FISCAL EQUIVALENCE: PRINCIPLE AND PREDATION IN THE PUBLIC ADMINISTRATION OF JUSTICE

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Abstract: Fiscal equivalence in the public administration of justice requires local police and courts to be financed exclusively by the populations that benefit from their services. Within a polycentric framework, broad based taxation to achieve fiscal equivalence is a desirable principle of public finance because it conceptually allows for the provision of justice to be determined by constituent's preferences, and increases the political accountability of service providers to constituents. However, the overproduction of justice services can readily occur when the benefits of the justice system are not enjoyed equally. Paradoxically, the same properties that make fiscal equivalence desirable by imposing restraint and control between constituents and local government also create internal pressures for agents of the state to engage in predatory, revenue-generating behavior.

KEY WORDS: fiscal equivalence, fees and fines, local public goods, polycentricity, public administration

"Society ... cannot subsist among those who are at all times ready to hurt and injure one another. The moment that injury begins, the moment that mutual resentment and animosity take place, all the bands of it are broken asunder ... Society may subsist, though not in the most comfortable state, without beneficence; but the prevalence of injustice must utterly destroy it."

- Adam Smith, 1759

1. Introduction

In August 2014, the fatal police shooting of an unarmed teenager, Michael Brown, in Ferguson, Missouri ignited weeks of protests throughout the St. Louis community. Protesters gained national attention by expressing deep-seeded, latent injustice regarding the ongoing relationship between residents and the police. Later that year, when the St. Louis County prosecutor announced that a grand jury would not seek an indictment of the officer responsible for the shooting, another wave of civil unrest ensued. Protesters responded with everything from peaceful resistance marches,

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community vigils, to setting property on fire in the streets. Police responded by shooting rubber bullets and throwing tear gas into crowds.¹

The events surrounding the death of Michael Brown prompted a Department of Justice investigation into the Ferguson Police Department.² The investigation revealed a pattern of unlawful conduct whereby officers were routinely violating the Constitution and federal statutory law. The report described Ferguson as a place where officers are "stopping people without reasonable suspicion, arresting them without probable cause, and using unreasonable force."^{3, 4} The report identified police and municipal court practices that "both reflect and exacerbate existing racial bias" and that "Ferguson's own data establish clear racial disparities that adversely impact African Americans."5

Underlying all of the cases of misconduct, the DOI identified a common, structural contributor to the disintegration of trust in the institutions of justice—the ability of the police and courts to generate revenue for their own budgets using fees and fines. The DOJ report found that "Ferguson's law enforcement practices are shaped by the City's focus on revenue rather than by public safety needs." Despite the fact that 22 percent of Ferguson residents live below the poverty line, fines and court fees comprise the second largest source of revenue for the city, averaging annual sums of \$2.6 million. A separate report from Arch City Defenders, a non-profit legal defense organization, found that in 2013 this amounted to an average of \$321 in fines / fees and 3 warrants per household. 6 Moreover, "this emphasis on revenue has compromised the institutional character of Ferguson's police department, contributing to a pattern of unconstitutional policing, and has also shaped its municipal court, leading to procedures that raise due process concerns and inflict unnecessary harm on members of the Ferguson community."⁷ The practice of using the police and courts to extract excessive fees and fines has "sown deep mistrust between parts of the community

¹ Monica Davey and Manney Fernandez, "Security in Ferguson is Tightened after Night of Unrest," New York Times, November 25, 2014 https://www.nytimes.com/2014/11/26/us/ ferguson-missouri-violence.html

Department of Justice, Civil Rights Division, "Investigation of the Ferguson Police Department," (March 4, 2015). Retrieved from https://www.justice.gov/sites/default/ files/opa/press-releases/attachments/2015/03/04/ferguson_police_department_report.pdf
³ Department of Justice, Civil Rights Division, "Investigation of the Ferguson Police

Department," p. 15.

⁴ Matt Apuzzo and John Eligon, "Ferguson Police Tainted by Bias, Justice Department Says,"

(2015/03/05/us/us-calls-on-use) New York Times, March 5, 2015. https://www.nytimes.com/2015/03/05/us/us-calls-onferguson-to-overhaul-criminal-justice-system.html

Department of Justice, Civil Rights Division, "Investigation of the Ferguson Police Department," p. 2.

In 2013, the Ferguson Municipal Court disposed of 24,532 warrants and 12,018 cases, or about 3 warrants and 1.5 cases per household. See https://archcitydefenders.org/wp-content/uploads/2019/03/ArchCity-Defenders-Municipal-Courts-Whitepaper.pdf

⁷ Department of Justice, Civil Rights Division, "Investigation of the Ferguson Police Department," p. 2.

and the police department, undermining law enforcement legitimacy among African Americans in particular."8

While the case of Ferguson is an extreme example, the practice of local administration of justice turning routine activities away from productive provision of public safety, and increasingly toward predation by revenue extraction is much more widespread. According to the U.S. Census Bureau's Census of Government, the average fine and forfeiture revenues per capita for local governments have been steadily increasing since 1977. In 2012, county fine and forfeiture revenues were equivalent to 15 percent of all law enforcement operating expenses, despite wide variation in the use of fines and fees across states and counties. In one out of every ten police departments, fines and fees revenues account for nearly 32 percent of operating expenses. At the extreme tail of the distribution, the revenue generated from fines and fees in some jurisdictions covered 90 percent or more of all local law enforcement operating expenditures.

Public safety, policing, and criminal justice are among the most central functions of public administration. While there are many factors that can influence the quality of public administration of justice, the structural rules of financing the police and courts have important systematic effects on how justice functions in practice. The principle of fiscal equivalence requires the community that enjoys the benefits of a public good to be the same group of constituents who fund the good through taxation. In theory, public goods are optimally priced according to the marginal benefits each user receives. However, in practice the nature of justice as a good does not lend itself to easily determining marginal beneficiaries. Indicative of the pricing problems, consider the fact that those who are benefiting the most from a well-functioning justice system are likely to either be those who interact with it the least, or those for whom it is most responsive. The nature of justice as a public good, then, is often best supplied when it is funded by a broad and general form of taxation, such as a property tax or sales tax. Broad-based

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⁹ In the ten years leading up to the 2014 incidents in Ferguson, the county was averaging 13 percent of their total annual revenue from fees and fines. By comparison, even the worst offending counties (in the 98th percentile) during this period were averaging less than 4 percent of total revenue. Author's calculations based on available county budget data https://www.fergusoncity.com/DocumentCenter/View/561/2010-COFM-CAFR?bidId= Census of Governments, U.S. Census Bureau (Census) 1977–2012. In February 2019, the Supreme Court ruled in the case of *Timbs v. Indiana* 586 U.S. __(2019) against the ability of states to levy excessive fines. While this demonstrates recognition of the problem, it doesn't specifically address the systematic problem.

¹⁰ Census of Governments, U.S. Census Bureau (Census) 1977–2012.

¹¹ For example, the ability for state and local agencies to profit off of civil asset forfeiture is governed by state law; only seven states and the District of Columbia prohibit law enforcement agencies from profiting at all from seizures, whereas twenty-five states allow law enforcement to keep 100 percent of forfeited revenue (S. Mughan, D. Li, and S. Nicholson-Crotty, "When Law Enforcement Pays: Costs and Benefits for Elected Versus Appointed Administrators Engaged in Asset Forfeiture," *The American Review of Public Administration* 50, no. 3 (2020): 297–314.

taxes paid by community stakeholders are the types of taxation that satisfy fiscal equivalence and create a budget constraint for local police and courts. Communities often settle on broad-based property taxation because the benefits of a well-functioning justice system benefit the whole community, albeit often unequally. However, even with satisfactory and established rules for financing the police and courts, public budgeting has a political character whereby actors within a framework of rules respond to incentives. A justice system where agents of the state can levy discretionary fines and fees incentivizes officers and judges to apply their discretion on the margin toward revenue-generating activities. The revenue-maximizing activities, like those identified by the DOJ in Ferguson, Missouri, represent a departure from the generality principle of taxation that makes fiscal equivalence normatively desirable.

One cannot understand the protests that erupted in Ferguson in the summer of 2014 without accounting for the community's long history of over-policing characterized by low-level harassment for petty infractions that result in costly engagement with a municipal court system. When the officer responsible for shooting Michael Brown initially stopped the teen and his friend, Dorian Johnson, it was for jaywalking. Many residents viewed the tragedy that resulted in a loss of an eighteen-year-old's life as part of a much larger failure of public administration of justice. 14 Understanding how these kinds of failures relate to the choice of fiscal rules for financing local public goods is the aim of this essay. I argue that while the principle of fiscal equivalence is empirically and normatively a desirable means of financing public administration of justice, it simultaneously introduces internal pressures for law enforcement to generate alternative revenue streams. Without additional mechanisms to prevent predatory revenue seeking on the part of law enforcement, local jurisdictions are vulnerable to these kinds of failures.

This essay begins by laying out how the principle of fiscal equivalence fits within a broader understanding of polycentric systems of public administration and a normative theory of self-governance. I then utilize a basic model of fiscal equivalence to illustrate some of the relationships between constituents of a single jurisdiction where the benefits of public administration of justice are not equally enjoyed and political power is not equally exercised. The examples illustrate that even when fiscal equivalence is approximated, public administration will likely be overproduced relative

¹³ Bruce L. Benson, David W. Rasmussen, and David L. Sollars, "Police Bureaucracies, Their

¹² V. Ostrom, "Can Federalism Make a Difference? *Publius* 3, no. 2 (1973): 197–237. K. Baicker and M. Jacobson, "Finders Keepers: Forfeiture Laws, Policing Incentives, and Local Budgets," *Journal of Public Economics* 91, nos. 11–12 (2007): 2113–36; R. E. Wagner, "Governance within a System of Entangled Political Economy," *Forest Policy and Economics* 107 (2019).

Incentives, and the War on Drugs," *Public Choice* 83, nos. 1–2 (1995): 21–45.

14 Trymaine Lee and Michele Richinick, "Police: Michael Brown Stopped Because He Blocked Traffic," MSNBC, August 15, 2014. http://www.msnbc.com/msnbc/ferguson-police-name-michael-brown

to constituents' own preferences. In cases where there are differential benefits that accrue to one group, this overproduction can be exacerbated. Overproduction, when constrained to a fixed budget constraint, generates incentives for agents of the state to use their power to generate revenues. Drawing on recent empirical studies, I illustrate one of the ways overproduction has manifested and the dangers this poses for a just and inclusive society.

II. FISCAL EQUIVALENCE AND PUBLIC ADMINISTRATION OF JUSTICE IN A POLYCENTRIC SYSTEM

Public administration of justice at the municipal level in the United States takes place within a polycentric system. Polycentric systems are ones that have "many centers of decision making that are formally independent of each other." These jurisdictions of authority relate to each other in competitive and cooperative ways and are embedded in a larger system, such that "the various political jurisdictions in a metropolitan area may function in a coherent manner." Competitive pressure among jurisdictions can discipline local jurisdictions to provide public goods more consistent with constituent preferences. Competition tends to operate better when there are many jurisdictions that are geographically proximate and relatively similar in real estate costs. Often jurisdictional competition between local municipalities takes place within a larger system governed by constitutional constraints. Pinally, polycentric systems tend to be more efficient than single, centralized, hierarchical jurisdictions of much greater scale and scope.

In the case of Ferguson, Missouri we can see the extent to which Ferguson displays characteristics of a single jurisdiction operating in a polycentric system. Ferguson is 6.2 square miles in size, with a population of just over 21,000 residents. It is just one of 90 independent municipalities that make up St. Louis County (not including the City of St. Louis, see Figure 1 in the Appendix). Of these 90 municipalities, 81 operate their own local courts, 58 operate their own police forces, and 18 have additional service contracts

¹⁵ Vincent Ostrom, Charles M. Tiebout, and Robert Warren, "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry," *American Political Science Review* 55, no. 4 (1961): 831–42.

 $^{^{\}rm 16}$ Ostrom, Tiebout, and Warren, "The Organization of Government in Metropolitan Areas," 831-42.

¹⁷ Charles M. Tiebout, "A Pure Theory of Local Expenditures," Journal of Political Economy 64, no. 5 (1956): 416–24.

¹⁸ Geoffrey Brennan and James M. Buchanan, *The Reason of Rules: Constitutional Political Economy* (New York: Cambridge University Press, 2008); Vincent Ostrom, *The Meaning of Democracy and the Vulnerability of Democracies: A Response to Tocqueville's Challenge* (Ann Arbor: University of Michigan Press, 1997).

¹⁹ Both James Buchanan and Vincent Ostrom conceptualized the constitutional "attitude" as something much broader than the constitutional rules on the books.

²⁰ Raaj Sah and Joseph Stiglitz, "The Architecture of Economic Systems: Hierarchies and Polyarchies," *The American Economic Review* 76, no. 4 (1986): 716–27.

with the St. Louis County Police Department. Ferguson has its own courts, police, and service contracts. The Ferguson City Council is comprised of six council members and a Mayor. The court is presided over by the municipal judge appointed by the City Council, and a municipal prosecutor handles cases of traffic violations, zoning, shoplifting, assault, nuisances, narcotics and liquor violations, and disturbances of the peace. Finally, market evaluations of the competiveness and quality of the housing market in Ferguson and neighboring jurisdictions are comparable (see Table 3 in the Appendix).²¹ As such, it is appropriate to examine a case like Ferguson as a single jurisdiction operating in a polycentric system.

Fiscal equivalence requires that the jurisdiction of taxation for the public good be the same as the jurisdiction that enjoys the benefits of the public good. In the case of public administration of justice, local police and courts would be financed exclusively by the populations they serve. These public services can be financed by benefit taxation, generality norms, or ability to pay. The principle of fiscal equivalence was first formalized by Knut Wicksell in 1896 as part of a greater attempt to theorize public provision of goods and services centered on voluntarism and individual choice. James M. Buchanan²² brought these ideas into the debates over resurgence of public economics.²³ The principle was then further utilized to develop more extensive theories of competitive local public good provision,²⁴ jurisdictional competition, ²⁵ and a much broader contractarian approach to the state. ^{26, 27}

Tiebout's²⁸ famous model shows that under the strong assumptions of perfect information and costless entry and exit, people will "vote with their feet" and choose jurisdictions where the bundle of public goods best fits their preferences. As a result, jurisdictional competition can generate the conditions under which local public good provision becomes more efficient. Within this framework, competition across jurisdictions enables citizens to

²¹ All housing market data comes from publicly available consumer analysis, accessed in 2020 at https://www.redfin.com/neighborhood/96511/MO/Ferguson/Ferguson/housing-

James M. Buchanan, "Wicksell on Fiscal Reform: Comment," The American Economic Review 42, no. 4 (1952): 599-602.

²³ Johnson details the differences between Buchanan's interpretation of Wicksell and that of Robert Musgrave (Marianne Johnson, "Wicksell's Unaminity Rule: Buchanan's Dominance Considered," American Journal of Economics and Sociology 64, no. 4 [2005]: 1049–1067).

²⁴ Ostrom, Tiebout, and Warren, "The Organization of Government in Metropolitan Areas"; M. Olson, "The Principle of "Fiscal Equivalence": The Division of Responsibilities among Different Levels of Government," The American Economic Review 59, no. 2 (1969): 479-87; Vincent Ostrom and Elinor Ostrom,"A Theory for Institutional Analysis of Common Pool Problems," in Managing the Commons, ed. Garrett Hardin and John Baden (New York: W. H.

Freeman, 1977), 157.

Freeman, 1977), 157.

Tiebout, "A Pure Theory of Local Expenditures," 416-24.

James M. Buchanan and Gordon Tullock, *The Calculus of Consent*, Volume 3 (Ann Arbor: University of Michigan Press, 1962).

²⁷ For an explicit discussion of the relationship between Wicksell's theory of public finance and Buchanan and Tullock's Calculus of Consent, see R. E. Wagner, "The Calculus of Consent: A Wicksellian Retrospective," Public Choice 56, no. 2 (1988): 153–66

²⁸ Tiebout, "A Pure Theory of Local Expenditures."

be "responsive" to the quantity and quality of public goods supplied at the local level. What exactly does responsiveness on the part of the citizens entail? First, people need to have a reasonable approximation of the benefits they receive from the public goods and the costs they bear. Second, they need the capacity to exercise either exit, voice, or initiative.²⁹ In the context of jurisdictional competition, exit means individuals' capacity to move locations in response to sufficiently large changes in their cost-benefit calculations. Voice often means voting or representation in local politics. Initiative is understood as grassroots political organization like petitions or peaceful protests. 30 In these cases, portions of the population within the jurisdiction may seek out substitute means of meeting the needs that the local public administration was previously meeting. Shared perceptions of common problems can also generate voluntary efforts to initiate change within the polity. This is consistent with one of the many ways that a polycentric system allows adaptive correctives to emerge when public administration is not meeting the needs of the people (or a subset of people) they are supposed to be serving. As such, jurisdictional competition places limits on—but cannot eliminate —the ability to exercise discretionary governmental power.³¹

The polycentric approach to self-governance developed by Vincent and Elinor Ostrom and the Bloomington School is part of a larger theoretical and empirical debate over the performance of public administration. Reformers at the time wanted to improve the performance of metropolitan public services by consolidating smaller jurisdictions into larger organizational structures. Ostrom, Parks, and Whitaker³² challenged these views by first pointing out that many of the calls for consolidation and reform were based on a faulty assumption that diversity and lack of uniformity across local municipalities was indicative of inefficiency. Elinor Ostrom sought to understand empirically why there was so much variation across

²⁹ Albert O. Hirschman, *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States* (Cambridge, MA: Harvard University Press, 1970); R. J. Oakerson, and R. B. Parks, "Citizen Voice and Public Entrepreneurship: The Organizational Dynamic of a Complex Metropolitan County," *Publius: The Journal of Federalism* 18, no. 4 (1988): 91–112.

³⁰ When local public governance is insufficiently meeting the demands of the population, alternative means of meeting those governance needs will emerge (E. C. Schaeffer, "Remittances and Reputations in Hawala Money-Transfer Systems: Self-Enforcing Exchange on an International Scale," *Journal of Private Enterprise* 24, no. 1 [2008]). In the extreme case of prison populations where physical exit is impossible and the local provision of governance is insufficiently meeting the demands of the population, extra-legal governance can be supplied by community norms (in the case of smaller populations) or organized, hierarchical prison gangs (David Skarbek, "Governance and Prison Gangs," *American Political Science Review* 105, no. 4 [2011]: 702-716; David Skarbek, *The Social Order of the Underworld: How Prison Gangs Govern the American Penal System* [New York: Oxford University Press, 2014]; David Skarbek, "Covenants without the Sword? Comparing Prison Self-Governance Globally," *American Political Science Review* 110, no. 4 [2016]: 845-62).

³¹ D. Epple and A. Zelenitz, "The Implications of Competition among Jurisdictions: Does Tiebout Need Politics?" *Journal of Political Economy* 89, no. 6 (1981): 1197–1217.

³² Elinor Ostrom, R. B.Parks, and G. P. Whitaker, *Patterns of Metropolitan Policing* (Cambridge, MA: Ballinger Publishing Company, 1978).

jurisdictions, what functions these jurisdictions serve, and how we might make a comparative assessment of these polycentric collections of local public administration and the more monolithic, uniform, hierarchical jurisdictions with a single authority. Elinor's empirical studies of the operation of municipal governance were complemented by Vincent's theorizing of the failures of public administration³³ and the relationship between public administration and democracy.^{34, 35}

Central to this approach is the recognition that any institutional arrangement for administering justice must cope with the knowledge problems and incentive alignment concerns necessary to ensure correspondence between the quality and quantity of justice services produced and the willingness of citizens to pay for these services. Those systems that are more robust in dealing with knowledge problems and incentive alignment are normatively more desirable than those that are less able to mitigate these problems over time. As such, polycentric systems do not require heroic assumptions of perfect information, costless entry and exit, or perfect competition in order to generate beneficial outcomes.

Fiscal equivalence financed with broad-based taxation (like property taxes) within a polycentric system is desirable because it provides an institutional structure that most closely aligns the interests, information, and incentives of citizens with the agents executing state power.³⁸ Fiscal equivalence when financed with a general mode of taxation works to better align these interests, information, and incentives in three ways. First, fiscal equivalence increases the political accountability of service providers to the citizens.^{39, 40} Correspondence between the contribution individuals make to police and courts and the benefits received from these services helps to preserve the connection between the total amount of government expenditure of these services and the amount of taxes levied to pay for them. If the population is dissatisfied by the quality or quantity of police and court

³³ Vincent Ostrom, *The Intellectual Crisis in American Public Administration* (Tuscaloosa: University of Alabama Press, 2008).

³⁴ Vincent Ostrom, *The Meaning of Democracy and the Vulnerability of Democracies: A Response to Tocqueville's Challenge* (Ann Arbor: University of Michigan Press, 1997).

³⁵ See Vlad Tarko, *Elinor Ostrom: An Intellectual Biography* (London: Rowman and Littlefield International, 2017) for an excellent overview.

³⁶ David Schmidtz, *The Limits of Government: An Essay on the Public Goods Argument* (New York: Westview Press, 1991); D. J. D'Amico, "The Social Provision of Punishment and Incarceration," *American Journal of Economics and Sociology* 76, no. 5 (2017): 1107–1132.

³⁷ M. Pennington, Robust Political Economy: Classical Liberalism and the Future of Public Policy (Northampton, MA: Edward Elgar Publishing, 2011).

³⁸ Buchanan and Tullock, *The Calculus of Consent*; M. Olson, "The Principle of 'Fiscal Equivalence'," 479–487; Ostrom and Ostrom, "A Theory for Institutional Analysis of Common Pool Problems," 157.

³⁹ Knut Wicksell, "Finanztheoretische Untersuchungen" (Jena: Gustav Fischer, 1896), trans-

³⁹ Knut Wicksell, "Finanztheoretische Untersuchungen" (Jena: Gustav Fischer, 1896), translated as "A New Principle of Just Taxation" in R. Musgrave and A. Peacock, eds., *Classics in the Theory of Public Finance* (New York: St. Martins, 1994).

⁴⁰ See James M. Buchanan and R. E. Wagner, *Democracy in Deficit: The Political Legacy of Lord Keynes* (New York: Academic Press, 1977).

service to their communities, they can exercise power over these institutions by way of their tax contributions—either through voice in the democratic process or by exiting the local jurisdiction by moving residences. 41 Second, taxpayers who provide the funding for public goods are instrumental in determining the goals of public administration. 42 Simply put, when funding for police and courts comes from sources outside the community, different interests shape the goals of policing and courts, with little connection to the demonstrated preferences of what the group consuming them expresses with regard to their consumption. Third, fiscal equivalence provides an important means for transparency of public expenditure. If spending decisions are coupled with the tax burden to finance those expenditures at the time of decision-making, people are better equipped to weigh the costs and benefits to themselves of funding the public good. Finally, if the local population of a jurisdiction consumes public goods financed by their tax contributions, they are less likely to succumb to problems of fiscal illusion. 43 As a result, fiscal equivalence in a polycentric system allows the community to place a democratically determined budget constraint on the public administration of justice. With competition from neighboring jurisdictions and the ability for citizens to vote with their feet, any one local government will be better incentivized to supply a bundle of local public goods that more closely matches constituent preferences.44

Critics argue that fiscal equivalence is inherently problematic because it implies unequal levels of public goods across communities that vary in the resources they are able to dedicate to fund these goods. In other words, rich communities will be able to afford more and/or better police and court protections than poorer communities. While these concerns are valid, calls for outside funding invite outside interests to play a role and necessarily involve a trade-off of local control. To the extent that communities find this trade-off advantageous, there are ways to structure supplemental funds to minimize the influence of external decision makers (e.g., per capita block grants). Moreover, proponents of fiscal equivalence argue that within a polycentric framework, diversity and variety in bundles of public goods

⁴¹ Knut Wicksell was an early advocate of the principle of fiscal equivalence. It is notable that he coupled the benefit principle of financing public goods with a unanimity principle for deciding tax contributions. In other words, there had to be a very high degree of agreement / consent within the tax base / population for how well their contributions were being spent. See James Buchanan, "Wicksell on Fiscal Reform: Comment," *The American Economic Review* 42, no. 4 (1952): 599–602.

⁴² Paul Dragos Aligica, Peter J. Boettke, and Vlad Tarko, *Public Governance and the Classical-Liberal Perspective: Political Economy Foundations* (New York: Oxford University Press, 2019); V. Ostrom, "Can Federalism Make a Difference?"

⁴³ On fiscal illusion, see James M. Buchanan, *Collected Works of James M. Buchanan, Volume* 1: *The Logical Foundations of Constitutional Liberty* (Indianapolis, IN: Liberty Fund, 1999), 150. The benefits of transparency assume current receipts finance current expenditures. The more that deficit finance is employed to finance current consumption, the more taxpayers are likely to experience fiscal illusion, further exacerbating the problems of accurately assessing the benefits and costs of justice services.

⁴⁴ Olson, "The Principle of 'Fiscal Equivalence'."

offered at the local level can be a feature of the overall system, not a flaw. 45 The normative desirability of fiscal equivalence weights community selfdetermination and system-wide experimentation over absolute cross-jurisdictional equity of resource endowments. The benchmark is how well constituents exercise agency and choice over the provision of justice services when compared to alternative, feasible institutional arrangements.

Fiscal equivalence financed by general taxation is a principle for improving the performance of public administration to the extent that it aligns the incentives and information between constituents and agents of the state. Previous literature examining the operation of local public administration of justice has identified interventions in the system from higher levels of government that cause this feedback mechanism to break down. 46, 47 External distortions include federal transfers that subsidize local police, 48 involvement of federal funding tied to the War on Drugs, 49 and greater militarization of the local police.⁵⁰ These external budgetary distortions from higher layers of government can disrupt the feedback mechanisms that serve to align incentives in the local jurisdiction—see Figure 3 in the Appendix. The focus of this essay, however, is on internal budgetary distortions (see Figure 3) whereby the means of achieving fiscal equivalence can also lead incentive alignment to break down. Section III develops these ideas conceptually and Section IV illustrates how this breakdown may manifest in practice.

III. FISCAL EQUIVALENCE AND PUBLIC ADMINISTRATION OF JUSTICE: DIFFERENTIAL BENEFITS AND POWER

For our purposes, justice services at the local level include the police, courts, and jails. Public administration of justice, taken as a whole, satisfies the criteria for the kinds of goods and services that exhibit some rivalry in consumption but that also have technological and geographic characteristics that make exclusion at the individual or household level impractical.⁵¹

⁴⁶ Peter J. Boettke, Jayme S. Lemke, and Liya Palagashvili, "Re-Evaluating Community Policing in a Polycentric System," Journal of Institutional Economics 12, no. 2 (2016): 305–325.

⁴⁵ Richard J. Stillman, II, Preface to Public Administration: A Search for Themes and Directions (Burke, VA: Chatelaine Press, 1999 [1991]).

⁴⁷ The failures of "community policing" initiatives of the 1980s are an example whereby the rhetoric of more community involvement turned out in practice to lead to greater centralization (Boettke, Lemke, and Palagashvili, "Re-Evaluating Community Policing in a Polycentric

⁴⁸ W. N. Evans and E. G. Owens, "COPS and Crime," Journal of Public Economics 91, nos. 1–2

⁴⁹ Baicker and Jacobson, "Finders Keepers"; R. Balko, Rise of the Warrior Cop: The Militarization of America's Police Forces (New York: Public Affairs, 2013).

50 C. J. Coyne and A. R. Hall, Tyranny Comes Home: The Domestic Fate of US Militarism

⁽Redwood City, CA: Stanford University Press, 2018).

⁵¹ I am aware of the large literature on private provision of public goods, including policing, law, courts, and jails. Nevertheless, this characterization is standard in public economics (Paul Samuelson, "The Pure Theory of Public Expenditure," Review of Economics and Statistics 36, no. 4 [1954]: 387-89) and public choice (James M. Buchanan, "Contractarian Political Economy and

The question of how the costs of justice services are financed under the benefit principle leads us to the obvious question of how the benefits of justice services are shared throughout the community.

One of the most well-known findings in the public goods literature is that when individuals in a group have different demands for consuming the public good, the optimal way to provide it is to tax each person according to the marginal benefits they receive.⁵² Justice as a good, however, does not lend itself to easily determining the individual marginal benefit of wellfunctioning justice services. For starters, those who are benefiting the most from a well-functioning justice system are likely either those who interact with it the least, or those for whom it is most responsive. One can easily see how problematic it is to determine just how much different people benefit from justice services on the margin. Moreover, even if one can put away the deep conceptual problem of determining marginal benefits for justice services outside of a functioning price system, strategic interaction complicates the problem of accurately eliciting willingness to pay.⁵³ Public choice scholars have also pointed out that as different groups come to hold power over the purse, they are likely to politicize different estimates of the benefits of the provision of justice to their advantage.⁵⁴

The Bloomington approach to these questions presents two challenges to the standard approaches to public administration. The first is a deep ontological critique of the problems of subjective assessment and measurement. In the self-governance framework, a public good that reflects the preferences of the population is not the same as a public good that is produced by the demonstrated preferences of those who benefit from the good. A set of institutions that merely reflects the preferences of a population is wholly different from a set of institutions that is generated by the choice and decisions of constituents expressing their agency. The problem of benchmarking public goods by expressed preferences of the population is that in practice this is consistent with an outside authority or expert articulating, interpreting, or imposing those preferences in a top-down manner. Recognition of public goods produced as the expression of people's actual choice

Constitutional Interpretation," *The American Economic Review* 78, no. 2 [1988], 135–39). Empirically, more often than not, the institutions charged with the administration of justice are publicly administered.

⁵² Otherwise known as Lindahl pricing of public goods.

⁵³ Moreover, as public choice scholars have pointed out that even reasonable estimates would be hard to make in the cases where benefits differ among people and are not correlated with observable metrics like the crime statistics, location and types of crimes committed, arrest rates, conviction rates, clearance rates, etc. Vickery (W. Vickery, "Counterspeculation, Auctions, and Competitive Sealed Tenders," *The Journal of Finance* 16, no. 1 [1961]: 8–37), Clarke (E. H. Clarke, "Multipart Pricing of Public Goods," *Public Choice* 11, no. 1 [1971]: 17–33) and Groves (T. Groves, "Incentives in Teams," *Econometrica* 41, no. 4 [1973]: 617–31) provide a formal mechanism design solution to the problem, which fails to address the fundamental problem regarding the demand estimation and revelation process for justice services.

⁵⁴ Wicksell understood this point and was particularly concerned with measurability, even though he did think it was conceptually possible (Buchanan, "Wicksell on Fiscal Reform").

behavior imparts a legitimacy and authenticity to those institutions constituted by the population.

The second challenge of the polycentric approach is the recognition that institutions that emerge to cope with governance needs can be as varied and diverse as the contexts in which they arise. The example given below elaborates three different means of cost sharing within a single jurisdiction, giving attention to how these diverse institutional forms may generate different avenues of constituent responsiveness when groups differ over the benefits they receive from the justice system and the power they exercise over it. In practice, polycentric systems produce jurisdictions that share common rules that prove to be robust, while at the same time varying across dimensions that reflect the heterogeneous compositions of each jurisdiction's populations. For example, many jurisdictions across the United States employ broad-based property taxation as a primary means of funding local public administration, while at the same time, there is great variation in the extent to which jurisdictions pad those revenues with fines and fees. Even amongs those that do aggressively collect fines and fees, there will be variation in the use of these that reflects local conditions. One thing is clear, the pressures for local law enforcement to increase revenue using fees and fines will be stronger the more justice is "overproduced" relative to constituent preferences. As such, we can use a simple model to help understand a few key factors that may lead to more systematic overproduction.

Analytically, we consider two cases—first, a case in which the benefits of justice are shared equally throughout the community, and second, a case in which the benefits of justice accrue to members of the community differentially. Here I extend the model of Buchanan and Congleton⁵⁵ to consider how overproduction may vary when the costs of funding the institutions of justice are apportioned with different means of sharing political power. Political power is represented by how often and to what extent one group is able to shift the costs to the other. The model generates six different cases that allow us to see how easy it can be to get an overproduction of justice services relative to constituent preferences. This is important because it is the overproduction coupled with the budget constraint inherent to fiscal equivalence that puts internal pressure on police and courts to seek additional revenue through fines and fees (see Figure 3).

A. An equally beneficial justice system with three rules of fiscal equivalence

Consider the following two-group community deciding how the cost of justice services is borne and what levels of service are to be provided. Here we are holding constant the quality and type of services offered, while recognizing that in practice this is perhaps even more important than the total quantities supplied. In our two-group case, as A's share of the cost (α)

⁵⁵ Buchanan, Collected Works of James M. Buchanan, 154.

α	β	Q=0	Q=1	Q=2	Q=3	Q=4
1	0	0,0	0,4	1,5	-2,6	-5,7
0.75	0.25	0,0	1,3	2,4	0,4	-2,4
0.5	0.5	0,0	2,2	3,3	2,2	1,1
0.25	0.75	0,0	3,1	4,2	4,0	4,-2
0	1	0,0	4,0	5,1	6,-2	7,-5

Table 1. Equally Beneficial Public Administration of Justice with Alternative Cost Shares and Output Levels

increases, B's share of the cost (β) necessarily decreases because the total costs are divided between the two groups, and must sum to one.⁵⁶

In Table 1 above, the payoffs listed for As and Bs are such that both groups realize identical benefits from the provision of justice services at each level of production. As maximum payoffs are along the bottom row, where their cost share is zero. Bs maximum payoffs are along the top row, where A pays the full cost of suppling justice services. In the equal benefit setting, As maximum payoff occurs when the highest quantity of justice is provided and B bears the full cost. Likewise, Bs maximum payoff occurs symmetrically, located in the top right-hand corner of the table.

Case 1: Equal Benefits, Equal Political Power

Consider the case where financing justice is determined by democratic decision-making with a majoritarian cycle, with groups A and B enjoying roughly equal political power. In this scenario, the tax burden of justice would alternate between As and Bs, with the group out of power bearing the full cost each cycle. However, as As and Bs are equally likely to be in office, each group has an average payoff of one unit. In this case, four units of justice are produced and this becomes the stable level of provision over time. Given the payoff schedule for both groups, 4 units of justice represents an overproduction of justice services. Both groups would maximize their individual and social payoffs with only 2 units produced and yielding each a payoff of 3. In this setting, both As and Bs benefit equally from the public provision of justice, but use the fiscal cycle to rotate the imposition of costs and end up with more expenditure on justice than they both prefer.

⁵⁷ Note that this example says nothing about the allocation of justice services between policing, courts, and jails. The total quantity is an aggregate and assumes quality is held constant.

⁵⁶ "The sum of the payoffs in each column is the same, as consistent with the Samuelsonian analysis in which cost shares do not affect the efficiency of the provision of a pure public good" (James Buchanan, and R. D. Congleton, *Politics by Principle, Not Interest: Towards Nondiscriminatory Democracy*, [New York: Cambridge University Press, 2006], 155).

Case 2: Equal Benefits, Unequal Political Power

Now consider a variant of the case above, in which there is a systematic difference in the political power between the two groups, even though they equally enjoy the benefits of public administration of justice. In this scenario, the tax burden of justice would alternate between As and Bs, with the group out of power bearing the full cost each cycle. However, as As and Bs are not equally likely to exercise political voice in office, it is unlikely that the average payoff of 1 unit would be realized in consecutive electoral cycles. In this case, 4 units of justice are produced and the group holding persistent political power uses the budgeting process to force the politically weak group to bear the full cost. There is a persistent overproduction of justice services, and the politically weaker group bears the full cost in consecutive iterations of the cycle.

Case 3: Equal Benefits, Constrained Political Power

Finally, consider the case where both As and Bs equally share the benefits of the local justice system and a generality rule constrains both groups to pay equal shares of the costs in each period (i.e., Table 1, where $\alpha = \beta = .5$). Here, if both groups are able to choose the level of public services conditional on splitting the costs evenly, both parties would choose an output of two units. With both groups paying equal shares in each period, they choose a lower quantity of justice services than in the politicized cases above. The constrained mechanism of public finance serves to help align the interests of both groups and produce a level of justice services that is most consistent with their preferences.

The example of Table 1 highlights key features of how the institutional rules of public finance affect the public administration of justice. First, if the benefits of justice services are enjoyed equally, the decision over the quantity of justice services demanded depends on how the rules structure how the costs are shared. The example in Table 1 is used to highlight the idea that even under a system where the benefits of the justice system are general and equally shared throughout the community, and where groups in the community are expected to share those costs, the institutional manifestation of how the costs are shared matters. If cost "sharing" is understood as using political power to impose a greater share of the burden on out-groups, then communities will end up systematically overproducing justice services. Moreover, to the extent that political power is unequally distributed, equal benefits from the local justice system will not be sufficient to ensure political stability. If, however, equal cost sharing is instantiated by a general rule, whereby cost shares are equally apportioned in each period, then the incentives of both groups are better aligned to achieve the total quantity of justice services that create the most value for the community. Within the framework, this is a politically stable and potentially efficient outcome.

α	β	Q=0	Q=1	Q=2	Q=3	Q=4
1	0	0,0	0,4	1,5	-2,9	-5,10
0.75	0.25	0,0	1,3	2,4	0,7	-2,7
0.5	0.5	0,0	2,2	3,3	2,5	1,4
0.25	0.75	0,0	3,1	4,2	4,3	4,1
0	1	0,0	4,0	5,1	6,-1	7,-2

Table 2. Unequally Beneficial Public Administration of Justice with Alternative Cost Shares and Output Levels

B. An unequally beneficial justice system with three rules of fiscal equivalence

What if one group has a greater demand for public administration of justice services? Greater demand might result from one group having higher income, stronger personal evaluations of the value of justice services, or because the provision of justice is comparably more productive for this group (for example, yields higher rates of deterrence on net). Let us assume that group B has a greater demand for justice services over some range of production (here between three and four units), and thus the benefits are not uniformly shared across the community. To illustrate, we can update the previous table by adding three units to the payoffs of group B to create a new set of relationships between As and Bs in Table 2.

Case 4: Unequal Benefits, Equal Political Power

Table 2 illustrates how differential benefits change the analysis. Assuming that As and Bs have roughly equal political power, four units of justice are produced with fluctuating assignment of the tax burden. The expected payoffs for A and B in a cycling majority are one and four respectively. A's payoffs under evenly rotating majoritarian cycles are [0.5(7-5)]=1. B's payoffs under evenly rotating majoritarian cycles are [0.5(10-2)]=4. Here again there is overproduction of justice services, but a competitive political landscape yields a tit-for-tat strategy that rotates the imposition of the costs over the election cycle.

Case 5: Unequal Benefits, Unequal Political Power

What happens when there are disproportional benefits from the justice system and both groups do not enjoy equal political power? In this case, both As and Bs benefit the most when they can exercise power to impose the full costs on the other group. However, if the Bs have a greater demand for justice services, they enjoy a higher relative benefit of being in power (10-2) than the As (7-5) each time they are able to gain political power. If this were an iterated game, the expected payoffs from playing are higher for the Bs

than the As.⁵⁸ As such, we would expect the Bs to invest more in rent-seeking activities directed at holding power.⁵⁹ In this scenario, the tax burden of justice would more often be shifted to the As bearing the full cost each cycle. Politically, this is a dangerous scenario, particularly if contact with the criminal justice system reduces political participation disproportionately by one group over time.⁶⁰ A small difference in the perceived benefits of the justice system can give rise to one group systematically bearing the disproportionate costs.

Case 6: Unequal Benefits, Constrained Equal Power

Now consider the case in which a rule is adopted whereby both groups equally share the tax burden each cycle ($\alpha=\beta=.5$). When the As have power, they choose a service level of 2 units. When the Bs have power, they choose 3 units of justice provision. Here A's payoff under a generality rule are [0.5(3+2)]=2.5 and B's payoffs are [0.5(3+5)]=4. Sharing the tax burden equally in each period is an improvement, but also implies that the quantity of justice produced is not stable over time. With one group consistently demanding a higher quantity than another group, there will be pressure to expand policing and the use of courts at the expense of the out-groups' preferences.

C. Implications

The purpose of employing the example above is to illustrate how differential perceived benefits of local public administration of justice interact with different ways power is shared throughout the community. The example is not exhaustive, comprehensive, or predictive. Nevertheless, the implications of the exercise are threefold. First, seemingly fair and democratic means of determining how costs are shared will tend to generate pressures to overproduce and overuse justice services. Second, generality norms that instantiate an equal sharing of the costs may provide a bulwark against overproduction, but are no guarantee against revenue-seeking predation—especially when the benefits of public administration of justice are not equally enjoyed and there are power differentials. Under these conditions, there will be much more pressure for internal revenue generation and the potential for a politically stronger group to impose the additional costs of the justice system on weaker constituents.

Liberty Fund, 2005).

60 B. R. Davis, "Testing Mechanisims: Carceral Contact and Political Participation," Social Science Quarterly 101, no. 2 (2019): 909–924.

⁵⁸ If it were an iterated game, we would need to model this with the behaviors of As and Bs as strategically dependent and consider the possibilities for Coasian bargaining between groups. ⁵⁹ Gordon Tullock and C. K. Rowley, *The Rent-Seeking Society*, Volume 5 (Indianapolis, IN: Liberty Fund, 2005).

⁶¹ For instance, the example generated outcomes based on a majoritarian system. Lacey argues that parliamentary systems of voting are likely to generate different dynamics as they tend to be more inclusive of minority voice (Nicola Lacey, *The Prisoners' Dilemma: Political Economy and Punishment in Contemporary Democracies* [Cambridge: Cambridge University Press, 2008]).

IV. INTERNAL INCENTIVES FOR PREDATION: THE IMPACT OF FEES AND FINES

The previous section illustrates that most instantiations of fiscal equivalence at the local level will produce a tendency to expand the use of police and courts beyond the amount preferred by the community. Yet at the same time, fiscal equivalence does impose an effective budget constraint. Figure 2 (in the Appendix) shows how a broadly financed relationship of fiscal equivalence works with budget composition and feedback mechanisms for a local jurisdiction. The political control is exercised by the tax base by determining the restricted revenue streams. The tax base then is also in the position to exercise control through choosing representation at the local level. Figure 3 then depicts the full picture of a local budget when additional revenue streams are included that are not part of the broadly funded, local fiscal equivalence relationship. These can include transfers from higher levels of government and they can include internally raised revenue through fees and fines. Figure 4 (in the Appendix) delineates the external sources of distortionary revenue from the internally generated, discretionary revenue streams. The focus of this essay has been on how the internally generated streams are possible when the public administration of justice is funded through fiscal equivalence. Overproduction relative to the amount of restrictive revenue raised, creates incentives for the agents of the state to allocate discretionary power toward revenue-generating activities. In Figure 4 we term these internal budgetary distortions aimed at increasing revenues outside the scope of constituent determined "tax burdens."

Law enforcement can generate revenue that is not tax constrained by directing policing toward victimless crimes. Routine traffic violations, ordinance infractions, and minor drug possession charges are the types of discretionary charges that police officers can issue that generate revenue through fees and fines. The empirical literature has shown that budgetary shortfalls lead police to issue larger numbers of traffic tickets,⁶² larger fines,⁶³ and higher rates of property seizure.⁶⁴ These results extend to the courts as well as the police. In an extensive study of local jurisdictions in Indiana, Mughan⁶⁵ finds that law enforcement agencies respond to fiscal stress by issuing more tickets, courts increase the amount of fees associated with the average case, and judges alter their collection efforts and sentencing decisions to increase revenues.

⁶² T. A. Garrett and G. A. Wagner, "Red Ink in the Rearview Mirror: Local Fiscal Conditions and the Issuance of Traffic Tickets," *The Journal of Law and Economics* 52, no. 1 (2009): 71–90.

⁶³ M. D. Makowsky and T. Stratmann, "Political Economy at Any Speed: What Determines Traffic Citations?" *American Economic Review* 99, no. 1 (2009): 509–27; M. D. Makowsky and T. Stratmann, "More Tickets, Fewer Accidents: How Cash-Strapped Towns Make for Safer Roads," *The Journal of Law and Economics* 54, no. 4 (2011): 863–88.

⁶⁴ M. D. Makowsky, T. Stratmann, and A. Tabarrok, "To Serve and Collect: The Fiscal and Racial Determinants of Law Enforcement," *The Journal of Legal Studies* 48, no. 1 (2019): 189–216.
⁶⁵ S. Mughan, "Budget Deficits and Revenue Extracting Activities in the Criminal Justice System," forthcoming.

Revenue-driven policing means that law enforcement efforts are directed, in part, away from safety-enhancing activities.⁶⁶ Local police offices have limited resources and discretion over what types of activities they police. Goldstein, Sances, and You⁶⁷ examine whether revenue collection activities compromise the criminal investigation functions of local police departments. Their findings suggest that police departments in cities that collect a greater share of revenue from fees solve violent and property crimes at significantly lower rates. The effect is largely driven by small cities, where officers substitute time directed to collecting fines and fees from efforts aimed at arrests for violent or property crime.

The effects of revenue-seeking discretionary policing are regressive and can generate or exacerbate racial bias. Individuals from low-income households are more likely to be arrested and incarcerated. The regressive effects are even steeper when financial barriers to paying up front, mounting an effective legal challenge, or negotiating a reduced sentence are taken into account. 68 Makowsky, Stratmann, and Tabarrok 69 show that revenue-motivated law enforcement can lead to racially biased arrest rates even if officers are themselves unbiased. Furthermore, to the extent that these practices disproportionately affect already disenfranchised individuals, there will be compounding effects that exclude groups from exercising the types of civic behavior associated with a self-governing citizenry.

The costs of using the justice system to generate revenue through fees and fines damages basic trust in the institutions of justice. In an extensive study of over 850 recorded and transcribed conversations across 12 heavilypoliced neighborhoods, Prowse, Weaver, and Meares⁷⁰ find that many participants characterize police as contradictory—"ubiquitous when surveilling everyday activity and absent when called upon to respond to serious harm." If people believe the primary activities of law enforcement are arbitrary and pernicious, a reasonable response is often to retreat from public life, to lose trust in laws and official governance, and seek out alternatives to public justice institutions.⁷¹ Moreover, lower public views of police legitimacy correspond with reduced public cooperation with the police.⁷² Overall, the safety of both the general public and officers who serve

⁶⁶ N. Garoupa and D. Klerman, "Optimal Law Enforcement with a Rent-Seeking Government," American Law and Economics Review 4, no. 1 (2002): 116-40.

⁶⁷ R. Goldstein, M. W. Sances, and H. Y. You, "Exploitative Revenues, Law Enforcement, and the Quality of Government Service," *Urban Affairs Review So*, no. 1 (2018): 5–31.
68 A. Natapoff, "Misdemeanors," *Southern California Law Review 85* (2011): 1313.

⁶⁹ Makowsky, Stratmann, and Tabarrok, "To Serve and Collect." ⁷⁰ G. Prowse, V. M. Weaver, and T. L. Meares, "The State from Below: Distorted Responsiveness in Policed Communities," Urban Affairs Review (2019): p. 1078087419844831.

⁷² K. Murphy, L. Hinds, and J. Fleming, "Encouraging Public Cooperation and Support for Police," *Policing and Society* 18, no. 2 (2008): 136–55; M. Desmond, A. V. Papachristos, and D. S. Kirk, "Police Violence and Citizen Crime Reporting in the Black Community," American Sociological Review 81, no. 5 (2016): 857-76.

is reduced when members of the community view the police as unfair and their authority as less legitimate. 73

V. Conclusion

The social philosophy of self-governance allows for the emergence of institutions for the formation and financing of local public administration of justice. At the same time, the open-system framework does not prescribe what form these institutions should take, nor that they should necessarily be exclusively or even principally public. However, to the extent that justice is a publicly produced good, and the bureaus that carry out the functions of justice remain effective and compatible with liberal, democratic ideals, a polycentric system of local provision may often be preferable to hierarchical, monocentric systems.

Within a polycentric system, fiscal equivalence financed by general taxation is a desirable principle for financing public administration of justice at the local level. It is desirable because it provides an institutional means for tighter incentive- and information feedback mechanisms between constituents and local authorities when compared to structures where there is less transparency, accountability, and avenues for learning and adjustment. However, within a single jurisdiction, there can be numerous ways in which differences in the benefits of the justice system can generate pressure to overproduce justice services relative to constituent preferences. Paradoxically, the same properties that make fiscal equivalence desirable by imposing restraint and control between constituents and local government also create internal pressures for agents of the state to engage in predatory behavior.

Revenue-seeking behavior on the part of law enforcement is likely to have deleterious effects on the foundational institutions of a just society. Within a polycentric framework, some of this dissatisfaction with local law enforcement may generate competition and change. To the extent that dissatisfaction translates into exit behavior, political activity, or initiatives on the part of groups to create alternatives or pressure for change, it can be a means to reform. However, many diagnoses of the problems of revenue-generating law enforcement come with proposals for removing the budgetary pressures of local administration. Calls for larger jurisdictions with federally funded budgets will not solve the problem. Polycentric systems call for polycentric solutions. Devising institutional means by which local jurisdictions are not claimants to residual revenues from fees and fines can improve fiscal equivalence, both as a normatively desirable fiscal principle and as a tool of local democratic control over the provision of justice.

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⁷³ K. Murphy and J. Barkworth, "Victim Willingness to Report Crime to Police: Does Procedural Justice or Outcome Matter Most?" Victims and Offenders 9, no. 2 (2014): 178–204.

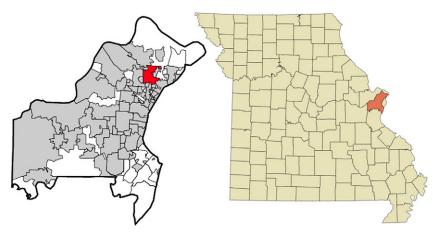


Figure 1. Location of Ferguson within St. Louis County (left) and Missouri (right)

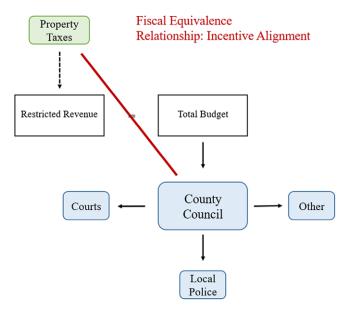


Figure 2. Fiscal Equivalence Relationship: Incentive Alignment

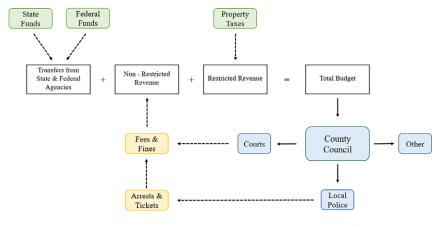


Figure 3. Funding of Local Public Administration of Justice

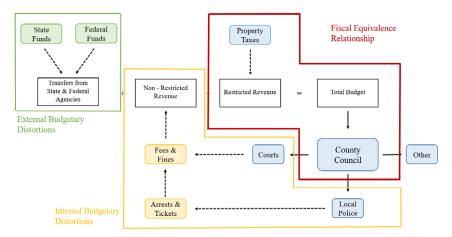


Figure 4. Fiscal Equivalence: External and Internal Budgetary Distortions

Table 3. Housing Market Comparison of Ferguson, Missouri and Neighboring Jurisdictions

Jurisdiction	Competitive Housing Market Score	Average Housing Price	Average Price Per Square Foot	Market Competitiveness
Ferguson	50	\$71.75K	\$58	Somewhat competitive; Some homes get multiple offers
Berkeley	66	\$45.12K	\$39	Somewhat competitive; Some homes get multiple offers
Jennings	51	\$26.5K	\$23	Somewhat competitive; Some homes get multiple offers
Castle Point	79	\$32K	\$33	Very competitive; Many homes get multiple offers, some with waived contingencies
Florissant	75	\$128K	\$98	Very competitive; Many homes get multiple offers, some with waived contingencies
St. Ann	56	\$96K	\$93	Somewhat competitive; Some homes get multiple offers