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Local Government Dependence on Criminal Justice Revenue and Emerging Constraints

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Abstract

Revenue generated through the criminal justice system has become a key component of local government budgets across the United States. Although numerous restrictions exist to constrain traditional sources of revenue, only recently have legislators introduced checks on the fiscal profitability of fines, fees, forfeitures, and asset seizures. Left unrestricted, fiscal incentives have demonstrably manifested in the enforcement patterns and discretionary decisions of police. The transformation of officers into agents of revenue creation leads to increased targeting of minority populations and out-of-towners, with emphasis on arrests that yield potential property seizure, with negative consequences for both community trust and the provision of public safety. Those burdened with legal financial obligations are disproportionately poor, positioning the criminal justice system as a pointedly regressive form of taxation. We discuss the mechanisms behind criminal justice revenue generation, the consequences to law enforcement outcomes, and policies designed to reform and mitigate revenue-driven law enforcement.

INTRODUCTION

The elected officials managing local governments in the United States are rarely given sufficient credit for the budgetary tightrope they must navigate. Dependence on property taxes directly connects the revenue base of local governments to the vagaries of both the local real estate market and the broader economy. They cannot inflate away their problems by printing money, and many states have tied their local governments to the fiscal mast, constitutionally committing them to tax and expenditure limits that can go as far as refunding every surplus dollar collected (Joyce & Mullins 1991). Come election season, they face voters that prefer higher spending, lower taxes, and a budget balanced by debt financing not always accessible for smaller municipal governments (Banzhaf & Oates 2012). Even if they navigate all of these hurdles, should they fall short in their provision of preferred public goods or overshoot in the levied tax burden for key constituents, their tax base may simply choose to leave (Tiebout 1956). Given these conditions, it should be expected that elected officials and their bureaucratic agents welcome with open arms any and all sources of revenue unobstructed by constitutional and political constraints.

The criminal justice system, over the past thirty years, has become a common means by which local governments balance their budgets, with many municipalities going so far as to become dependent on fine and fee revenue to maintain solvency (Carpenter et al. 2019, Colgan 2017a, Maciag 2019, Makowsky 2019). In a case study of Morrow, Riverdale, and Clarkston, Georgia, Carpenter et al. (2019) found that each collected between 14% and 25% of their total revenues from fines and fees between 2012 and 2016. Revenues collected were predominantly from traffic and city ordinance violations that posed little to moderate risk to public safety, suggesting a strong revenue motivation for law enforcement. In the wake of the Department of Justice investigation into Ferguson, Missouri, and the local government's fiscal dependence on fines and fees levied on African Americans, the US Commission on Civil Rights identified 38 US city governments whose budgets were more dependent than Ferguson on similar revenues (USCCR 2017); Maciag (2019) identified 284 such jurisdictions.

The 2012 Census of Governments reports local government fine and forfeiture revenues were equivalent to 7.4% of all law enforcement and court expenditures within the middle quintile of reporting counties (Liu et al. 2019). Local governments in the top 5% of counties were able to offset roughly half of these expenditures through criminal justice collections (see **Figure 1**). These numbers include all fines and penalties as well as conviction-contingent fees. They do not, as classified, include the yield from confiscated property sales, processing fees, and supervision or incarceration fees, which are often far greater than the principal fines.[1] Baicker & Jacobson (2007) estimated that US Department of Justice and state seizures amount to roughly $3 per capita on average (with a standard deviation of $5). Including such revenues, we expect that far more local governments employ a police department that generates revenues in excess of costs. For this minority

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[1]Within the Census of Governments classification manual for reporting governments, revenues reported as fines and forfeitures (code U30) are directed to include "Revenue from penalties imposed for violations of law; civil penalties (e.g., for violating court orders); court fees if levied upon conviction of a crime or violation; court-ordered restitution to crime victims where government actually collects the monies; and forfeits of deposits held for performance guarantees or against loss or damage (such as forfeited bail and collateral)" and should exclude "Penalties relating to tax delinquency...library fines...and sale of confiscated property (use code U99)" (US Census Bureau 2006). It appears that, in practice, revenues from confiscated property sales (especially prior to 2005) were likely accounted for within two separate miscellaneous categories, as well as fines and forfeitures. We can be confident in the assumption that "fines and forfeitures," as a category, regularly underestimates the total revenues from law enforcement for any government entity.
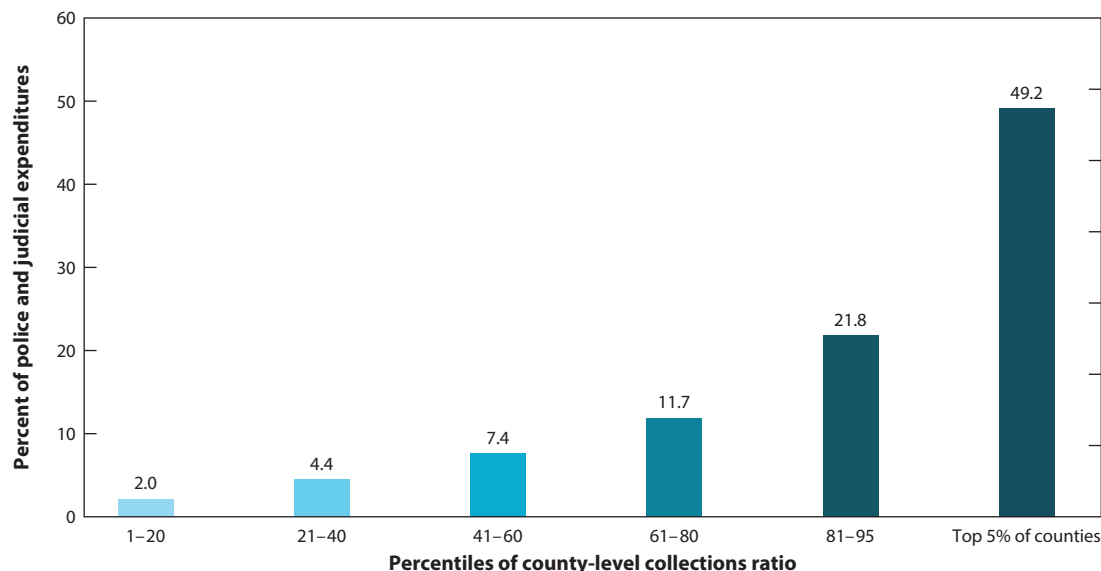
Figure 1

Criminal debt collections as a share of police and court expenditures within counties, by county percentile. Revenue from fines and forfeits includes penalties imposed for violations of law, civic penalties, court fees if levied upon conviction, court-ordered restitutions to crime victims, and forfeits of deposits held (such as forfeited bail and collateral). The sale of confiscated property is not included. Police and court expenditures cover current operations, construction, land, and existing structures as well as equipment, all of which are for police protection and judicial and legal functions. Data include observations at the city and county level, aggregated to the county level. Counties in higher quintiles have higher shares of criminal debt collection. Adapted from Liu et al. (2019). Original data source: US Census Bur. (2013).

of local governments, law enforcement has become a source of revenue depended on for fiscal solvency.[2]

In his construction and analysis of local government revenues, Maciag (2019) found that fines and fees have become a critical source of revenue. For each town, city, and municipal government identified, Maciag (2019) calculated the fines as a share of general revenues and the total fines per adult resident, reporting the number of local governments over certain thresholds for each state. The top ten states and totals including all states are reported in **Table 1**. Some of these local governments collect up to 80%–90% of their general revenues from fines and forfeitures, and others collect more than $500 per resident, suggesting the majority of fine revenue comes from out-of-towners in those localities. These states tend to be concentrated in the south, where there are more rural towns. Maciag (2019) argued the biggest impact is on the smaller localities because they have smaller tax bases and long-developed dependencies. Several of these smaller localities also tend to circumvent legal restrictions on fine revenue. Missouri, Georgia, Maryland, and Texas all have caps on fine-generated revenue, but there are ways to get around legal restrictions and often states simply do not enforce them.[3]

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[2]Although our focus here is on local governments, it should be noted the federal government also profits from public enforcement. In FY 2012, federal agencies collected $4.152 billion from health care fraud lawsuits, financial sanctions, and civil and criminal penalties (Lemos & Minzner 2013).

[3]For example, Maciag (2019) found several localities in West Virginia that had not conducted their required annual audits for at least five years.

Table 1   Local government fines by state

Fines as a share of general revenues[a]				
State	**Over 10%**	**Over 20%**	**Over 30%**	**Over 50%**
Georgia	92	52	30	13
Texas	90	39	22	10
Louisiana	70	49	40	25
Oklahoma	55	42	29	14
Arkansas	44	14	11	3
New York	34	12	5	1
Illinois	33	11	4	1
Ohio	24	15	10	8
Tennessee	18	12	10	2
Missouri	18	6	2	-
TOTALS	583	284	179	80
Total fines per adult residents[b]				
State	**Over $100**	**Over $200**	**Over $300**	**Over $500**
Texas	147	77	40	22
Georgia	87	54	37	19
Louisiana	66	48	36	21
Oklahoma	53	33	22	14
Ohio	41	21	16	6
Illinois	41	14	11	4
New York	39	11	4	2
Tennessee	24	14	8	6
Arkansas	19	11	10	5
Florida	19	8	6	2
TOTALS	723	363	233	124

[a]Number of local governments in each state where the sum of fines, forfeitures, and other court revenue exceeds the stated percentage. Top 10 states reported. Either FY2018 or FY2017.
[b]Number of local governments in each state where the sum of fines, forfeitures, and other court revenue per adult resident exceeds the stated dollar value. Top 10 states reported, FY2018 and FY2017. Both figures exclude governments (*a*) reporting less than $100,000 in fines or other court revenues and (*b*) with insufficient public audit records that did not respond to requests for additional information (Maciag 2019).

Liu et al. (2019) showed that spending on police, judicial and legal services, and corrections has increased substantially over time. Between 1982 and 2015, expenditures within these categories increased from $388 per capita to $937 per capita (Liu et al. 2019). There are counties whose fine and fee revenue regularly exceeds police and judicial expenditures. A large portion of assets collected via forfeiture, at both the federal and state levels, are seized without a criminal conviction. Bail is too expensive for the average household income. Partially due to the inability to post bail (Reaves 2013), approximately 460,000 people are incarcerated daily without having been convicted of a crime. Roughly two-thirds of those who are incarcerated are charged some sort of fine or fee. In Alabama, at least half of individuals with a felony conviction carry more than $5,000 in criminal debt, much of which will likely never be collected (Liu et al. 2019), and those with criminal debt have higher recidivism rates.

The Return of Tax Farming

The explicit establishment of law enforcement as agents of revenue generation, particularly in sub-national governments, is not a new practice, going back to ancient Rome (Webber & Wildavsky 1986). Fines collected in the feudal and seignorial courts of Europe were a significant source of revenue that lords collected through their private court systems (Coşgel et al. 2011). The privilege of retaining tax and fine revenues was typically delegated to the same entity by provincial governors in the Ottoman Empire (Coşgel et al. 2012). Profit motives, in the form of piecemeal employment incentives, were an explicit part of the US criminal justice system prior to World War I (Parrillo 2013). Tax agents received a share of additional remittances resultant of any evasion they uncovered. Prosecutors were rewarded with additional fees per conviction. In the early twentieth century, however, financially motivated overenforcement became a significant public concern and most of these types of rewards vanished (Parrillo 2013).

Johnson & Koyama (2014) demonstrated within a historical model how the piecemeal contracting of tax collection to individuals and monopsonistic cabals, i.e., tax farming, proved crucial in seventeenth-century Europe to the expanding of governments operating under significant capacity constraints. Giving collection agents a direct share of the proceeds collected is a means to efficient taxation of income and other property that is otherwise infeasible for both historic macro-states and modern, smaller, subnational governments. Incentivized as the budget-maximizing agents of vote-maximizing principals, law enforcement in smaller cities and municipalities in the United States have, in effect, been recast as the tax farmers from antiquity, providing a second-best solution for capacity-constrained governments.

True to historical form, it is within the smallest local governments that we observe the greatest dependence on revenue generated by the criminal justice system. Government revenues characterized by the largest shares from fines, non-property-seizure-related forfeitures, and court fees are predominantly observed in counties in the lowest population quartile (**Figure 2**). Similarly, the local governments most dependent on criminal justice revenues [presented in **Table 1**; Maciag (2019)] are predominantly from rural areas with smaller constituent tax bases and limited
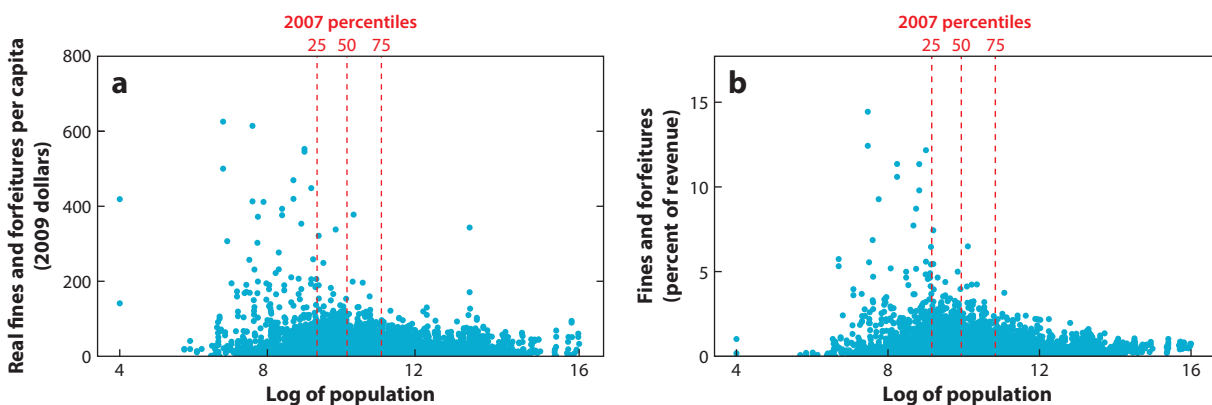
Figure 2

County fine and forfeiture revenues. (*a*) Per capita fine and forfeiture revenues and county population, 1977–2012. (*b*) Fine and forfeiture share of total revenues and county population, 1977–2012. In 2005, the Census of Governments expanded the sample to include smaller counties, generally those with populations less than 250,000. The dotted lines denote the 25th, 50th, and 75th percentiles of county population in the 2007 Census of Governments. Original data sources: Census of Governments, US Census Bureau 1977–2012 (available at **https://www.census.gov/data/tables.html**) and author's calculations.

government resources. From the point of view of government officials seeking to sustain solvency and, in turn, the continued existence of their own elected and paid positions, dependence on criminal justice revenues is not just a function of opportunity but also necessity born of limited alternatives.

REVENUE MECHANISMS WITHIN CRIMINAL JUSTICE

Financial sanctions are an economically sound form of punishment (Becker 1968, Ehrlich 1996), but the possibility of overzealous enforcement, particularly regarding "victimless" crimes, complicates any model of optimal deterrence (Landes & Posner 1975). Virtually every step of the criminal justice process can generate revenue at the expense of alleged offenders. The prospects for generating revenue via the criminal justice system have become so fully integrated into local political economies that fiscal motivations cannot be left out of any model of welfare-maximizing law enforcement.

The broad categories of sanctions that can be levied on individuals pulled into the criminal justice system fall under the umbrella category of legal financial obligations (LFOs) (Logan & Wright 2014, Pleggenkuhle 2018, Ruback 2015). Within the Revised Model Penal Code are six types of LFOs: (*a*) victim restitution, (*b*) fines, (*c*) costs, (*d*) fees, (*e*) assessments, and (*f*) asset forfeitures (Am. Law Inst. 2017). Victim restitution is given priority over all other LFOs; is paid by the offender, postconviction, to the victim(s) of his crime; and, in contrast to the other five categories, cannot be used for government expenses (Am. Law Inst. 2017).[4]

It is with the other five categories and their viability as revenue for local governments that we concern ourselves here. Researchers, journalists, and government officials have compiled data on the revenues generated within each category, to differing degrees of success. With regard to each, we take care to discuss what is known while also pointing out the limitations within the available data.

Fines

Although costs, fees, and assessments are ostensibly imposed to cover expenses incurred by the criminal justice system, the stated goal of fines is punishment and deterrence (Appleman 2016, Logan & Wright 2014, Ruback 2015). Fines, or financial penalties for a crime or violation, are typically set by statute. The amount of the fine is based on the severity of the crime, as well as the harm suffered by the victim and the offender's ability to pay (Appleman 2016, Logan & Wright 2014, Ruback 2015). Fines do not have to be the sole punishment for a crime; the offender may be charged a fine in conjunction with another punishment, such as prison time (Bannon et al. 2010, Martin et al. 2018, Polinsky 2006, Ruback 2015). Many fines also tend to have surcharges added at the outset of the fine (Appleman 2016, Logan & Wright 2014). Surcharges can be flat rates or percentages of the fine and are another source of revenue for the criminal justice system (Appleman 2016).

Fees, Costs, and Assessments

Fees, costs, and assessments, used interchangeably here and throughout, are the most common types of LFOs (Ruback 2015). They all refer to an economic sanction used as a revenue source to

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[4]The ostensible goal of restitution is not to punish the offender but to restore the victim's economic, emotional, or psychological losses (Appleman 2016, Martin et al. 2018, Ruback 2015).

reimburse the criminal justice system for operating costs. They include LFOs such as administrative expenses, as well as costs for services issued by the court and other expenditures (Appleman 2016, Ruback 2015).

The prevalence of fees and the dollar amounts charged have increased substantially in recent decades (Bannon et al. 2010, Beckett et al. 2008, Beckett & Harris 2011). Florida, for instance, has added in excess of 20 types of financial obligations since 1996 while also increasing several of the current fees. Fees are charged on top of other fine and restitution charges and are often in excess of three times the combined fine and restitution charges (Bannon et al. 2010). A woman convicted of a drug crime in Pennsylvania in 2009 incurred fines of $500 and restitution charges of $345, while her 26 different fees totaled $2,464 (Bannon et al. 2010). In Alabama, depending on the city or county, a simple $20 base fine for running a stop sign or red light can turn into from $190 (Birmingham Municipal Court) to $263 (Walker County Municipal Court) with the addition of penalties and surcharges (LCCR 2017).

Various types of fees arise before a conviction. Varying by state and locality, fees can be charged pre-, mid-, and post-trial. Pretrial fees include those such as bail charges, booking fees (Logan & Wright 2014), and public defender fees (Appleman 2016, Logan & Wright 2014). Some localities even offer optional fees in place of going to trial, effectively buying a clean record (Appleman 2016, Logan & Wright 2014). Another option in some places for minor cases is a deferred prosecution agreement (Logan & Wright 2014). The suspect can agree to complete, e.g., community service or a drug program in exchange for the prosecutor conditionally dropping charges. Following conviction, fees can take the form of court or prosecution costs (Logan & Wright 2014), jury fees (Appleman 2016), a multitude of supervision fees (Appleman 2016, Logan & Wright 2014, Ruback 2015), and jail fees that could include telephone charges or room and board (Appleman 2016, Logan & Wright 2014). For an in-depth review of fines, fees, and costs, see Martin et al. (2018).

Property Forfeiture and Seizure

The US Department of Justice (2009, p. 8) defines forfeiture as "the taking of property derived from a crime, involved in a crime, or that which makes a crime easier to commit or harder to detect without compensating the owner." The forfeiture process begins with a "seizure," or what is effectively the changing of hands of the property in question. The forfeiture that follows falls into one of a few categories depending on the jurisdiction and the value of the seized property (Holcomb et al. 2011).

At the federal level, agencies file property forfeitures as either criminal or civil. Criminal forfeitures were first authorized in 1970 with the Racketeer Influenced and Corrupt Organizations Act (RICO) and the Controlled Substances Act (Blumenson & Nilson 1998, Solomon 1993, US Dep. Justice & Off. Atty. Gen. 1990, Warchol et al. 1996). Criminal forfeiture had initially been passed with very basic guidance and only for racketeering and drug kingpin offenses, finding limited application. As part of the Comprehensive Crime Control Act of 1984, the Comprehensive Forfeiture Act adjusted the legislation to make criminal forfeiture a stronger asset. With the motivation to stop drug trafficking, essentially any asset used in a crime or purchased with proceeds from a crime could now be forfeited (Warchol et al. 1996). The Anti-Drug Abuse Act of 1986 authorized the criminal forfeiture of "substitute assets." If the actual property or cash used in a criminal action is missing, law enforcement can forfeit other property of the same value as the missing property (US Dep. Justice & Off. Atty. Gen. 1990).[5]

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[5]Criminal forfeitures proceed in personam, i.e., "against the person." In order for the law enforcement agency to legally obtain the asset of a person, that person must be convicted of a crime beyond a reasonable doubt

State laws place additional strictures on seized property, predominantly with regard to the final destination of revenues generated. Statutes include requirements that dedicated portions of proceeds go toward paying off debt or educational line items (Williams 2002). The majority of states allow some portion to go back to the forfeiting law enforcement agency, whether the property itself is kept and used by the department or the proceeds pay for forfeiture expenses (Holcomb et al. 2011, Williams 2002). Eight states prohibit local law enforcement from retaining any proceeds from seized property, and the remaining 42 allow agencies to retain between 50% and 100% of revenue (Holcomb et al. 2011). State statutes mandate varying levels of standards of proof, some setting a burden of proof more restrictive than the federal requirement of a preponderance of the evidence (Holcomb et al. 2011).

Even in states with more restrictive standards of proof and limitations on revenue retention, there remains the opportunity for revenue-motivated law enforcement. The federal equitable sharing program was created in 1984 with the passing of the Comprehensive Forfeiture Act. State and local agencies can seize any property associated with a felony crime (even if no charges are actually levied) and then transfer it to federal agencies, who then return the property to the seizing agency via the appropriate federal equitable sharing fund—the Asset Forfeiture Fund or the Treasury Fund (Holcomb et al. 2011).

Depending on the type of case, the state and local agencies can receive up to 80% of the proceeds back from the federal fund (Blumenson & Nilson 1998, Holcomb et al. 2011). Under adoptive forfeitures, the state or local agencies seize the property for state crimes. However, federal agencies can adopt these forfeitures with a transfer from the state and local agencies if the crime is also a federal crime (Blumenson & Nilson 1998, Holcomb et al. 2011). State and local agencies can then receive 80% of the proceeds back while the government keeps the remaining 20% for costs associated with operating the federal funds (Holcomb et al. 2011). Budget maximizing incentives are likely to be a concern in nearly any property seizure context (Carpenter et al. 2019). Such concerns, however, are especially heightened with regard to equitable sharing forfeitures—proceeds can only be used to fund law enforcement activities or officer salaries, as long as the payment is going toward positions that were created to fill slots that were opened up when another officer was moved to a task force (Holcomb et al. 2011, US Dep. Justice 2009).

THE REVENUE-MOTIVATED LAW ENFORCEMENT HYPOTHESIS

The capacity for revenue generation changes the incentives of law enforcement agents and the government principals they serve. That said, an observed increase in revenue generated within the criminal justice system does not necessarily imply that fiscal motivations are a meaningful determinant of criminal justice outcomes. Estimating the salience of these incentives on outcomes requires identifying effects separate from agent responsibilities to respond to observed conditions, deter future crime, and provide broad public safety. Researchers within this growing literature use several strategies to estimate the impact of revenue motivations on officer discretion and the

(Holcomb et al. 2011, Solomon 1993, Warchol et al. 1996, Warchol & Johnson 1996). These circumstances include due process protections for the defendant, and the forfeiture does not take place until conviction (i.e., forfeiture and conviction happen at the same time) (US Dep. Justice & Off. Atty. Gen. 1990). Civil forfeitures fall under in rem jurisdiction, i.e., "against a thing", where the target of the forfeiture is the property instead of the person and does not require a formal hearing. These are typically forfeitures of contraband, when the property is illegal in all circumstances (Warchol et al. 1996). Administrative forfeitures are more common. With a currently capped value of $500,000, a law enforcement agency can seize cash or other property associated with illegal activity, given probable cause. Regardless of value, means of transportation used to carry controlled substances are also subject to seizure (US Dep. Justice & Off. Atty. Gen. 1990).

allocation of law enforcement resources. **Table 2** presents a breakdown of this literature, including the object of focus within the criminal justice system, identification strategy, and observed outcomes.

A simple political economy model of law enforcement as a budget-maximizing entity within local governments serves as a sufficient starting point. Such a model finds considerable support within the literature. Benson et al. (1995), Worrall & Kovandzic (2008), Holcomb et al. (2011), and Holcomb et al. (2018) each investigated whether law enforcement budgets are, in fact, sensitive to the manner in which officers carry out their duties. Benson et al. (1995) observed higher noncapital expenditure in police departments that collect more forfeited assets. Controlling for drug and other arrests and levels of crime, they found that the forfeiture revenues are not simply substituted for other general revenues by public officials, allowing officers to enhance their agency's budget. Worrall & Kovandzic (2008) and Holcomb et al. (2011, 2018) identified the effects of the state asset forfeiture laws on federal equitable-sharing payments to agencies or municipalities, testing the hypothesis that police entities in states that do not allow departmental retention of revenue from forfeitures are nonetheless able to circumvent their state laws and generate revenue through equitable sharing. Each article demonstrated that states with more restrictive forfeiture laws have higher federal equitable sharing payments. In a similar vein, Mughan et al. (2019) examined the difference in revenue incentives between sheriff departments and municipal departments. They observed that those in the elected office do not have as strong a response to the financial incentive, seizing far fewer assets, as their appointed counterparts.

Budgetary effects are persistent and self-reinforcing, as local governments and their police departments grow dependent on the criminal justice revenues for which they can be directly and indirectly credited (Baicker & Jacobson 2007, Beck & Goldstein 2017, Worrall 2001). Police officials, for all their efforts, are likely to find themselves on little more than a budgetary treadmill. As law enforcement succeeds in generating revenue, the expectation of self-funding enters into the budget, eventually displacing previous support from general funds to other expenditure line items. Each year they increase their revenue, higher government officials will have the opportunity to reduce general fund allocations for law enforcement, leaving police increasingly dependent on their own revenue generation just to maintain their budgetary status quo. Gains to the broader municipality may be limited as well. Carroll (2009) found that increased nontax diversification of revenue sources fails to increase year-to-year local fiscal stability.

Given the established relationship between budget incentives and revenue generation, it logically follows that officer discretion and deployment are sensitive to the costs and benefits associated with different law enforcement outcomes. Garrett & Wagner (2009) found that traffic tickets and citations depend on local fiscal conditions—towns ramp up ticketing while enduring budgetary shortfalls. Further in this vein, Makowsky & Stratmann (2009, 2011) observed that officer discretion depends on the residency status (in-town or out-of-town) of drivers in conjunction with fiscal conditions. Harvey (2020) exploited variation in laws in Canadian towns in Saskatchewan, identifying sharp discontinuities across town borders depending on the share of citation revenues that the towns in question are able to retain in their budgets.

Several papers explore the relationship between state-level forfeiture revenue retention laws and drug arrest rates (Baicker & Jacobson 2007, Bishopp & Worrall 2009, Kantor et al. 2017, Kelly & Kole 2016, Makowsky et al. 2019, Mast et al. 2000). Kantor et al. (2017) built an identification strategy around the implementation of the Comprehensive Crime Control Act of 1984 (implementation of federal equitable sharing) and the state forfeiture retention rates. They found that in states that otherwise limit police retention of proceeds from seized property, the establishment of federal equitable sharing redirected police effort toward drug enforcement. These states subsequently produced 37% more drug arrests while experiencing a 17% reduction in reported crime

Table 2 Summary of revenue-motivated law enforcement literature

Authors	Fines	Fees	Forfeitures	Equitable sharing	Observation level	Dependent variable	Explanatory variables	Model	Fixed effects	Errors	Data source	Results
Benson et al. (1995)	No	No	Yes	No	Agency	Noncapital expenditures of police	Value of assets forfeited, drug and other arrests	OLS	NA	Standard	FDLE	More seizures lead to higher police expenditures, consistent with agencies responding to monetary incentives
Mast et al. (2000)	No	No	Yes	No	City	Drug arrest ratio	Forfeiture laws	WLS	City, time	Standard	DUFP, UCR	States allowed to keep proceeds have higher drug arrest to total arrest ratios by ~20% and higher drug arrest rates by ~18%
Baicker & Jacobson (2007)	No	No	Yes	Yes	County	Police budget; drug arrest rate	Lagged seizures and deficits, introduction of forfeiture laws	OLS	County, year	Clustered	COG, DOJ, STRIDE, UCR	Local governments offset police seizures by reducing their general allocations to police, police then increase drug arrest rates, heroin prices also increase
Worrall & Kovandzic (2008)	No	No	Yes	Yes	Municipality	Forfeiture proceeds; equitable sharing payments	Forfeiture laws	Log–log	NA	Robust, clustered	LEMAS, UCR	Fewer equitable sharing payments collected in states with higher state retention rates, thus maximizing their potential for revenue generation

(Continued)

Table 2 (*Continued*)

Authors	Fines	Fees	Forfeitures	Equitable sharing	Observation level	Dependent variable	Explanatory variables	Model	Fixed effects	Errors	Data source	Results
Bishopp & Worrall (2009)	No	No	Yes	No	Municipality	Drug arrest rates	Forfeiture laws	OLS	NA	Robust, clustered	LEMAS, UCR	Contrary to Mast et al. (2000), no association between forfeiture laws and drug arrest rates; contrary to Baicker & Jacobson (2007), past asset forfeitures do not affect drug arrest rates
Garrett & Wagner (2009)	Yes	No	No	No	County	Percent change in traffic tickets	Local government fiscal health	OLS	County, time	Robust, clustered	LINC	Increase in traffic tickets following a year of decreased local government revenue
Makowsky & Stratmann (2009)	Yes	No	No	No	Traffic stop	Tickets and citations	Fiscal indicators, driver residency, distance to court	Probit, LPM, Heckman	Officer	Clustered	BG, RMV	Municipal fiscal conditions affect the issuance of traffic tickets, lower revenues from property taxes lead to more fines
Holcomb et al. (2011)	No	No	Yes	Yes	Municipal police, sheriff agencies	Equitable sharing amounts	Aspects of state forfeiture laws	Left-censored tobit	Region	Robust, clustered	LEMAS, DOJ AFF	More restrictive state forfeiture laws lead to more federal equitable sharing proceeds
Makowsky & Stratmann (2009)	Yes	No	No	No	Tickets per month by city	Traffic tickets, accidents	IV: indicator of fiscal distress, tickets	IV	NA	Clustered	BG, RMV, HDHSD	Fewer accidents with more tickets issued, fewer traffic injuries with more law enforcement

(*Continued*)

Table 2 (*Continued*)

Authors	Fines	Fees	Forfeitures	Equitable sharing	Observation level	Dependent variable	Explanatory variables	Model	Fixed effects	Errors	Data source	Results
Kelly & Kole (2016)	No	No	Yes	No	Agency	Serious crime clearances, drug arrests	Forfeiture proceeds	OLS	Agency, year	Standard	LEMAS, UCR	Weak support of forfeiture affecting police behavior, forfeiture is not vital for police funds and incentives
Kantor et al. (2017)	No	No	Yes	Yes	County	Reported crime, arrests, police budget, police strength	Forfeiture laws, CCCA	OLS	County, year	Clustered	COG, UCR	Crime fell where states had smaller retention rates before CCCA, shifted effort to drug crimes, increased roadway fatalities
Sances & You (2017)	Yes	Yes	No	No	Municipality	Fine revenue per capita	Percent African American	OLS	State, county	Robust	COG, US Census	More fines and fees collected in municipalities with higher African-American populations
Holcomb et al. (2018)	No	No	Yes	Yes	Jurisdiction	Equitable sharing proceeds	Index measure of state forfeiture laws	Multilevel tobit	NA	Standard	LEMAS, DOJ AFF	Agencies in states with state laws that are more restrictive or less rewarding to police collect more in federal equitable sharing payments

(Continued)

Table 2 (Continued)

Authors	Fines	Fees	Forfeitures	Equitable sharing	Observation level	Dependent variable	Explanatory variables	Model	Fixed effects	Errors	Data source	Results
Makowsky et al. (2019)	No	No	Yes	No	Jurisdiction	Drug, DUI, prostitution, and violent arrests	Deficits–state forfeiture law interaction	OLS	State, year	Robust, clustered	COG, NIBRS	With fiscal distress, increase in African-American and Hispanic drug, DUI, and prostitution arrests; increase in white prostitution arrests
Mughan et al. (2019)	No	No	Yes	Yes	Jurisdiction	Criminal, civil forfeiture revenues	Sheriff versus municipality, forfeiture law and forfeiture law	OLS	Year	Robust	LEMAS, DOJ ESP	Sheriff (elected) agencies seize less than municipal (appointed) agencies, sheriffs less responsive to forfeiture laws
Goldstein et al. (2020)	Yes	Yes	No	No	Municipality	Violent and property clearances	Own-source revenue from fines and fees, commuting times as IV	OLS, IV	County, time	Clustered	COG, UCR, CSL-LEA, ACS	Municipalities with higher shares of revenue from fines and fees have lower violent- and property-crime clearances
Harvey (2020)	Yes	No	No	No	Towns	Traffic citation rates	Whether a town receives fine revenue	RDD	Year	Robust, clustered	SMJ, SGI	Higher share of fine revenues leads to higher police effort and safer driving with only small effects on citation frequency

Abbreviations: ACS, American Community Survey; BG, Boston Globe; CCCA, Comprehensive Crime Control Act of 1984; COG, Census of Governments; CSLLEA, Census of State and Local Law Enforcement Agencies; DOJ AFF, Department of Justice Asset Forfeiture Fund; DOJ ESP, Department of Justice Equitable Sharing Program; DUFP, Drug Use Forecasting Program (National Institute of Justice); DUI, driving under the influence; FDLE, Florida Department of Law Enforcement; HDHSD, Massachusetts Highway Department and Highway Safety Division; IV, instrumental variable; LEMAS, Law Enforcement Management and Administrative Statistics; LINC, Log Into North Carolina; LPM, linear probability model; NA, not available; NIBRS, National Incident-Based Reporting System; OLS, ordinary least squares; RDD, regression discontinuity design; RMV, Massachusetts Registry of Motor Vehicles; SGI, Saskatchewan Government Insurance; SMJ, Saskatchewan Ministry of Justice; STRIDE, System to Retrieve Information from Drug Evidence; UCR, Uniform Crime Reporting; WLS, weighted least squares.

and a 22% increase in roadway fatalities. Makowsky et al. (2019) found increased rates of arrests for drug crimes, DUI, and prostitution, and higher rates of property seizure; these increases, however, are observed only for black and Hispanic arrest rates. Sances & You (2017) similarly observed that dependence on fine and forfeiture revenues in local governments is increasing with the size of the constituent African-American population.

If revenue motivations lead to greater prioritization of drug, DUI, or prostitution arrests, departments may, in turn, reduce the resources applied toward violent and property crime–related enforcement. It is at least feasible, however, that departments could generate sufficient revenue from prioritizing revenue-generating law enforcement that it results in a net increase in resources available to non-revenue-generating law enforcement. Goldstein et al. (2020) studied municipality police use of own-source revenue from fines and fees toward clearing reported violent and property crimes, using commuting zones in an instrumental variables identification strategy. Their results support the dominance of substitution effects; violent- and property-crime clearances are lower where fines and fees constitute a greater share of total revenue. Kelly & Kole (2016) and Makowsky et al. (2019) found weak relationships between seizure-related revenues on violent crimes, suggesting that movement of enforcement toward revenue generation is unlikely to be at the expense of the investigation and deterrence of the highest-profile and most serious crimes.

SUBOPTIMAL DETERRENCE, BIAS, AND DETERIORATING TRUST

Prior research has demonstrated the distortion of law enforcement and, in turn, its deviation from the optimal provision of public safety when revenue concerns enter the decision-making calculus of enforcement agents (Garoupa & Klerman 2002). These deviations from optimal enforcement manifest via the prioritization of fiscal profitability, which includes not just the expected yield of individual arrests but also the probability that arrest proceeds will be retained and the expected costs and benefits of associated adjudication. Goldstein et al. (2020) found that clearance rates of violent criminal incidents reported to police decrease when the proportion of local government revenue from fines and fees increases. The observed effect is predominantly driven by smaller municipalities.[6]

It can be difficult to estimate how much debt individuals with different criminal convictions typically incur. Fees are often not located in a single place in the statutory code and are not collected at a single point in an individual's criminal proceeding, making it difficult to calculate exactly how much debt a criminal conviction might engender. Louisiana, for example, has dozens, if not hundreds, of assessments sprawled throughout its code (Bannon et al. 2010). In fiscal year (FY) 2018, outstanding federal criminal debt was $126.7 billion and outstanding civil debt was $18.5 billion, making the total outstanding federal debt $145.2 billion (Off. US Attys. 2018). Although both prisoners and nonprisoners can accumulate debt, prisoners are at higher risk for longer-term financial difficulties (Bannon et al. 2010, Pleggenkuhle 2018). Link (2019) analyzed prisoner criminal justice debt using survey data from prisoners in the Returning Home Studies in metropolitan areas of Texas, Ohio, and Illinois. In FY 2018, 44% of the prisoners in the survey had accumulated some amount of debt, with a median amount of $260 for those with debt

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[6]This is not to say that directing police resources toward areas where enforcement yields revenue is without a positive effect in the chosen area of emphasis. Makowsky & Stratmann (2011) demonstrated that when a municipality experiencing fiscal distress has the incentive to increase the number of traffic citations issued, drivers respond by driving more conservatively, leading to fewer traffic collisions. Harvey (2020) reported similar findings.

(Link 2019). This personal accumulation of LFOs can put individuals in significant financial distress (Mello 2018) and even drive them toward crime: In a survey of individuals involved with the justice system conducted by Alabama Appleseed Center for Law & Justice and the University of Alabama-Birmingham (AACLJ 2017), 38.3% of respondents indicated they had committed at least one crime to pay outstanding LFOs.

A by-product of these distortions in law enforcement are biases against socially, politically, and financially vulnerable portions of the population (Agan et al. 2018, Alesina & La Ferrara 2014, Anwar et al. 2012). Sances & You (2017) found that fine and forfeiture revenues increase with the size of a county's African-American population and that this effect is mitigated by African-American representatives on elected city councils. Makowsky et al. (2019) found that black and Hispanic drug and DUI arrests, and associated seizures of cash and automobiles, increase with local deficits when police can retain proceeds from forfeited property in their budgets, whereas comparable white arrests are unchanged. When combined with racially biased institutions (Antonovics & Knight 2009, Anwar et al. 2012, Goncalves et al. 2017), revenue-driven policing exacerbates broader racial bias in the criminal justice system (AACLJ 2017, USCCR 2017).

Increased perception of law enforcement as agents of revenue generation, less beholden to fair application of the law, undermines the legitimacy of their authority (Katzenstein & Waller 2015, Natl. Res. Counc. et al. 2004, Tyler et al. 2015). Murphy et al. (2008) and Murphy & Barkworth (2014) found that lower public estimates of police legitimacy correspond with reduced cooperation with police by victims or witnesses. In his review of the broad revenue motivations behind municipal law enforcement, McBride (2018, p. 330) observed that if communities believe that "...police power is being used for illegitimate purposes, faith and trust in officers that exercise that power would be undermined and their ability to perform their legitimate functions would be stymied." Given the frequent bias in enforcement and the crushing financial burden it often imposes, the emergence of law enforcement as a regressive source of revenue generation stands as a threat to law enforcement and its provision of public safety.

PROPOSED LEGAL AND POLICY REFORMS

A variety of legislative efforts and policy proposals have emerged in recent years with the common goals of constraining revenue-motivated law enforcement. These efforts, however, have little choice but to exist on top of the elected leaders and municipal police departments of local governments that have grown dependent on subsidizing not just police budgets, but their broader general funds. In many cases, the fiscal solvency of an entire municipality stands threatened by limitations on the generating and retention of revenue from the criminal justice system.

In 2018, the city of Philadelphia reached a settlement with the Institute of Justice to reform its civil asset forfeiture laws. Within the settlement, the city agreed to two legally binding consent decrees that committed to both restrictions on civil forfeiture practices and payment of reparations to past victims of overzealous asset forfeiture (Wimer 2018).[7] The city also agreed to remit all future property forfeiture proceeds to community-based drug prevention and rehabilitation programs. This final component is noteworthy for its attempt to mitigate the direct incentives for law

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[7]The settlement banned confiscation of property for drug possession and the seizure of any cash amount less than $1,000 without strong proof of criminal activity. Police officers must record in-depth summaries of all property seized and communicate the explicit process used to retrieve seized property. Civilians must be granted a prompt hearing if they request the return of their assets. Reparations were to be made from a $3 million fund established by the city to compensate those whose property was wrongfully seized.

enforcement to feed their own budgets through the confiscation of assets. It, however, also leaves as an open question whether law enforcement will remain indirectly rewarded for their ability to subsidize drug prevention and rehabilitation programs, freeing up otherwise committed funds to return to the general fund.

In the wake of the tragic death of Michael Brown in Ferguson, Missouri, and the subsequent investigation by the Department of Justice, the Missouri state legislature passed Senate Bill 5. The bill, among other things, placed limits on the percentage of revenues that municipalities could generate from traffic fines, banned "failure to appear" charges, placed limits on the combined costs of fines and fees, banned jail sentences for minor traffic offenses, and eliminated the collection of court costs if a case is dismissed (FFJC 2014). Perhaps most importantly, it banned jailing of individuals unable to pay a fine, eliminating a mechanism that had effectively hailed the return of debtors' prisons [S.B. 5, 98th Gen. Assembly, first Reg. Sess. (Mo. 2015)]. From a political economy point of view, the final provision of the settlement is perhaps the most interesting: Citizens in Missouri were granted, under the bill, the ability to dissolve their local governments via referendum if they do not turn over excess traffic revenues to the state.

Several policies enacted or under consideration would mitigate the burden of fines and fees, on the grounds of both their burden to low-income individuals and their relationship to the Excessive Fines Clause (Colgan 2020). Colgan (2019)[8] proposes an adjustment to how economic sanctions are collected. Citing experiments in US localities—Staten Island, New York; Maricopa County, Arizona; and Milwaukee, Wisconsin, to name a few—her proposal outlines a day-fine structure to account for ability to pay. The day-fine policy would use a self-reported base income to calculate ability to pay and then multiply the adjusted daily income by the penalty unit, which is determined by the degree of severity of the offense. In this vein, the proposed Florida SB 1328/HB 903 would eliminate driver's license suspension for unpaid fines and fees and allow for smaller structured payments (FFJC 2020). Contra Costa County, California, adopted a moratorium on adult criminal justice fees for probation, indigent-defense, and work-release programs (FFJC 2019).

Makowsky (2019) laid a general framework to change fiscal incentives underlying revenue-motivated law enforcement. The core policy innovation is the remittance of all criminal justice revenue to the state government for redistribution back to municipal governments as per capita block grants, dampening the direct fiscal incentive behind any discretionary arrest decision and undermining the less than 5% of governments reliant on criminal justice revenues as a de facto form of regressive taxation. In doing so, a state can begin the steady process of weening local governments off of dependence on criminal justice revenue.[9]

CONCLUSION

Revenue generated through the criminal justice system has become a key component of municipal budgets for a growing number of local governments across the United States. Its value lies not just in its immediate value and flexibility, but its capacity for expropriating from those whose socioeconomic or residential status softens the political costs that would otherwise be expected from any tax borne by fully enfranchised constituents. Police departments are not just funding themselves—they are often subsidizing their entire municipal government.

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[8]See also Colgan (2017b) for greater detail on the merits of graduating fines with ability to pay.
[9]In a more nuanced version of the policy, Makowsky suggests that states require that any revenues generated via law enforcement be rebated to all citizens within the state that qualified for SNAP benefits.

The literature to date demonstrates the broader costs of revenue-motivated law enforcement. First and foremost, the economic damage to the marginal felon arrestee is difficult to overstate: their lives are disrupted and expected lifetime earnings are irrevocably damaged with the acquisition of a criminal record. Even beyond felony and misdemeanor arrests, however, poor households rarely have means to absorb the potentially thousands of dollars in LFOs often associated with a noncriminal citation. The secondary costs of revenue-driven law enforcement are equally disconcerting. As budgets become more dependent on the criminal justice system for revenue, the occupational incentives facing police officers at each node of discretion in their interactions with citizens shift more toward fiscal profit and further from public safety.

DISCLOSURE STATEMENT

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