

4.1. Racial Differences in the Effect of the Emanuel Policy on Bankruptcy Filings

Figure 3 plots total bankruptcy filings by race. Figure 3A compares African Americans and non-African American filers; Figure 3B compares African Americans with white filers. The data underlying Figure 3 are drawn from individual-level bankruptcy files. Before the Emanuel policy was announced in 2011, total Chapter 13 filings by African Americans were nearly identical to filings by white debtors. After 2011, we see a divergence, with an increase in African American Chapter 13 filings in absolute terms and relative to others. A very different pattern characterizes Chapter 7 filings, which declined across all races beginning in 2010, with a much sharper decline among non-African American debtors. This decline predates the Emanuel policy and likely reflects the end of the recession; a similar decline in Chapter 7 filings is observed throughout the country.

If the Emanuel policy caused an increase in Chapter 13 filings, especially among African Americans, we should also observe that, among bankruptcy filers, the propensity to select Chapter 13 should increase for all races after the policy went into effect, and this increase should be larger for African Americans. We test this hypothesis using a standard event-study difference-in-difference regression, following Almond, Hoynes, and Schanzenbach (2011) and Autor (2003):

$$\begin{aligned}
 B_{it} = & \alpha + \sum_{k=2008}^{2010} \mu_k \times \text{African American}_i \times \mathbb{I}[t = k] \\
 & + \sum_{k=2012}^{2016} \mu_k \times \text{African American}_i \times \mathbb{I}[t = k] \\
 & + \text{African American}_i + \theta_t + \mathbf{X}_{it} + \varepsilon_{it},
 \end{aligned} \tag{1}$$

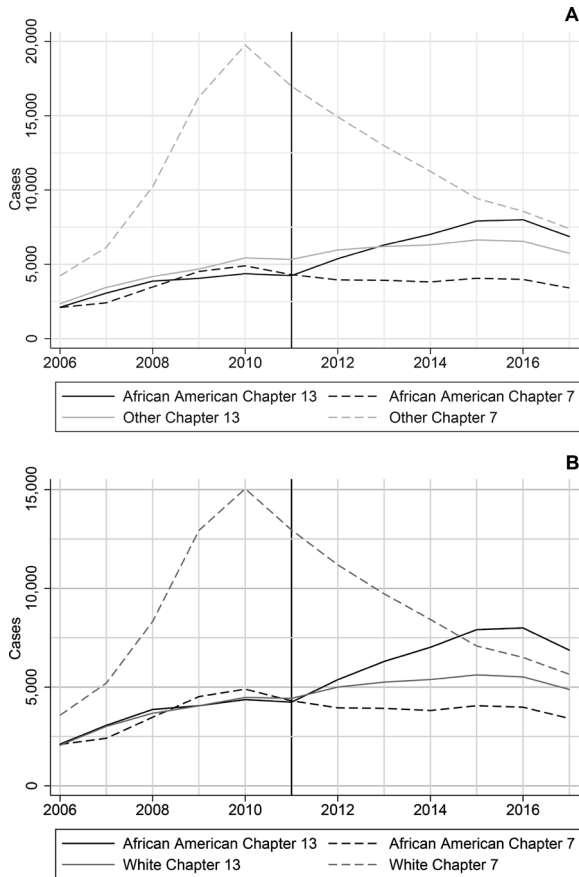


Figure 3. Total bankruptcy filings by race

where B_{it} is equal to one if consumer i filed a Chapter 13 petition in calendar year t and equal to zero if she filed for Chapter 7. The variable $\text{African American}_i$ is equal to one if the consumer is African American, θ_t is a vector of calendar-year fixed effects, and matrix \mathbf{X}_{it} includes a variety of controls, including the (log) value of personal property, real property, total debt, secured debt, and monthly income and expenses.¹³ The coefficient of interest is μ_k , which measures the change in the probability of a Chapter 13 filing among African Americans relative to other debtors, and we calculate it during the calendar years prior to and following 2011, when the Emanuel policy was rolled out. Standard errors are clustered by zip code. The identifying assumption in our model is that, conditional on observables, the timing of the choice between Chapters 7 and 13 is unrelated to the individual's race, up to a constant difference. By interacting $\text{African American}_i$ with

¹³ We avoid zeroes by using the log of the variable plus \$1.

year fixed effects both before and after the policy was rolled out, we can assess whether prepolicy trends are (in)consistent with our identifying assumption.¹⁴

Figure 4 presents the values for μ_k from this model (the baseline estimates in Table 3). We observe a sudden jump upward, immediately after implementation of the Emanuel policy, in the relative probability that an African American debtor selects Chapter 13 instead of Chapter 7. By 2013, African American bankruptcy filers were 5 percentage points more likely to choose Chapter 13, relative to other debtors.¹⁵ The pre-2011 interactions between African American and calendar year show little or no evidence of a prepolicy trend: the difference between African American and other debtors is small, negative, and generally insignificant. We conclude that the Emanuel policy caused an increase in Chapter 13 filing rates, especially among African Americans.¹⁶

4.2. Mechanisms: Race and Distance

Prior work has argued that racial discrimination by attorneys explains the higher propensity of African American debtors, relative to others, to file for Chapter 13. Another plausible hypothesis is that the higher propensity is caused by differences in background characteristics of African American and other debtors. Evidence consistent with this hypothesis appears in Figure 5, which plots the ratio of Chapter 13 filings during a given quarter to DLS notices during the preceding two quarters by zip code. We view this ratio as a measure of the Chapter 13 take-up rate among consumers who received DLS notices. Prior to the Emanuel policy, the ratio was virtually identical for African Americans and others. After the policy was implemented, we see a divergence in the ratio, with DLS notices translating into Chapter 13 filings at a higher rate for African Americans than others. This pattern suggests that license suspensions could be more costly to African Americans, on average, inducing them to file for Chapter 13 at a higher rate than others.¹⁷

One reason why license suspensions could be more costly for African Ameri-

¹⁴ Although we do not have individual-level data for jurisdictions outside the Northern District of Illinois, we can run tract-level analysis comparing outcomes in Chicago tracts with matched tracts outside Chicago. We run that analysis in Section OA2 of the Online Appendix and obtain results comparable to those reported in the main text.

¹⁵ The μ_k coefficients appear to decline in 2015 and 2016, which may reflect a slowdown in enforcement. Figure 2 shows that DLS enforcement decelerated among African Americans around 2015.

¹⁶ Online Appendix Table OA1 shows that the Emanuel policy caused a shift in the composition of debtors filing for Chapter 13. It presents means for debtors who filed Chapter 13 petitions during the 3 years before the Emanuel policy began (2008–10) and for debtors who filed for Chapter 13 during the 3 years after (2012–14). The results for all cases show that, after the Emanuel policy, Chapter 13 filers were more likely to be African American, be unmarried, have income below 200 percent of the poverty line, not own a home, and owe debt to the City of Chicago. Although there is no change in the proportion of filers who own a car, there is a sharp increase in the proportion of filers who own a car but not a home. Among individuals who own a car but not a home, the majority of filers are African American during the post-Emanuel-policy period.

¹⁷ We observe comparable patterns when we count only the number of initial DLS notices, as Online Appendix Figure OA3 shows.

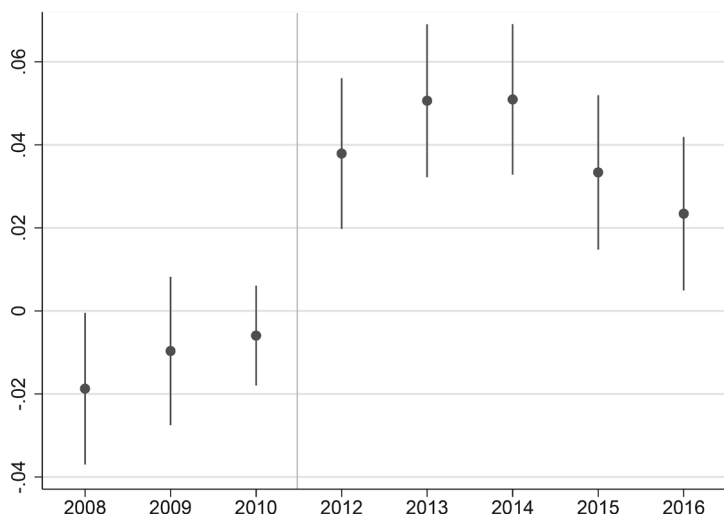


Figure 4. Event-study difference-in-difference estimates

Table 3
Effect of the Emanuel Policy on Share of Chapter 13 Filings

	Baseline	Long Commute	Short Commute	Matching	Matching within Tract
African American \times 2008	-.019* (.044)	-.012 (.318)	-.015 (.688)	-.013 (.223)	-.00050 (.972)
African American \times 2009	-.0096 (.289)	-.010 (.371)	.024 (.459)	-.0037 (.722)	.0030 (.831)
African American \times 2010	-.0059 (.331)	.00042 (.968)	-.067 (.091)	.0014 (.888)	.0059 (.642)
African American \times 2011					
African American \times 2012	.038** (.000)	.037** (.001)	.0072 (.848)	.022* (.024)	.018 (.179)
African American \times 2013	.051** (.000)	.042** (.000)	.000064 (.999)	.033** (.001)	.0095 (.501)
African American \times 2014	.051** (.000)	.050** (.000)	.0015 (.976)	.046** (.000)	.0086 (.545)
African American \times 2015	.033** (.001)	.035** (.002)	-.024 (.456)	.039** (.000)	.012 (.350)
African American \times 2016	.023* (.013)	.027* (.020)	-.059 (.142)	.026** (.007)	-.0043 (.759)
N	259,390	116,652	31,539	154,225	55,259

Note. All regressions include zip-code fixed effects (first column) or tract fixed effects (other columns), year fixed effects, and case controls.

* $P < .05$.

** $P < .01$.

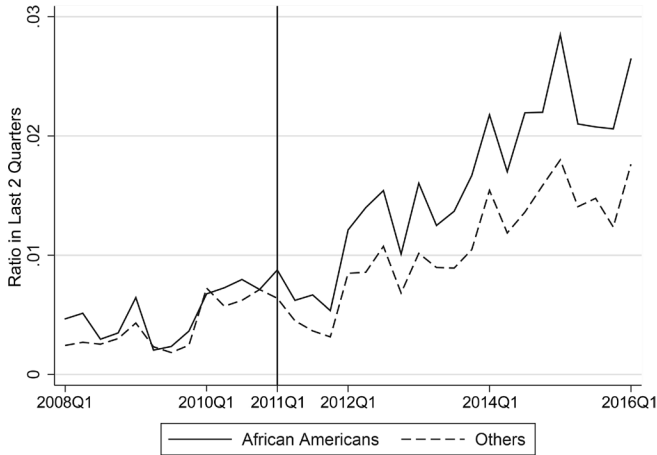


Figure 5. Ratio of Chapter 13 filings to suspension notices by race

cans is that they are more likely to live in geographic areas with longer commutes to work, supermarkets, schools, and other destinations. To explore this hypothesis, we identify long-commute debtors, who are likely to place relatively high value on their licenses and cars and therefore incur relatively high costs from license suspension and vehicle seizure. We assume a debtor has a long commute if she lives in a census tract that is either classified by the FDA as a food desert or in the top quartile of tracts as measured by percentage of residents who travel more than 45 minutes to work. Similarly, we define a short-commute debtor as one who lives in a tract that is not a food desert and is among the bottom 50 percent of tracts as measured by percentage of residents traveling more than 45 minutes to work. We estimate equation (1) separately for each subsample. Figure 6 reports the coefficients, which show relatively small and statistically insignificant effects of the Emanuel policy in short-commute tracts (Figure 6B), indicating that the policy response among African American debtors is indistinguishable from the response among other debtors (coefficient estimates are reported in Table 3). In long-commute tracts (Figure 6A), by contrast, we observe a sharp postpolicy response among African American debtors relative to other debtors.¹⁸ This result is consistent with the hypothesis that commuting time is an important determinant of Chapter 13 filings, but it is unclear why commuting time matters more for African Americans than other debtors living in the same tracts. One possibility is that, even within a given tract, African Americans have longer commutes.

We explore this possibility by matching African American debtors to other debtors who are observationally identical. Our matching algorithm is standard

¹⁸ We observe the same pattern—no effect in short-commute tracts and large effects in long-commute tracts—when we drop food deserts and compare tracts with relatively long and short commutes. We also observe the same pattern when we drop tracts in which one group (African American, Hispanic, or other) accounts for more than one-third of the population.

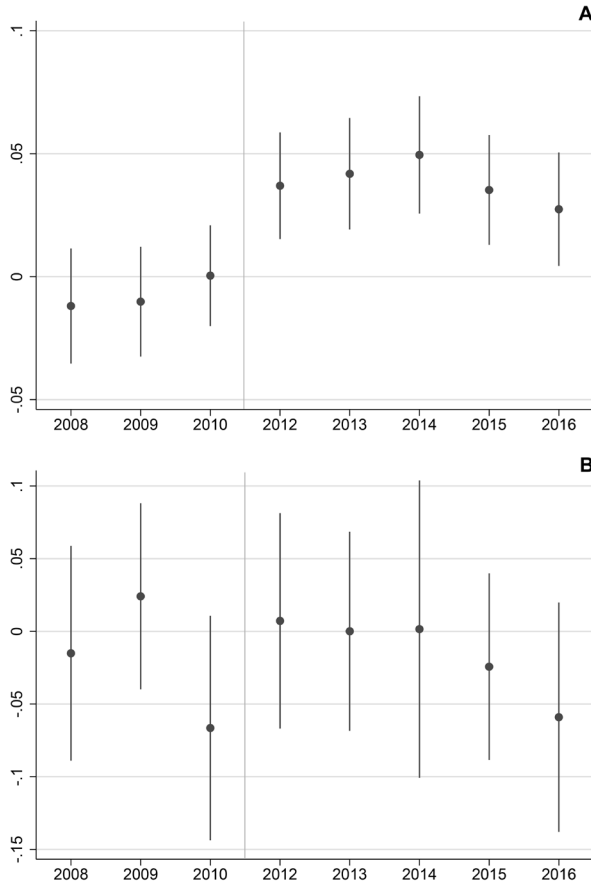


Figure 6. Event-study difference-in-difference estimates by commuting time. A, Long-commute sample; B, short-commute sample.

nearest-neighbor propensity-score matching with common support and no replacement (the procedure is described in more detail in Section OA1 of the Online Appendix). Figure 7 shows the effect of matching; Table 3 reports the coefficients. We begin by reproducing the baseline regression in Figure 7A. Matching on controls, as we do in Figure 7B, has little effect on the estimates, but matching on both census tract and observables has a marked effect, as we see in Figure 7C. Specifically, when African Americans are matched to others who are not only observationally similar but also live in the same tract, there is a sizable but imprecisely estimated effect in 2012 but no observable effect in subsequent years. We view this as evidence that although the Emanuel policy had a larger effect on African Americans, the typical African American debtor has substantially different characteristics—especially geographic location—than the typical non-African

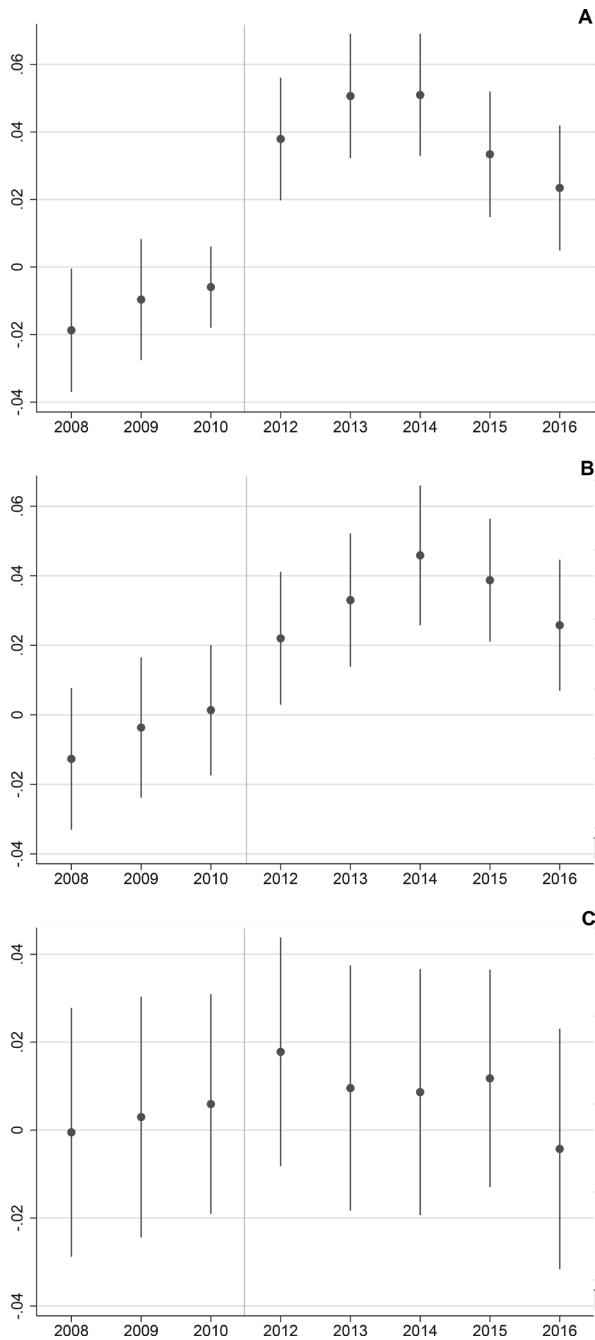


Figure 7. Effect of matching debtors. *A*, No matching; *B*, matching on controls; *C*, matching on tract and controls.

American debtor. These differences rendered African Americans more sensitive to the Emanuel enforcement policy and therefore more likely to file for Chapter 13 bankruptcy, which allows debtors to recover their cars and licenses.¹⁹

4.3. *Alternative Mechanisms*

We have focused on one difference between Chapters 7 and 13 that can generate a preference for Chapter 13 among African Americans: Chapter 13 allows the debtor to recover seized assets, such as driver's licenses. Another potentially important difference is that attorneys' fees generally must be paid in full before a debtor files for Chapter 7 but can be paid in installments after a debtor files for Chapter 13. Liquidity constraints, in other words, can generate a preference for Chapter 13, as documented by Gross, Notowidigdo, and Wang (2014), among others. Because the Emanuel policy effectively placed thousands of drivers into default, it increased demand for bankruptcy generally and especially increased demand for Chapter 13 among liquidity-constrained drivers. Racial differences in liquidity constraints—not differences in commuting distances—might therefore explain the post-Emanuel-policy increase in Chapter 13 filings among African Americans relative to others.

This mechanism is inconsistent with the estimates reported in Figure 7, which explicitly control for liquidity by including (log) income, assets, and debt in the regressions as well as the matching algorithm. Figure 7B, in other words, matches African American and other debtors on liquidity. We can go further, however, and explore the role of liquidity using variation in law firms' pricing. One firm in our sample, the LAF, served indigent clients and charged no legal fees regardless of chapter choice. Unsurprisingly, the LAF's clients were liquidity constrained, as Figure 8B shows by plotting the median income of cases filed by LAF clients and by other firms. If liquidity constraints are the primary reason for the post-Emanuel-policy rise in Chapter 13 filings, we are unlikely to observe an increase among LAF clients. Figure 8A plots the number of cases per year for LAF, showing an increase in the total number of Chapter 13 filings immediately after the Emanuel policy went online. Figure 8C plots the share of Chapter 13 filings, again showing a sharp post-Emanuel-policy increase. What is most striking here is that the postpolicy increase is sharpest for the debtors with liquidity constraints; that is, those represented by the LAF. Consistent with the fact that this pro bono agency selects debtors who are very poor, regardless of race, Figure 8D shows that the postpolicy increase is nearly identical for both African Americans and other debtors. We view these patterns as evidence that liquidity constraints do not fully

¹⁹ Our results reflect both responses along the intensive margin (increased demand for Chapter 13 among consumers who would have filed for some type of bankruptcy in the absence of the policy) and responses along the extensive margin (increased demand for Chapter 13 among consumers who were unlikely to file for bankruptcy in the absence of the policy). Section OA3 of the Online Appendix attempts to isolate responses along the extensive margin by focusing on consumers who had little or no reason to file for bankruptcy in the absence of the Emanuel policy.

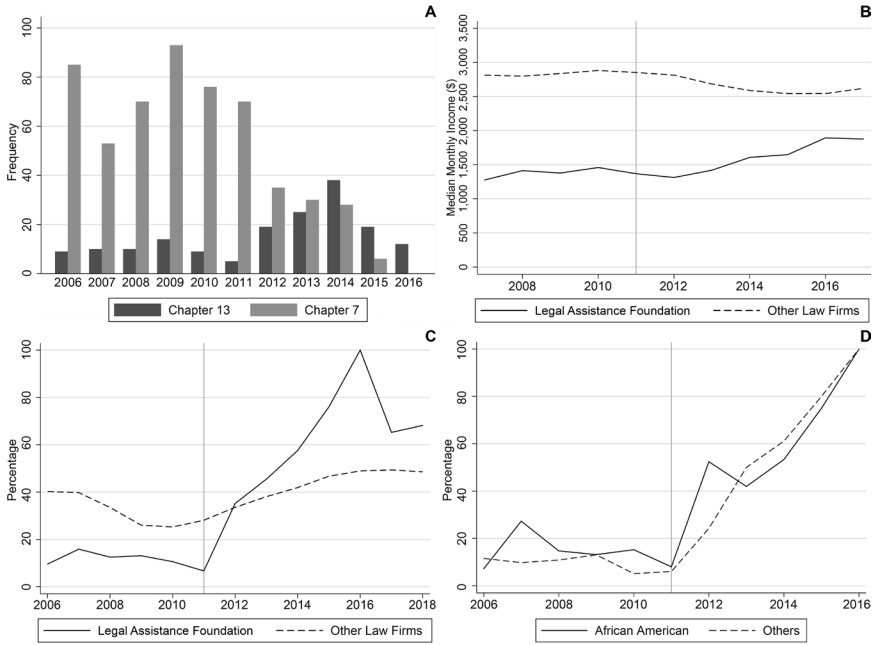


Figure 8. Law firms' pricing and liquidity constraints. *A*, Cases filed by the Legal Assistance Foundation; *B*, median debtor income; *C*, share of Chapter 13 filings; *D*, Legal Assistance Foundation's chapter 13 filings by race.

explain the post-Emanuel-policy increase in Chapter 13 filings by African Americans.

4.4. Effect on Total Filings

Our analysis has focused primarily on a compositional change: the Emanuel policy increased the share of Chapter 13 bankruptcy filings, especially among African Americans. The policy had effects on the level of filings as well. To show this, we construct a synthetic control group of non-Chicago zip codes, located anywhere in the United States, that are the nearest-neighbor matches for the Chicago zip codes in our data. We match Chicago and non-Chicago (control) zip codes using 2010 census data, including bankruptcy filing rates, the share of Chapter 13 bankruptcy filings, median income, percentage of residents below the poverty line, and percentage of residents who are African American.²⁰ Figure 9 shows the annual per capita filing rate for Chicago and control zip codes. Figure 9A and B split the zip codes by race, with African American zip codes defined as those where African Americans account for over half of the population. Figure 9A shows little discernible difference in Chapter 7 filing rates between Chi-

²⁰ Section OA1 of the Online Appendix describes the matching procedure in detail.

Table 4
Effect of the Emanuel Policy on Filings: Cases Per Capita

	All Zip Codes	African American Zip Codes	Other Zip Codes
Chicago	.00081** (.008)	.0024* (.038)	.00057* (.018)
After Policy	-.00089** (.000)	-.00035 (.172)	-.0012** (.000)
Chicago \times After Policy	.0010** (.000)	.0035** (.000)	.00053* (.022)
Dependent variable mean	.00431	.00914	.00383
N	1,320	320	1,000

Note. All regressions include zip-code controls.

* $P < .05$.

** $P < .01$.

cago and control zip codes during the post-Emanuel-policy period, though African American filings in Chicago decline less sharply than filings in the control zip codes. Figure 9B, by contrast, shows a large difference in Chapter 13 filings for both African Americans and others: filing rates in Chicago diverge sharply from the controls during the post-Emanuel-policy period. Figure 9C shows the per capita filing rate for all types of bankruptcy, regardless of race. We see that the postpolicy increase in Chapter 13 filings prevented total filings in Chicago from declining as sharply as they did in the control zip codes.

We can use a simple difference-in-difference estimator to calculate the extent to which the Emanuel policy elevated total filings in Chicago relative to the control zip codes. Table 4 shows that, without the Emanuel policy, per capita bankruptcy filings in Chicago would have been .001 lower. Put differently, relative to the mean per capita filing rate in Chicago (.00431), filings in Chicago would have been over 20 percent lower in the absence of the Emanuel policy. Among African Americans, filings would have been over 35 percent lower. To put this into perspective, there were about 17,000 bankruptcy filings in Chicago during 2012. Our estimates indicate that nearly 4,000 of these filings were caused by the Emanuel policy.

5. The Relative Importance of Attorney Steering

Our analysis shows that selection effects are an important explanation for racial disparities in consumer bankruptcy because Chapter 13 is attractive to consumers seeking to protect key assets such as cars and driver's licenses. Because of geographic disparities, including relatively longer commuting times, African American bankruptcy filers place a higher value on those assets than filers in other racial groups and, therefore, are more likely to file a Chapter 13 case.

Our data point to another potential selection effect: Chicago-area attorneys often specialize in one type of bankruptcy case (Chapter 7 or 13), and the attorneys who favor Chapter 13 are also the attorneys most often used by African American

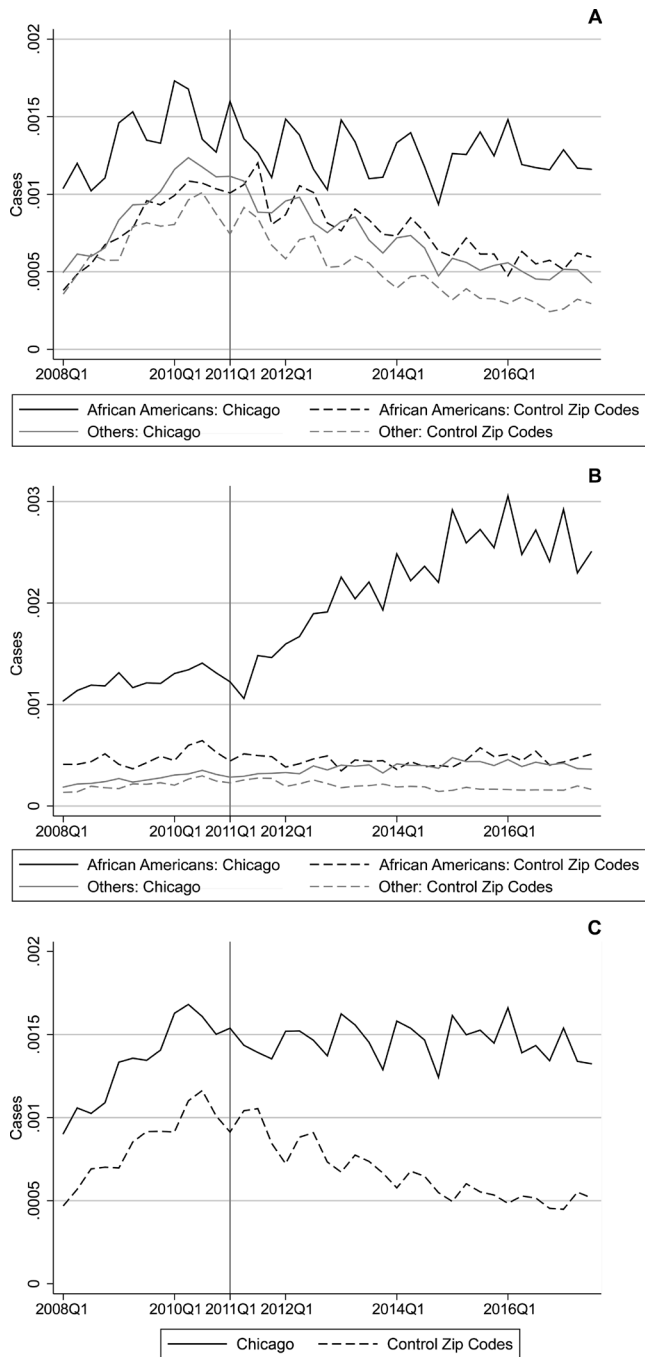


Figure 9. Effect on filings. A, Chapter 7 filings; B, Chapter 13 filings; C, filings per capita

debtors. Indeed, two attorneys (Geraci and Semrad) account for nearly 80 percent of Chapter 13 filings by African Americans. To the extent that consumers select attorneys on the basis of factors that are unrelated to their underlying case characteristics—such as distance (Lefgren, McIntyre, and Miller 2010) or social networks (Miller 2015)—we may observe racial disparities in Chapter 13 simply because African Americans select attorneys who favor Chapter 13 and do so regardless of race.

Table 5 explores racial disparities in Chapter 13 filings after accounting for these potential selection effects. These regressions analyze the subset of Chapter 7 and 13 bankruptcy cases filed by African American and white consumers—the comparison drawn in prior literature. Pro se filings are excluded because our goal is to assess how much of the racial disparity in bankruptcy is attributable to law firms' behavior. Columns 1 and 2 present the results of a simple regression in which the dependent variable is a dummy equal to one if the consumer chose Chapter 13 (and zero if she chose Chapter 7); the only regressor in column 1 is the consumer's race, while column 2 adds time fixed effects. Both columns yield roughly the same coefficient, which shows that African Americans are about 25 percentage points more likely to file a Chapter 13 case relative to non-Hispanic consumers. This coefficient is consistent with prior literature, such as Braucher, Cohen, and Lawless (2012, table 2), which finds a 26.1-percentage-point difference between African American and white Chapter 13 filing rates. Column 3 adds attorney fixed effects, which account for the possibility that some consumers tend to select attorneys with strong preferences for one style of bankruptcy. This control, by itself, reduces the size of the African American coefficient by over 50 percent. Columns 4 and 5 rerun the analysis on two subsamples: consumers with no debt owed to the City of Chicago and consumers with such debt. We create these subsamples to account for the selection effect documented in this paper: Chapter 13 is particularly attractive to consumers who owe debts to the City of Chicago and are therefore at risk of having their cars seized or licenses suspended. Once we separate the two subsamples in this way, the coefficient on the African American dummy drops by 50 percent again.

Finally, in columns 6 and 7 we include zip-code fixed effects, which help account for differences in commuting time across zip codes. This control causes the African American dummy to fall by over 50 percent again. Thus, with the full battery of controls, the share of Chapter 13 among African American consumers is only 1 or 2 percentage points higher than among white consumers. Selection effects might, therefore, be the primary driver of perceived racial disparities in bankruptcy.

6. Conclusion

It is well understood that Chapter 13 is most valuable to distressed consumers hoping to retain assets they would lose in Chapter 7 or outside bankruptcy. That well-understood phenomenon provides an (at least partial) explanation for racial

Table 5
Racial Steering and Selection Effects

	(1)	(2)	(3)	No Debt (4)	Debt (5)	No Debt (6)	Debt (7)
African American	.25** (.000)	.24** (.000)	.10** (.000)	.052** (.000)	.046** (.000)	.022** (.000)	.010** (.008)
Year-quarter fixed effects	No	Yes	Yes	Yes	Yes	Yes	Yes
Law-firm fixed effects	No	No	Yes	Yes	Yes	Yes	Yes
Zip-code fixed effects	No	No	No	No	No	Yes	Yes
N	213,263	213,263	205,103	137,540	63,607	137,540	63,607

** $P < .01$.

disparities in bankruptcy, as illustrated by Chicago's policy. As the city increased the rate at which it seized driver's licenses and cars, residents increased the rate at which they filed for Chapter 13, which allows immediate recovery of those assets and permits discharge of city debt, neither of which is possible in Chapter 7. The increase in Chapter 13 filings was largest for African Americans, who are more likely to incur city debt and who appear to experience larger costs from asset seizure because they have longer commutes to work and amenities. Thus, racial differences in debt burdens and in the costs of debt enforcement help explain well-documented racial disparities in bankruptcy filings.

Our findings suggest that Chapter 13 plays an important role in allowing the working poor to retain access to transportation. In this paper, the importance of Chapter 13 is driven, in part, by a quirk of the bankruptcy code: fines, such as parking tickets, can be discharged in Chapter 13 but not in Chapter 7. But even if this rule were eliminated, Chapter 13 would remain important to the working poor because it permits consumers to retain (and recover) assets that are vulnerable to collection by creditors. For example, a Chapter 13 filing allows a consumer to retain a vehicle that might otherwise be seized by a lender. Because of the importance of Chapter 13 to the working poor, it is puzzling that the same rules apply to both poor and nonpoor debtors. For example, bankruptcy courts often require debtors to pay a minimum recovery to unsecured creditors (for example, 10 percent of outstanding debt).²¹ A requirement like this renders Chapter 13 infeasible or unsuccessful for many poor debtors (see Morrison and Uettwiller 2017). Courts might consider relaxing those rules for the working poor.

Our findings also suggest that, because Chapter 13 may function as the only avenue of relief for the working poor faced with collection efforts that threaten their transportation options, the poor may have very weak bargaining power when they seek legal representation. Bankruptcy attorneys, therefore, are able to charge substantial fees for routine cases. Although Cook County is served by a large number of bankruptcy attorneys, 80 percent of African American debtors are represented by two law firms, which suggests substantial market power. Those attorneys can be assured of payment, even though the vast majority of Chapter 13 cases are dismissed before the debtor completes the repayment plan, because attorneys' fees are paid first as the debtor submits payments pursuant to the plan. Poor debtors, therefore, have weak bargaining power, agree to large fees, but typically receive no discharge because their cases are dismissed. Bankruptcy courts might consider limiting attorneys' fees in Chapter 13 cases, which would help mitigate the effects of the disparity in bargaining power.

Finally, our findings point to the role of nonbankruptcy policies (such as the City of Chicago's enforcement policies) in driving racial disparities in bankruptcy. In Chicago, these disparities would attenuate if the city were to reform its policies for collecting fines. Relative to other large cities such as Los Angeles and New York, Chicago allows its residents to accumulate large balances before tak-

²¹ Technically, this requirement is imposed by Chapter 13 trustees, with court consent; see Morrison and Uettwiller (2017) for a discussion.

ing steps such as seizing a vehicle or suspending a driver's license, as discussed in Sanchez and Kambhampati (2018). Not only is the city slow to collect, but there is no statute of limitations on parking tickets in Chicago (unlike Los Angeles and New York, which have 5- and 8-year limitations periods, respectively). Thus, by the time a driver's license is suspended, the outstanding balance may be much larger than a consumer's ability to pay, which triggers a bankruptcy filing. If the city were to act more quickly to collect fines, or if parking tickets were subject to a limitations period, consumers would have smaller balances when collection efforts commenced and would be more likely to pay those balances (or enter a repayment plan) without a bankruptcy filing.

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