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Economic Theory Applied to Civil Forfeiture: Efficiency and Deterrence Through Reallocation of External Costs

by

CATHERINE CERNA*

Except in rare cases, murder’s red hand falls on one victim only, however grim the blow; but the foul hand of the drug dealer blights life after life and, like the vampire of fable, creates others in its owner’s evil image. . . .¹

In the seven years since the Fifth Circuit made this statement against drug dealers, the United States has experienced a substantial increase in drug crimes.² Indeed, most people would agree that drug trafficking is an offensive, damaging activity, and that those who do it deserve punishment. In addition to penal sanctions, under the federal civil forfeiture statute³ economic sanctions are imposed to punish⁴ drug crimes. These sanctions have been imposed indiscriminately against drug dealers and drug possessors alike. This Note uses economic analysis to answer the question: how much property is constitutionally forfeitable as punishment for drug crimes?

Introduction

To illustrate this question, consider the following two cases:

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* J.D., 1995; B.A., University of California, Los Angeles, 1992. I dedicate this Note to my son, A.J. whose love and precocious wisdom made my law school experience bearable. Special thanks to Judge Alex Kozinski whose relentless red pen sharpened my legal writing skills, and to Professors Jack Hirshleifer and Harold Demsetz for teaching me the utility of assumptions.

2. This increase is documented by the rise in inmates convicted of drug crimes. See Drug Crimes Boost Prison Population, L.A. TIMES, May 10, 1993, at 14 (reporting Justice Department statistics which reveal a new high in the prison population and attribute the increase in part to the boost in drug crime convictions).
(1) In 1990, the government seized a tavern and two adjacent apartments in Chicago under a civil forfeiture statute. This action came after a sale of over 3 kilograms of cocaine (with a street value of approximately $126,000) occurred on the property while the property owner served as a lookout. Because the property facilitated the sale of a dangerous drug, the government took ownership of the Chicago buildings which were certainly worth far more than the $126,000 value of the drug bust.

(2) In 1991, the Hamilton, Ohio police discovered 354 marijuana plants in the home of Ernie and Barbara Sizemore. Approximately 25 of these plants were mature, each of which would yield about seven to eight grams of marijuana. The Sizemores claimed to have grown the marijuana solely for their own use, and the state court gave them the lightest sentences and fines permissible under Ohio law. Nonetheless, the federal government took ownership of the Sizemore's home. Thus, for the mere possession of $137.50 worth of marijuana, the home was forfeited.

The underlying crimes triggering forfeiture in the cases above imposed significantly different harms upon society. For example, the U.S. Department of Justice recognizes that cocaine is especially notable for its addictive power, and that such addictive drugs maintain a relationship with crime both in that some users steal to support their habit, and that violent offenses occur with the drug distribution itself. Moreover, the California Governor's Budget Summary for 1992-1993 allocated over 22 million dollars for drug programs, largely to combat addiction to drugs such as cocaine.

Conversely, the Senate Committee reporting on the Comprehensive Drug Abuse Prevention and Control Act concluded that marijuana is not physically addictive, and that violent crimes are not likely

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8. Id. at *1.
9. While the case did not reveal the value of the forfeited property, it is safe to conclude that the 1990 property value of a tavern and two apartment buildings located in Chicago, Illinois far exceeds the $126,000 street value of the drugs confiscated.
11. Id. at 826.
12. Id.
13. Id.
14. Id. at 824.
16. 311 Cleveland Avenue, 799 F. Supp. at 824.
linked to marijuana use because users tend to become "passive." Finally, the amounts which would have been spent by users on the street had the respective drugs been distributed are substantially different—$126,000 in the Chicago case, verses $137.50 in the Ohio case. Thus, even though the crimes imposed disproportionate harm upon society, through in rem forfeiture, the outcome in both was accession of the property to the United States government.

Penalties such as these which do not consider the underlying crime may violate the "excessive fines" clause of the Eighth Amendment of the Constitution. And from an economic standpoint, imposition of fixed sanctions is inefficient because this disproportionate cost allocation shifts wealth randomly without considering the actual harm caused, how much of a fine is necessary to deter, or the party's respective valuation of resources.

Economic theory recognizes that activities often cause external costs—costs created by the actor which are borne by others external to him. Drug crimes create external societal costs in the areas of law enforcement, judicial and legal services, corrections, related health problems, drug programs, and drug awareness education. Linking the external costs created by the underlying crime to the forfeiture would deter efficiently without needless shifting of resources. For example, imposition of a proportionate fine based on the societal costs associated with marijuana possession and a deterrence multiple

20. See supra note 6 and accompanying text.
22. See supra note 15 and accompanying text.
23. 311 Cleveland Avenue, 799 F. Supp. at 826.
25. See supra notes 8 and 14. Forfeiture has proven quite profitable for the government. Justice Kennedy recently commented on the government's stake in forfeiture by quoting a 1990 memo from the Attorney General urging United States Attorneys to increase the volume of forfeitures in order to meet the Department of Justice's annual budget target: "We must significantly increase production to reach our budget target. Failure to achieve the $470 million projection would expose the Department's forfeiture program to criticism and undermine confidence in our budget projections. Every effort must be made to increase forfeiture income during the remaining three months of [fiscal year] 1990."

26. See Part I of this Note, outlining the Austin v. United States decision which holds that an Eighth Amendment excessiveness inquiry must be satisfied before property can be forfeited. Austin, 113 S. Ct. at 2812.
27. See Part III(A) for discussion of external costs.
28. See Part III(A) and text accompanying notes 138 and 142-43.
29. See Part IV of this Note for development of a model for the imposition of proportionate fines.
would likely have deterred the Sizemores in the Ohio case from growing marijuana. Accordingly, the important goal of deterrence\textsuperscript{30} would be accomplished with a fine proportionate to the harm caused in an amount sufficient to deter.

Conversely, forfeiture of the entire property was likely far more punishment than necessary to deter. This was inefficient reallocation of resources because the home was almost certainly more valued by the Sizemores than by the government; thus forfeiture shifted resources to a less valued use. Moreover, the forfeiture probably caused avoidable transaction costs in the form of the property owner's appeals and the government's resale costs.

Nonetheless, until the summer of 1993, the government took property without considering proportionality. Then, in June 1993, the United States Supreme Court mandated a constitutional inquiry in civil forfeiture cases.\textsuperscript{31} This holding provides an opportunity to achieve deterrence with economic efficiency and forms the basis of this Note.

Part I of this note outlines the \textit{Austin v. United States}\textsuperscript{32} decision, including the Court's analysis of the history of both the Eighth Amendment and forfeiture, focusing on how this history supports the \textit{Austin} decision. Part II describes a possible constitutionality test for trial courts imposing forfeiture - a proportionality analysis derived from \textit{Solem v. Helm}.\textsuperscript{33} Part III explores application of economic theory to achieve efficiency and deterrence through reallocation of the external costs associated with drug crimes. Part IV suggests, and applies to the two forfeiture cases above, a model system which proportionally allocates external costs: "the external cost index." This model uses 3 factors: 1) the Sentencing Guidelines representing the magnitude of the crime; 2) the per capita costs of drug trafficking as a measure of damages; and 3) the probability of conviction to consider deterrence. Finally, Part V explains how a system such as the "external cost index" could satisfy one possible excessiveness inquiry—the three prong \textit{Solem} proportionality test.\textsuperscript{34}

\textsuperscript{30} Deterrence as a goal of punishment is a common theme of American law. For example, the Notes by the House Committee reporting for the Comprehensive Drug Abuse Prevention and Control Act indicate the desire to deter drug trafficking through penalty. The House Committee wrote: "This legislation is designed to deal in a comprehensive fashion with the growing menace of drug abuse in the United States ... (3) by providing for an overall balanced scheme of criminal penalties for offenses involving drugs." H.R. Rep. No. 1444, 91st Cong., 2d Sess. 1 (1970).

\textsuperscript{31} \textit{Austin}, 113 S. Ct. at 2801.

\textsuperscript{32} \textit{Id.}

\textsuperscript{33} 463 U.S. 277 (1983).

\textsuperscript{34} See infra note 101.
I. The Austin Decision

A. Background of the Austin Decision

In Austin v. United States, the United States Supreme Court critically examined the use of in rem forfeiture with some groundbreaking results. The drug sale which triggered the Austin forfeiture occurred on June 13, 1990. On this date, Richard Austin met with a potential buyer at Austin's auto body shop, where Austin agreed to sell the buyer cocaine. Austin then retrieved two grams of cocaine from his mobile home and conducted the sale. The police acquired a search warrant and recovered small amounts of drugs in both Austin's shop and mobile home. Austin pleaded guilty in state court to one count of possession with intent to distribute cocaine.

Shortly thereafter, the federal government brought a civil forfeiture action under 21 U.S.C. section 881(a)(4) and (7) against the body shop and the mobile home. In defense against the seizure, Austin argued that forfeiture of his home and business for conducting a small-scale drug operation violated the Eighth Amendment's prohibition against excessive fines. The trial court rejected this argument and the Eighth Circuit affirmed.

The Eighth Circuit felt "constrained" to agree with the Ninth Circuit's response to a request for an Eighth Amendment inquiry, in which that court reasoned that "[i]f the constitution allows in rem for-
feiture to be visited upon innocent owners . . . the constitution hardly requires proportionality review of forfeitures . . . ."44

The Eighth Circuit also looked briefly at history, concluding that "the primary focus of the Eighth Amendment was the potential for governmental abuse of its 'prosecutorial' power, not concern with the extent or purposes of civil damages."45 The court thought that "the government . . . [was] exacting too high a penalty in relation to the offense committed,"46 and "sincerely hope[d] Congress . . . re-examines § 881 and considers injecting some sort of proportionality requirement into the statute . . . ."47

B. Austin's Prescription: The Excessive Fines Clause Inquiry

The Supreme Court granted certiorari to consider Austin's argument that forfeiture was unconstitutionally excessive.48 The government argued that its forfeiture action was not subject to the Excessive Fines Clause because it was not criminal punishment.49 The Court rejected the government's argument and reversed the Eighth Circuit's decision, holding that forfeiture under section 881 requires an Eighth Amendment excessiveness inquiry.50

Justice Blackmun wrote for the five-four majority, consisting of himself, Justices O'Connor, Souter, Stevens, and White.51 The Court concluded that the appropriate question is not whether forfeiture under section 881(a)(4) and (7) is civil or criminal, but rather whether it is punishment.52 All members of the Court agreed that civil forfeiture can be punishment.53

The Court split, however, on the question of whether in rem forfeiture requires personal culpability.54 This division is crucial because the test employed to evaluate excessiveness turns on this distinction.55

44. Id. (quoting United States v. Tax Lot 1500, 861 F.2d 232, 234 (9th Cir. 1988), cert. denied, 493 U.S. 954 (1989)).
45. Id. at 818 (quoting Browning-Ferris Indus., Inc. v. Kelco Disposal, Inc., 492 U.S. 257, 263-64 (1989)).
46. Id.
47. Id.
48. Austin, 113 S. Ct. at 2801.
50. Austin, 113 S. Ct. at 2812. The Court did not fashion a test for its mandate. Rather, it left this task to lower courts. Id.
51. Id. at 2802.
52. Id. at 2806.
53. Id. at 2805-2806, 2813, 2815.
54. Id. at 2814 (Scalia, J., concurring).
55. Id. at 2812. Contrary to the majority, Justice Scalia points out that the excessiveness analysis "must be different from that applicable to monetary fines . . . ." Id. at 2814 (Scalia, J., concurring). For a discussion, see infra text accompanying notes 78-87.
Regardless of the test employed, the Austin decision requires lower courts to engage in an Eighth Amendment excessiveness inquiry before granting forfeiture under section 881.56

C. The Supreme Court's Basis for the Austin Decision

The Supreme Court has said that application of the Eighth Amendment turns on its original meaning, “demonstrated by its historical derivation.”57 Thus, the historical roots of the Excessive Fines Clause are highly relevant to the question of whether it applies to forfeiture.

(1) History of the Excessive Fines Clause

In England, before the Norman conquest, the Saxon legal system provided that victims of wrongs would accept financial compensation for their injury rather than seek retaliation or engage in “blood feuds” with the wrongdoer’s family.58 After 1066, this form of dispute resolution gave rise to a system in which wrongdoers placed themselves “in the King’s mercy” and, in order to gain clemency, were required to pay an “amercement” to the Crown, its representative, or a feudal lord.59 The Supreme Court has acknowledged the amercement’s similarity to a modern-day fine.60 Moreover, the Court has generally referred to the Magna Carta’s limits on the amercement as the origin of the Eighth Amendment.61

In response to periodic abuse of amercements, the Magna Carta sought to make amercements proportional to wrongdoings by providing in part: “A Free man shall not be amerced for a small fault, but after the manner of the fault; and for a great fault after the greatness thereof, saving to him his contenement.”62 This part of the Magna Carta was revitalized in the English Bill of Rights, adopted by the Virginia Declaration of Rights, and implemented in the United States Constitution as part of the Eighth Amendment.63

The fact that amercements served as sanctions for civil as well as criminal wrongs64 weakens the government’s argument that the

56. Id. at 2812.
59. Id. at 287-288 (quoting McKechnie, supra at note 58, 285).
60. Id. at 289-90.
61. See id. at 290-291.
62. Id. at 270 n.14 (quoting Magna Carta, 9 Hen. III, ch. 14 (1225)).
64. The majority opinion in Browning-Ferris, called amercements an “all-purpose’ royal penalty,” used for what today we would consider minor criminal offenses as well as
Eighth Amendment does not apply because section 881 forfeiture is a civil action. The Austin Court dispensed with the government's argument by noting that "the history of the Eighth Amendment requires no such limitation."

The Court concluded that the purpose of the Excessive Fines Clause is to limit the government's power to take payments, "in cash or in kind, as 'punishment for some offense.'" The majority held that application of the Eighth Amendment depends on whether forfeiture is punishment. Thus, the only remaining question was whether forfeiture under sections 881(a)(4) and (a)(7) is properly considered punishment in light of forfeiture's historical roots.

(2) The History of Forfeiture

Statutory forfeitures were "likely a product of the confluence and merger of the deodand tradition and the belief that the right to own property could be denied the wrongdoer." The deodand was an English law providing that any property found to be instrumental in a person's death would be forfeited to the Crown and used for some pious purpose. It began as a penance of sorts, dating back to Biblical and pre-Judeo-Christian practices which believed that the instrument was guilty, hence, religious expiation was required. When this early application ceased "the deodand became a source of Crown revenue . . . justified as a penalty for carelessness."

The common-law tradition of the United States did not adopt deodands. However, the First Congress passed statutory forfeiture laws. The Austin Court concluded that the First Congress considered forfeiture to be punishment. The Court explained that the

"civil' wrongs." Browning-Ferris, 492 U.S. at 269. Another commentator has noted that the amercement was a monetary penalty assessed for a variety of illegal conduct "both civil and criminal." Calvin R. Massey, The Excessive Fines Clause and Punitive Damages: Some Lessons From History, 40 Vand. L. Rev. 1233, 1251 (1987).

66. Austin, 113 S. Ct. at 2804-05.
67. Id. at 2805 (quoting Browning-Ferris, 492 U.S. at 265).
68. Id. at 2806.
69. Id.
70. Id. at 2807 (quoting Calero-Toledo v. Pearson Yacht Leasing Co., 416 U.S. 663, 682 (1974)).
71. WEBSTER's NEW WORLD DICTIONARY (3d College ed. 1988).
72. Austin, 113 S. Ct. at 2806.
73. Id.
74. Id. at 2807.
75. Id.
76. Id.
word "forfeit" was used for fine, suggesting a general understanding that forfeitures were punitive in nature.

The Court also examined a line of its own cases that rejected the "innocence" of the owner as a defense. Justice Blackmun's majority opinion interpreted these holdings as based on the theory that the owner of property used for illegal purposes is negligent, and therefore culpable. Because civil forfeitures were based on the owner's culpability, they were punishment.

Conversely, Justice Scalia saw the caselaw as "far more ambiguous" and rejected the proposition that in rem forfeiture requires "negligence or any other form of culpability." For historical support, Justice Scalia pointed out that with deodands, juries confiscated the instrument of death and nothing more. Thus, the property was taken for its own guilt.

Justice Kennedy (joined by Justices Rehnquist and Thomas) concurred with Justice Scalia and noted that in rem forfeiture may be imposed for reasons other than punishment, such as to remove property that causes injury, to gain jurisdiction, or to serve remedial purposes. The majority anticipated this argument, noting that "sanctions frequently serve more than one purpose." Moreover, "a civil sanction that...can only be explained as also serving either retributive or deterrent purposes, is punishment."

Even though Justice Scalia agreed that the Eighth Amendment can cover civil forfeiture, his concurring opinion ultimately disagrees with the majority on the crucial question: is the punishment imposed upon the property for its participation in the wrong or upon the owner for his culpability? The nature of the punishment is directly related to the majority's decision to require lower courts to perform an Eighth Amendment excessiveness inquiry before granting forfeiture to the

77. Id. at 2808. The Court also looks to dictionaries of the time which confirm that "fine" was thought to include "forfeit" and vice versa. Id. at 2808 n.7.

78. Id. at 2808.

79. Id.

80. Id. at 2814 (Scalia, J., concurring).

81. Id. at 2814.

82. Id. at 2815. Justice Scalia gives an example where a man who is killed by a moving cart would be avenged with the forfeiture of the cart and horses but if he died in a fall from atop a wheel of a cart, only the wheel would be forfeited. Id.

83. Id. at 2815-16.

84. Id. at 2806.

85. Id. at 2812 (quoting United States v. Halper, 490 U.S. 435, 448 (1989)).

86. Id. at 2813. Justice Scalia's concurring opinion states that forfeiture of property may be covered by the Eighth Amendment, noting that definitions of "forfeiture" and "fine" reference each other in various 18th Century dictionaries.

87. Id. at 2814 (Scalia, J., concurring). See supra text accompanying notes 80-82.
government. The next section explores the possible criteria to apply in the excessiveness inquiry.

II. Eighth Amendment Excessiveness Analysis—The Test
A. Naughty Owner or Naughty Property—Whose Culpability Should Be Tested?

The proper test under the Supreme Court’s mandate turns on whether forfeiture serves as punishment for the owner’s culpability or for the guilt of the property. As noted above, the Austin majority attributes forfeiture to the owner’s culpability. Under this view, an appropriate test would be a proportionality analysis, which will be outlined in Part II below.

Justice Scalia, on the other hand, believes only the property need be guilty. In his view, the inquiry should involve the relationship between the property and the offense: “Was [the wrong committed] close enough to render the property . . . ‘guilty’ and hence forfeitable?” This position would uphold the fictional “guilty” property notion that the majority has rejected.

B. The Proportionality Inquiry

Justices Kennedy, Rehnquist and Thomas voiced agreement with Justice Scalia when he suggested that there have been reasons for forfeiture other than culpability of the owner. However, they also admit that the issue of whether forfeiture is permitted when the owner has committed no wrong “would raise a serious question.” This issue was not decided in Austin. Therefore, by concurring in the result—remand to the trial court for an excessiveness inquiry—three of the four justices in the minority concede that where the owner is culpable an excessiveness inquiry should ensue. This implies that the proper inquiry compares the owner’s culpability to the forfeiture. Hence, this Note approaches the mandated excessiveness inquiry with

88. See id. 2814-2815.
89. Id. at 2812.
90. See infra text accompanying notes 97-101.
91. Austin, 113 S. Ct. at 2815 (Scalia, J., concurring).
92. Id.
93. Id. at 2808-2809. The Austin majority does not rule out the potential use of the connection between the property and the offense for the inquiry, but the decision in no way limits use of other factors in making an excessiveness evaluation. Id. at 2812 n.15. The shared characteristics are recognized in the statute’s requirement that the property facilitates the offense. See infra note 110.
94. Id. at 2815-16 (Kennedy, J., concurring).
95. Id. at 2816.
96. Id. at 2812.
a proportionality analysis which considers the property owner's culpability.

C. The Proportionality Analysis

In *Solem v. Helm*\(^9\) the Supreme Court held that the Eighth Amendment's proscription of cruel and unusual punishment prohibits not only barbaric punishment but sentences that are disproportionate to the crime committed.\(^9\) Based on a recidivist statute, Helm had been sentenced to life in prison for writing a bad check for $100.\(^9\) Even though all of Helm's prior crimes were nonviolent, none were committed against a person, and alcohol was a contributing factor in each, the recidivist statute applied.\(^10\) In ordering a constitutional assessment of criminal sentences, the Supreme Court set forth an objective test for use by lower courts in evaluating sentences.\(^10\)

In *Browning-Ferris Industries Inc. v. Kelco Disposal Inc.*,\(^10\) Justice O'Connor proposed that the formula advanced in *Solem* be used to test the excessiveness of punitive damage awards.\(^10\) Because Justice O'Connor's analysis involves the application of the Eighth Amendment's Excessive Fines Clause to a penalty her test would also be appropriate for the excessiveness inquiry.

O'Connor's formula parallels the *Solem* test. The formula includes three parts which provide that: (1) the reviewing court must accord "substantial deference" to legislative standards mandating appropriate sanctions for the conduct involved; (2) the court should evaluate the gravity of the defendant's conduct and the harshness of the penalty; and (3) the court should compare the penalty to the civil and criminal penalties imposed for the same or similar conduct in dif-

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\(^9\) *Solem*, 463 U.S. 277 (1983). In a 1991 case, Harmelin v. Michigan, 111 S. Ct. 2680 (1991), Justice Scalia questioned the viability of the *Solem* test. *Id.* at 2686. This view was joined only by Justice Rehnquist. *Id.* at 2684. However, Kennedy's concurrence, in which Justices O'Connor and Souter joined, concludes that *Solem* is still good law. *Id.* at 2707. Moreover, Justice White's dissent, joined by Justices Blackmun and Stevens, concludes that the *Solem* approach has "worked well in practice," *Id.* at 2712, and that "there is no justification for overruling or limiting *Solem.*" *Id.* at 2716.

\(^9\) *Solem*, 463 U.S. at 284.

\(^9\) *Id.* at 281.

\(^10\) *Id.* at 279-80. Helm's prior convictions included three third degree burglaries—obtaining money under false pretenses, grand larceny, and driving while intoxicated. *Id.*

\(^10\) The Supreme Court provided that courts should give substantial deference to legislatures and consider the following objective criteria: 1) the gravity of the offense and the harshness of the penalty; 2) sentences imposed on other criminals in the same jurisdiction; and 3) sentences imposed for commission of the same crime in other jurisdictions. *Id.* at 290-92.

\(^10\) *Id.* at 279-80. Helm's prior convictions included three third degree burglaries—obtaining money under false pretenses, grand larceny, and driving while intoxicated. *Id.*

\(^10\) *Id.* at 279-80. Helm's prior convictions included three third degree burglaries—obtaining money under false pretenses, grand larceny, and driving while intoxicated. *Id.*

\(^10\) *Id.* at 279-80. Helm's prior convictions included three third degree burglaries—obtaining money under false pretenses, grand larceny, and driving while intoxicated. *Id.*
different jurisdictions and civil and criminal penalties imposed in the same jurisdiction for different conduct that is similarly grave.\textsuperscript{104}

The following three subsections apply Justice O'Connor's formula, illustrating that the proportionality test provides an Eighth Amendment excessiveness inquiry as mandated by the \textit{Austin} court.

(1) \textit{ Legislative Standards}

A look at the legislative history of the forfeiture statutes provides limited insight to congressional intent. In 1970, Congress, envisioning a "comprehensive" drug abuse and enforcement statute, enacted the predecessor to section 881.\textsuperscript{105} The Committee Reports associated with section 881's predecessor do not reveal an intent to define the scope of forfeiture. The House Report does no more than set forth a brief summary of the statute.\textsuperscript{106} The Committee does, however, express concern with the problem of organized drug trafficking.\textsuperscript{107} Moreover, the rehabilitative tone of the Committee discussion implies

\textsuperscript{104} \textit{Id.} at 301. The explanation of the different conduct that should be evaluated in the same jurisdiction is based on the Second Circuit's analysis of the \textit{Solem} criteria. United States v. 38 Whalers Cove Drive, 954 F.2d 29, 38 (2d Cir. 1992).

In \textit{Harmelin}, the Supreme Court was unable to agree on how the \textit{Solem} criteria should be applied. \textit{Harmelin}, 111 S. Ct. at 2707. The three-justice concurrence consisting of Justices Kennedy, Souter and, notably, O'Connor, felt that only where a threshold showing of gross disproportionality between the offense and the sentence exists should the following factors be evaluated. \textit{Id.} However, Justice O'Connor's recitation of all of the \textit{Solem} factors in her \textit{Browning-Ferris} opinion, with no threshold limitation, implies that the inquiry is different when applied to forfeiture. \textit{Browning-Ferris}, 492 U.S. at 301. This distinction makes sense in light of the fact that forfeiture is an additional punishment, thus, the defendant has already been criminally sanctioned for the underlying offense.

\textsuperscript{105} Consideration of the original conveyance forfeiture statute, 21 U.S.C.S. § 511(a) P.L. 91-513 (1970), is inappropriate since its wording is nearly mirrored in the forfeiture statute at issue—21 U.S.C. § 881(a)(4), which states in relevant part: "All conveyances, including aircraft, vehicles, or vessels, which are used, or intended for use, to transport, or in any way facilitate the transportation, sale, receipt, possession, or concealment of property . . . ." 21 U.S.C. § 881(a)(4) (1988).

In passing section 881's predecessor, the House Committee wrote: This legislation is designed to deal in a comprehensive fashion with the growing menace of drug abuse in the United States (1) through providing authority for increased efforts in drug abuse prevention and rehabilitation of users, (2) through providing more effective means for law enforcement aspects of drug abuse prevention and control, and (3) by providing for an overall balanced scheme of criminal penalties for offenses involving drugs.


See also \textit{id.} at 6 (explaining that many pieces of legislation enacted at various times have "necessarily given rise to a confusing and often duplicative approach . . . . This bill collects and conforms these diverse laws in one piece of legislation . . . .").

\textsuperscript{106} \textit{Id.} at 55-56.

\textsuperscript{107} The findings and declarations of the bill focus on the trafficking in illegal drugs. \textit{Id.} at 29.
clemency towards simple users. With this limited information, however, we cannot deduce an intent to favor forfeiture against drug traffickers over those who only possess drugs. The next consideration is the language of the statute.

The text of section 881 prescribes the broadest possible reach of forfeiture. The language explains that use of or intent to use any property or conveyance in any manner or part to facilitate the transportation, sale, receipt, possession or concealment of illegal drugs or drug paraphernalia may result in forfeiture. However, by requiring an Eighth Amendment inquiry, the Austin Court recognized that this reach requires judicial scrutiny to pass constitutional muster. Accordingly, Justice Thomas recently explained that under section 881(a)(7) "it may be necessary—in an appropriate case—to reevaluate our generally deferential approach to legislative judgments . . . ." Hence, the substantial legislative deference prong of Justice O'Connor's test must balance Congress' desire to provide for comprehensive enforcement of drug abuse laws against the constitutional rights of property owners.

(2) Gravity of Conduct Verses Harshness of Penalty

The circuit court decisions involving forfeiture and the Eighth Amendment illustrate how courts may compare gravity of conduct to the harshness of an imposed penalty. For example, in United States v. 38 Whalers Cove Drive, the Second Circuit used two of the Solem criteria for its analysis. This case involved forfeiture of a $68,000 interest in a condominium which was the site of two sales of cocaine valued at $250. Though this case was decided before the Austin holding, because the forfeiture was punitive in nature, the Second Cir-

108. The committee's goal was to reduce the use of drugs by reducing the availability, indicating protective attitude towards users. Id. at 8. More specifically stated, if the abuser was to be penalized, "he should not be penalized in the spirit of retribution," rather, "[p]enalties should be designed to permit the offender's rehabilitation wherever possible." Id. at 9.
111. The illustrious Marbury v. Madison, 5 U.S. 137 (1803), instructs that the Constitution properly controls exercise of all government power including Congress. Id. at 137-38.
113. The remaining parts of O'Connor's test provide for such a balancing.
114. 954 F.2d. at 29.
115. Id. at 38. These are the same criteria applied by Justice O'Connor and suggested to be used in analyzing constitutionality of forfeiture by this Note. See supra text accompanying note 104.
116. Id. at 32.
cuit performed an Eighth Amendment analysis. The court decided the forfeiture was constitutional.117

The 38 Whalers Cove Drive court first examined the “inherent gravity of the offense.”118 It cited the Supreme Court’s language in Harmelin v. Michigan,119 which characterized drug offenses as “a serious threat to individuals and society.”120 The court also noted Justice Scalia’s auspicious grant to the Michigan legislature to “take appropriate measures to address ‘the situation on the streets of Detroit,’” while approving a life sentence imposed for possession of 672 grams of cocaine.121 The 38 Whalers Cove Drive court relied on Harmelin to conclude that the serious nature of drug trafficking alone was dispositive of the inherent gravity of conduct inquiry.122

By contrast, in United States v. Sarbello,123 the Third Circuit applied a more in-depth analysis to a RICO forfeiture, looking not only at the “seriousness” of the offense, but also at the moral gravity and nature of its harmful reach.124 In its decision, which preceded Austin, the Sarbello court remanded the case for an Eighth Amendment inquiry.125 Since Austin, in United States v. R.R. #1126 the Third Circuit reiterated the analysis it set forth in Sarbello,127 remanding the case to the district court with an order to consider “all the circumstances” in the case for an excessiveness inquiry.128

In United States v. Busher,129 the Ninth Circuit remanded a RICO conviction to the district court for an excessiveness inquiry.

117. Id. at 39.
118. Id. at 38-39.
120. 38 Whalers Cove Drive, 954 F.2d at 38-39 (citing Harmelin, 111 S. Ct. at 2680).
121. Id. at 39 (quoting Harmelin, 111 S. Ct. at 2706).
122. Id. at 38-39; see also National Treasury Employees Union v. Von Raab, 489 U.S. 656, 668 (1989) (stating that drug use and distribution is one of the “greatest problems affecting the health and welfare of our population.”). The context of National Treasury Employees Union was the Supreme Court’s review of the constitutionality of mandatory drug testing for certain customs service agents. Id. at 656.
123. 985 F.2d 716 (3d Cir. 1993) (analyzing RICO forfeiture under Eighth Amendment Excessive Fines Clause).
124. Id. at 724.
125. In Sarbello, the defendant’s entire business was forfeited under RICO when only 10% of the asset facilitated wrongdoing. Id. at 719.
127. Id. at 875.
128. Id. at 876.
129. 817 F.2d 1409 (9th Cir. 1987). In this case, Judge Kozinski, of the Ninth Circuit, was the first to hold that forfeiture under § 1963(a) of RICO required a proportionality determination under the Eighth Amendment. Id. at 1415. Despite the criminal nature of RICO forfeitures, many of the factors set forth by the Ninth Circuit may be applied to a
The court suggested consideration of the *Solem* criteria with the following expansion:

In comparing the penalty imposed to the gravity of the offense, the district court may consider the circumstances surrounding the defendant's criminal conduct. More particularly, *Solem* noted that, in considering the gravity of the offense, a court should look both at the harm suffered by the victim and the defendant's culpability.

The Ninth Circuit also found it appropriate to consider the severity of the penalty in relation to the magnitude of the harm caused by the defendant's conduct, including "the dollar volume of the loss caused, whether physical harm to persons was inflicted, threatened or risked, and whether the crime had severe collateral consequences, e.g., drug addiction." The court also pointed out that the benefit reaped by the convicted defendant was a relevant consideration. However, the court noted that a "forfeiture is not rendered unconstitutional because it exceeds the harm to the victims or the benefit to the defendant." The Ninth Circuit reasoned that the use of RICO to exact costs beyond those directly and collaterally caused by the crime, through forfeiture of assets exceeding the harm caused or benefit reaped by a defendant, was justified by the fact that forfeiture is "[a]fter all . . . intended to be punitive."

In summation, this collection of circuit court opinions illustrates that courts weigh the severity of the offense with inquiries varying in depth, ranging from: a) disposing of the inquiry due to the inherent graveness of drug offenses in *38 Whalers Cove Drive*, to b) considering the "harmful reach" of the crime in *Sarbello*, and finally, c) a quite specific inquiry into the actual harm caused in *Busher*.

(3) Civil and Criminal Penalties in the Same and Other Jurisdictions

The most appropriate measure of penalty will be the sanction for the underlying offense. For example, where the owner faces forfeiture because of "willful blindness," courts should compare damage awards for similar negligence in tort actions to the value of the forfeiture.
On the other hand, where an underlying criminal offense is involved, the logical place to start is with the sentence imposed in the criminal proceeding.

III. Economic Theory Applied to Forfeiture—Efficiency and Deterrence Through Reallocation of External Costs

A. External Costs

Economic theory shows that the reallocation of external costs of drug offenses, as suggested by the Ninth Circuit in Busher, is efficient and will deter the behavior. External costs are those produced by an actor's conduct aside from those for which he or she must pay directly. For example, pollution resulting from manufacturing is a cost imposed upon individuals external to the actor, the manufacturer.

Economic theory says that failure to internalize external costs results in allocative inefficiency. This result is due to the actor's failure to consider external costs in his or her production choices. Hence, the best use of resources may not be achieved. For example, because price reflects manufacturing costs, the price of goods will be lower when the manufacturer is not required to pay for anti-pollution costs. Yet failure to invest in anti-pollution equipment results in the external cost to society of pollution. Meanwhile, consumers may prefer to pay a higher price for goods in exchange for the cleaner air that would result from anti-pollution expenditures. This is a more efficient allocation of resources.

Similarly, the drug trafficker creates many social costs that do not affect his profit. Because the drug dealer does not pay for external costs in the areas of law enforcement, judicial and legal services, corrections, care for related health problems, drug programs, drug education, or for the non-monetary pain and anguish associated with drug dependency, he realizes greater profits. Society currently pays for these costs with taxes, the diminished productivity of addicts, and the

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136. Perhaps damage awards in suits involving negligent landowners paying for their tortious tenant's actions would be applicable.
137. 817 F.2d at 1415.
139. Id.
140. Id.
141. Id.
142. Of course it does not make sense to say that just because the public would prefer fewer addicts instead of a greater supply of drugs the dealer will sell less. While manufacturers may voluntarily internalize their external costs by complying with antipollution regulations, a mechanism such as forfeiture will be necessary to force drug dealers to internalize their external costs.
lost resource of drug-free persons. If the monetary external costs were levied upon drug traffickers by way of forfeiture, the risk of lost profits would deter a number of traffickers from entering the business. While this decrease in supply will not likely diminish the current demand for drugs, decreased availability of drugs may inhibit the creation of new addicts. Accordingly, courts can use economic theory to justify allocation of the external costs of the drug trade to drug traffickers via forfeiture because this allocation will deter dealers who are rational and risk averse, and deterrence is a primary goal of the forfeiture statute.

B. Allocation of External Costs is Efficient and Deters Drug Trafficking

In the interest of 1) efficiency and 2) deterrence, some portion of these costs should be allocated through civil forfeiture to drug dealers who are successfully convicted.

(1) Imposing Systematic Costs on Convicted Drug Traffickers is Efficient

Efficient allocation places costs on the least cost avoider. In other words, the most effective imposition of costs is upon the entity which can bear such costs most easily. For instance, in the manufacturing example given above, the polluting manufacturer may curb polluting activity, perhaps by installing screening devices on his smoke stacks. Alternately, the public, through taxes, may resort to some sort of vacuum system to suck pollution from the sky. The manufacturer can clearly solve the pollution problem by prevention, which carries a lower cost. Thus, the manufacturer is the least cost avoider because he can solve the pollution problem (avoid the cost) at the smallest expense.

143. A class of drug traffickers exists which can be attributed with such profit maximizing goals. See infra note 156 and accompanying text.

144. Because convicted traffickers are incarcerated and their property forfeited, unlike the manufacturer example infra, the costs will not be passed to drug buying customers. Instead, the profitability of the industry will be diminished, and, in turn, supply will decrease.

145. See infra text accompanying notes 149-51.

146. See infra notes 153-54 and accompanying text.

147. Notes by the House Committee indicate the desire to deter drug trafficking through penalty. The House Committee wrote:


Decreasing the number of drug traffickers by imposing upon them a portion of the societal costs of drug use and trafficking\textsuperscript{149} through civil forfeitures may curb trafficking by removing profits. While extraction of property has social and individual costs—compromised freedom and equality\textsuperscript{150}—these costs will almost certainly be lower than the costs imposed on society from subsequent traffickers who are not deterred.\textsuperscript{151} Hence, convicted drug traffickers are the least cost avoiders and imposition of a reasonable portion of costs upon them is efficient.

(2) Calculated and Directed Civil Forfeiture Will Deter Drug Trafficking

Economic analysis is also useful in terms of reaching the goal of deterrence. Economists note that an offender is deterred by expected punishment.\textsuperscript{152} They also recognize that criminals are risk avoiders.\textsuperscript{153} Moreover, some criminals make fairly rational decisions about their career choice, indicating that raising the price of crime would reduce the frequency of the its commission.\textsuperscript{154} Predicting rational behavior makes particularly good sense with drug trafficking where profit often motivates the activity.\textsuperscript{155} There appears to be a category of drug traffickers who display risk averse behavior, and considering the substantial profits involved, can be treated as investors in the distribution business.\textsuperscript{156} These investors put time and money into distributing drugs and are averse to the risk of penalty.\textsuperscript{157}

\textsuperscript{149} Societal costs of drug trafficking include law enforcement, judicial and legal services, corrections, related health problems, drug programs, and education.

\textsuperscript{150} Forfeiting property from individuals to pay some portion of societal costs in the areas of the justice system, drug related health care, education, and corrections exacts costs on society in the intangible areas of both equality and freedom. Specifically, highly valued freedom is implicated because property is taken against rightful owners' free will. Equality is also compromised since asset owners will pay more for their crimes than traffickers who own nothing.

\textsuperscript{151} See infra note 172 and accompanying text.


\textsuperscript{154} Gordon Tullock, Does Punishment Deter Crime, The Public Interest, Summer 1974, at 106.

\textsuperscript{155} See infra note 156.

\textsuperscript{156} This analogy can be shown in two ways. First, the enormous profit they reap. See Anderson, Justice Department Leaves Mob Assets Intact, Wash. Post, Apr. 15, 1981, at B16 (through heroin operations, one organization acquired $10 to $16 million a year). Second, by their risk adverse behavior. See Belkin, The Booty of Drugs Enriches Agencies, N.Y. Times, Jan. 7, 1990 (Lisa Graffis, who manages seized and forfeited property for the U.S. Marshal in Texas, commented that drug dealers are leasing vehicles and renting homes so that they cannot be seized). See also infra text accompanying note 159.

\textsuperscript{157} This dealer can be identified through the procedure discussed in note 186 and accompanying text.
Basic risk analysis says that a risk averse and profit-maximizing individual will invest up to a point where the risk approaches the profit. Imagine, for example, a student who can purchase a parking pass for $100 per a 10 week quarter. Assume that without the pass the student risks one ticket per week. If a parking ticket fine is $8, the student may rationally choose to sneak into the lot and pay up to $80 in fines, still coming out $20 ahead. If, on the other hand, the fine is $12, the student stands to lose $20 by gambling on sneaking into the lot. Hence, with a $12 fine, the risk averse student would opt to buy the pass.

Indeed, the risk-balancing behavior described above has been attributed to criminals. Economist George Stigler asserts that offenders are deterred by expected punishment, which equals the probability of punishment multiplied by the punishment. Under this logic, the drug trafficker will be deterred if the probability of conviction multiplied by the predictable punishment outweighs the benefit he can reasonably expect.

The forfeiture statute as applied prior to *Austin* rolled out the cannon in an effort to deter drug trafficking. *Austin*’s mandate forces courts to rethink Congress’ “take it all” tack. However, in order to achieve deterrence through forfeiture that is proportionate to the crime, Part IV of this Note sets forth a method by which to calculate an amount attributable to the drug trafficker that will efficiently deter future drug trafficking activity. Thus, under the theory of external cost allocation, we can direct systematic costs through civil forfeiture to achieve efficiency and deterrence.

C. Legal Support for Imposing External Costs on Convicted Drug Traffickers

Courts currently allocate external costs. For example, the Supreme Court allows compensation for government’s direct costs resulting from criminal acts, calling them a form of “liquidated damages” for harm caused by the individual wrongdoer. Furthermore, the Ninth Circuit recognizes “collateral” costs as an appropriate con-

158. This point is calculated using the investor’s utility function. For this basic discussion we will omit mathematical calculations.

159. Stigler, *supra* note 152, at 56. For this analysis, I will ignore the possibility that other punishment was imposed at the criminal phase of the case. Indeed, civil forfeiture does not require a criminal conviction.

160. The broad and indiscriminate coverage of the forfeiture statute is described at notes 109-10 and accompanying text.

sideration for quantifying the harm caused by the defendant's conduct. Additionally, the Second Circuit considers it perfectly acceptable to allocate "reasonable . . . generalized enforcement costs—in the nature of overhead"—to the defendant. Thus, the government may use forfeiture to compensate itself for investigation and enforcement costs. Therefore, it is plausible to allocate external costs to defendants in determining proportionate forfeitures.

IV. The External Cost Index

The external cost index developed in this section provides a model intended to guide legislatures in giving courts a mechanism with which to calculate a forfeiture amount based on the specific facts of each case which is efficient, proportionate to the crime, and geared toward deterrence.

A. Factors Adopted in the External Cost Index

(1) Sentencing Guidelines—the "Severity Factor" Used to Achieve Proportionality

Because the Federal Sentencing Guidelines reflect Congress's opinion of the varying culpability associated with different types and amounts of drugs, they can be used to measure the severity of a particular crime. This factor distinguishing severity is essential because the crimes covered by the forfeiture statute create different external

162. See supra text accompanying note 132.
163. 38 Whalers Cove Drive, 954 F.2d at 37. However, in United States v. Halper, 490 U.S. 435, 449-450 (1989), the defendant was convicted of 65 counts of medicare fraud, for a total cost to the government of $585 and was fined for each violation, resulting in a $130,000 fine. Since the sanction was presumed to be punitive, the Supreme Court shifted the burden to the government to prove its costs through an accounting, noting, however, that leeway was to be given, particularly in view of quantifying the exact amount of costs. Thus, the government will likely be called upon to justify costs attributed to defendants.
164. 38 Whalers Cove Drive, 954 F.2d at 36. The allocation, however, must not be incommensurate with the portion of costs represented by the particular offense. Id. at 37.
165. The Sentencing Commission's Guidelines Manual documents the goals Congress imparted upon the Commission. UNITED STATES SENTENCING COMMISSION, GUIDELINES MANUAL, ch.1, pt.A, intro. cmt. (Nov. 1994) [hereinafter, U.S.S.G.]. Specifically, Congress sought proportionality in sentencing through a system that would impose appropriately different sentences for criminal conduct of differing severity. Id. Congress set forth specific directives for the Commission to consider, such as the nature and degree of harm caused by the offense, and community views and concerns about the gravity of the offense. 28 U.S.C. § 994 (c) (1988).

Specific to drug control, the Anti-Drug Abuse Act was enacted in 1986 to alter federal drug sentencing by expanding the practice of linking sentences to drug quantity. H.R. REP. No. 845, 99th Cong. 2d Sess. 11-12 (1986). The underlying rationale of the Act was to punish drug traffickers based on the amount of the substance they were dealing in the market sense. Id. at 17.
costs. For example, section 881(a)(4) covers the sale, receipt, possession or concealment of illegal drugs or drug paraphernalia within a range of types and amounts of drugs.\textsuperscript{166} Under this section, a person cultivating marijuana not for distribution\textsuperscript{167} and a person conducting a large scale cocaine distribution conspiracy\textsuperscript{168} are equally subject to forfeiture.\textsuperscript{169}

The external costs generated by an individual growing marijuana for personal use will be limited to the costs of law enforcement, drug education, and potentially related health care.\textsuperscript{170} On the other hand, the person involved in a large scale conspiracy to distribute addictive drugs\textsuperscript{171} creates external costs in the nature of addicts who often turn to crime to support their habit.\textsuperscript{172} Thus, costs attributable to the drug dealer are substantially greater than those attributable to the drug possessor. A bigger slice of the government's liquidated or collateral damages should be visited upon drug dealers than upon drug possessors.\textsuperscript{173}

Similar to the procedure for sentencing,\textsuperscript{174} courts evaluating forfeitures should hold evidentiary hearings to determine how much of a controlled substance is attributable to an owner.\textsuperscript{175} A base offense

\begin{itemize}
\item \textsuperscript{166} Section 881(a)(4) provides for “all controlled substances which have been manufactured, distributed, dispensed or acquired” in violation of section 881. 21 U.S.C. § 881(a) (1988) (emphasis added). This includes harvesting of marijuana.
\item \textsuperscript{167} United States v. 566 Hendrickson Boulevard, 986 F.2d 990, 997 (6th Cir 1993) (upholding forfeiture of a home worth $65,000 for possession of two marijuana plants and an incomplete, non-operational cultivation system, with no accusation of distribution).
\item \textsuperscript{168} United States v. 3201 Caughey Road, 715 F. Supp. 131 (W.D. Pa. 1989) (forfeiture resulting from large scale conspiracy to distribute cocaine).
\item \textsuperscript{169} “[T]he transportation of any quantity of drugs however minute is admittedly sufficient to merit the forfeiture of [a] vehicle.” United States v. One 1974 Cadillac Eldorado Sedan, 548 F.2d 421, 425 (2d Cir. 1977).
\item \textsuperscript{170} For this analysis we will not consider the external costs imposed upon people close to the defendant such as family members and employer since these costs are more personalized and, thus, less in the nature of true external social costs.
\item \textsuperscript{171} Expert testimony given before Congress reported that marijuana is not addictive. H.R. REP. No. 1444, 91st Cong., 2d Sess. 2 (1970).
\item \textsuperscript{172} Indirect costs of drug trafficking are substantial. They include added financial burdens on taxpayers to support narcotics law enforcement, drug clinics and entitlement programs that multiply partly because of the thousands of incapacitated addicts incapable of providing for themselves. The more direct costs, the criminal fall-out, however, is even more serious. Theft is a common method of maintaining a costly drug addiction. See Forfeiture of Narcotics Proceeds: Hearings Before the Subcomm. on Criminal Justice of the Comm. on the Judiciary, 96th Cong., 2d Sess. 1 (1980) (statement of Sen. Biden).
\item \textsuperscript{173} See infra text accompanying notes 187-92.
\item \textsuperscript{174} For example, under unlawful trafficking or possession, the guidelines provide starting base offense levels of the following: level 38 for 150 kilograms or more of cocaine; 34 for between 15 and 50 kilograms of cocaine; 10 for between 1 and 2.5 kilograms of marijuana; and 6 for less than 250 grams of marijuana. U.S.S.G., supra note 165, at § 2D1.1.
\item \textsuperscript{175} United States v. Innamorati, 996 F.2d 456, 489 (1st Cir. 1993).
\end{itemize}
level will be determined by the amount of drugs involved. For example, the Sentencing Guidelines provide the noted base offense levels for:\textsuperscript{176}

\begin{itemize}
\item Level 6: Less than 250 grams of Marijuana;
\item Level 44: At least 5 grams but less than 10 grams of Heroin;
\item Level 28: At least 2 kilogram but less than 3.5 kilograms of Cocaine;
\item Level 42: 30 kilograms or more of Heroin;
\end{itemize}

Additionally, as with the current sentencing procedure, the court should consider past relevant conduct (prior trafficking/possession charges and convictions) to mitigate or enhance the base offense level.\textsuperscript{177}

Once the offense level is determined, it should be divided by the highest possible level (currently 38) to represent the severity of the owner's crime compared to the most severe drug crime rated by the guidelines.\textsuperscript{178} For example, as noted above, nine kilograms of marijuana yields an offense level of 14. The severity factor will be found by dividing 14 by the maximum offense level: 38. Hence, for nine kilograms of marijuana the severity factor will be $14/38$, or $\frac{1}{34}$, yielding a severity factor of 34 when multiplied by 100 (in order to produce a whole number to facilitate later application). This process will result in a number for use in allocating systematic external costs.

\textsuperscript{176} U.S.S.G., \textit{supra} note 165, at § 2D1.1(a). These levels translate into sentences varying from 15 to 21 months for level 14 to 360 months to life for level 42. \textit{Id.} at ch.5, pt. 1.A.

\textsuperscript{177} For example, if the defendant was a "minimal participant" in the criminal activity there will be a four level decrease. U.S.S.G., \textit{supra} note 165, at § 3B1.2(a). On the other hand, the guidelines provide some harsh levels for past crimes where the defendant has been characterized as a career criminal. \textit{Id.} § 4B1.1(3) (providing high offense levels regardless of initial base level). For our purposes, if this section is to apply, it must first be determined that the crime is related to the underlying reason for the forfeiture. The Ninth Circuit has noted that the sentencing court shall consider all relevant conduct, not just that which is cited in the count of the conviction. United States v. Hatley, 15 F.3d 856, 859 (9th Cir. 1994). Thus, all conduct related to the drug distribution or possession should apply, including any past similar offenses.

\textsuperscript{178} The current guideline range should be adjusted, and perhaps broadened, for this purpose.
(2) Probability of Conviction—the "Deterrence Multiple":

As discussed earlier, a primary goal of punishment is deterrence, and the Supreme Court considers forfeiture to be punishment. Thus, the goal of forfeiture is deterrence. Accordingly, this proposal must include deterrence among its goals. As discussed earlier, economists note that criminals are deterred by expected punishment in the amount of the probability of punishment times the expected punishment. The probability of conviction parallels the probability of punishment. Accordingly, the probability of conviction should be used as the deterrence multiple.

According to the Drugs and Crime Data Center and Clearinghouse, in 1990, 30% of drug arrests resulted in conviction. Thus, 70% of arrests for which states expended resources failed to yield convictions. Viewing the costs of all arrests as the price for successful convictions and allocating an equal cost to each arrest, the conviction of one drug offender costs the government 2.3 times as much as the cost directly imputable to that person's arrest. Thus, only 50% of arrests for which the government pays result in conviction.

Accordingly, the model uses a multiple of two composed of one for the external costs directly attributable to the convicted drug offender, plus one for the external cost of "unsuccessful arrests" associated with the conviction. Thus, the external cost amount, which will be developed in the next section, will be multiplied by the severity factor, then multiplied by the deterrence factor: 2.

179. Austin, 113 S. Ct. at 2813-14. See infra Part I(C)(iii) for discussion.
180. See supra note 147.
181. See infra note 186 and accompanying text.
182. This percentage was calculated by dividing the following two statistics: In 1990 there were 1,089,500 drug offense arrests in state courts. DRUGS AND CRIME DATA CENTER & CLEARINGHOUSE, FACT SHEET: DRUG DATA SUMMARY 2 1994. Of those 1,089,500 drug offense arrests, 328,000 convictions were noted. Id. at 4.
183. Imposing these costs has been commended by the Court. See supra note 161 and accompanying text.
184. See, e.g., infra text accompanying note 189.
185. See infra Part IV(A)(i).
186. The deterrence multiple of 2 serves two purposes: 1) deterrence—because probability of conviction (.49) multiplied by an appropriate fine (the external costs measure to be developed in the next section) should deter trafficking; and 2) using the multiple of two incorporates the proportion of external costs allocable to each convicted trafficker, namely 51% over costs directly imputable to the convicted trafficker.
(3) **Per Capita Cost of Drug Trafficking to Society—A Measure of External Costs**

According to the Bureau of Justice Statistics, California's\(^{187}\) 1990 per capita\(^{188}\) cost of the justice system, including police protection, courts, prosecution and legal services, as well as corrections, was $376.06.\(^{189}\) Since drug offenses comprised only 28.3\(^{190}\)% of the arrests for 1990, this figure must be pared down to $106.42 ($376.06 x .283).\(^{191}\) The per capita cost of drug programs—$359.15\(^{192}\)—should then be added. Therefore, the 1990 total per capita annual cost of the justice system and drug programs attributable to drug offenses in California was $465.57. This amount can be used to represent the external cost generated by the drug offender, and the number to which the model applies the severity factor and the deterrence multiple outlined above.

(4) **Application of the External Cost Index**

The best way to illustrate how a system like the external cost index would work is to apply it to the two cases described in the introduction of this note:\(^{193}\)

1) In the first case, the Chicago properties were seized for the sale of three kilograms of cocaine.\(^{194}\) The severity factor described above would begin with a base offense level of 28.\(^{195}\) The severity factor will be 67 (28/42 x 100). Applying the deterrence multiple of two yields 134 (67 x 2). Finally, 134 will be multiplied by the measure of external costs—$465.57—to reach the amount forfeitable under the external cost index: $62,386.38.

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187. The use of California statistics is merely illustrative. An index developed by Congress should allow for each state to use its own cost statistics.

188. The per capita amount is used to better represent the amount attributable to a single individual. Because the drug trafficker is usually a resident of the state in which the conviction/crime occurred, this amount will have been expended for his or her benefit.


191. The resulting figure will be conservative since many drug offense arrests involve a great deal of investigation and undercover and informant costs.


193. This application is imprecise because the measure of external cost in the model is based on California statistics and the cases took place in Chicago and Ohio. However, this application serves as an example. Actual application of the model requires precise statistics and overhaul of the sentencing guidelines.

194. See supra note 7.

195. See supra note 176 and accompanying text.
2) On the other hand, in the second case the Sizemore's home was forfeited for approximately 7.5 grams of marijuana. Here the base offense level would be six. It seems that this offense level should be mitigated, perhaps by four, because the Sizemore's were given the lightest sentence possible and probably had no prior offenses. Thus, the severity factor will be 4.8 \(\frac{[6 - 4]}{42} \times 100\). Applying the deterrence multiple yields 9.6 \((4.8 \times 2)\). Finally, 9.6 will be applied to the measure of external costs, yielding a forfeitable amount of $4,469.47 \((465.57 \times 9.6)\).

V. Use of the External Cost Index as a Mechanism for Executing Forfeiture Satisfies the Three Prong *Solem* Test

Recall that the proportionality analysis outlined in Part II provides for the following considerations: (1) deference to legislative standards; (2) balancing the gravity of the conduct against the harshness of the penalty; and (3) comparison to civil and criminal penalties imposed in the same and other jurisdictions. Application of the external cost index synthesizes all of the interests in this analysis.

A. Deference to Legislative Intent

Both the severity factor and the deterrence multiple serve legislative intent. The severity factor incorporates the Sentencing Guidelines, which were drafted by Congress to impose appropriate sentences for criminal conduct of differing severity by linking sentences to drug quantities. Because the external cost index utilizes the severity factor to make forfeitures proportionate to the amount of drugs seized, the legislative goal of proportionate punishment which is expressed in the guidelines is achieved.

The deterrence multiple uses the probability of conviction as a gauge by which to determine a fine that will deter. Because deterrence is recognized by Congress as a primary aspiration of punish-
ment,\textsuperscript{206} as well as an aim of the forfeiture statute,\textsuperscript{207} the external cost index furthers another legislative goal. Thus, the external cost index advances legislative intent and satisfies the first prong of the proportionality test.

B. Balancing the Gravity of the Conduct Against the Harshness of the Penalty

Balancing the gravity of the conduct versus the harshness of the penalty is achieved through the use of both the severity factor\textsuperscript{208} and the measure of external costs.\textsuperscript{209} Because it is derived from the Sentencing Guidelines which base the offense level on the amount of drugs seized,\textsuperscript{210} the severity factor has a built-in systematic balancing, satisfying the second prong of the proportionality test.

In addition, the measure of external cost reflects the per-capita cost of drug offenses. Use of this measure inherently correlates conduct with its cost to society. Moreover, because the external cost measure is ameliorated by the severity factor and the deterrence multiple, it correlates costs imposed upon society to the specific drug offense.

The deterrence multiple, two, consists of one for costs directly attributable to the offender and one for systematic costs. Thus, applying the deterrence multiple to the external cost measure approximates the government's actual liquidated costs attributable to the offender based on culpability as determined by both society and Congress.\textsuperscript{211}

Accordingly, the external cost index provides a model for a consistent, systematic balancing of the gravity of the underlying drug offense and the harshness of the forfeiture.

C. Comparison to Civil and Criminal Penalties Imposed in the Same and Other Jurisdictions

Since this comparison against other penalties across jurisdictions is a part of a proportionality test, one interpretation may be that the test strives for similarity among jurisdictions. The external cost index clearly achieves such similarity. By applying this index, forfeitures will vary depending only on the facts of each case and the external costs calculated for the state in which the case arises.\textsuperscript{212} Even if for-

\textsuperscript{206} For one example, the Sentencing Reform Act of 1984 provided for the development of guidelines that would further the basic purposes of criminal punishment, including among other things—deterrence. U.S.S.G., \textit{supra} note 165, at ch.1, pt.A, intro. cmt.

\textsuperscript{207} \textit{See supra} note 108.

\textsuperscript{208} \textit{See supra} note 178 and accompanying text.

\textsuperscript{209} \textit{See Part IV(A)(iii) infra}.

\textsuperscript{210} \textit{See supra} notes 176 through 178 and accompanying text.

\textsuperscript{211} \textit{See supra} note 165.

\textsuperscript{212} \textit{See infra} Part IV for complete discussion.
feitures are significantly different between states as a result of variance in state per-capita expenditures on drug offenses,\footnote{213} the model still metes out fines proportionate to the drug offense because the forfeitures will still reflect the crime’s relative cost to society. Hence, the third and final prong of the Solem test is satisfied.

**Conclusion**

Because history indicates that civil forfeitures are punishment and that the Eighth Amendment applies to civil as well as criminal punishment,\footnote{214} the Austin Court mandated an excessiveness inquiry in all forfeiture cases.\footnote{215} One appropriate test for this inquiry is a proportionality analysis, as derived from Solem v. Helm\footnote{216} and applied to a penalty by Justice O’Connor in Browning-Ferris Industries v. Kelco Disposal.\footnote{217}

To satisfy the proportionality test, this Note develops a model—the external cost index—which dispenses forfeitures based on the amount of drugs seized in a manner designed to deter. Thus, forfeiture allocates societal costs to the wrongdoer in a proportionate measure.\footnote{218} Under a system such as the external cost index, the Sizemores would likely still be homeowners, the Chicago property owner would have received a stiff but fair fine, and both forfeitures would have been proportionate to the harm imposed upon society and economically efficient.

\footnote{213}{For example, West Virginia’s total per-capita expenditures for the justice system in 1990 were $97.30, compared to California’s $376.06. \cite{218}See Sourcebook, supra note 189, at 5.}
\footnote{214}{See Part I infra.}
\footnote{215}{See Part I infra.}
\footnote{216}{463 U.S. 277 (1983).}
\footnote{217}{492 U.S. 257 (1989). \cite{supra}See supra text accompanying notes 102-04 for discussion.}
\footnote{218}{See Part IV which outlines the external cost index, and Part VI which illustrates its application.}