
ARTICLES

COSTS OF PRETRIAL DETENTION

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INTRODUCTION	2
I. COSTS OF PRETRIAL DETENTION AND RELEASE.....	4
A. <i>Costs of Pretrial Detention</i>	5
1. Costs to Detainees	5
2. Costs to Society	6
B. <i>Costs of Pretrial Release</i>	8
II. A COST-BENEFIT ANALYSIS OF PRETRIAL-DETENTION DECISIONS IN FELONY ARREST CASES	10
A. <i>Estimating the Costs Avoided Through Pretrial Detention</i>	10
B. <i>Estimating the Costs of Pretrial Detention</i>	15
C. <i>Net Economic Benefit of Pretrial Release</i>	19
III. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH	28
A. <i>Impact of Latent Variables on Estimates</i>	28
B. <i>Impact of Release Conditions on Analysis</i>	28
C. <i>Impact of Explicit Heuristic Release Criteria on Charging and Plea Bargaining</i>	29
CONCLUSION.....	29

Spending on U.S. incarceration has increased dramatically over the last several decades. Much of this spending goes toward incarcerating pretrial detainees—inmates not convicted of a crime—who constitute the majority of individuals in our nation’s jails. Current statutory schemes give judges almost complete discretion to order pretrial detention based on unexplained or unidentified factors. With this discretion, judges in every jurisdiction tend to make inconsistent decisions, some releasing almost all defendants—including the most dangerous—and others detaining most defendants—even those who are safe to release. There are constitutional and moral reasons to evaluate our current detention scheme, but the fiscal impact of pretrial detention alone calls for empirical analysis. Although legal scholarship has applied cost-benefit

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analysis to other areas of criminal law, this Article is the first to conduct such analysis in the pretrial arena. This Article compares the risk posed by each defendant and the cost of any crimes they may potentially commit during their pretrial release with the costs incurred by detaining these defendants. The results show that by relying on the cost-benefit model provided here to formulate pretrial-detention decisions, judges could unlock significant societal benefits—including approximately \$78 billion in economic value, increased safety, and, potentially, more equitable outcomes for detainees.

INTRODUCTION

Over the past few decades, the amount of money expended on the administration of the criminal justice system has skyrocketed.¹ In particular, spending on prisons has increased dramatically.² According to one study, spending on corrections rose 455% between 1972 and 2002.³ Institutions of higher learning and prisons compete for limited state funds, and prisons often win.⁴ In California, thirty years ago, 10% of the state general fund went to higher education and 3% went to prisons; today, 11% goes to prisons and 7.5% to higher education.⁵ Per-inmate spending in the state is now \$48,214, compared with per-student spending of \$7463.⁶ And nationwide, the United States spends an estimated \$80 billion per year on incarceration.

However, not all incarceration costs are associated with prisoners. Rather, much of it goes toward housing pretrial detainees—individuals held without bail based on some perceived level of dangerousness or flight risk. Pretrial detainees now make up the majority of detainees nationwide.⁷ Historically, many inmates

¹ William J. Stuntz, *The Political Constitution of Criminal Justice*, 119 HARV. L. REV. 781, 784 n.11 (2006) (“From 1972 to 2001, spending on criminal adjudication rose 298% in constant dollars.”).

² See Shima Baradaran & Frank L. McIntyre, *Predicting Violence*, 90 TEX. L. REV. 497, 551 (2012).

³ Stuntz, *supra* note 1, at 784 n.12. This measurement adjusts for inflation. *See id.*

⁴ David Brodwin, *How High Prison Costs Slash Education and Hurt the Economy*, U.S. NEWS & WORLD REP.: ECON. INTELLIGENCE (May 24, 2012, 11:20 AM), <http://www.usnews.com/opinion/blogs/economic-intelligence/2012/05/24/how-high-prison-costs-slash-education-and-hurt-the-economy> [<https://perma.cc/4STR-VQ9Y>] (“With state revenues under pressure and prison budgets off-limits, funds for higher education have been slashed.”).

⁵ *Id.*

⁶ Brian Resnick, *Chart: One Year of Prison Costs More Than One Year at Princeton*, THE ATLANTIC (Nov. 1, 2011), <http://www.theatlantic.com/national/archive/2011/11/chart-one-year-of-prison-costs-more-than-one-year-at-princeton/247629> [<https://perma.cc/4CG9-QEDV>].

⁷ Baradaran & McIntyre, *supra* note 2, at 551 (“In 1990, the percentage of pretrial detainees was about 50%, but in 2007, the pretrial detainee population increased to 62% of the jail population.” (footnote omitted)).

enjoyed the constitutional right to release before trial.⁸ But as the law has evolved in this area, judges have been charged with deciding which defendants can be safely released and which should be held in jail before trial.⁹ The current balancing process that judges use to make pretrial release and detention decisions is laden with individual biases and ad hoc heuristics that make these decisions unpredictable.¹⁰ This is evidenced by the inconsistency in pretrial-release rates across counties in the United States—some judges release less than 5% of defendants, whereas others release more than 90% of defendants, even when the defendants were charged with exactly the same types of crimes in similar neighborhoods.¹¹ Given the amount spent on pretrial detention and the inconsistent decision-making processes from which those costs stem, our current system requires reconsideration.

In this Article, I explore the potential value of a cost-based method of pretrial-detention decision-making. In its simplest form, cost-benefit analysis is a means of converting the losses and gains of two different courses of action into quantifiable dollar terms and aggregating to determine total gains and losses to society.¹² It is an examination of the factors that weigh in favor of or against two courses of action—with the goal of deciding which course, as a matter of policy, will produce the greatest net benefit.¹³ Relying on my own research as well as on data aggregated from prior studies, I first quantify the total costs and benefits—both economic and social—of pretrial detention of those accused of various crimes and compare those to the costs and benefits of pretrial release. Next, with the understanding that it is likely unrealistic to achieve the optimum pretrial-detention policy of detaining only those individuals for whom detention produces a net benefit to society, I use this same data to identify characteristics of felony criminal defendants that most accurately predict the net benefit of a judge's decision to detain or release a particular defendant pretrial. I ultimately find that with violent crime, economic savings are greatest when a relatively low number of defendants—those statistically most likely to pose a danger to

⁸ Shima Baradaran, *Restoring the Presumption of Innocence*, 72 OHIO ST. L.J. 723, 768-72 (2011) (chronicling changes in constitutional law that have impaired the pretrial presumption of innocence).

⁹ Baradaran & McIntyre, *supra* note 2, at 525-26 (discussing the types of selectivity bias inherent in the pretrial risk assessment performed by judges).

¹⁰ *Id.* at 499 (“Congress and state legislatures charged judges with the task of predicting who could be safely released and who should be held in jail before trial.” (footnote omitted)).

¹¹ *Id.* at 540 fig.5 (showing the percentage of jurisdictions (i.e., counties in a given year) with a given release rate for pretrial detainees).

¹² See MATTHEW D. ADLER & ERIC A. POSNER, *NEW FOUNDATIONS OF COST-BENEFIT ANALYSIS* 12-18 (2006).

¹³ See David L. Weimer & Aidan R. Vining, *Assessing the Costs and Benefits of Social Policies*, in *INVESTING IN THE DISADVANTAGED* 1, 2-3 (David L. Weimer & Aidan R. Vining eds., 2009) (stating that cost-benefit analysis “provides a framework for comprehensively taking account of the full range of social benefits and costs” and is a tool for suggesting new policy as well as changes to existing policy).

society—are detained pretrial. I further find that adopting such an approach could yield savings of \$78 billion as compared to the current approach of deferring to the subjective evaluation of judges. I suggest that, at a minimum, federal and state courts should consider a cost-benefit approach to pretrial-detention decision-making as they seek ways to increase efficiency in the criminal justice system and reduce budget expenditures overall.

This Article proceeds as follows: Part I lays out the costs inherent in the decision to either detain or release a defendant pretrial. Part II presents the empirical model used to determine the net costs and benefits of both pretrial detention and pretrial release and then determines the factors that are most predictive of cost savings to society. Part III offers critiques and limitations of the methodology. Lastly, Part IV explains that if judges considered the risk of pretrial violent crime in line with this Article's analysis, they could release more people pretrial, while delivering substantial cost savings nationwide. After interpreting the results of a cost-benefit analysis of pretrial detention, the Article concludes that judges could save approximately \$78 billion and release individuals who pose less of a risk to society by following the model that I describe.

I. COSTS OF PRETRIAL DETENTION AND RELEASE

An important consideration in pretrial detention or release is the costs and benefits—economic and social—that result from these decisions. When a judge chooses to detain an individual, that individual bears the direct costs and inconvenience associated with detention.¹⁴ In addition, the detainee's family, employer, government, and the detention center bear societal costs.¹⁵ Conversely, when a judge chooses to release a defendant prior to trial, she subjects the public to the costs of that release. The foremost cost derives from the risk that the defendant will commit further crimes during the pretrial period.¹⁶ In this Part, I enumerate the various costs that warrant consideration in the cost-benefit analysis. This explanatory section is not intended to be all-

¹⁴ Thomas Bak, *Pretrial Release Behavior of Defendants Whom the U. S. Attorney Wished to Detain*, 30 AM. J. CRIM. L. 45, 64-65 (2002) (discussing the types of losses a pretrial detainee will incur while incarcerated).

¹⁵ See JAMES J. STEPHAN, U.S. DEP'T OF JUSTICE, NCJ 202949, STATE PRISON EXPENDITURES, 2001, at 1-6 (2004), <https://www.bjs.gov/index.cfm?ty=pbdetail&iid=1174> [<https://perma.cc/827X-ZQW4>] (reporting data on state expenditures on prison inmates); NAT'L HEALTHY MARRIAGE RES. CTR., INCARCERATION AND FAMILY RELATIONSHIPS: A FACT SHEET (2010), <http://www.healthymarriageinfo.org/resource-detail/index.aspx?rid=3285> [<https://perma.cc/9CWV-67LS>] (discussing the negative consequences of incarceration on family relationships).

¹⁶ See TED R. MILLER, MARK A. COHEN & BRIAN WIERSEMA, U.S. DEP'T OF JUSTICE, NCJ 155282, VICTIM COSTS AND CONSEQUENCES: A NEW LOOK 9-18 (1996), <https://www.ncjrs.gov/App/publications/Abstract.aspx?id=155282> [<https://perma.cc/468D-HALR>] (explaining and quantifying the tangible and intangible losses incurred by victims of crime).

inclusive. Rather, the costs noted are intended to be indicative of the types of costs that appear in the cost-benefit analysis that follows in Part II.

A. *Costs of Pretrial Detention*

1. Costs to Detainees

Pretrial detention imposes direct economic costs on detainees. A detainee's inability to work causes the loss of income and, potentially, the loss of employment and property.¹⁷ If pretrial detainees lose employment, they often encounter reduced wages if and when they find new employment, as serving time reduces hourly wages for men by approximately 11%, annual employment by nine weeks, and annual earnings by 40%.¹⁸ Furthermore, when property (either apartments or rented homes) is lost, as occurs in 23% of cases,¹⁹ extra funds must be expended on a subsequent housing search. In addition, one study found that one-third of detainees reported being threatened or having their property stolen upon or after detention,²⁰ amounting to about \$370 of larceny per incident.²¹

In addition to direct economic costs, detention imposes significant yet difficult-to-quantify costs on individuals, including the loss of liberty, dignity, damaged reputation, standing in the community,²² and disruptions to family life and other relationships.²³ Detainees are often victims of humiliation, rape,²⁴ and other violent acts while incarcerated, and they also suffer added anxiety, stress, and a lower quality of life as a result.²⁵ All told, the value of lost freedom to

¹⁷ Bak, *supra* note 14, at 65.

¹⁸ PEW CHARITABLE TRS., COLLATERAL COSTS: INCARCERATION'S EFFECT ON ECONOMIC MOBILITY 11 (2010), http://www.pewtrusts.org/~media/legacy/uploadedfiles/pcs_assets/2010/collateralcosts1pdf.pdf [<https://perma.cc/9Q9Y-CWYT>].

¹⁹ Mark Pogrebin, Mary Dodge & Paul Katsampes, *The Collateral Costs of Short-Term Jail Incarceration: The Long-Term Social and Economic Disruptions*, CORR. MGMT. Q., Fall 2001, at 64, 64-65.

²⁰ See Ian O'Donnell, *Prisons and Penal Purpose: Measuring "Performance" in English Jails*, 8 CRIM. L.F. 111, 118 (1997) (reviewing ROY KING & KATHLEEN MCDERMOTT, *THE STATE OF OUR PRISONS* (1995)).

²¹ MILLER, COHEN & WIERSEMA, *supra* note 16, at 9 tbl.2 (indicating the dollar costs associated with various crimes).

²² Pogrebin, Dodge & Katsampes, *supra* note 19, at 64-65 (summarizing the various "collateral costs" of imprisonment).

²³ See NAT'L HEALTHY MARRIAGE RES. CTR., *supra* note 15, at 5 (presenting research on the factors that strain family relationships when one partner is incarcerated).

²⁴ See ALLEN J. BECK ET AL., U.S. DEP'T OF JUSTICE, NCJ 231169, *SEXUAL VICTIMIZATION IN PRISONS AND JAILS REPORTED BY INMATES, 2008-09*, at 7-8 (2010) <http://bjs.ojp.usdoj.gov/content/pub/pdf/svpjri0809.pdf> [<https://perma.cc/D7GT-JYHB>].

²⁵ Pogrebin, Dodge & Katsampes, *supra* note 19, at 69 ("[T]he hardships faced during the postrelease period for . . . prisoners . . . can be devastating when so much of their financial

pretrial detainees may be as high as \$6770, even for the least dangerous defendants.²⁶

2. Costs to Society

Society's highest direct cost associated with pretrial detention is the cost of imprisonment, including maintaining facilities, hiring prison staff and administrative officials, and providing meals, rehabilitation, and education programs. One study estimated that the annual cost to detain one inmate is \$22,650,²⁷ although individual states, most notably California, spend more than twice as much on imprisonment.²⁸ Other monetary costs to society include a reduction in GDP from wages that the defendant would have otherwise earned²⁹ as well as lost tax revenue.³⁰ Society also bears the expenses incurred to administer court proceedings and the cost of providing counsel for indigent defendants.³¹

and emotional stability has been undermined.”); *see also* MILLER, COHEN & WIERSEMA, *supra* note 16, at 9-18 (estimating the monetary cost of each rape to be \$87,000); Katherine Nesbitt, *Preventative Detention of Terrorist Suspects in Australia and the United States: A Comparative Constitutional Analysis*, 17 B.U. PUB. INT. L.J. 39, 46-50, 89 (2007) (examining the intrusion of preventative detention and torture in the United States on personal liberties).

²⁶ David S. Abrams & Chris Rohlfs, *Optimal Bail and the Value of Freedom: Evidence from the Philadelphia Bail Experiment*, 49 ECON. INQUIRY 750, 751 (2011). To calculate the value to defendants of lost freedom, David Abrams and Chris Rohlfs applied the concept of revealed preference to defendants' bail-posting decisions; that is, when a defendant posts bail at a certain amount, the researchers implicitly assume that the benefits of freedom exceeded the cost of posting that amount, and assign a value accordingly. *Id.* Abrams and Rohlfs also estimate that the typical defendant is willing to pay \$1000 for ninety days of freedom. *Id.*

²⁷ STEPHAN, *supra* note 15, at 2.

²⁸ Resnick, *supra* note 6 (finding that per-inmate incarceration costs in California were \$48,214).

²⁹ *See* Douglas L. Colbert, Ray Paternoster & Shawn Bushway, *Do Attorneys Really Matter? The Empirical and Legal Case for the Right of Counsel at Bail*, 23 CARDOZO L. REV. 1719, 1763 (2002) (“During pretrial incarceration, detainees' loss of freedom results in many losing jobs and homes. Taxpayers are left to pay the rising costs of detention, while absorbing the social and financial impact of newly dislocated family members.”); *see also* Albert W. Alschuler, *Preventative Pretrial Detention and the Failure of Interest-Balancing Approaches to Due Process*, 85 MICH. L. REV. 510, 517 (1986) (“The jobs of detained defendants frequently disappear, and friendships and family relationships are disrupted.”).

³⁰ One study of inmates in the Northern District of California from 1997 found that, on average, incarceration resulted in \$4960 and \$1205 in lost federal and state tax revenue, respectively. Loren A.N. Buddress, *Federal Probation and Pretrial Services—A Cost-Effective and Successful Community Corrections System*, 61 FED. PROB. 5, 10 (1997) (reporting data on lost tax revenue due to incarceration).

³¹ William A. Brockett, Jr., *Presumed Guilty: The Pre-Trial Detainee*, 1 YALE REV. L. & SOC. ACTION 10, 18 (1970) (explaining that the appointment of Public Defenders for pretrial detainees is “another financial burden . . . placed on the state”).

Pretrial detention may also result in indirect costs to society. For example, because pretrial detention often deprives detainees' children of financial and emotional support,³² these children are much more likely to develop antisocial behaviors and engage in future criminal activity themselves.³³ Children of detainees are likewise significantly more likely to drop out of school, resulting in a long-term cost of approximately \$260,000 per child.³⁴ And given that these children are more likely to receive public assistance, cost shifting is further enhanced.³⁵

Pretrial detention also entails other costs that are difficult to quantify. For example, unexplained pretrial-detention decisions have an impact on the presumption of innocence—producing costs that are difficult to monetize.³⁶ It would appear that these costs nonetheless belong in the analysis.

³² Jeffrey Manns, *Liberty Takings: A Framework for Compensating Pretrial Detainees*, 26 CARDOZO L. REV. 1947, 1974 (2005) (“Children may suffer from both the absence of a detained parent, and from neglect from other family members who may be forced to spread their attention more widely or work to make ends meet.”).

³³ See John Hagan & Ronit Dinovitzer, *Collateral Consequences of Imprisonment for Children, Communities, and Prisoners*, 26 CRIME & JUST. 121, 123-29 (1999) (discussing the various theories for understanding the “predisposing processes that may lead children to follow imprisoned parents into crime”); see also JEREMY TRAVIS, ELIZABETH CINCOTTA MCBRIDE & AMY L. SOLOMON, URBAN INST., FAMILIES LEFT BEHIND: THE HIDDEN COSTS OF INCARCERATION AND REENTRY 2 (2005), <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/310882-Families-Left-Behind.PDF> [<https://perma.cc/9RVV-5JPG>] (“[P]arental separation due to imprisonment can have profound consequences for children.”); Pogrebin, Dodge & Katsampes, *supra* note 19, at 66 (elaborating on the emotional and financial consequences of a parent’s incarceration on the child). *But see, e.g.*, STEVE CHRISTIAN, NAT’L CONFERENCE OF STATE LEGISLATURES, CHILDREN OF INCARCERATED PARENTS 2 (2009), <http://www.ncsl.org/documents/cyf/childrenofincarceratedparents.pdf> [<https://perma.cc/8ZD3-R3LA>] (alluding to “methodological flaws” and observing that “[n]o empirical data currently support th[e] claim” that “children of incarcerated parents are six times more likely than other children to be incarcerated as adults”). Dispute is still present here as to whether the relationship is correlational or causal.

³⁴ JASON AMOS, ALL. FOR EXCELLENT EDUC., DROPOUTS, DIPLOMAS, AND DOLLARS: U.S. HIGH SCHOOLS AND THE NATION’S ECONOMY 2 (2008), <http://all4ed.org/wp-content/uploads/2008/08/Econ2008.pdf> [<https://perma.cc/2PYW-64FY>] (“Over the course of his or her lifetime, a single high school dropout costs the nation approximately \$260,000 in lost earnings, taxes, and productivity.”).

³⁵ Manns, *supra* note 32, at 1974 (“The public as a whole may be left footing the bill in terms of greater Aid to Families with Dependent Children or greater services for at-risk youth.”); Pogrebin, Dodge & Katsampes, *supra* note 19, at 66 (“Having the major provider absent . . . often leads to . . . the need to be placed on some sort of welfare subsistence program.”).

³⁶ Manns, *supra* note 32, at 1971-72.

B. *Costs of Pretrial Release*

As compared to pretrial detention, pretrial release generates relatively minimal direct costs. In the federal system, for example, pretrial release programs cost \$3100 to \$4600 per defendant, depending upon the degree of risk that the defendant will flee or commit crimes in the period before trial.³⁷ These estimates account for the costs of supervising defendants, providing alternative residential arrangements or treatment programs, and recovering defendants who have fled the jurisdiction.³⁸ The budgetary funds apportioned to these programs can be minimal, yet highly effective; one municipality with a population of 50,000 has a fully functioning pretrial release program supported by an annual operating budget of \$19,880.³⁹ Thus, pretrial release in the majority of cases would clearly result in substantially enhanced direct-cost savings to state and federal budgets.

However, the decision to release a defendant pretrial gives rise to other costs, which, though indirect, are nonetheless borne by society. Foremost among these are the costs that come from releasing defendants who reoffend during the interim period between release and resolution of their cases. That is, there are costs of crimes that would not have been committed but for the pretrial release of dangerous defendants.⁴⁰ When defendants that are granted pretrial release go on to commit crimes, there is a concomitant increase in law enforcement costs, court costs, and the costs borne by victims.⁴¹ Crime also imposes further costs on society, such as reduced housing prices,⁴² and reduction in local business

³⁷ Marie VanNostrand & Gena Keebler, *Pretrial Risk Assessment in the Federal Court*, 73 FED. PROB. 3, 6 (2009).

³⁸ *Id.* at 6 n.15.

³⁹ Melinda Tanner, Dillon Wyatt & Douglas L. Yearwood, *Evaluating Pretrial Services Programs in North Carolina*, 72 FED. PROB. 18, 20 tbl.1 (2008).

⁴⁰ See Manns, *supra* note 32, at 1968 (“Approximately thirty-two percent of felony defendants engage in some form of misconduct while out on bail, ranging from a failure to appear at their court hearing to committing other criminal offenses.”); see also Bak, *supra* note 14, at 64-65 (considering the costs incurred by victims of crimes committed by defendants on pretrial release).

⁴¹ Julie Berry Cullen & Steven D. Levitt, *Crime, Urban Flight, and the Consequences for Cities*, 81 REV. ECON. & STAT. 159, 159-60, 168-69 (1999) (analyzing the cost of crime and its effect on cities); Manns, *supra* note 32, at 1968 (highlighting court costs, law enforcement costs, and the costs to crime victims); see also Andrew W. Bogue & Thomas G. Fritz, *The Six-Man Jury*, 17 S.D. L. REV. 285, 288-90 (1972) (presenting figures for the cost of jury trials in South Dakota); Benjamin Landis, *Jury Trials and the Delay of Justice*, 56 A.B.A. J. 950, 950-51 (1970) (discussing costs associated with jury trials in California). See generally THOMAS H. COHEN & BRIAN A. REAVES, U.S. DEP’T OF JUSTICE, NCJ 214994, STATE COURT PROCESSING STATISTICS, 1990-2004: PRETRIAL RELEASE OF FELONY DEFENDANTS IN STATE COURTS (2007), <https://www.bjs.gov/content/pub/pdf/prfdsc.pdf> [<https://perma.cc/HJA2-8F6Q>].

⁴² Ralph B. Taylor, *The Impact of Crime on Communities*, 539 ANNALS AM. ACAD. POL. & SOC. SCI. 28, 37 (1995) (presenting evidence that an increase in violent crime lowered home

activity.⁴³ Table 1 provides a comprehensive estimate of the unit cost to society for individual crimes.

Table 1. Total Per-Offense Cost for Different Crimes⁴⁴

Type of Offense	Tangible Cost (\$)	Intangible Cost (\$)	Total Cost (\$)
Murder	1,420,857	9,333,475	10,754,332
Rape/Sexual Assault	45,608	220,724	266,332
Aggravated Assault	21,528	105,057	126,585
Robbery	23,630	24,959	48,589
Arson	18,164	5675	23,839
Motor Vehicle Theft	11,646	290	11,936
Stolen Property	8816	N/A	8816
Household Burglary	6820	355	7175
Embezzlement	6059	N/A	6059
Forgery/Counterfeiting	5821	N/A	5821
Fraud	5563	N/A	5563
Vandalism	5373	N/A	5373
Larceny/Theft	3895	11	3906

values in various areas).

⁴³ See, e.g., Robert T. Greenbaum & George E. Tita, *The Impact of Violence Surges on Neighbourhood Business Activity*, 41 URB. STUDS. 2495, 2508 (2004) (finding statistically significant effects of crime on business activity). *But see* Wesley Skogan, *Fear of Crime and Neighborhood Change*, 8 CRIME & JUST. 203, 204, 220-22 (1986) (“[E]ven in disorderly, problem-ridden, high-crime areas, owners were more likely to plan to remain in business and make future investments if they believed the future of their market area looked bright and if they were optimistic about local development efforts.” (citing MARLYS MCPHERSON, GLENN SILLOWAY & DAVID FREY, *CRIME, FEAR, AND CONTROL IN NEIGHBORHOOD COMMERCIAL CENTERS, MINNEAPOLIS AND ST. PAUL, 1970-1982* (1983))).

⁴⁴ See Kathryn E. McCollister, Michael T. French & Hai Fang, *The Cost of Crime to Society: New Crime-Specific Estimates for Policy and Program Evaluation*, 108 DRUG & ALCOHOL DEPENDENCE 98, 104 tbls.3 & 4 (2010) (presenting data on tangible and intangible costs). The dollar values have been adjusted for inflation to reflect the value of 2014 dollars.

The study identifies four main categories of costs resulting from crime: (1) victim costs, covering direct economic losses, such as health care costs, lost earnings, and property losses; (2) criminal justice system costs, including government expenditures on police protection, legal services, and corrections; (3) crime career costs, which estimate the opportunity costs incurred by the choice to forego legal activities; and (4) intangible costs, which estimate the indirect societal costs suffered by victims, such as pain and suffering, stress, and a lower quality life. *Id.*

II. A COST-BENEFIT ANALYSIS OF PRETRIAL-DETENTION DECISIONS IN FELONY ARREST CASES

Cost-benefit analysis allows for a consideration of whether decisions are efficient and whether empirical data justifies decision makers' results. By drawing on various estimates presented in Part I of this Article, and by relying on data from my previous work estimating the probabilities associated with criminal behavior during pretrial release,⁴⁵ I demonstrate below that twenty-eight percent fewer defendants could have been detained pretrial over the past decade without statistical risk to the public. Furthermore, this reduction in detentions would have saved defendants and society an estimated \$78 billion.

In Section A, I estimate the economic benefits to society of pretrial detention, and then in Section B, I estimate the economic costs. Section C compares the results of the two preceding Sections and makes assessments as to the types of individuals for whom, empirically, it would be more cost effective to either release or detain pretrial.

A. *Estimating the Costs Avoided Through Pretrial Detention*

The benefits of pretrial detention include avoiding the costs associated with (1) prosecuted crimes committed during the interim period between release and trial, (2) failures to appear in court, (3) felonies for which no arrest is made, and (4) the monitoring of released individuals. I rely on estimates by other scholars for each of these costs. Table 2 lists estimates for the potentially avoidable costs associated with each type of crime and the sources from which I derived each estimate.

To estimate the rate of re-arrest prior to trial, I use Bureau of Justice Statistics ("BJS") data from 134,767 randomly selected felony-arrest cases between 1990 and 2006. The BJS regularly collects information on felony arrestees in the nation's seventy-five largest counties, reporting information on each defendant's demographic characteristics, type of offense, status in the criminal justice system at the time of arrest, criminal history, bail and pretrial release record, court appearance record, and re-arrests while on pretrial release.⁴⁶

⁴⁵ See Baradaran & McIntyre, *supra* note 2, at 557-58 (analyzing the most predictive factors of pretrial violence, as well as the effect they have on prisoner detention and release).

⁴⁶ See generally *Data Collection: State Court Processing Statistics (SCPS)*, BUREAU JUST. STATS., http://www.bjs.gov/index.cfm?ty=dcdetail&iid=282#Publications_and_products [<https://perma.cc/RK3F-MBZW>] (last visited Oct. 22, 2016). These data are also known as State Court Processing Statistics ("SCPS").

Table 2. Economic Benefits of Detention⁴⁷

Description	<u>Benefits per Incident</u>	
	Low Estimate (\$)	High Estimate (\$)
<u>Violent Crimes Avoided</u>		
Murder	4,602,326 ⁴⁸	18,780,120 ⁴⁹
Rape	136,191 ⁵⁰	488,243 ⁵¹
Assault	14,715 ⁵²	158,250 ⁵³
Robbery	12,523 ⁵⁴	364,898 ⁵⁵
Other	75,453 ⁵⁶	426,571 ⁵⁷
<u>Property Crimes Avoided</u>		
Motor Vehicle Theft	5949 ⁵⁸	19,299 ⁵⁹
Forgery	5731 ⁶⁰	10,439 ⁶¹
Fraud	3950 ⁶²	5478 ⁶³
Burglary	2192 ⁶⁴	44,875 ⁶⁵
Larceny	580 ⁶⁶	3839 ⁶⁷

⁴⁷ The dollar values of each estimate from each respective source have been adjusted for inflation to reflect the value of 2014 dollars.

⁴⁸ MILLER, COHEN & WIERSEMA, *supra* note 16, at 9 tbl.2.

⁴⁹ Matt DeLisi et al., *Murder by Numbers: Monetary Costs Imposed by a Sample of Homicide Offenders*, 21 J. FORENSIC PSYCHIATRY & PSYCHOL. 501, 506 tbl.1 (2010).

⁵⁰ MILLER, COHEN & WIERSEMA, *supra* note 16, at 9 tbl.2.

⁵¹ DeLisi et al., *supra* note 49, at 506 tbl.1.

⁵² MILLER, COHEN & WIERSEMA, *supra* note 16, at 9 tbl.2.

⁵³ DeLisi et al., *supra* note 49, at 506 tbl.1.

⁵⁴ MILLER, COHEN & WIERSEMA, *supra* note 16, at 9 tbl.2.

⁵⁵ DeLisi et al., *supra* note 49, at 506 tbl.1.

⁵⁶ MILLER, COHEN & WIERSEMA, *supra* note 16, at 9 tbl.2.

⁵⁷ DeLisi et al., *supra* note 49, at 506 tbl.1.

⁵⁸ MILLER, COHEN & WIERSEMA, *supra* note 16, at 9 tbl.2.

⁵⁹ Mark A. Cohen & Alex R. Piquero, *New Evidence on the Monetary Value of Saving a High Risk Youth*, 25 J. QUANTITATIVE CRIMINOLOGY 25, 40 tbl.6 (2009).

⁶⁰ McCollister, French & Fang, *supra* note 44, at 104 tbl.3.

⁶¹ *Id.*; see also COHEN & REAVES, *supra* note 41, at 10.

⁶² Cohen & Piquero, *supra* note 59, at 33 tbl.5.

⁶³ McCollister, French & Fang, *supra* note 44, at 104 tbs.3 & 4.

⁶⁴ MILLER, COHEN & WIERSEMA, *supra* note 16, at 9 tbl.2.

⁶⁵ DeLisi et al., *supra* note 49, at 506 tbl.1.

⁶⁶ MILLER, COHEN & WIERSEMA, *supra* note 16, at 9 tbl.2.

⁶⁷ McCollister, French & Fang, *supra* note 44, at 104 tbs.3 & 4.

Other	3950 ⁶⁸	10,439 ⁶⁹
<u>Drug Crimes Avoided</u>		
Sales	730 ⁷⁰	730 ⁷¹
Possession/Other	34 ⁷²	34 ⁷³
<u>Public Order Crimes Avoided</u>		
Driving-Related	18,661 ⁷⁴	33,858 ⁷⁵
Weapons	3094 ⁷⁶	3094 ⁷⁷
Other	6554 ⁷⁸	6554 ⁷⁹
Avoidance of Failure to Appear	409 ⁸⁰	518 ⁸¹
Avoidance of Felony for Which No Arrest Is Made	40,338 ⁸²	40,338 ⁸³
Avoidance of Daily Cost of Monitoring Released Individual	9 ⁸⁴	9 ⁸⁵

Estimating the economic benefit of pretrial detention involves two steps. First, I model the probability that a defendant commits a particular felony during

⁶⁸ DeLisi et al., *supra* note 49, at 506.

⁶⁹ *Id.*

⁷⁰ EXEC. OFFICE OF THE PRESIDENT, OFFICE OF NAT'L DRUG CONTROL POL'Y, No. 207303, THE ECONOMIC COSTS OF DRUG ABUSE IN THE UNITED STATES: 1992-2002, at B-19 tbl.B-17 (2004), https://www.ncjrs.gov/ondcppubs/publications/pdf/economic_costs.pdf [<https://perma.cc/2ZYQ-GMPD>].

⁷¹ *Id.*

⁷² Andrew S. Rajkumar & Michael T. French, *Drug Abuse, Crime Costs, and the Economic Benefits of Treatment*, 13 J. QUANTITATIVE CRIMINOLOGY 291, 308 tbl.III (1997).

⁷³ *Id.*

⁷⁴ MILLER, COHEN & WIERSEMA, *supra* note 16, at 9 tbl.2.

⁷⁵ Cohen & Piquero, *supra* note 59, at 33 tbl.5.

⁷⁶ JOHN ROMAN & AARON CHALFIN, URBAN INST., DOES IT PAY TO INVEST IN REENTRY PROGRAMS FOR JAIL INMATES? 16 tbl.10 (2006), http://www.urban.org/sites/default/files/roman_chalfin.pdf [<https://perma.cc/S77U-AF9S>].

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ Abrams & Rohlfs, *supra* note 26, at 767.

⁸¹ *Id.*

⁸² *Id.* at 768.

⁸³ *Id.*

⁸⁴ Buddress, *supra* note 30, at 5. This figure is found by dividing the yearly supervision cost per year (\$2344) by 365, and adjusting for inflation to reflect the value of 2014 dollars. *Id.*

⁸⁵ *Id.*

pretrial release as a function of the category of original arrest (violent crime, property crime, drug crime, or public order crime), defendant age, year of arrest, and prior criminal record. Second, I multiply the probability of re-arrest by the benefits listed in Table 2. This procedure assigns each defendant from the BJS data a monetary value that reflects the expected economic benefit of pretrial detention. Below, I briefly summarize and present the results for each step.

As the first step in determining the costs imposed if a released detainee commits a crime, I model the probability of a defendant i committing a particular felony f in year t in county c as follows:

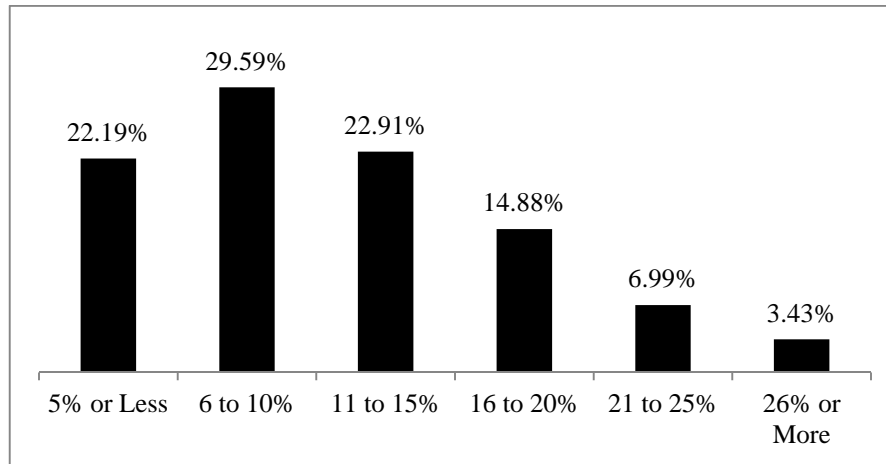
$$f_{itc} = \alpha_t + X_{itc}\beta + Z_{tc}\gamma + \epsilon_{itc}$$

Where α_t refers to defendant age, X_{itc} are a defendant's observed characteristics, Z_{tc} are county characteristics, and ϵ_{itc} is an unobserved error term. Using standard probit regressions, I then estimate the model for each of the sixteen felonies reported in Table 2.⁸⁶ This assigns each defendant an unobserved index value that reflects the likelihood of arrest during pretrial release. Defendants actually arrested for a particular felony are assigned a positive value, while those not re-arrested receive a negative value. I convert these values into probabilities by maximizing the log of:

$$\prod_{i=1}^n P(f_{itc} > 0)^{f_{itc}} P(f_{itc} \leq 0)^{1-f_{itc}}$$

Figure 1 below displays the results of these calculations. These results are striking in that they contravene the average individual's estimations about the frequency of reoffense postrelease. While an individual arrested for a felony and then released may well be more likely than a nonarrested individual to commit a crime, the probability of re-arrest for a new felony during pretrial release is relatively low. On average, a defendant on pretrial release has an 11.36% chance of being re-arrested for a felony. Only 3.43% of all defendants are more than 26% likely to be re-arrested while on release, while nearly 90% of all defendants are less than 20% likely to be re-arrested postrelease.

⁸⁶ Results from the sixteen probit regression models and descriptive statistics for predictor variables are in possession of author.

Figure 1. Probability of Re-Arrest If Released

The calculations presented in conjunction with Figure 1 above reveal a point crucial to my analysis: generally, while the relative cost of releasing some defendants is greater than the cost of detaining those defendants, the converse is also true for other subsets of defendants.

The next step, then, is to derive a formula that will determine the economic benefit of pretrial detention for each individual defendant. I accomplish this by multiplying the probability of re-arrest by the economic savings associated with avoiding the felonies reported in Table 2. The total benefit b for preventing person i living in year t and county c from committing felony f is:

$$\sum b_{itc} = \sum P_{itc} f\$$$

where $f\$$ represents the economic savings in 2014 dollars of avoiding felony f .

Of course, felonies-avoided is only one category of cost savings for which this analysis must account. Using the same two procedures described above, I also calculate the economic savings associated with avoiding a defendant's failure to appear in court, and avoiding felonies for which no arrest is made. The total economic benefits, represented as S , through detaining a particular defendant is given by:

$$S_{itc} = \sum_{i=1}^n b_{itc} + \sum_{i=1}^n l_{itc} + 9d_{itc}$$

where l represents the benefit of avoiding failures to appear and felonies for which there is no arrest, and d represents the number of days between arrest and adjudication. This formula will later prove useful in estimating the costs potentially avoided through cost-benefit analysis.

Overall, this Section demonstrates that the relative cost of releasing some defendants is greater than the cost of detaining them, but that releasing other defendants allows for substantial savings. By using information on which defendants are safe to release, judges can make more informed decisions pretrial.

B. *Estimating the Costs of Pretrial Detention*

The converse of the benefits of pretrial release are the costs imposed when a judge decides to continue to detain a pretrial detainee. There are a number of direct and indirect economic costs inherent in continuing to detain a defendant pretrial. These include loss of freedom, income, and housing; childcare costs; loss and theft of property; strain on intimate relationships; potential violent or sexual assault; prison operation; loss of federal and local tax revenue; and welfare benefits paid to a detainee's family. I again rely on external sources to estimate each of these costs, which are presented in Table 3 below. The estimate from each source has been converted into a per-day detainment cost. While some sources reported only a single, general-level economic figure, others provided estimates for specific years or geographic areas. Where possible, I adjusted the cost estimates for each individual defendant's geographic location and year of arrest. The last column of Table 3 shows these calculations, where e represents the calculation for person i , y represents a year-specific adjustment, and a is an area-specific adjustment. The total cost of detainment E for a given person i in year t living in county c is:

$$E_{itc} = \sum_{i=1}^n e_i y_i a_i d_i$$

where d is the number of days between arrest and adjudication.

Table 3. Economic Costs of Detention⁸⁷

Individual Costs			
Description	Key Figure(s)	Expense (\$)	Calculation for Person i
Loss of Freedom	Typical defendant willing to pay \$1036 for 90 days of freedom ⁸⁸	~\$11 per day	$e_i = \left(\frac{\$1036}{90}\right) d_i$
Loss of Income	Mean U.S. county per capita income is approximately \$31,028 ⁸⁹	~\$85 per day	$e_i = \left(\frac{\$31,028}{365}\right) y_i a_i d_i$
Loss of Housing	23% of misdemeanants forfeit \$1565 in lost and new deposits ⁹⁰	~\$2748 if detained 60+ days	$e_i = \$1565 m_i$
Childcare Costs	Families earning under \$56,670 spend \$1938 per year in childcare costs for children 5 and under; ⁹¹ a majority of inmates have minor children ⁹²	~\$5 per day	$e_i = \left(\frac{\$1938}{365}\right) d_i$
Stolen or Lost Property	Approximately 1 out of 3 inmates have property stolen; ⁹³ larceny costs \$580 per incident ⁹⁴	~\$193 per incident (if detained 60+ days)	$e_i = \left(\frac{\$580}{3}\right) m_i$

⁸⁷ The dollar values have been adjusted for inflation to reflect the value of 2014 dollars. The variable m takes on a value of 1 if a defendant has been detained for greater than 60 days and 0 otherwise.

⁸⁸ Abrams & Rohlfs, *supra* note 26, at 750-51.

⁸⁹ *QuickFacts*, U.S. CENSUS BUREAU, <http://www.census.gov/quickfacts/table/PST045215/00> [<https://perma.cc/EH6Q-Z2X3>] (last visited Nov. 12, 2016).

⁹⁰ Pogrebin, Dodge & Katsampes, *supra* note 19, at 64-65.

⁹¹ MARK LINO, U.S. DEP'T OF AGRIC., NO. 1528-2010, EXPENDITURES ON CHILDREN BY FAMILIES, 2010, at 26 tbl.1 (2011), https://www.cnpp.usda.gov/sites/default/files/expenditures_on_children_by_families/CRC2010.pdf [<https://perma.cc/5LKL-VXVB>].

⁹² LAUREN E. GLAZE & LAURA M. MARUSCHAK, U.S. DEP'T OF JUSTICE, BUREAU OF JUSTICE STATISTICS SPECIAL REPORT: PARENTS IN PRISON AND THEIR MINOR CHILDREN 1 (2008).

⁹³ ROY D. KING & KATHLEEN McDERMOTT, THE STATE OF OUR PRISONS 119 (1995).

⁹⁴ MILLER, COHEN & WIERSEMA, *supra* note 16, at 9 tbl.2.

Strain on Intimate Relationships	Marriage is worth \$103,670 per year; ⁹⁵ 17% of federal inmates are married ⁹⁶	~\$84 per day	$e_i = \left(\frac{\$103,670(.17)}{365} \right) d_i$
Possibility of Violent or Sexual Assault	4.4% of prison and 3.1% of jail inmates report 1 or more incidents of sexual victimization; ⁹⁷ rape costs \$136,191 per incident ⁹⁸	~\$11 per day	$e_i = \left(\frac{\$136,191(.032)}{365} \right) d_i$
Public Costs			
Description	Key Figure(s)	Expense (\$)	Calculation for Person <i>i</i>
Prison Operation Costs	Mean U.S. state cost of inmate detention is \$31,406 ⁹⁹	~\$83 per day	$e_i = \left(\frac{\$31,406}{365} \right) a_i d_i$
Loss of Federal Tax	Annual federal tax revenue reduced by \$5142 per incarceration ¹⁰⁰	~\$19 per day	$e_i = \left(\frac{\$5142}{365} \right) d_i$
Loss of State Tax	Annual state tax revenue reduced by \$1249 per incarceration ¹⁰¹	~\$3 per day	$e_i = \left(\frac{\$1249}{365} \right) d_i$
Welfare for Detainee's Family	Typical family of incarcerated person receives \$8293 per year in welfare benefits ¹⁰²	~\$30 per day	$e_i = \left(\frac{\$8293}{365} \right) d_i$

Figure 2 below incorporates these calculations to display the average estimated direct cost resulting from a decision to detain or release a defendant before trial. In conjunction with Figure 1, these calculations show, perhaps unsurprisingly, that the economic costs of pretrial detention typically exceed the costs imposed by pretrial

⁹⁵ David G. Blanchflower & Andrew J. Oswald, *Well-Being over Time in Britain and the USA*, 88 J. PUB. ECON. 1359, 1381 (2004).

⁹⁶ GLAZE & MARUSCHAK, *supra* note 92, at 21 app. tbl.16. Because 201,600 out of 1,226,200 state inmates are married and 33,600 out of 129,300 federal inmates are married, thus, the total married is 235,200 out of 1,355,500, or 17.35%. *Id.*

⁹⁷ BECK ET AL., *supra* note 24, at 5.

⁹⁸ MILLER, COHEN & WIERSEMA, *supra* note 16, at 9 tbl.2.

⁹⁹ STEPHAN, *supra* note 15, at 1.

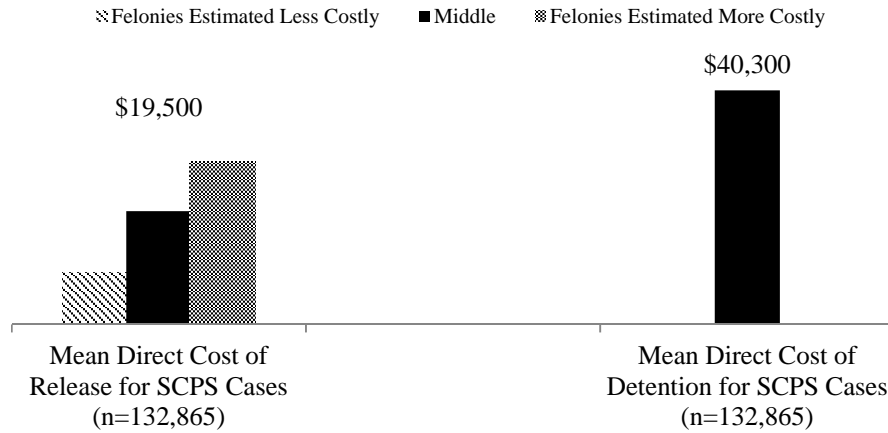
¹⁰⁰ Buddress, *supra* note 30, at 10.

¹⁰¹ *Id.*

¹⁰² *Id.*

release. Specifically, the average cost of detention exceeds the cost of release by approximately \$20,000; detaining a defendant, on average, results in \$40,300 in direct costs, while the average cost of releasing a defendant pretrial is just \$19,500.

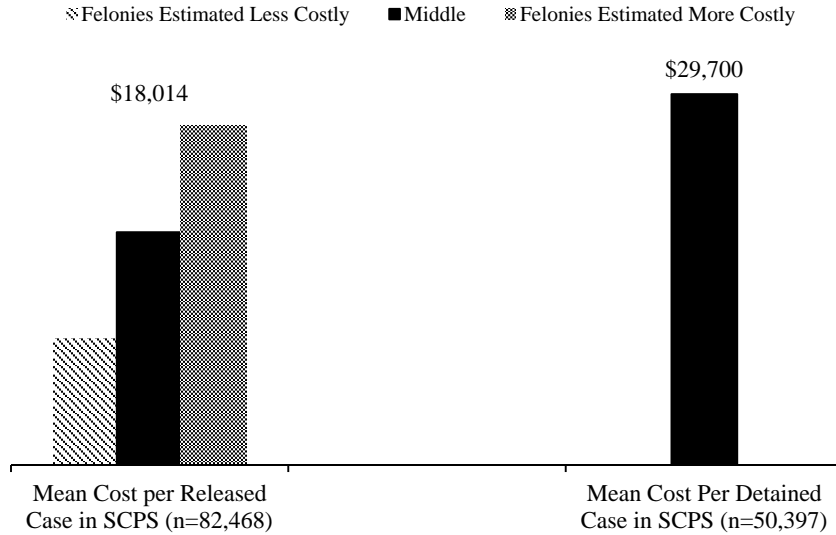
Figure 2. Mean Cost of Release and Detention



Of course, these calculations are merely the result in the average case—and theoretical results, at that. Figure 3, below, puts theory into practice by showing the estimated direct cost of pretrial release and detention in actual judicial pretrial detention and release decisions. Out of 132,865 defendants, 62% were released, while the remaining 38% were detained.¹⁰³ Importantly, the reported data presented in Figure 3 mirror the data presented in Figure 2 above; pretrial release resulted in an average direct cost of \$18,014 compared to an average cost of \$29,700 for pretrial detention.

¹⁰³ COHEN & REAVES, *supra* note 41, at 2 tbl.1.

Figure 3. Direct Cost Differentials Between Released and Detained SCPS Cases



C. Net Economic Benefit of Pretrial Release

The cost calculations set forth above mean that pretrial release is, accounting for all costs and benefits, often less expensive than pretrial detention and suggest that judges would do best to release defendants pretrial more often than to detain them. To complete the analysis, however, one must also account for the benefits of avoiding costs associated with pretrial detention. If the cost of releasing a defendant, including the cost of any crimes committed during release, exceeds the cost of detention, releasing the defendant fails to produce a net economic benefit. Similarly, if the cost of detention exceeds the cost of release, detaining the defendant pretrial fails to produce a net economic benefit. Table 4 below presents hypothetical representations of the four possible net benefit scenarios of pretrial-detention decisions: (1) detain with negative net benefit; (2) detain with positive net benefit; (3) release with negative net benefit; and (4) release with positive net benefit.

Table 4. Net Benefit Scenarios

Scenario	Detained or Released?	Cost of Detention (\$)	Cost of Release (\$)	Net Benefit Formula (\$)	Net Benefit (\$)
A	Detained	25,000	20,000	20,000 - 25,000	- 5,000
B	Detained	25,000	30,000	30,000 - 25,000	+ 5,000
C	Released	25,000	30,000	25,000 - 30,000	- 5,000
D	Released	25,000	20,000	25,000 - 20,000	+ 5,000

Using the cost and benefit calculations from the previous two sections, it is possible to measure the expected net benefit associated with the decision to release or detain each defendant in the BJS data. To calculate the net benefit of release, I subtract the expected benefit of release from the expected cost of detention. The decision to release a defendant produces a net economic benefit if the costs imposed on society of releasing the defendant do not exceed the expected cost of detention. The net benefit formula for release is therefore:

$$N_{itc} = E_{itc} - S_{itc}$$

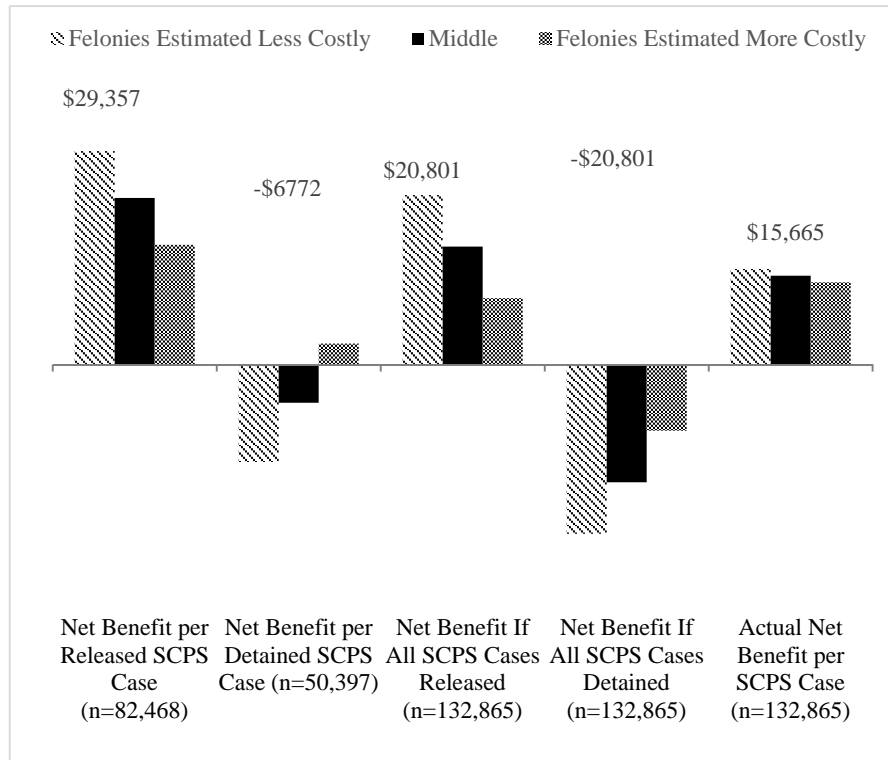
where N is the net benefit, E is the economic cost of detention, and S is the benefit (i.e., avoided cost of release) for each defendant in the sample.

For defendants detained pretrial, the formula is simply reversed. That is, a judge's decision not to release a defendant pretrial produces a net benefit if the avoided cost of release (i.e., monitoring, crime, failure to appear) exceeds the expense of detention. The net benefit formula for detention is therefore:

$$N_{itc} = S_{itc} - E_{itc}$$

The analysis that follows reports three different net benefit calculations in three different scenarios: (1) the net benefit of judges' actual pretrial-detention decisions between 1990 and 2006, (2) the net benefit if all judges had released every defendant, and (3) the net benefit if all judges had detained every defendant. Recall that Table 2 reported a range of costs associated with each of sixteen felonies: a low estimate and a high estimate. Figure 4 presents each of those estimates in the three alternate scenarios.

Figure 4. Net Benefit Scenarios



Note that the actual decisions in practice produced a net benefit per defendant of approximately \$15,665 but that the actual decisions to detain defendants produced a \$6772 loss on average. Compared to the actual benefits achieved, a policy of *universal* pretrial release would have produced approximately \$5000 in economic savings per defendant. Thus, even a universal pretrial release regime is better than the current system, at least as far as costs and benefits are concerned.

Of course, universal release is neither feasible nor the optimal policy from an efficiency standpoint, as crime rates could potentially increase. Table 5 shows that 50% of all pretrial detentions produced an economic benefit, while around 20% of pretrial releases resulted in an economic loss. This result has broader implications for cost-benefit analysis in pretrial-detention decision-making; that is, systematically fine-tuning pretrial-detention decisions through cost-benefit analysis could result in significant economic savings to society.

Table 5. Net Benefit by Release or Detention

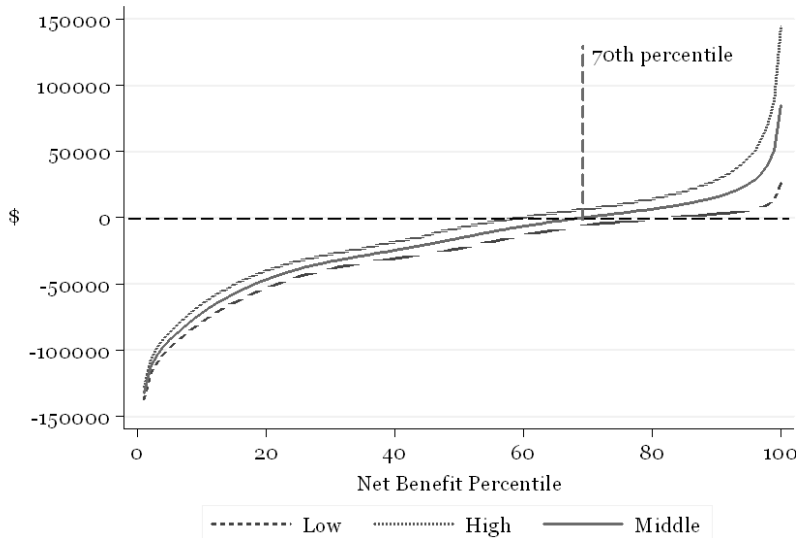
Category	% with Net Benefit	Benefit (\$)	% with Net Loss	Loss (\$)
Released (n=82,468)	80.2	40,483	19.8	15,525
Detained (n=50,397)	50.0	16,699	50.0	30,208

The critical task, then, is to identify those defendants for whom pretrial detention produces a net benefit. That task may be accomplished by finding subsets of defendants who share common characteristics that could lead to a general framework for making cost-benefit calculations in pretrial-detention decisions. If these defendants share common characteristics that differ systematically from defendants for whom pretrial detention produces a net loss, then judges could use criteria backed by empirical data in order to promote more efficient and equitable decisions.

Figure 5 represents a first step in this direction. It displays the net benefit of pretrial detention for each defendant in the BJS data in order of lowest net benefit to highest. Note that 31% of all defendants would produce a net benefit if detained. This figure is seven percentage points lower than the 38% of defendants judges actually detained.¹⁰⁴ Figure 5 therefore suggests a substantially more middle-ground approach: a 31% detention rate is a far more conservative, feasible, and preferable approach to a policy of universal release.

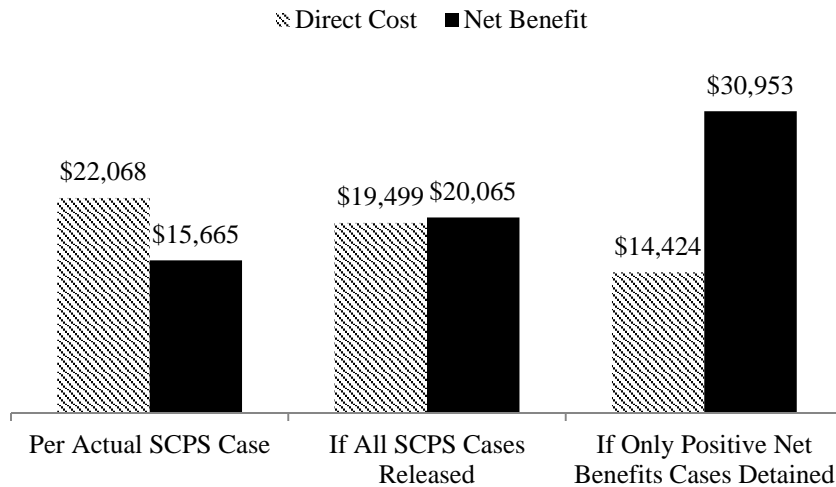
¹⁰⁴ COHEN & REAVES, *supra* note 41, at 2 tbl.1.

Figure 5. Net Benefits of Detention by Percentile



Clearly, an optimal pretrial-detention policy would detain only those individuals for whom detention will on average produce a net benefit to society. Figure 6 shows the significant savings of such a policy compared to actual pretrial-detention decisions and universal release. Note that the net benefit per defendant in the optimal scenario is almost \$30,000, which represents savings of approximately \$10,000 per defendant under universal release and approximately \$15,000 compared to judges' actual pretrial-detention decisions.

Figure 6. Direct Cost and Net Benefit of Release in SCPS Cases



To determine the characteristics that best predict criminal behavior during release, I model the expected net benefit of detention as a function of the category of a defendant's original arrest (i.e., violent, property, drug, or public order), age, year, prior criminal history, and geographic location. Thus, the economic benefits b of detaining person i in year t living in county c are determined by:

$$\log b_{itc} = \alpha_t + X_{itc}\beta + Z_{tc}\gamma + \epsilon_{itc}$$

where X are a defendant's observed characteristics, Z are county characteristics, and ϵ is an unobserved error term.¹⁰⁵ Using the BJS data, I estimate the model using an ordinary least squares regression, the results of which are reported in Table 6.

¹⁰⁵ The net benefits variable has undergone a log transformation because it was not normally distributed. Taking the natural log of net benefits more accurately reflects the relationship between the net benefits of detention and the predictor variables.

Table 6. Log of Benefits List Regressed on Predictor Variables¹⁰⁶

Variable	Coefficient	Standard Error
<u>Type of Original Crime</u>		
Violent	--	--
Property	-0.818***	0.003
Drug	-0.651***	0.007
Public Order	-0.674***	0.004
<u>Prior Arrests</u>		
None	--	--
One	-0.246***	0.007
Two or Three	-0.128***	0.013
Four or More	0.622***	0.005
Prior Incarceration	0.314***	0.002
Multiple Charges	-0.131***	0.004
Prior Failure to Appear	0.434***	0.005
Active Criminal Justice Status	0.454***	0.004
Felon	-0.162***	0.004
<u>Age</u>		
19 or Less	--	--
20 to 24	-0.559***	0.004
25 to 29	-1.287***	0.009
30 to 39	-1.605***	0.011
40 to 49	-2.324***	0.018
50 or More	-1.850***	0.008
Constant	9.559***	0.082
Year Dummies	YES	
County Characteristic Controls	YES	

Critically, the course of this regression analysis reveals six defendant-specific factors with the greatest influence on the net benefit derived from detention in a particular case: (1) original arrest for a violent crime, (2) four or more prior arrests, (3) prior incarceration, (4) a prior failure to appear, (5) an active criminal justice status, and (6) aged nineteen or younger. These six characteristics, then, are those that have the potential to be the most useful in making cost-benefit calculations for pretrial-detention decisions.

The analysis also demonstrates that releasing an individual with any one of these six characteristics results in direct costs of \$159,519. Yet, judges released 30% of

¹⁰⁶ Year and county coefficients are available upon request to author. Note that $n = 132,865$. Note that *** denotes a coefficient is statistically significant at the $p \leq .001$ level.

defendants with these characteristics.¹⁰⁷ Conversely, releasing individuals who possess none of these characteristics results in an average cost of \$4181 per defendant. Yet, judges detained 18.6% of these defendants.¹⁰⁸

The impact of these variables on the net benefits of detention are striking and substantial. On average, detaining a defendant with four or more prior arrests produces a net benefit 82% higher than detaining a defendant with no prior history. Likewise, detaining a defendant who has either a prior incarceration or a prior failure to appear produces net benefits 37% and 54% higher, respectively, than defendants with neither. Finally, detention of a defendant with an active criminal justice status produces a net benefit 57% higher than detention of a defendant without an active status. With respect to the type of offense, detaining a defendant arrested for a violent crime produces average net benefits 44% higher than a defendant arrested for a property crime, 52% higher than a defendant arrested for a drug crime, and 51% higher than defendants arrested for public order crimes. It thus seems that a middle-ground approach to pretrial detention, in which judges decide to release some offenders and detain others based on statistical risk, is economically preferable to any system of universal release or detention. The middle-ground approach is likewise preferable to the current pretrial detention system.

Given the number of felony arrests per year,¹⁰⁹ pretrial-detention policies that incorporate judicial consideration of these characteristics could save billions of dollars per year. For example, Figure 7 shows how accounting for some of the characteristics identified in Table 6 could result in significant savings. Even a simple policy, such as universally detaining any defendant under the age of twenty-four who was arrested for a violent felony and releasing all others, produces a higher net benefit than either a universal release policy or judges' actual detention decisions. Such a policy saves an average of \$7624 per defendant relative to judges' actual detention decisions and \$1341 relative to universal release. Note that these savings would accrue despite employing a detention rate that is twenty-eight percentage points lower than the actual detention rate.¹¹⁰

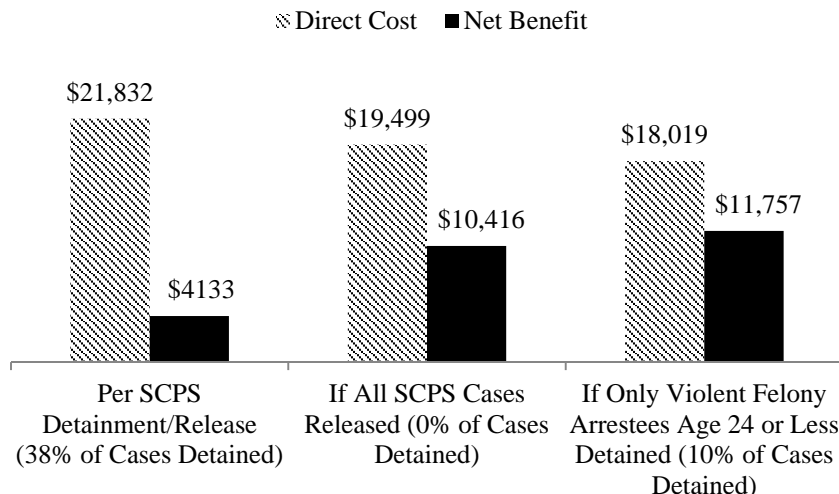
¹⁰⁷ See COHEN & REAVES, *supra* note 41, at 14 app. tbl.2. This is not to say that judges should detain all defendants under the age of 19, regardless of their prior criminal history.

¹⁰⁸ See *id.* at 2 tbl.1.

¹⁰⁹ See *id.* (providing data concerning all of the felony arrests per year from 1990 to 2004).

¹¹⁰ See *id.*

Figure 7. Direct Cost and Net Benefit of Detainment in Violent Felony Arrests, Age 24 or Less



Multiplying the economic savings per defendant calculated in Figure 7 by the number of felony arrests in America¹¹¹ yields savings of \$78 billion compared to current policies and \$14 billion compared to universal release.

Clearly, the dollar net savings realized from utilizing this cost-benefit approach are substantial. Yet a look beneath the bottom line reveals something far more interesting. The reason why such an amount can be saved is because, at least in the context of pretrial-detention decisions, it is statistically more costly to detain some defendants than it would be to release them, and vice versa. As explained above, the balancing test in which judges engage in making pretrial-detention or release decisions requires judges to weigh a detainee's liberty interest against the risk of the detainee committing a crime while freed on bail. This implies that judges take into account the nature of the crime of which a detainee is accused, because the risk of releasing a detainee accused of, say, murder, is probably greater than the risk incurred for releasing an individual accused of a nonviolent crime, such as property damage or petty larceny.

This cost-benefit analysis took these necessarily vague and indefinite risk calculations, and attached quantified costs incurred and avoided for the detention of specific subsets of detainees. The three main takeaways from this Article are as follows: First, there are ways for judges to know which defendants are more likely to pose a threat pretrial.¹¹² Second, this analysis shows not merely that release of pretrial detainees is less costly overall, but that it is more cost-effective to release some and detain others. Specifically, it is more cost effective to detain individuals

¹¹¹ See SNYDER, *supra* note 109, at 2 tbl.1.

¹¹² See Baradaran & McIntyre, *supra* note 2, at 557-58 (discussing the most common predictive factors of pretrial crime).

who pose a violent crime risk *because of the costs imposed* if these individuals commit crimes similar to those for which they are accused while on bail. Conversely, it is more cost effective to release nonviolent detainees because the costs to the individual and society are significantly lower if these individuals commit similar crimes while on bail. Third, the reason *why* cost-benefit analysis may result in substantial savings to society comes from classifying pretrial detainees into subsets, aggregating costs associated with detention or release, and allowing judges to render decisions according to those costs.

III. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

In the pretrial arena, cost-benefit analysis may prove to be an effective tool to help judges rationally decide whether economics support releasing or detaining defendants pretrial. My goal has been to identify what benefits and costs are implicit in both decisions, and to discover a means of accomplishing this analysis for the ultimate benefit of society. There are certainly limitations with this approach. I suggest that, despite the limitations discussed below, a cost-based pretrial-detention method is, if not necessarily the best approach, an important consideration for legislative policy and judicial evaluation for pretrial detention.

A. *Impact of Latent Variables on Estimates*

The analysis detailed above relies on the assumption that, in data collected by the BJS, judges did not rely on any characteristics of the defendants or the crime they were accused of that were not subsequently collected by the survey. To the extent that judges used unreported information available to them to correctly detain defendants of greater hazard to the community, the cost-benefit calculations in this Article will be incorrect. To illustrate this using an extreme hypothetical: if all of the defendants actually detained would have committed murder had they been released prior to trial, and the judge detained them because of unreported knowledge (i.e., perhaps they made threats at a hearing), then the decision-making framework suggested in this Article vastly overestimates the hypothetical benefit of releasing such defendants.

Because some jurisdictions have a much higher rate of pretrial detention than others for similar crimes, it is unlikely that latent variables have played a significant, systematic role in judicial decision-making. Creating decision-making criteria that do not suffer from latent variable bias would require collecting data from defendants whose pretrial-detention decision was made without any judicial discretion whatsoever. This could be accomplished if a jurisdiction adopted a universal release policy, randomly released half of all defendants, or used some other explicit heuristic such as the one suggested earlier in this Article.

B. *Impact of Release Conditions on Analysis*

This analysis does not explicitly consider the conditions of release. Simplifying the release choice into a binary choice of release-or-detain simplified the data collection and analysis, but may not reflect the reality of practice. Release conditions might include house arrest, an ankle monitoring system, or a restraining order. The use of such conditions may have substantially decreased the rate of criminal acts by

defendants that were released. One could imagine a pretrial release granted with severe restrictions on interaction with the public, including a house arrest, an ankle tracking system, and an injunction against using communication technology such as the telephone or internet. Given that such restrictions on freedoms may have significantly reduced the rate of criminal activity perpetrated by defendants in the past, it would be inappropriate to conclude from this analysis that heuristics suggesting release should necessarily be without such restrictions in the future.

C. *Impact of Explicit Heuristic Release Criteria on Charging and Plea Bargaining*

Currently, prosecutors have extensive discretion in choosing what charges to bring against a defendant, and judges have discretion to determine pretrial detention based on the charges brought as well as the circumstances as presented to them by the prosecutor. To the extent that a district adopted heuristics for pretrial detention based on the crime charged, prosecutors might alter their choice of charges brought to influence or fix the pretrial-detention determination. Similarly, the presence of an explicit formula in determining pretrial-detention decisions might cause defendants to be more willing to accept a plea bargain if they know they are going to be detained, much in the same way that child support formulas have decreased litigation in the family law context.¹¹³ Conversely, those defendants who know that they will not be detained based on a formula might be less likely to accept a plea bargain if acceptance means they would have to immediately forfeit their freedom.

CONCLUSION

This nation spends billions of dollars detaining roughly a half-million suspects pretrial on any given day.¹¹⁴ While these detentions are arguably constitutionally and morally suspect, this Article focuses on the costs incurred by society and by the defendant to detain this group of individuals. While local, state, and national governments have all lamented the costs incurred by incarceration, this Article provides the first cost-benefit analysis of the pretrial-detention decision. It considers the risk of crime posed by each group of defendants and proportionately compares this to the numbers and types of defendants released. It then considers the costs of detention to the defendant and to society, but also considers the costs of releasing defendants, including consideration of the crimes these defendants may commit during pretrial release. While much legal scholarship has advocated for cost-benefit analysis in other areas of criminal law, little work has been done to investigate whether and how the same could be accomplished in pretrial-detention decisions. Utilizing recent existing research and my own research, I have calculated the

¹¹³ RALPH WARNER, TONI IHARA & FREDERICK HERTZ, *LIVING TOGETHER: A LEGAL GUIDE FOR UNMARRIED COUPLES* 237-38 (Marcia Stewart ed., 15th ed. 2013) (discussing how the Child Support Enforcement Act has required states to adopt child support formulas, resulting in less litigation).

¹¹⁴ Shima Baradaran, *The State of Pretrial Detention*, in *AM. BAR ASS'N, THE STATE OF CRIMINAL JUSTICE* 2011, at 187, 190 (Myrna S. Raeder ed., 2011) (estimating that there are 500,000 total pretrial detainees in the United States).

benefits and costs, both primary and secondary and direct and indirect, of pretrial detention. I have also calculated the net benefits and costs of pretrial-detention decisions in actual cases, which illustrate some important ramifications.

The primary finding of this Article is that systematically fine-tuning pretrial-detention decisions through cost-benefit analysis could result in economic savings of \$78 billion dollars. To be exact, 28% fewer defendants could be detained pretrial without statistical risk to the public. Using explicit heuristics to guide their decisions, judges can release significantly more defendants without increased economic or social costs. The model suggests that only 50% of all pretrial detentions produced an economic benefit, while a mere 20% of pretrial releases resulted in an economic loss. Like any human decision maker, judges cannot make good choices without having quantified estimates of the risks and benefits of the options before them. In addition to providing those estimates, this Article has suggested a simple detention heuristic based on readily identifiable defendant-specific factors.

This analysis contains admitted weaknesses and limitations. As with all cost-benefit analyses, quantifying the costs incurred and saved is easier on paper than implementing them in real life. It is either impractical or impossible to control all potential factors in conducting such an analysis. For instance, putting temporal limitations on a particular analysis is bound to be uncertain, as the effect of costs on an individual or on society will inevitably shift with changing circumstances. It is likewise difficult to anticipate the secondary effects of a proposed policy that could change the outcome of the analysis significantly. Even monetizing direct costs and benefits is a potentially perilous endeavor given the sheer amount of data available. But even if there were a way to conduct a perfect analysis, this Article does not ignore the inherent undemocratic nature of cost-benefit analysis and its potential pitfalls.

Nothing in this Article is intended to argue against the relative importance of constitutional rights or equity, fairness, and justice—all arguments that pose valid critiques of cost-benefit analysis. Rather, this Article claims that, while no perfect solution exists, a correctly implemented cost-benefit analysis can at least inform judicial decision-making in the pretrial-detention process. Despite its empirical limitations, the cost-benefit analysis provided here could allow judges to release more defendants (while maintaining or even lowering crime rates), and save state and federal governments substantial amounts of money.