

## Institutional Requirements for Effective Imposition of Fines

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# 1. Introduction

More than at any other time over the past 30 years, state and local governments are interested in reducing the burden of the criminal justice system. While some reform proposals are aimed at reducing the intrusion of the system, current interest in reform is largely motivated by fiscal concerns (Scott-Hayward 2009). To the extent that fines can replace more socially costly sanctions such as incarceration without adverse consequences on crime rates and other goals of the criminal justice system, increasing their use is a move toward “economical crime control.”

Limited data suggest that in the early years of the US, fines were more frequently used than today, and that there were generally an alternative, not a supplement, to confinement.<sup>1</sup> Goebel and Naughton (1970) found that fines were common in the colonial era, based on data from New York courts. In the more recent period, there was a surge of interest in fines as an alternative sanction in the 1980’s, when prison populations were rapidly expanding. A series of articles from the Vera Institute of Justice and the Rand Corporation made the case for fines as a sanction, described and assessed court practices and evaluated demonstration projects.<sup>2</sup>

Before that point, theoretical analyses of fines were concerned with how to impose fines that did not unfairly discriminate against the poor<sup>3</sup> but could still be collected and not manipulated by defendants. In the background research on existing practice and field demonstrations evaluated by Vera and Rand, very few of the problems brought up in more

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<sup>1</sup> Some of the earliest uses of fines, such as the “wergeld” in Anglo-Saxon law, seem to be essentially negotiated blood money truces between warring clans. Before the technology of incarceration was fully developed, it seems that the average state or ruler could choose from a criminal punishment menu limited to fines, corporal punishment, or capital punishment. It was fairly common for a punishment for a major crime to be “fine if you can pay it, death if you can’t,” or for a single polity to switch freely between the use of the punishment of a fine and the punishment of a death sentence for the same crime (Zamist & Sichel 1982). Rusche et al. (2003) suggest that a growing population of poor in Europe in the middle ages and early modern era led to the use of prison as a deterrent. In their view, industrialization and the increased prevalence of money and market relations up to 1850 then made the fine a more practical option in Europe, and it was brought back.

<sup>2</sup> The most complete reference is Hillsman et al. (1984), but see also Greene (1988), Hillsman (1990, 1988), Hillsman and Greene (1988). For evaluation results for the demonstration projects, see Turner and Petersilia (1996).

<sup>3</sup> See the Equal Protection Clause arguments in *Williams v. Illinois* (1970) and *Tate v. Short* (1971), heavily cited Supreme Court cases that established rights of indigent defendants not to face long terms of incarceration for inability to pay criminal fines.

theoretical analyses seemed to apply. Fines were used for a significant minority of offenses (perhaps a quarter of offenses); where fines were assessed as a function of income, courts were usually able to get a good sense of the income of the perpetrator quickly; and collection rates were decent, if imperfect. And, once fines are nontrivial, they become more attractive to judges, making them a viable alternative to incarceration (Hillsman & Greene 1988).

Despite these fairly positive findings, fines have not gained much traction as an alternative criminal sanction in the United States. Under Tony Blair, the United Kingdom greatly expanded the use of fines for minor offenses.<sup>4</sup> But in the American criminal justice system, outside of automobile offenses and white-collar crime, fines are something of an afterthought. While they seem to be imposed quite frequently as part of a package of sanctions, both across the United States and within specific jurisdictions, fines do not seem to be prioritized, and little thought or planning seems to go into setting up systems to design fines, track them, and enforce collection.

In this essay, we undertake an analysis of the role of fines as a criminal sanction in the U.S. today and the potential for fines to play a larger role in crime control. The literature is generally divided into two conceptual strands: one that considers issues such as the setting of fines within a menu of criminal sanctions, how fines do or do not fulfill the purposes of punishment, and the deterrent and other impacts of fines on choices of potential offenders; and second a more descriptive strand that considers mechanisms for increasing collection rates and the perspectives of judges and others on the appropriate utilization of fines and other sanctions. We consider both the policies regarding fines as criminal sanctions and the organizational and ecological issues surrounding their collection in order to assess the practical relevance of an increasing reliance on fines.

A quick summary of our conclusions is that first, fines are economical *only* in relation to other forms of punishment, second, that for many crimes fines will work well for the majority of offenders but fail miserably for a significant minority, third, that they present a number of very significant administrative challenges, fourth, that the political economy of fine imposition and

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<sup>4</sup> The motivation for the expanded use of fines was to reduce pressure on the courts so that major cases would receive more attention and could be resolved more quickly. Some have criticized the lack of due process. Others have argued that fines were more of a “tax” on behavior than a punishment, suggesting that fines did not communicate sufficiently a sense that the behavior was socially unacceptable.

collection is complex. Despite these facts, and with the caveats that jurisdictions vary tremendously and that there are large gaps in our knowledge about them, we build a model showing that it is possible to expand the use of fines as a criminal sanction if institutional structures are developed with these concerns in mind.

## 2. Fines as Punishment

Courts have a set of sanctions that can be applied as punishment for criminal offenses, and the very language “alternative sanctions” reflects the central role of secure confinement as a sanction. This chapter generally considers probation, jail, prison, and post-incarceration supervision as the “main” sanctions in order to discuss other options as “alternatives.” But, frequently these sanctions are not distinct. Probation is backed with the threat of incarceration, as are parole and mandatory post-incarceration supervision. Therefore, a given offender may transition through several of these sanction types under a single sentence.

As we begin, it is important to bear in mind that the variation across criminal justice jurisdictions is tremendous – size, rules, allocation of responsibilities, funding, etc. As a result, generalizations are necessary. In our discussion, we treat various sanctioning schemes in their narrowest form in order to highlight distinctions across the canonical forms of the sanction types. But we recognize that jurisdictions combine and adjust sanctions so that the distinctions we draw in prose are not nearly so clean in practice.

“Alternative” sanctions are those forms of punishment other than conventional probation or parole supervision and jail or prison confinement. This category includes “intermediate sanctions” designed to fall somewhere between probation and incarceration as well as monetary penalties (such as fines, victim compensation, and court and other fees). In practice, monetary penalties are frequently assigned along with probation or incarceration, so in some cases they may not serve as alternatives but as complements. And specialized courts (such as drug courts, mental health courts, and the like) have introduced an alternative way of supervising and punishing, one that is not necessarily intermediate to probation and prison. We return to these more comprehensive sanctioning “programs” later in the chapter. To begin with, we concentrate on fines as a distinct sanction.

## A. Estimates of the Imposition and Collection of Fines

Many minor infractions are routinely punished with monetary sanctions. A small fine resolves many driving violations, including ones that put people and property at risk. Monetary sanctions are generally considered effective and appropriate for minor infractions.

But for more serious offenses, fines are infrequently applied as the primary punishment. In 2004, there were 2.2 million arrests for serious violent or property crimes. Of these, 68% were convicted and 9% diverted to another disposition. Of those convicted of a felony, 32% were sentenced to prison, 40% to jail, 25% to probation, and 3% to other sanctions (Useem & Piehl 2008, p.10). From this accounting, clearly sanctions explicitly labeled as diversion or alternatives, including fines, represent a minority of outcomes. But, as noted above, monetary penalties including fines or court costs may be part of a criminal sentence to confinement or probation.

Table 1 reports data from federal courts in 2006, showing that 76% of convictions have no fine or restitution imposed. Despite the fact that fines are imposed in a minority of cases, the total obligation is substantial: nearly \$5 billion. Few offenders had both restitution and fine orders, and, in the federal courts at least, financial obligations vary greatly by offense type. The table reports some of the most common offenses. Immigration offenses are unlikely to have financial penalties, while fraud convictions frequently require restitution. In contrast, drug possession cases frequently result in a fine. Seventy percent of the total payment ordered comes from fraud cases, which represent fewer than 10% of the offenses.

For state and local jurisdictions, lack of data on fines and other alternative sanctions seems to be a nearly universal problem -- a consequence of the lack of priority placed on these sanctions. Vera researchers made heroic efforts to assemble information, and the reports by Vera represent the high water mark for concrete data about fines and their implementation in the United States, a level that has never been approximated before or since.<sup>5</sup> So, in spite of the age of the information, we report a few of their findings.

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<sup>5</sup> A sense of the general lack of real numbers comes through in the story of a statistic on the extent of fine use, as reported by Hillsman et al. (1984). Apparently born in 1932, the modal figure in the literature for over forty years was that 75% of cases involved fines. "A figure of seventy-five percent was published in 1953 by the University of Pennsylvania Law Review and was passed along by Rubin in 1963 and again in 1973, Davidson in 1966, and the Rutgers Law Review in 1975. Miller used a very similar figure in 1956 without noting a source. It is

Table 2 reports results of a telephone survey of court administrators during the 1980s, showing that the use of fines declines as the seriousness of the offense increases. Our own informal survey of court administrators found a great deal of variation in the role of fines and also in the ability of courts to report on the extent of their use. In fact, most of the information they could provide had to do with the collection more than with the imposition of fines. For example, one county jurisdiction we contacted could easily provide information on active fines outstanding, but could not provide any numbers to put this in context.

The focus of court administrators is generally on the collection of fines. And the general impression in the field is that collection rates are low. Langan (1994) reports that half of probationers had not complied with their conditions of probation, including financial penalties, by the time they were discharged from probation and that noncompliance was infrequently punished. Table 3 reports on collection of fines in misdemeanor courts across New York City in 1979. While the sample sizes are small (researchers took a one-week sample from each court), the results show variation in success, both across offense and across court, and generally indicate that fines collections are not uniformly low (Hillsman et al. 1984). McLean and Thompson (2007) report more recent data showing great variation across states in imposition of monetary sanctions and low levels of collection. But this does not mean that collection rates must necessarily be low.

Data from Twin Falls (Idaho) in Figure 1 show that collection rates for fines in misdemeanor cases and infractions were high in 2001, whereas collection rates were low for felonies and victim restitution. In 2004 the jurisdiction began using a collection agency. Since that time, collections in the lagging categories increased substantially. This is evidence that collection is, at least in part, a function of attention.

One perspective on the potential for fine collection comes from the costs of collection itself. A review of the British experience is that it costs £91 to collect an £80 fine (United Kingdom 2006). An Orange County (California) official reported that its collection costs were an order of magnitude greater than revenues. For an agency charged with collecting fines, such as a county court, this is a large negative return. But for the jurisdiction imposing fines as an

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fascinating that the University of Pennsylvania cites a 1932 article for this figure, and researchers desperate for some measurement have kept this seventy-five percent alive for over forty years, apparently without confirmation that it reflects current fines use.” (Zamist & Sichel 1982).

alternative to incarceration, including the avoided costs of incarceration would yield a very high financial return. To paraphrase Winston Churchill, fines are the least economical form of punishment, except for all others that have been tried.

This point is best illustrated by results from a felony-collections program implemented by Snohomish County in Washington State. In 2003, the state Department of Corrections (DOC) entered into agreement with local county clerks' offices to assume collection of financial penalties owed to the state by felony offenders. The county reports that the results of its program shown that "collection efforts in felony cases can be highly successful" (Snohomish County 2009). And from the county's perspective, it was. From an expenditure of \$85,000, the program produced \$146,000 for the county. This latter figure was comprised of a \$61,000 grant from the state and \$85,000 in collection recovery fees (\$100 per account). Note that the program would have simply broken even for the county without the state grant. The benefit touted by the county was due to the transfer from the state to encourage counties to participate.

The intervention was relatively simple. Monthly statements were issued, and administrative hearings held to monitor these accounts. Only after months of delinquency and repeated administrative intervention is the case referred for formal court hearings. In a sample of 100 cases in the county clerk's program, 16% paid in full (three times the rate in a similar group of cases managed by the DOC) and 38% of the balance was collected (compared to 6% in the DOC sample). The average payment collected was on the order of \$100.

As in the earlier cases cited, attention to collection can raise rates of collection substantially, but the return is positive only if the fines have punishment value. From the state's perspective, the program was costly, as the incentives to counties were not covered by the increase in collections. If the fines are alternatives to other more costly punishments, paying more than is recovered *is* economical.

The collection of fines, even when the fine is an alternative to incarceration, is frequently backed up by the threat of incarceration if payment is not made. Nagin (2008) discusses that fine collection requires the "commitment of real resources" including systems to track payment and implement followup punishments, such as incarceration, in the case of failure to pay. He cites Moxon and Whitacker (1996) that roughly 25% of persons fined in England and Wales were imprisoned for some period as punishment for nonpayment.

In a finding known as “the miracle of the cells,” those with credible threats of sanctioning for nonpayment of monetary penalties had significantly greater compliance. In an experimental design, Weisburd et al. (2008) found that 35-40% of those facing the threat of incarceration paid 100% of their obligation compared to just 13% of controls. (The addition of other conditions did not increase compliance over and above the threat of incarceration.) Together with the results of the Snohomish County pilot project, these results show that agencies that make collection a priority can achieve much improved, if still imperfect, compliance rates.

However, a brief look at data from the collection industry suggests that there are serious limitations. Data from ACA International, which describes itself as the Association of Credit and Collection Professionals, suggests that of the total credit granted in the United States in any particular year, as much as 8% is written off by the creditor at some point.<sup>6</sup> Collection agencies seem to be able to collect less than 20% of debts that go into delinquency.<sup>7</sup> Because the recovery rate tends to vary greatly by type of account, it is hard to make a clear comparison between “bad debt” in a private transactional setting and “bad debt” from fines, but the fact that companies that are able to preselect who they lend to have an overall recovery rate that is possibly as low as 92% is sobering for agencies trying to collect from individuals who are selected on the basis of noncompliance with criminal law.

In Figure 2 we reproduce a number of data points from diverse agencies in different regions and different time periods, focusing on collecting from very different populations. It should be noted that two courts, Maricopa County Superior and Pima County Superior, that did not deal with traffic cases, had total court expenditures 33 and 89 times total collections, respectively, and would thus be completely impossible to include in the graph.

A few patterns seem to come through. First, looking at the different categories, it is clear that collecting on traffic and parking offenses is highly efficient, with low costs per dollar collected and fairly high collection rates (although these are simply guesses by previous researchers in several cases). Second, there is something of a negative relationship between rate of collection and efficiency of collection. Private collection agencies have an extremely high efficiency, paying about \$0.20 to collect each dollar, but their recovery rate is under 20%. Public

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<sup>6</sup> The authors use Federal Reserve Bank data showing \$2,550 billion of outstanding consumer credit in early 2008 and IRS data estimates of \$152 billion of bad debt write-offs on consumer debt for the year (PriceWaterhouseCoopers 2008).

<sup>7</sup> ACA International (2005) finds a rate of 16.2% across the industry.



agencies are lower efficiency, but show significantly higher recovery rates. Third, even the highest recovery rates don't get close to 100% - all available data suggest that collection rates in the 70-80% range are better than average. With more and better data, it should be possible to sketch out an efficient frontier of fine collection.

We draw several conclusions from this review of available evidence on collection practices and success. High rates of collection are possible, as indicated by results from traffic courts and from pilot projects to increase collection. But many jurisdictions appear not to emphasize collection. This may be due to generally inattention in light of other workload demands. But it also in part reflects the high costs of collection generally and from the population of convicted offenders in particular. An agency charged with collection will not be motivated to attain high collection rates simply by the financial returns to doing so.

## B. Fines and the Purposes of Punishment

The discussion above suggests that fines and other monetary penalties play multiple roles in the criminal justice system. The traditional theoretical purposes of punishment are incapacitation, deterrence, rehabilitation, and retribution. Relative to incarceration, fines (and other alternative sanctions) offer less in terms of incapacitation, but can potentially fulfill the other purposes. But in practice, a particular sanction for a particular offense must fulfill multiple purposes. At the same time, different agents of the system may conceive of the same sanction differently. As an example, the view by court administrators of fines as a potential revenue stream to be balanced against the costs of collection is very different from the view of a fine as a punishment, perhaps to be compared in terms of efficiency to other sanction alternatives.

Economists tend to emphasize the deterrent effect of criminal sanctions. But other justice system participants have other priorities. The victims' rights movement of the 1980s and 1990s led to the increasing imposition of financial penalties in order to provide some compensation to victims and to fund offices to support crime victims. In addition, many states routinely impose a wide range of fees on criminal defendants. Reynolds et al. (2009) report a hypothetical (presented as representative) case of a person convicted of possession of a controlled substance in Texas, facing a prison sentence of five years (expected time served behind bars is two years of these five), a fine of \$1500, and court costs of \$362, including clerk's fee, records management fee, and court security fee, among others. Some government agencies rely heavily on revenue

streams resulting from criminal sentences. McLean and Thompson (2007) report that “administrative assessments on citations fund nearly all of the Administrative Office of the Court’s budget in Nevada . . . and [i]n Texas, probation fees made up 46 percent of the Travis County Probation Department’s \$18.3 million budget.”

Another view of the appropriateness of particular sanction options comes from a consideration of the expressive quality of punishment. Many authors express concern that fines do not carry sufficient expressive condemnation of conduct, and thus become more like a “price” of conduct, a licensing fee, or a “cost of doing business.” To the extent that it is the moral expressiveness of punishment that leads to deterrence, increasing reliance on fines instead of sanctions that restrict liberty may become a false economy.<sup>8</sup> Yet, concerns that fines lack sufficient expression of public scorn often omit consideration of the ways that fines are imposed. As Feeley (1979) and others have described, navigating one’s way through the courts, even if one’s case ends in charges being dropped or the imposition of a fine, will be experienced by many as punishing. And, as the outcome of criminal conviction is frequently a suspended sentence, an imposed fine could be experienced as a more onerous punishment.

One metric of appropriateness of fines as punishment for particular conduct is judges’ willingness to impose them. A 1987 survey of judges found that 53% to 64% expressed a willingness to punish the sale of 1 ounce of cocaine with a fine and 27% to 46% expressed a willingness to punish daytime residential burglaries with a fine. Nagin (2008) interprets these findings as indicating willingness to use fines for fairly serious offenses. He observes “My hunch is that the major barrier to a large increase in the use of fines for nonviolent crimes would not involve adverse public reaction about being soft on crime. Rather, it would involve justifiable concerns about the effectiveness of fine enforcement and the possibility that offenders would pay the fine by committing more crimes (Nagin 2008: 39).”

In contrast, those particularly concerned with rehabilitation, including agencies and organizations focused on the challenges facing prisoners after release, often view monetary sanctions as a barrier to rehabilitation and a driver of recidivism (McLean & Thompson 2007).

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<sup>8</sup> Zamist and Sichel’s (1982) review summarizes the literature on expressive role of sanctions. Gneezy and Rustichini (2000) argue that fines can increase problem behavior under certain circumstances. Their analysis of fines for late arrival at a day care center found that parents were more likely to be late after the fines were imposed. It is unclear whether these findings are relevant to the context of criminal fines, as the day care fines were very small.

Offenders are likely to face a variety of financial obligations, including court costs, victim restitution awards, and other debts (notably child support payments). The marginal tax rates for paying these debts can become extremely high, providing strong disincentive to working in the legal labor market. As noted by McLean and Thompson (2007), “Federal law provides that a child support enforcement officer can garnish up to 65 percent of an individual’s wages for child support. At the same time, a probation officer in most states can require that an individual dedicate 35 percent of his or her income toward the combined payment of fines, fees, surcharges, and restitution.”

Reynolds et al. (2009) report data from an Office of Court Administration study in Texas that shows for the population that have both criminal justice debt and owe child support (which may be 20-25% of the offenders, or more), offense debt is dwarfed by child support obligations. Perhaps in recognition of the financial demands, the repayment time horizon for the offense debt is long – roughly five years assuming no gaps in payment. Reynolds et al. (2009) recommend, based on these data, providing judges better training on the financial circumstances of the offenders so that they will impose fines that are collectable. The view that sentences do not reflect the practical issues of the collection of monetary penalties was echoed by court administrators with whom we communicated.

McLean and Thompson (2007) make a somewhat different policy recommendation, based on essentially the same findings and with a similar set of concerns. Monetary fines, including court costs and victim restitution, can be effectively collected if caseworkers coordinate debt collection across sources, facilitate the logistics of collection across agencies, and keep the repayment rate practical. Under this approach, the enforcement of the fee requirements will be individualized (as a function of wealth, earnings capacity, and other debt obligations) even if the imposition of the fees is not.

Under both of these recommendations, fines (or their partial forgiveness) may become individualized to an offender’s ability to pay. In the process, the link between the fine as a distinct punishment and the particular conviction that lead to it may well become diffuse in the offender’s and in the state’s perspective (if it wasn’t already). There are two main arguments in these policy proposals – that it is not practical to fully collect imposed fines in many cases given the low ability to pay and high debt loads and furthermore it may not be in society’s interest to push too hard to collect, as it may on the margin drive more out of legitimate labor market

activity. These are important constraints to be incorporated into any serious proposal regarding expanded use of fines as an alternative criminal punishment.

### C. Jurisdictional Issues

One institutional matter of particular practical concern is that of jurisdiction. While criminal justice is frequently referred to as a “system,” it is anything but. There are multiple layers of legal jurisdiction (from local to state to federal), and sometimes overlapping jurisdictions of agencies (such as lower and upper courts, probation, city police, county jails, and state prisons, among many others).

As has been implicit in the discussion above, different sanctions are implemented by different authorities, meaning that individuals may transfer from one agency to another within the criminal justice system to fulfill the conditions of a single conviction. These transfers may be transfers of authority or legal responsibility, physical custody, or both.

For violations of state criminal law, a sentence to prison means that the state correctional agency has responsibility for the details of the incarceration experience, subject to the time established by the court and the many restrictions of federal and state laws and regulations. Other sanctions may be carried out by corrections agencies, probation, or the courts. In about two-thirds of states probation is in the judicial branch and in the other one-third it is an executive agency (Piehl & LoBuglio 2005). Therefore, a system of fines collected by the courts with jail time as punishment for noncompliance may require repeated handovers across jurisdiction, as an individual passes from the courts to the county sheriff and back again.

Handovers across these agency boundaries can be clunky, and the time and administrative work involved can undermine efficiency and rehabilitation. In addition, we argued above that different agencies may have different goals for the same activities. If a county clerk (or a collection agency operating under contract) sees revenue as the highest priority, fine collection might be treated quite differently than by a probation officer working to attain compliance across a wide range of conditions. As a result, jurisdictional boundaries not only lead to administrative costs, but may by their very existence fundamentally alter the form the imposed punishment takes as it is executed in practice.

A number of alternative sanctions programs have faced this same issue. For example, programs that employ a strategy of quickly administered, minor sanctions for rule infractions

have shown a lot of promise for modifying criminal behavior (for examples, see Kleiman 2009 and Piehl 2009). But, just as in the fines example, such strategies run counter to traditional jurisdictional boundaries. In order to be successfully implemented, such programs require either the development of new agency relationships or new capacities within agencies.

One approach is to contract out with private (usually non-profit) entities to manage, as is often done with halfway houses prior to prison release. Another approach has been for agencies to develop new capacities and manage the punishment for rule violations “in house.” For example, parole in New Jersey has developed a “halfway back” program to reduce its reliance on county and state prison cells for punishment of violations of parole conditions. To do this, the parole agency now has several facilities with secure cells, located in cities with large numbers of parolees. Parolees in violation are taken to the halfway back facility where they may serve a few days, be held for as long as 30 days to be assessed for appropriate disposition, or transferred to a county or state cell. The new program was promoted as a way to both save resources and improve outcomes.<sup>9</sup>

Yet another solution to jurisdictional conflicts in imposing and carrying out alternative punishments is a relatively new institutional form known as the specialized court. Drug courts, mental health courts, reentry courts, and the like have been promoted to provide more appropriate and flexible supervision and sanctioning. In these courts, a judge (along with a group of law enforcement and social service practitioners) aims to construct a punishment that both sanctions the criminal behavior and facilitates rehabilitation. Because of the individualized program, fines and other monetary obligations of the offender are prioritized and managed against issues such as work disincentives. In these courts, the details of the sanction are organized around the particular circumstances of the offender, and these details can be, and are, modified over time. By including participants from multiple criminal justice and social service agencies, any conflicts can be managed within the team, with the leadership of the judge.

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<sup>9</sup> The added capacity for parole allows more flexibility which can speed resolution, allow punishment with minimum disruption to an offender’s productive activities (for example, by allowing him to continue any paid employment), and to individualize parole requirements. It is projected to save money by reducing transfers to physically remote locations and reducing disruption to those facilities. If outcomes improve, then downstream savings will accrue to the system.

In all of these alternative sanctions models, the punishment is oriented around the offender rather than the offense. Choices about priorities for expectations of the offender and sanctions for noncompliance are made with the offender as the audience, with the goal of modifying behavior to improve his or her functioning in society in the future. Advocates of such an approach to punishment tend not to be terribly concerned about the impact of these choices on other audiences, such as deterrent impact.

We attempt to accommodate concerns with both the offender and with wider audiences in the theoretical model below. The model explores the possibility of sorting offenders in a way that efficiently deters and at the same time is realistic in its imposition of penalties. Certain offenders are likely to be deterrable by fines or other sanctions, while others may be incapable of being deterred (because unstable income and minimum allowable consumption levels make it impossible to collect sanctions from them or because of low levels of social skills).

### 3. Modeling Offender Choice under Fines

A long theoretical literature in economics addresses the heavy reliance of the criminal justice system on very expensive forms of punishment – prison – when cheaper alternatives – such as fines and other sanctions – are available. Becker’s (1968) well known result that the most efficient way to achieve deterrence is with a maximal fine has been analyzed or extended in a large number of papers,<sup>10</sup> many of which analyze the conditions under which a maximal penalty may not be optimal. (See Durlauf & Nagin, this volume, for more on modeling deterrence.)

But the tradeoff among types of punishment has received somewhat less attention. The essential dimension for present purposes is the tradeoff between fines and incarceration, maximal or not. Incarceration is socially costly, and growing literatures in sociology, criminology, economics and policy document the various types of social costs involved in the use of incarceration (fiscal costs of provision of secure confinement, labor market impacts, costs imposed on community due to disruption of removal and return of residents, impact on family members, etc.) If the same level of crime could be achieved at lower social cost using alternative punishments, the social cost savings could be substantial. As Polinsky and Shavell (2000, p. 51) state it, “different types of sanctions should be employed in the order of their costs (per unit of

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<sup>10</sup> See references in recent reviews by Polinsky and Shavell (2000) and Garoupa (1997).

deterrence).” And these sanctions should be imposed so that marginal deterrence is maintained. (We discussed earlier that in practice sanctions are frequently combined. To keep the model tractable, we treat fines and prison as distinct alternative punishments.)

The current literature reports heterogeneity in how people respond to various sanctions and threat of sanctions (Hillsman et al. 1984, Kleiman 2009, Moxon & Whittaker 1996). For example, when given the option, many inmates often prefer incarceration to terms of supervision “on the street” (Piehl 2002). But there is very little empirical data on deterrent impacts of the sanctions much less heterogeneity in the effects. Therefore, the literature does not currently allow for calculations of the cost-effectiveness per unit of deterrence.

One potential limitation on fines is the low level of income and assets of the majority of criminal offenders (James 2004, Tyler & Kling 2007). The deterrent value of fines may be high enough to justify an important role in punishment for richer defendants, but for poor offenders there may be a low deterrent effect. Garoupa (2001) presents a model in which it is optimal for law enforcement to increase both the probability of apprehension and the penalty against richer defendants, as the return to prosecution of poor defendants is so low (yet still somewhat costly).

## A. Fine Structure and Deterrence

We begin with a benchmark model of the deterrent power of fines, where the potential offender has a full-time stable job. He (without loss of generality, we stick to the male pronoun) receives a fixed wage  $w$  every period. If he commits a crime he receives a benefit  $b$ . The probability of being caught, convicted and sentenced is  $p$ .

If honest, his payoff is:  $w$

If dishonest, his payoff is:  $-pf+w+b$

In this benchmark model, fines can successfully deter crime when our “taxpayer” finds that honesty is a better policy than dishonesty, which under our assumptions reduces to:

$$f > b/p$$

The interpretation of this is fairly simple: in order to make it advantageous for the average law-abiding citizen to stay law-abiding, all that is required in the benchmark model is a simple fine structure, based on an estimate of the upper-bound of the benefit the citizen might gain from

breaking a specific law,  $b$  and the odds of successfully catching him and convicting him if he does,  $p$ . We simply set a fine equal to the first value divided by the second. If it is believed that the citizen would at most gain \$10 from jay-walking, and the state would have a 50/50 chance of catching him, the appropriate fine would be set at or slightly above \$20.<sup>11</sup>

The above assumes that the disutility of the fine is purely the loss of money. There is substantial evidence that many if not most fines impose additional disutility on offenders beyond the simple out-of-pocket cost (Feeley (1979) is the classic statement of this). The nonfinancial disutility is even more difficult to measure than financial disutility, and subject to remarkable variance. Various situational issues, such as whether or not there is an actual arrest or simply a ticket or penalty notice for disorder, whether the offender is detained for several hours or days before the fine is imposed, whether the police, court officials and judge who impose the fine are professional or gratuitously hostile all can play a role here. Additionally, the personality and social disposition of the offender may lead him to see the fine as alternatively a minor nuisance, a substantial imposition.<sup>12</sup>

To take this into account, we add a variable  $d_i$  for the individual  $i$ 's expected disutility from the procedure itself. For each individual, the non-financial disutility is assumed to a random finite positive value that only he knows, updating the equation to:

$$d_i + f > b/p$$

A few comments are in order. Here, fines, wages, and benefits are measured in comparable units. If fines are considered to be relative to wage levels, as a day fine would be, this would require that benefits also be parameterized relative to wages. If utility scales perfectly with earnings, then the results are unchanged by this reparameterization.

Note also that we have assumed the offender can pay the fine from his wage this period. However, the model is effectively identical if the offender is capable of paying from some store

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<sup>11</sup> Note that in Becker (1968) a single variable,  $f$ , stands in for a generic form of punishment. It might reasonably be summarized as “total pain,” “total disutility” or “total loss of utility” from punishment. While Becker’s article discusses the cost, to society, of inflicting this disutility on individuals, there is no discussion of the issues of uncertainty, income, wealth etc. There are numerous papers that incorporate one or more of these additional considerations. See Polinsky and Shavell (2000) for a review of this literature.

<sup>12</sup> Under certain circumstances an offender may see a punishment as a badge of honor. We believe these circumstances are unusual, so set this case aside.



of wealth. Thus, for offenders who have either high income or high wealth, deterrent fine size and structure are straightforward.

If the taxpayer has a low income, we will need to make some adjustments to the model. We begin by adding the assumption that consumption is a function of the wage,  $c(w)$  and cannot drop below a threshold,  $\underline{c}$ . Define  $c(w)$  as:

$$\begin{aligned} c(w) &= w \text{ if } w \geq \underline{c}, \\ c(w) &= \underline{c} \text{ otherwise} \end{aligned}$$

In the case where consumption hits the lower bar, the fine cannot be levied. This corresponds to a range of real-life scenarios, where convicted offenders are so poor that they have neither income nor assets from which a fine can be collected. In the context of this paper, if the offender was truly incapable of paying out any money in the near future, the case would no longer be handled by a fine and would instead have to be handled by some combination of incarceration, probation, etc. Such cases of completely indigent offenders appear to be a very minor part of overall criminal activity. A system of fines that cannot handle such cases directly can still be effective.

A much more common case is where  $w > \underline{c}$ , but only by a relatively small amount. That is to say, the offender does have a steady wage, but it is relatively small, and the amount that can be taken by fine is similarly small. Thus, for every period, there is some amount  $\xi = w - \underline{c} > 0$  that can be taken from the offender without being excessive punishment. If we assume that this amount is taken regularly every period for a set number of periods, and that the offender discounts the future utility by  $\beta$  (which is both a rate of time preference and a sense of the probability of continued fines) then the expected impact in period 0 of a fine exacted over  $T$  periods would be:

$$F_T = \sum_{t=0}^T (\beta^t \xi)$$

For a fine to be successfully exacted against a low income offender, it is necessary to find a  $T$ , such that

$$F_T + d_i = \sum_{t=0}^T (\beta^t \xi) + d_i > \frac{b}{p}$$

We see that

$$F_T = \sum_{t=0}^{\infty} (\beta^t \xi) - \sum_{t=T+1}^{\infty} (\beta^t \xi) = (1 - \beta^T) \sum_{t=0}^{\infty} (\beta^t \xi) = (1 - \beta^T) \frac{\xi}{(1 - \beta)}$$

And solve for

$$T = \frac{\ln\left(1 - \left(\frac{b}{p} - d_i\right) \frac{(1 - \beta)}{\xi}\right)}{\ln(\beta)}$$

Several comments are in order: First,  $T$  can only be found if  $1 - \left(\frac{b}{p} - d_i\right) \frac{(1 - \beta)}{\xi}$  is positive,

which is only true when  $\left(\frac{b}{p} - d_i\right) < \frac{\xi}{(1 - \beta)}$ . Since the figure on the right is the net present value of all future payments of  $\xi$ , this makes sense; if the inequality didn't hold, the net value of all payments would never exceed the  $\frac{b}{p}$  value.

Second, the higher  $\xi$ ,  $\beta$ ,  $d_i$  and  $p$  are, the lower  $T$  is. Likewise, the lower  $b$  is, the lower  $T$  is. All of which stands to reason – an increase in the steepness of the fine, the greater the “slap in the face” an offender feels from receiving *any* fine, or the certainty of the fine process (both  $\beta$  and  $p$ ) would lower the number of periods we would need to impose fine payments, while the greater the benefit to the potential offender, the more periods we would need to impose fine payments.

Third, for valid  $T$ s, both the numerator and the denominator are logarithms of numbers between 0 and 1, which mean both have negative values (making  $T$  positive). If either value approaches zero, then the logarithm of that value will asymptotically approach  $-\infty$ . This is most critical if  $\frac{\xi}{1 - \beta}$  is only slightly greater than  $\frac{b}{p} - d_i$ , the situation of an agent who will only barely pay off (over an infinite number of periods) a fine equal to the “expected benefit.” As the net present value of his total fine payments approaches the gain from the crime, the value of the numerator approaches  $-\infty$ , and the value of the overall expression approaches  $\infty$ .

Fourth, we should assume that there is some  $\bar{T}$ , a maximum number of periods that a system can expect to collect period payments ( $\infty$  is a helpful idea for modeling purposes but not susceptible to implementation). We can effectively use fines to deter even very poor individuals from a wide variety of crimes, so long as they have a predictable wage, place a high value on the future, and are unlikely to move around.

The potential criminal we envision in this adjustment, while not indigent, has an uncertain honest wage  $w$ , which is a simple Bernoulli variable with a sample space  $\{\underline{w}, \bar{w}\}$ . The higher wage,  $\bar{w}$ , allows the agent to pay  $\xi$  in each period, while the lower wage draw  $\underline{w} \leq c$ , does not allow the agent to pay anything. The probability of drawing  $\bar{w}$  in a given period is  $\rho$ , and the probability of drawing  $\underline{w}$  is  $1 - \rho$ .

Because the expected payment any single period is  $E(f_i) = \xi \times \rho + 0 \times (1 - \rho) = \xi\rho$  we can very simply adjust the earlier equation to get

$$T = \frac{\ln\left(1 - \left(\frac{b}{p} - d_i\right) \frac{(1 - \beta)}{\xi\rho}\right)}{\ln(\beta)}$$

The change is simple, but significant: for a given  $b, p, d_i, \beta$  and given “time limit”  $\bar{T}$ , a drop in the certainty of employment per period will require a matching increase in  $\xi$ ; a 1/10th drop in  $\rho$  will require a 0.1 increase in  $\xi$ ; a 50% drop in  $\rho$  will require  $\xi$  to double.

In summary, fines can be powerfully deterrent for a wide range of possible crimes and potential offender situations. However, for every crime there will be some potential offenders for whom the threat of a fine will simply not be credible or threatening. Potential offenders who are indigent, who have highly unstable situations, who discount the future heavily, or who are confident in their ability to outwit the system in the long run will not be deterred by fines.

## B. Fines as the First Line of Defense

Thomas Schelling (quoting Walter Lippman) spoke of the plate glass window as a model deterrent mechanism – once you go too far, it breaks and an uproar ensues (Schelling 1956). Our vision of a fine is close to that, but not quite as binary – something like a thicket. Once you cross the line it marks out, you get immediately stuck by the branches, which will deter most people. However, a minority are so willful or heedless that they will keep on going. To deal with them you need a second, much more powerful, system that they *cannot* ignore. That doesn't mean the thicket doesn't play an important role, or that it's not a good investment. By cheaply deterring the hoi polloi, it allows you to focus on the real troublemakers.

Similarly, fines may do an efficient job of deterring the majority of potential offenders, but a significant minority (25%, as a rough guess) may crash right through any fine system, accumulating a huge number of fines, failing to pay, etc. This is in keeping with a common pattern in criminal justice, and in management and administration generally. DiIulio and Piehl (1991) provide evidence of the high variation in offender patterns, showing that focusing punishment on the minority with the highest rates of offense yields the biggest benefits. Models of offending trajectories likewise show variation in offending that falls into identifiable clusters (Nagin et al. 1995). More generally, a commonplace of management lore is the “80/20 Rule” or “Pareto Principle,” the general idea that 80 percent of activity can be traced to 20 percent of individuals (i.e., 80% of sales are due to 20% of customers, 80% of complaints due to a presumably different 20% of customers, etc.).<sup>13</sup> This general idea seems to be very clearly borne out in all the available data on fine use and administration. For a wide range of nuisance crimes, misdemeanors, and even some basic felonies, efficient crime control will require a system that effectively sort offenders.

For the appropriate crimes, fines will represent the first line of defense. An offender who is caught and convicted can be fined using a flat penalty or one scaled according to his wage or expected wage. The research by Vera suggests that this latter method can be trusted to assess a fine that is both payable but onerous. An effective administrative system needs to be in place to follow up (see Turner and Petersilia 1996 for a summary of some of the issues involved). After a certain amount of followup, triage becomes possible – one group of offenders pay quickly and fully, a second pays slowly and only after harassment, and a third group will completely fail to pay. If the administrative system is well-run, the first two groups will have been punished at only minor net cost to the system.

The third group, those who have failed to pay, will have crashed through the fine system into the next level. Most likely a court will need to tailor a solution for them, depending on the pattern of crimes. The development of the solution could draw on the experiences of the “miracle of the cells” (Weisburd et al. 2008) or programs with a more graduated set of sanctions that can be more narrowly tailored, such as those frequently used in specialized courts (Kleiman

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<sup>13</sup> It appears that Joseph Juran was responsible for the popularization of this idea (Wood & Wood 2005).

2009) or those used to encourage labor force attachment in corrections programs to prepare inmates for release (Piehl 2009).

### C. Using Fines in a System that is Both Fair and Efficient

For this proposed system to work fairly and efficiently for a particular class of crimes, it must do a good job of allocating fines to those for whom they will be effective and retaining the “thicket” only for the others. Equilibrium is attained when those who never offend are happy to stay that way; those who offend once, in a weak moment, are glad it wasn't more than that, and wish it had never happened; and those who are undeterred wish they had better control of themselves.

What precepts can we employ to maintain this balance? First, the system should not overreact to temporary failings. It is very easy for a poor but hardworking offender to miss one payment of an overall payment regimen. Carelessly treating them as if they were undeterrable may create needless misery for them, and unnecessary waste for the system. The simple economics of an efficient criminal justice system are that deterrence should not be maximal (Becker 1968). The system proposed here should be evaluated as a whole, not on an incident-by-incident basis.)

Second, whatever tailored program is developed for those who are not deterred by the sanctioning scheme must not be compelling to somebody behaving according to the benchmark model, a “taxpayer.” This seems easy to achieve. The tailored program should ensure that noncompliance with the sanction produces further obligations to government (such as garnished wages or additional appointments to keep) that the “taxpayer” will find much more noxious than a simple fine. (For example, someone with regular wages or a hope of regular wages will not want to lose them.) This condition provides a constraint on how generous the tailored program can be in terms of writing down the financial obligations for those who cannot pay (Levitt 1997).

Thirdly, while it is not clear that fines have any less deterrent power than other punishments, we are certain that first, there are some people who will not be deterred by fines, and second, that fines are likely to *look* “softer” to voters than some other choices available (especially ex post). It is therefore vitally important that fines not be used as punishments in cases where a single failure of deterrence is catastrophic: any crime that directly causes serious pain or anguish to another person would be very inappropriate for punishment *solely* by fines.

Obvious examples would be murder, rape, or assault. Built into our model of fines is the certainty that they will fail to deter for a substantial minority of potential offenders.

Finally, the fine system will need to be sensitive both to offenders who fail to pay, and offenders who pay and then commit the same crime again. The second offense should cost more than the first, and the third should cost more than the second. It is important, but perhaps expensive, for the system to prevent the sanction from becoming a “cost of doing business” or an indulgence for wealthy offenders.<sup>14</sup>

Fines can be an efficient sanction, in equilibrium, where it is possible for the system to sort offenders into different eventual punishments. Note that the imposed sanction is the same for all offenders convicted of the same offense, but the behavioral response to the sanction will vary by offender. After a certain record of failure, courts will tailor a solution. In order to maintain this as an equilibrium, the system must be keep people from “gaming” it – strategically appearing undeterrable to the court in order to have the obligation reduced.

## 4. Discussion

Fines potentially provide a low-cost sanction for criminal activity. Yet, fines are infrequently imposed, and when imposed, often not collected. Is there a reasonable scope for increasing reliance on fines to improve the efficiency of the criminal justice system?

In theory, increasing the use of fines could have several benefits. It could provide punishment for criminal offenses that are currently not punished severely, either because cases are not pursued or because sentences are suspended or otherwise not enforced. At the other margin, fines could also provide a mechanism of punishing at lower social cost than short terms of jail or prison confinement.

The early part of the article described several practical reasons for the limited use of fines currently in the American criminal justice system. Three of these seem of particular importance. One real limitation on the use of fines is the financial position of many offenders: low earnings, no or minimal assets, and high debts, frequently to other government agencies. The high marginal tax rates that would be required to add further fines to such an offender would work

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<sup>14</sup> Note: Polinsky and Shavell (2000) assume that the fine (net of collection costs) represents the true social cost, and hence is indifferent to repeat offenses.

against their rehabilitation into work in the legitimate labor market and eventual payments of any of these obligations.

Another constraint is that is that agencies or units responsible for fine collection frequently view active pursuit of the debts as not “worth it” due to the high costs of collection. Criminal justice writ large will never be revenue producing for government, as producing order and enforcing laws are expensive. Fines will not be imposed more broadly unless judges and the public see them as real punishments, and this requires that effort be expected to collect the judgments. Even if it costs more to collect a fine than the amount of the fine, doing so is likely to be cheaper at achieving expressive or deterrent purposes of punishment than any alternative method. This issue of organizational perspective is compounded by the many jurisdictional boundaries that may exist in a given criminal case. The overlapping responsibilities of the many agencies that operate within criminal justice mean that any given offender may be transferred (physically or in terms of legal authority) across agencies multiple times during the course of a single term of punishment. These handovers provide repeated opportunities for administrative failures or for priorities to shift. Thus, a fine imposed by a judge to affect deterrence and express social outrage may be forgiven by another agency either due to lack of resources for collection or because it is now viewed as an impediment to rehabilitation.

The model in the previous suggestion proposes to use fines as a first line of defense with another system as backup. In equilibrium, if the system can sort offenders into different eventual punishments, the fine can be an important part of an efficient sanctioning system. Fines may deter and punish many offenders. But the model takes seriously those offenders for whom the first line of defense is insufficient. After a certain record of failure, courts will tailor a solution.<sup>15</sup>

In order to maintain this as an equilibrium, the system must be keep people from strategically appearing undeterrable to the court in order to have the obligation reduced. This means that whatever tailored program is developed for those who are not deterred by the sanctioning scheme must produces further obligations to government (such as garnished wages or additional appointments to keep) that those who are deterrable will find much more noxious than simply paying the fine. This condition requires that the tailored program cannot be overly

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<sup>15</sup> Note that the tailored solution is not terribly different from how the current system works in the cases in which the sanction is not simply ignored. Many prisoner reentry programs are designed to work out individualized solutions to accumulated fines and debts. In the model, this tailored solution is purposeful and is designed to maintain the equilibrium.

generous in terms of writing down the financial obligations for those who cannot pay without adding other requirements of participants. Specialized courts, day reporting centers, and comprehensive pre-release programs provide examples of how these programs can be structured.

One negative possibility is that the “thicket” entered after nonpayment of a fine could be more costly to society than the system it replaces. For example, if incarceration is used as a threat to collect fines, then the use of incarceration could logically increase. Murphy (2009) describes how punishment for process crimes – offenses “against the machinery of justice itself” – can result in substantial criminal penalties that in some cases are more serious than the initial conduct under investigation. This is an important caution. At the same time, for many, the thicket need not be complicated or extensive. As the Snohomish County experience demonstrates, regular follow-up can do a lot to support collection, suggesting that many offenders are simply disorganized.

What are the primary threats to the equilibrium envisioned in the model? The single most important requirement to achieve expanded use of fines is that voters, judges, and court administrators believe that fines are efficient, that fines have a punitive and deterrent impact, that fines are regularly collected, and that people who don't pay fines face very serious consequences. Only if voters, judges and court administrators believe all these things will fines be used on a regular basis, and resources allocated to developing them further. Of these beliefs, the most complicated is the belief in efficiency. Fines have been badly overpromised, suggesting that they are almost perfectly efficient (Becker 1968), while the data suggest that at best, the net loss in fine enforcement (ignoring the economic cost of the crime) is, in the absolute best case, on the order of at least 20%.

Combined with the overpromising is the fact that many people think that fines are only efficient if fine collection covers its own cost, narrowly defined. Those who think about efficiency without considering opportunity cost will only want to impose fines on wealthy white collar defendants and traffic violators. Court administrators will enthusiastically fight off any attempt to broaden the use of fines when expanding the usage is likely to radically reduce efficiency rates (defined from their perspective) and the overall statistics for their court.

Finally, fines will not work as standalone mechanisms. The substantial majority of those punished with fines will pay them, but a significant minority will “crash” through the system and enter the thicket. Fines cannot be successfully implemented without some acknowledgment of



this, and a well-developed backup system. For the lowest level offenses, the backup can be largely administrative (at least until several repeat offenses ensue or compliance is unacceptably low). This could involve adopting a traffic offense-like system for nuisance offenses. For more serious offending, the backup could involve incarceration (the “miracle of the cells”) or some set of tailored and/or graduated consequences sufficient to maintain the equilibrium.

At this time, the research literature does not provide sufficient guidance to allow for detailed consideration of institutional design. The single most important gap in our knowledge about fines is an understanding of their real deterrent power. A stronger empirical base is necessary for informing judgments about the efficiency of fines for particular offenders and particular offenses. Because of the expected heterogeneity, identifying the views at the policy-relevant margins for different offenses and different offender types is the particular research challenge.

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Table 1. Monetary Penalties in Federal Cases, 2006: Overall and Selected Common Offense Types

PRIMARY OFFENSE	TOTAL	NO FINE OR RESTITUTION		RESTITUTION ORDERED/NO FINE		FINE ORDERED/NO RESTITUTION		BOTH FINE & RESTITUTION ORDERED		AMOUNT OF PAYMENT ORDERED			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Total	Mean	Median	Sum
Total	72,112	54,974	76.2	8,717	12.1	7,569	10.5	852	1.2	17,126	291,699	4,453	4,995,631,047
Drugs - Trafficking	25,035	22,252	88.9	444	1.8	2,267	9.1	72	0.3	2,779	21,013	1,500	58,396,502
Drugs – Simple Possession	754	283	37.5	4	0.5	461	61.1	6	0.8	471	1,018	1,000	479,486
Firearms	8,354	6,903	82.6	497	5.9	914	10.9	40	0.5	1,450	98,578	2,000	142,938,157
Fraud	6,820	1,935	28.4	3,881	56.9	708	10.4	296	4.3	4,883	729,525	39,532	3,562,271,537
Immigration	17,527	17,058	97.3	46	0.3	418	2.4	5	0.0	469	12,341	1,000	5,787,957

Source: Table 15, U.S. Sentencing Commission, 2006 Datafile, USSCFY06

URL: <http://www.uscc.gov/ANNRPT/2006/table15.pdf>

Table 2. Use of fines for cases other than parking or routine traffic (phone survey of select courts around the United States)

Type of Court		All or virtually all cases	Most cases	About half	Seldom	Never	Total
Limited Jurisdiction	Misdemeanor and Ordinance Violation	19	38	10	7	0	74
General Jurisdiction	Felony, Misdemeanor and Ordinance Violation	1	15	7	5	0	28
	Felony Only	0	5	4	13	2	24
Total		20	58	21	25	2	126

Source: Hillsman et al. (1984) Table II-1, p.30.

Table 3. Fined Offenders who Paid in Full (New York counties, 1979)

Conviction Charge Type	<u>New York</u>		<u>Bronx</u>		<u>Kings</u>		<u>Queens</u>		<u>Citywide</u>	
	No.	%	No.	%	No.	%	No.	%	No.	%
Theft-related	17	41.5	4	80	3	42.9	4	50	29	46
Assault	6	85.7	2	66.7	1	100	3	100	12	85.7
Prostitution-related	13	35.1	4	30.8	4	28.6	B	-0-	21	32.8
Gambling	24	72.7	10	100	9	90	B	-0-	45	81.8
Disorderly Conduct, Loitering	24	82.8	26	57.8	33	82.5	48	68.6	143	71.5
Trespass	2	100	2	33.3	6	60	4	100	14	58.3
Drugs	12	52.2	6	50	4	57.1	14	87.5	36	62.1
Motor Vehicle	9	75	13	92.2	20	69	27	87.1	75	81.5
Other	7	77.8	6	46.2	5	100	4	100	22	71
Total Paid In Full	114	59.1	73	60.3	85	69.1	104	76.4	397	66.1
Total Fined Offenders	193		121		123		136		601	

Source: Hillsman et al. (1984), Table D-4, p. 313



Figure 1a. Twin Falls, Idaho - Percent Collected by Category

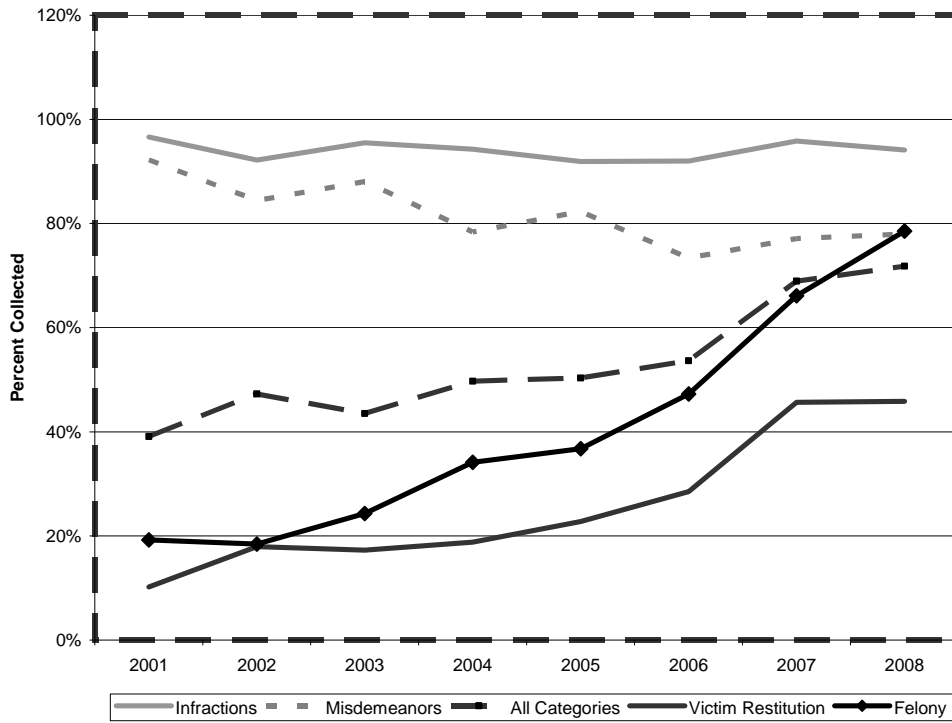
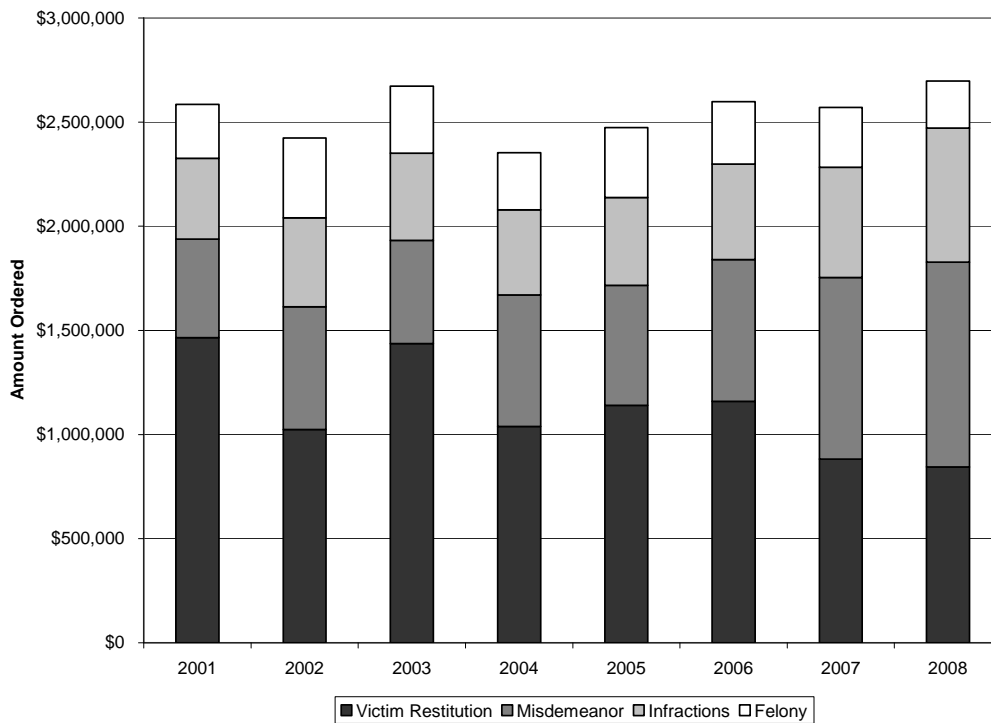
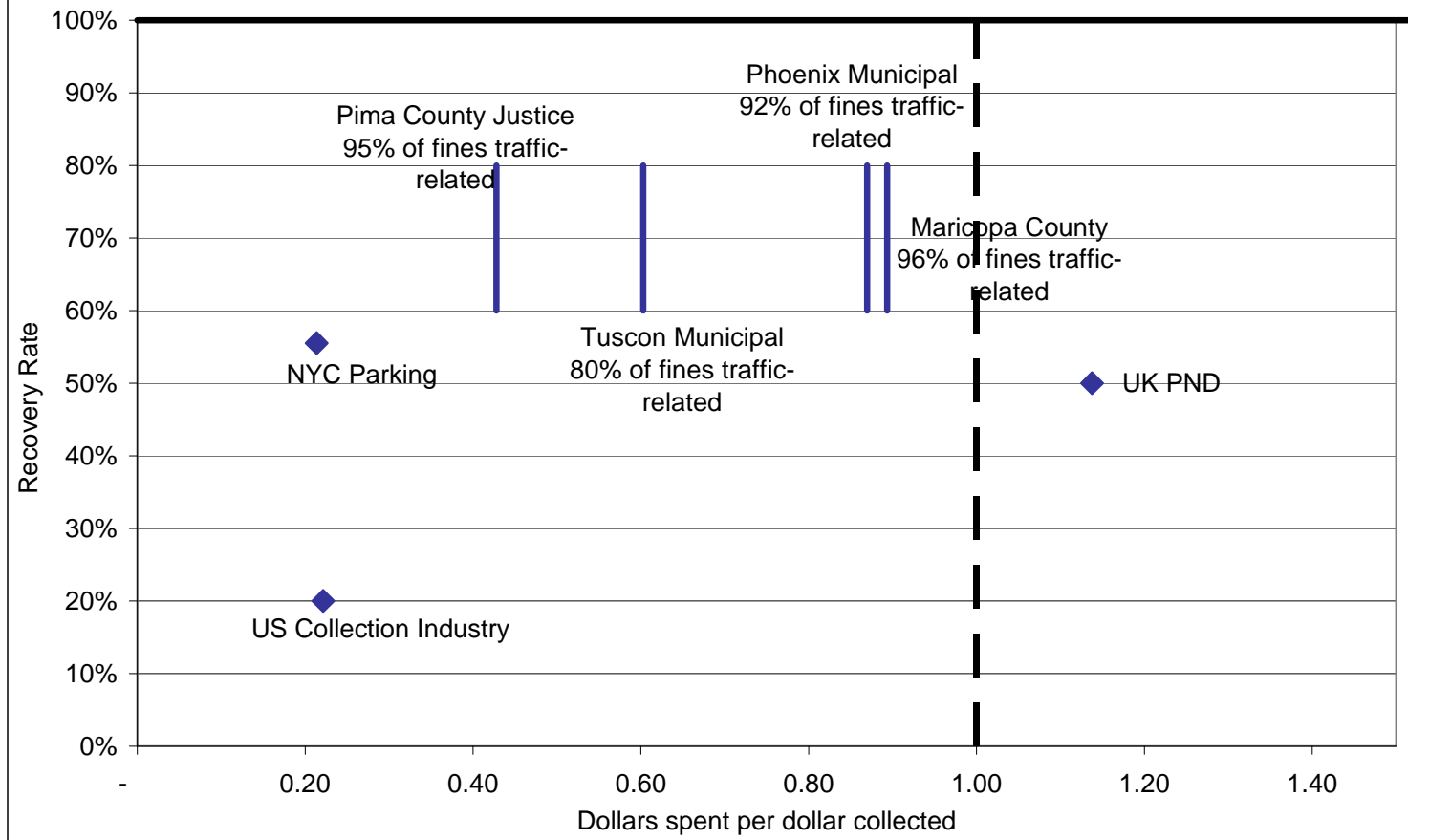


Figure 1b. Twin Falls, Idaho - Amounts Ordered by Category



Source: Twin Falls County, Idaho. Personal correspondence with the authors.

**Figure 2. Recovery Rates vs. Costs in Fine Collection:  
An Efficient Frontier?**



Sources: PriceWaterhouseCoopers (2007), ACA International (2005), Sichel (1982), Zamist (1982), UK Home Office (2005). Recovery rate ranges for Pima County, Phoenix Municipal, Tucson Municipal and Maricopa County are from Sichel (1982) but are only speculative. It is important to note that 2 Arizona courts, Maricopa County Superior and Pima County Superior, both of which deal exclusively with felonies (no traffic offenses) have expenditures 33 and 89 times total fine collections, respectively.