"Eggshell" Victims, Private Precautions, and the Societal Benefits of Shifting Crime

Robert A. Mikos

University of California, Davis, School of Law

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“EGGSHELL” VICTIMS, PRIVATE PRECAUTIONS, AND THE SOCIETAL BENEFITS OF SHIFTING CRIME

Robert A. Mikos*

Individuals spend billions of dollars every year on precautions to protect themselves from crime. Yet the legal academy has criticized many private precautions because they merely shift crime onto other, less guarded citizens, rather than reduce crime. The conventional wisdom likens such precaution-taking to rent-seeking: citizens spend resources to shift crime losses onto other victims, without reducing the size of those losses to society. The result is an unambiguous reduction in social welfare. This Article argues that the conventional wisdom is flawed because it overlooks how the law systematically understates the harms suffered by some victims of crime, first, by ignoring some types of harm altogether in grading and sentencing decisions, and second, by ignoring wide disparities in the amount of harm caused in individual cases. It follows that the same “crime”, as defined by the law, may inflict significantly different amounts of harm on different victims, and by aggregation, on society. Thus it cannot be safely assumed that displacing a given crime from one citizen to the next is necessarily wasteful, from a social point of view. Indeed, this Article argues that shifting crime may be beneficial to society, from an economic point of view, since eggshell victims—those who are harmed more by crime—tend to take more precautions. The implication is that private crime fighting efforts that displace crime—universally criticized in the literature—may be more socially useful than previously acknowledged. The Article concludes by discussing how this insight impacts the ongoing debates over the regulation of precaution-taking.

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INTRODUCTION

The legal academy is paying increased attention to the precautions ordinary citizens take to protect themselves from crime,¹ and for good reason. Citizens of the United States spend more on private precautions—estimates range from $160 billion to $300 billion per year—than on the entire public law enforcement budget.² That is, citizens spend more on locks, neighborhood watches, and the like than U.S. governments (state and federal) spend on police, judges, prosecutors, prisons, and prison guards. And these already high estimates of private crime-fighting expenditures may not reflect the total economic cost of precautions, including opportunity costs, like foregoing an evening out, and other difficult-to-monetize costs, like the effort expended walking a friend home at night.³

In some situations, private precautions represent an attractive, low-cost alternative to more traditional crime-fighting tactics, like hiring more police

¹. Any measure taken by a private individual (or firm) to reduce the risk that he or she will be victimized by crime constitutes a precaution. Examples include devices like door locks, security cameras, car alarms, and firearms, as well as actions like keeping valuables out of sight, using a password on a computer, staying indoors at night, or having a neighbor watch one's home.


or building more prisons. For example, some legal scholars have suggested that private citizens may be particularly effective at combating certain types of crime, such as cybercrime and identity theft. More commonly, however, scholars claim that many of the resources spent in the private war on crime are being wasted because many private precautions only shift crime onto other, less guarded citizens. The conventional wisdom is that any time a crime is displaced by a precaution from one victim to another, the precaution-taker's private gain is simply offset by the substitute victim's loss. Thus, precautions that do no more than shift crime produce no societal benefit. But they do have costs: after all, it takes money, time, and energy to protect oneself from crime. It follows that precautions that displace crime are necessarily wasteful and inefficient, from a social point of view. Professors Robert Cooter and Tom Ulen, in their influential text, summarize the prevailing view: "Redistributing crime has no net social benefit." In economic terms, precautions that only shift crime constitute rent-seeking behavior: individuals expend resources to transfer losses, without reducing the size of those losses.

An example illustrates the point. Suppose a thief sets out to steal a single car from a crowded parking lot. The thief spies several cars in the lot that suit his needs and tastes. However, the thief notices that one car is protected by an antitheft device, while the others are not. Given that it would take him some time to overcome this precaution, the thief—having no reason to prefer the protected car to the others—decides to take one of the unprotected cars instead. In this example, the precaution did not reduce crime, it merely displaced it. It is easy to see why, from a social point of view, existing scholarship considers such precaution-taking wasteful. Although the car's owner incurred costs in protecting her vehicle, she generated no corresponding societal benefit; that is, there was no net reduction in crime.

Concerns over crime displacement have also played an important role in policy debates over both public and private crime-control measures. Given


5. E.g., Neal Kumar Katyal, Criminal Law in Cyberspace, 149 U. PA. L. REV. 1003, 1077–80 (2001) (suggesting that it costs far less for private firms to secure computer records than it does for governments to identify, prosecute, and punish cybercriminals).


9. For a discussion of the impact of displacement on policy and policy discourse, see infra Section I.D.
the prevailing view that displacement is necessarily wasteful, policy makers have sought to discourage or even ban the use of precautions that merely displace crime onto other citizens. Two prominent criminologists have observed as follows:

There is little point in the policy maker investing resources and effort into situational prevention if by doing so he merely shuffles crime from one area to the next but never reduces it. For this reason the possibility of displacing crime by preventative intervention is a crucial issue for the policy maker.

This Article argues that extant scholarship and subsequent policy debates have mistakenly condemned displacement on efficiency grounds. The scholarly literature incorrectly assumes that the societal cost of any given crime is identical for all victims. By making this assumption, the literature has overlooked the societal benefits of displacing crime.

The Article demonstrates that the way the law grades and punishes crime systematically understates the magnitude of the harms suffered by some victims—whom this Article calls "eggshell" victims. First, the law ignores some types of harm, such as the destruction of sentimental value, in grading and punishing criminal offenses. Second, the law treats some criminal acts the same, in spite of the fact that the harms inflicted by them are obviously different. In some jurisdictions, for example, the theft of $100,000 is treated the same as the theft of $200,000; both are considered "grand larceny" and trigger identical sanctions. For both reasons, any two instances of the same "crime" (as presently defined by the law) may impose different societal costs. Thus it cannot be safely assumed that displacing any given crime from one citizen to the next is necessarily wasteful, from a social point of view. Society is better off when crime is committed against typical (i.e., low-harm), as opposed to eggshell victims. Hence, to the extent a precaution steers crime away from eggshell victims—who are more likely to purchase the precaution—it has some social value, even if it does not reduce the crime rate. This argument has profound implications for the private war on crime and the ongoing debate over crime displacement.

The Article proceeds as follows. Part I discusses the economics of private precautions and briefly reviews the legal, economic, and criminological literature on the subject. This Part explains why the literature has been so


11. Eggshell victims are individuals who suffer harms, such as the loss of sentimental value, beyond those that the typical victim of crime suffers. An individual may be an eggshell victim for purposes of one crime, e.g., the theft of his wedding ring, because he is sentimentally attached to it, but not necessarily for purposes of other crimes, e.g., the theft of his camera or some other possession, for which he experiences no atypical loss. The concept of the eggshell victim of crime is thus similar to the concept of the "eggshell skull" plaintiff in tort law. There is, however, one important difference. Tort law usually holds defendants liable for all of the harms they cause eggshell skull plaintiffs, including idiosyncratic harms. See Restatement (Second) of Torts § 461 (1965). By contrast, criminal law often neglects to consider eggshell victims' idiosyncratic harms for purposes of grading and punishing criminal offenses. See infra Sections II.A–B.
uniformly critical of displacement, and how that assessment has affected policy discourse. Part II then critiques the assumption made in the extant scholarship that the societal cost of any given crime is identical across victims. It argues that the way the law grades and punishes crime is a poor proxy for the total harm done in any individual case. It also explains why eggshell victims are not more attractive targets for criminals, and thus why shifting crime can reduce the cost of crime to society without simultaneously reducing the incentives to commit crime. Finally, Part III explains why precautions tend to shift crime from eggshell victims onto lower-harm victims, resulting in a net reduction in the societal cost of crime. It also discusses the implications for policy making. The Conclusion offers some observations on future research, including noneconomic considerations that may play a larger role in the debate over crime displacement in the future.

I. THE ECONOMIC THEORY OF CRIME DISPLACEMENT

Much of the extant legal and economic scholarship on precautions and crime control is devoted to studying the displacement phenomenon. Section I.A discusses the private incentives to take precautions. It explains that private precautions generate externalities—including crime displacement—and, as a result, private citizens may take more or less than the socially optimal level of precautions. Section I.B focuses on the most studied and influential externality—that of crime displacement—and examines the conditions under which precautions are likely to displace crime onto other citizens. Section I.C then explores why legal theorists and economists have concluded that precautions that displace crime generate no societal benefit and are thus necessarily wasteful, from a societal perspective. Section I.D discusses the impact that concerns over displacement have had on policy discourse.

A. The Private Incentives to Take Precautions

Individuals take precautions to reduce their expected crime-related losses, which are a function of both the crime rate \((p)\) and the harm that would be suffered if the crime occurs \((H)\). Precautions ward off a would-be criminal by making it more difficult to commit a crime, or by raising the chances that the offender will be caught and punished for the intended offense. For example, locking the door makes it more difficult for a burglar to enter a home, while installing a security camera makes it easier for the police to identify and later punish the burglar. The risk of crime faced by precaution-takers \((p_p)\) is thus lower than the crime rate for the general population \((p)\). In deciding whether to take a precaution, an individual will weigh the benefit of the reduction in risk to her \((p - p_p)\), as measured by the reduction in the expected crime loss \(((p - p_p) * H)\), against the cost of the precaution \((C)\), which includes the cost to purchase it as well as the time and energy spent to activate and deactivate it. The individual will take the
precaution when the expected benefits exceed these costs, in other words, when \( C < (p - p_pr) \times H \).\(^\text{12}\)

When the precaution-taker captures the full benefit of the precaution (i.e., she does not reduce anyone else's crime risk), and also bears the full cost of the precaution (i.e., she generates no negative externalities), the private incentives to engage in precaution-taking are socially optimal. The crime-related loss that would otherwise be suffered by the individual is a societal cost (and eliminating that loss represents a societal gain),\(^\text{13}\) as is the cost of taking the precaution. Hence, barring any externalities, rational individuals will take precautions only when the societal benefits outweigh the societal costs. However, precautions often do generate externalities that the individual will not consider when deciding whether to take a precaution. The externalities may confer a benefit on others, e.g., by reducing the expected crime loss suffered by another party, or they may impose a cost on others, e.g., by increasing the expected crime loss suffered by other potential victims. When precautions generate such externalities, the private incentives to take precautions diverge from the socially optimal incentives.

On the one hand, some precautions confer benefits on third parties, by reducing the likelihood that they—and not just the precaution-taker—will be victimized by crime. For example, a homeowner who installs a light in a dark alleyway might deter would-be burglars from targeting her neighbors' homes, and not just her own. Economists and criminologists refer to this as the "halo effect."\(^\text{14}\) Unless the precaution-taker can extract a payment from her neighbors, she will take less than the socially optimal level of such precautions.

Conversely, some precautions impose costs on third parties. Some precautions may annoy or even harm third parties. For example, a gun fired in self-defense against an intruder may accidentally injure an innocent bystander. Or a car alarm may sound off in the middle of the night, waking the entire neighborhood, and not just the car’s owner.\(^\text{15}\) Other precautions simply

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\(^{12}\) This simplified model of private precaution-taking resembles the Learned Hand formula for determining negligence in tort. See POSNER, supra note 4, at 167-70 (discussing the formula with respect to efficient levels of care). There are more elaborate formal models of precaution-taking in the literature, see, e.g., Charles T. Clotfelter, Private Security and the Public Safety, 5 J. URB. ECON. 388 (1978); Keith N. Hylton, Optimal Law Enforcement and Victim Precaution, 27 RAND J. ECON. 197 (1996); and Shavell, supra note 6, but the simplified model in the text is sufficient for present purposes.

\(^{13}\) Some economists argue that the loss to the victim must be discounted by the gain to the criminal. For a discussion of whether criminal gains should be included as part of social welfare, see generally Jeff L. Lewin & William N. Trumbull, The Social Value of Crime?, 10 INT'L REV. L. & ECON. 271 (1990). Needless to say, this is a controversial point, but it does not affect the analysis here: even if we count the criminal's (illicit) utility as part of societal welfare, we still might prefer the criminal to steer clear of eggshell victims; as discussed below in Section II.C, the criminal often gains nothing extra by targeting such victims, but eggshell victims still tend to lose more than other victims of the same crime.

\(^{14}\) E.g., Neal Kumar Katyal, Architecture as Crime Control, 111 YALE L.J. 1039, 1109 (2002).

\(^{15}\) The socially optimal level of precaution-taking is the point at which the marginal cost of the precaution is equal to its marginal benefit. E.g., Clotfelter, supra note 12, at 399.

shift crime away from the precaution-taker—who is a relatively more difficult or risky target for the criminal—to some other victim who is less protected and hence relatively more vulnerable. The effect of shifting an identical crime (as presently defined by the law) from a precaution-taker to another victim is referred to as crime displacement.\textsuperscript{17} Suppose A buys a guard dog and posts a "Beware of Dog" sign on her lawn; the precaution might dissuade a burglar from breaking into A's house, but it might not dissuade him from committing a burglary elsewhere—for example, the burglar might decide to break into A's neighbor's house instead, assuming the neighbor has not also posted such a warning sign. At the extreme, a precaution results in what is called "total displacement": there is a one-for-one tradeoff between crimes prevented against precaution-takers and crimes perpetrated against persons who do not take precautions. In other words, the precaution has no effect whatsoever upon the crime rate; it only redistributes crime among different victims.

B. The Types of Precautions That Displace Crime

Crime displacement has received more attention in the scholarly literature and has had a more significant impact on policy-making discourse than any other externality associated with precaution-taking.\textsuperscript{18} The next Section discusses why crime displacement is considered a particularly undesirable externality. This Section discusses in more detail the reason that some precautions, but not others, tend to displace crime, by focusing on the criminal's incentives to commit crime.

An offender will commit a crime when the expected benefits outweigh the expected costs, including the risk of apprehension and difficulty of completing the offense, among other things.\textsuperscript{19} Any precaution will of course make some potential victims more costly targets, either by increasing the odds the criminal will be caught or by frustrating efforts to complete the crime. But as long as there are other potential targets who do not take the precaution, and these victims are good substitutes, in the eyes of the criminal, for the ones who self-protect, the precaution may simply shift crime onto the more vulnerable targets. The car thief in a crowded parking garage,

\textsuperscript{17} Criminologists have recognized at least five types of displacement, which often overlap. These include victim, spatial, temporal, tactical, and crime-type displacement. See Thomas A. Repetto, Crime Prevention and the Displacement Phenomenon, 22 CRIM. & DELINQ. 166, 168–69 (1976). This Article focuses on the most commonly discussed type: victim displacement, i.e., an identical crime is shifted from the precaution-taker onto a different victim.

\textsuperscript{18} See, e.g., Derek B. Cornish & Ronald V. Clarke, Situational Prevention, Displacement of Crime and Rational Choice Theory, in SITUATIONAL CRIME PREVENTION: FROM THEORY INTO PRACTICE, supra note 10, at 1, 1–3; Gloria Laycock, Property Marking as a Deterrent to Domestic Burglary, in SITUATIONAL CRIME PREVENTION: FROM THEORY INTO PRACTICE, supra note 10, at 55, 70; Philipson & Posner, supra note 2, at 409 (acknowledging that the debate over victim precautions has focused almost exclusively on the question of whether they reduce or displace crime).

\textsuperscript{19} See generally Gary S. Becker, Crime and Punishment: An Economic Approach, 76 J. POL. ECON. 169 (1968) (explaining that the decision whether to commit an offense can be modeled as a function of the probability of conviction and the severity of the punishment imposed if convicted).
for example, has plenty of options if some car owners choose to lock their vehicles; if she is intent on stealing, say, a Honda Accord (one of the most popular vehicles among car thieves), she will probably be indifferent as to vehicles of the same year, color, model, and so forth.\footnote{Sometimes, of course, a criminal is interested in one, and only one particular target. Consider the crime of domestic abuse. Presumably, the husband who is foiled in his attempt to beat his estranged wife is unlikely to look for another victim. \textit{E.g.}, Neal Kumar Katyal, \textit{Deterrence’s Difficulty}, 95 \textit{Mich. L. Rev.} 2385, 2429 (1997) (arguing that so-called non-market offenses are unlikely to be displaced).}

The criminal must also be able to observe precaution-taking;\footnote{\textit{E.g.}, Ian Ayres \& John J. Donohue III, \textit{Shooting Down the “More Guns, Less Crime” Hypothesis}, 55 \textit{Stan. L. Rev.} 1193, 1203 (2003).} after all, to steer clear of victims who self protect, the criminal must be able to tell who has taken the precaution and who remains a vulnerable target. To see why observable precautions are more likely to displace crime, consider the example of The Club, a popular precaution against car theft. The Club is a brightly colored, steel, U-shaped device that can be attached to a car steering wheel. Millions have been sold since it was invented in the 1980s. The device makes it impossible to operate a vehicle—or at least, to use the steering wheel to guide it—while it is attached, thus foiling car thieves. The fact that one car owner puts The Club on his car steering wheel makes it more difficult to steal his car, but it does not increase the difficulty of stealing any other car, or increase the odds of being caught doing so. On the contrary, it is widely believed that users of The Club probably increase the risk that cars without The Club will be stolen.\footnote{\textit{E.g.}, \textit{Barry Nalebuff \& Ian Ayres, Why Not?: How To Use Everyday Ingenuity to Solve Problems Big and Small} 23–26 (2003).} The manufacturer of the device explains in its marketing materials:

\begin{quote}
Compared to other types of anti-theft devices, the main advantage of The Club is its high visibility. Thieves don’t want or need to mess around with a car that has this as a safety device when there are so many others in the parking lot that don’t have anything. It’s a small price to pay to make sure your car stays where you put it.\footnote{The Club, http://www.theclub.com/default.asp (last visited Aug. 7, 2006) (video advertisement on the company’s webpage).}
\end{quote}

By contrast, if the precaution is hidden, the criminal will have no reason to prefer one target to the next. The criminal may continue to commit the intended crime. But it is also possible that she will abandon the crime altogether. If the criminal knows that some victims have taken a precaution, but she is unable to observe which ones have done so, the precaution will raise the expected cost of committing the crime against all victims. In other words, the criminal will assume that, with some probability, each potential victim has taken the precaution. Thus, if the precaution is taken by enough targets, it may reduce the crime rate for everyone, and not just precaution-takers.\footnote{Shavell, \textit{supra} note 6, at 124–27.} This is an example of the halo effect, the flip side of crime displacement.
Consider LoJack, an antitheft device that, unlike The Club, has proven remarkably effective at deterring, and not just displacing, car thefts. LoJack is a hidden radio transmitter installed in automobiles. When a vehicle equipped with LoJack is stolen, the transmitter can be activated to help police locate the vehicle instantly. Noted economists Ian Ayres and Steve Levitt studied the LoJack device and its effect on car thefts in markets where it is offered. The economists found that LoJack is very effective at reducing the overall rate of car theft and does not simply displace it from LoJack-installed vehicles to other vehicles. The reason is that the device makes car theft both more perilous and also less lucrative. It more than triples the likelihood that a car thief will be caught and punished; moreover, it has been quite successful at helping the police locate and shut down chop shops, thereby disrupting the market for stolen automobiles and parts. Ayres and Levitt suggest that LoJack is effective as a deterrent precisely because car thieves do not know which cars have the device installed (owners are prohibited by contract from advertising that they use the device). But this means that LoJack users capture only a small fraction (roughly ten percent) of the overall societal benefit of installing the device, suggesting that the device is underutilized from a social point of view.

To summarize, displacement is likely to occur when victims are homogeneous in the eyes of the criminal, only some victims take precautions, and the criminal can observe precaution-taking, so that he or she can easily switch to more vulnerable targets. In theory, these conditions will often be met. Indeed, empirical scholarship has identified several types of precautions that tend to displace crime, rather than reduce it.


26. Id. at 45–46 (finding that annually one car theft is deterred for every three LoJack devices that are installed).

27. Id.

28. Id. at 45 n.4.

29. Id. at 47. Users pay a one-time fee of $600 for the LoJack device, but they capture only $200 of the $1,500 in annual benefits to society from using the device. Id. at 74.

30. In addition, the criminal also must not have to incur significant costs in switching from one target to the next. Switching costs include any cost a criminal incurs in changing targets—the cost of locating a new target, traveling to it, reformulating plans, and so on.


C. Why Displacement Is Considered Necessarily Wasteful

The threat of crime displacement has sparked more concern than any other externality associated with private precautions. Displacement is thought to lack any socially redeeming value. To see why, consider the worst-case scenario called total displacement—that is, every crime that is prevented against a precaution-taker is instead committed against someone else; the overall crime rate is left unchanged. The losses suffered by the victims of displaced crimes cancel out the gains reaped by precaution-takers. All the while, precaution-takers have spent resources, but to no societal benefit. The conventional wisdom thus concludes that precautions that do nothing but shift crime are necessarily wasteful, from a social point of view. No level of precaution-taking is socially desirable.

Essential to this conclusion is the assumption that the societal cost of any given crime is the same across all cases and victims. This assumption has an empirical foundation (though as argued below in Part II, it is ultimately mistaken). In practice, the law strives to define and punish each offense according to the harm done in that case. As the Supreme Court noted in Payne v. Tennessee, a decision upholding the use of victim-impact evidence at the capital sentencing stage of a criminal case, "the assessment of harm caused by the defendant as a result of the crime charged has understandably been an important concern of the criminal law, both in determining the elements of the offense and in determining the appropriate punishment.

Thus, acts that inflict more serious harms are graded as more...
serious crimes than are acts inflicting less serious harms. Manslaughter, which involves the death of a human being, is distinguished from aggravated assault, a felony that involves the infliction of serious bodily injury on another; aggravated assault is likewise distinguished from simple assault, a misdemeanor which involves mere "bodily injury" to another; and so on. Criminal acts that inflict more serious harms are also punished more sternly. Under the federal sentencing guidelines, for example, the theft of $500,000 incurs a higher sanction (thirty-three to forty-one months) than does the theft of, say, $100,000 (fifteen to twenty-one months). The sanction imposed in each case corresponds to the harm inflicted, even though both offenses may be considered the same crime (say, grand larceny).

Because the law goes to such great lengths to define and punish crime according to the harm done, many scholars of crime prevention seem to assume that if we were to compare two separate incidents involving the same crime (and carrying the same sentence), they would necessarily also involve the same amount of harm. For example, an aggravated assault upon victim A would involve the same amount of harm—and hence, the same societal cost—as an aggravated assault upon victim B. It follows that the only way to reduce the societal cost of crime is to reduce the incidence of crime. Shifting crime from A to B has no societal benefit. A precaution that shifts an aggravated assault from A to B cannot reduce the societal cost of the crime; the gain to A is offset exactly by the loss to B. But since precaution-taking is a costly activity—individuals must expend resources (money, time, energy, etc.) to protect themselves—it follows that precautions that only displace crime are necessarily wasteful. Individuals expend resources just to transfer a loss, without reducing the size of the loss, which is what economists refer to as rent-seeking. Since the private benefit exceeds the societal benefit (which is, in this case, zero), such precautions will be oversupplied by the market; indeed, if we are talking about precautions that do nothing but displace crime (The


36. Compare Model Penal Code § 211.1(1) (defining crime of simple assault), with id. § 211.1(2) (defining crime of aggravated assault). Under the MPC, simple assault is graded as a misdemeanor, whereas aggravated assault is graded as a felony in the second or third degree. Id.


38. The sentencing stage only adds precision if it is based on a real offense, as opposed to a charge offense system. The real offense system would impose sanctions based on factors other than the crime elements charged and proved by the prosecution at trial. David Yellen, Reforming the Federal Sentencing Guidelines' Misguided Approach to Real-Offense Sentencing, 58 STAN. L. REV. 267, 268–69 (2005). Most sentencing schemes embody some features of a real offense system, so that sentencing decisions supply at least some additional information about the total amount of harm that was inflicted in individual cases, above and beyond that provided by grading decisions alone. See id.

39. See, e.g., sources cited supra note 33.

40. See Tullock, supra note 8. Rent-seeking is, by definition, wasteful, since it involves the investment of resources that do not increase the overall utility or well-being of society. See generally Gordon Tullock, Rent Seeking (1993).
Club, for example), from a social point of view, the optimal level of precaution-taking is zero, according to the conventional wisdom.

Although scholars sometimes disagree over the degree to which specific precautions displace crime, they agree that when it occurs, displacement always poses a problem—that it always detracts from the social utility of precautions.\textsuperscript{41} Ayres and Levitt, for example, warn that precautions that result in total displacement represent a “pure deadweight loss” to society.\textsuperscript{42} Professors Cooter and Ulen, in their seminal \textit{Law and Economics} text, summarize the prevailing view, in discussing the utility of taking a precaution against burglary: “Installing [a] lock has little social value if it prevents the burglary of [one] house by causing a burglar to rob the house next door. Call this effect \textit{redistributing crime. Redistributing crime has no social benefit}.”\textsuperscript{43}

To summarize, the conventional wisdom is that precautions that merely shift crime onto other victims lack any socially redeeming value. The conventional wisdom suggests that when a precaution changes only the identity of the victim, and not the type of crime that is committed, it does not reduce the societal costs of the crime—it only redistributes them. And since there is no social gain to taking the precaution, i.e., no reduction in crime, the resources spent taking the precaution are entirely wasted.\textsuperscript{44} As discussed below, this damming conclusion has important implications for how the law should respond to precaution-taking.

\textbf{D. The Impact of Displacement on Policy Discourse}

Concerns over crime displacement play a central role in debates over both public and private crime-control strategies.\textsuperscript{45} The legal academy and policy makers adhere to the notion that private precautions are socially beneficial, if, and only if, they reduce crime. Success in the war on crime—both public and private—is thus often judged by the extent to which anticrime measures deter, rather than displace, crime.\textsuperscript{46} Displacement is portrayed as a

\begin{itemize}
\item \textsuperscript{41} See sources cited supra note 32; see also Dharmapala & Garoupa, supra note 33, at 200 (noting that “aggregate expenditures on avoidance activities represent a social loss . . . as displacement generates \textit{no social benefit}” (emphasis added)); id. at 187 (noting that “ avoidance activities merely displace hate crimes onto other [victims] and are thus socially wasteful”); John R. Lott, Jr., \textit{More Guns, Less Crime} 92 (1998) (“In the extreme, if the entire reduction in crime from concealed-handgun laws was simply transferred to other areas, society as a whole would be \textit{no better off with these laws, even if individual jurisdictions benefited}.”) (emphasis added); Nalebuff & Ayres, supra note 22, at 23 (“[I]f you buy The Club to deter auto theft and all this action does is send the thief to the next car, then the price of The Club doesn’t reflect its value to society (which is zero).”) (emphasis added).
\item \textsuperscript{42} Ayres & Levitt, supra note 25, at 76.
\item \textsuperscript{43} Cooter & Ulen, supra note 7, at 476 (second emphasis added).
\item \textsuperscript{44} By contrast, precautions that reduce crime may be socially valuable, even if they generate other types of externalities, such as nuisances; citizens will take too many precautions, since they do not internalize the full cost of them, but at least \textit{some level} of precaution-taking of this sort may be socially desirable.
\item \textsuperscript{45} See sources cited supra note 18.
\item \textsuperscript{46} E.g., Thomas Gabor, \textit{Crime Displacement and Situational Prevention: Toward the Development of Some Principles}, in \textit{Crime Displacement: The Other Side of Prevention} 71, 95
\end{itemize}
"frustrating side effect"—the "Achilles heel of situational crime prevention," and is often raised as a key objection to many types of crime-control strategies. Some commentators have even claimed that concerns over crime displacement have had a paralyzing effect on campaigns to enact crime-control measures that are not aimed at the underlying causes of crime, such as poverty.

Consider, for example, the debate over gated communities. Gating is one of the most widespread types of private precaution used today. Gated communities are neighborhoods that install locked gates and hire security patrols—at private expense—to prevent criminals from gaining access to residents. As of 2003, there were nearly seven million households located in gated communities, or nearly seven percent of all households in the country. The problem with such communities, some scholars assert, is that "gating always diverts crime to other communities." Burglars and other wrongdoers who are frustrated in their attempts to enter secure, gated communities simply prey upon more vulnerable communities instead. The money spent to fortify one neighborhood is thus of little value to society at large.

In response to concerns over the displacement of crime across neighborhoods, some local governments have refused to allow real estate developers to control access to new or existing communities. In other words, city

(Robert P. McNamara ed., 1994) ("The resolution of the displacement issue, without a doubt, is an essential part of ascertaining the feasibility of situational crime prevention programs."); Arthur J. Lurigio & Dennis P. Rosenbaum, Evaluation Research in Community Crime Prevention: A Critical Look at the Field, in CRIME DISPLACEMENT: THE OTHER SIDE OF PREVENTION, supra at 11, 32 ("[T]he collective or ultimate benefits of an anticrime strategy remain dubious unless displacement effects can be dismissed."); Emma Short & Jason Ditton, Seen and Now Heard: Talking to the Targets of Open Street CCTV, 38 BRIT. J. CRIMINOLOGY 404, 405 (1998) (arguing that CCTV "cannot be counted as a success until it can be demonstrated that . . . apparently saved crimes have not simply been displaced elsewhere"); Gordon Trasler, Situational Crime Control and Rational Choice: A Critique, in SITUATIONAL CRIME PREVENTION: FROM THEORY INTO PRACTICE, supra note 10, at 17, 18 ("Whether measures for the environmental control of crime . . . are to be counted as a success depends . . . on whether they have succeeded in reducing the incidence of [crime in the target area and on] whether displacement has occurred.").


49. See, e.g., Cornish & Clarke, supra note 18, at 1–3 (noting that displacement is often a "crucial objection to situational crime prevention approaches").

50. Id. Although they agree with the notion that displacement is undesirable, some criminologists have been dismayed by the reaction to it because they believe that displacement is not as common as others (particularly economists) have suggested. See, e.g., Barr & Pease, supra note 47, at 280–82 (arguing that displacement is not the inevitable result of crime prevention measures).


53. EDWARD J. BLAKELY & MARY GAIL SNYDER, FORTRESS AMERICA: GATED COMMUNITIES IN THE UNITED STATES 157 (1997) (noting, for example, that the Plano, Texas, city council refused to grant permission to install gates around a particular neighborhood in part out of concerns that doing so would only displace crime onto other non-gated communities); see also Bob Greene, The
governments are blocking private efforts to control crime in part out of the belief that the efforts have no social utility, that they merely redistribute crime from one neighborhood to the next, and do not reduce its impact on the overall community. Similar concerns regarding displacement of crime have appeared in debates over the regulation of myriad other precautions as well, ranging from the installation of advanced closed circuit television (CCTV) cameras to more traditional programs like the neighborhood watch.

In short, concerns over displacement have spilled over from the academy into policy discourse. Policy-makers have taken their cue from the academy, seeking to curtail (or even block) the use of precautions that displace crime, on the theory that such precautions are not in the public interest. Unfortunately, as the next two Parts argue, we may be condemning precautions that are socially desirable. This Article contends that the concerns over displacement may be misguided, not because displacement never occurs—it clearly does—but because displacement may not be inherently harmful after all. The next two Parts explain why the existing case against displacement is flawed. Part II shows that the conventional wisdom rests upon an assumption that is both empirically and theoretically unsound. Part III offers a new theory of beneficial displacement.

II. THE DISCREPANCY BETWEEN LAW AND HARMs

This Part challenges the assumption behind the conventional wisdom regarding crime displacement, namely, that separate violations of the same criminal code necessarily cause identical amounts of harm, and thus, that we can assess the societal benefit of any precaution by determining whether it reduces the number of crimes of a given type (e.g., aggravated assault) that are committed. Conventional wisdom says, for example, that displacing an

Elusive Sense of Community Behind the Gates, CHI. TRIB., Nov. 20, 1995, at C1 (noting that a city planner in San Diego argued against allowing more gated communities, saying that "the walling off of developments or neighborhoods may only serve to temporarily displace crime from one area to another").

54. See, e.g., Tracey Sagar, Street Watch: Concept and Practice: Civilian Participation in Street Prostitution Control, 45 BRIT. J. CRIMINOLOGY 98, 103 (2005) (noting that citizens protested a government-sponsored neighborhood watch program that had displaced prostitution and other crimes into different neighborhoods); Jessica Gresko & Natasha Lee, Cameras on Watch Across L.A., L.A. TIMES, July 10, 2005, at B1 (reporting the ACLU’s criticism of the installation of thousands of security cameras across southern California, claiming the cameras do not deter, but only displace, crime); Roy Wood, Cameras to Scan Crime Hot Spots, CINCINNATI POST, July 2, 2005, at A12 (quoting a city official urging Cincinnati not to install CCTV cameras, on the belief that such cameras only displace crime).

It is also possible that communities will encourage private precaution-taking that merely displaces crime—as long as it displaces it onto other communities. See Doron Teichman, The Market for Criminal Law, 103 MICH. L. REV. 1831, 1843-57 (2005) (suggesting that states have adopted various crime-control programs to displace crime onto other states or communities, including three strikes laws and sex offender registries).

55. As suggested in the Conclusion, there may be other reasons to condemn precaution-taking that merely shifts crime—for example, certain segments of society may end up bearing a disproportionate share of the crime burden—but this Article focuses on the economic argument against displacement that has been the focal point of the debate over private precautions.
aggravated assault from one victim to the next does not change the harm to society; the law’s treatment of the two cases (e.g., labeling each an “aggravated assault”) implies that the societal harms are identical.

This Part argues that the way the law actually grades and punishes crime is a poor proxy for the total harm done in any individual case. To begin, the law ignores some types of harm altogether, such as the loss of sentimental value, for purposes of grading and punishing crime. In addition, by attempting to sort every offense into one of a finite number of crime categories (e.g., petty larceny or grand larceny), the law, in effect, ignores wide disparities in the amount of harm caused in individual cases. In short, just because the law treats two cases identically does not mean that they necessarily caused identical amounts of harm. Victims are heterogeneous; the law systematically understates the total harm suffered by so-called eggshell victims. Moreover, given that criminals do not always gain in direct proportion to what their victims lose, it is theoretically possible to reduce the total harm suffered by crime victims without reducing the payoff or incentive to commit crime. It is thus mistaken to conclude that shifting crime from one victim to another cannot affect the societal cost of the crime. As long as crime is displaced onto victims who are harmed relatively less, as the theory developed in Part III suggests will happen, precautions may reduce the societal cost of crime, even if they do not reduce the crime rate.

A. The Law Ignores Some Harms

One reason the total harm caused by a given crime may vary across individual cases is that the law simply ignores some types of harm for purposes of grading and punishing offenses. In grading and punishing offenses, the law focuses almost exclusively on foreseeable, objectively verifiable harms, such as the market value of stolen property. The law disregards other types of harms, such as the destruction of sentimental value, for two main reasons. First, courts have difficulty measuring or even verifying some harms ex post (that is, after the crime was committed). Consider, for example, how a court might assess the sentimental value of stolen property in grading a theft offense. The court would have to rely almost exclusively upon the victim's testimony, which can be unreliable. A victim may

56. This Article assumes, without loss of generality, that the law is enforced flawlessly. Cases causing different levels of harm are treated alike not because of mistakes made by those who apply the law (the police, prosecutors, judges, etc.), but because of the way the law is written.

57. Cf United States v. Bae, 250 F.3d 774, 777 (D.C. Cir. 2001) (lost profits are an “undesirable measure of loss” in fraud cases, in part, because they are difficult for courts to ascertain); People v. Dyer, 403 N.W.2d 84, 86 (Mich. Ct. App. 1986) (suggesting that one of the reasons subjective value is not considered in larceny cases is that it cannot easily be verified); Richard A. Posner, Frontiers of Legal Theory 235 (2001) (doubting the ability of courts to identify individual crimes inflicting special harms, such as hate crimes).

A related concern is that courts would be overwhelmed if required to consider more than a “reasonably small number of discrete harm categories” in making grading and sentencing decisions. Frederick M. Lawrence, Punishing Hate: Bias Crimes under American Law 56 (1999) (attempting to explain why the law does not evaluate ex post many types of harms experienced by victims).
overstate his loss to exact revenge on the wrongdoer or may simply struggle to monetize—not to mention articulate—the true extent of his loss. Ignoring the loss of sentimental value and certain other harms is thus a second-best solution. The law will treat some offenses too leniently, but it may still be less arbitrary and capricious than if it based grading and sentencing decisions on difficult-to-measure harms. Second, some harms are not foreseeable to the criminal ex ante (that is, at the time the crime was committed). For example, a thief may not know that the person she is about to rob has an "eggshell skull" and will be badly injured in the ensuing confrontation. Punishing the robber for having caused an unforeseeable amount of harm will not enhance the deterrent effect of the law; by definition, the robber did not expect her crime to trigger the additional sanction. Moreover, punishing criminals for inflicting unforeseeable harms does not comport with some notions of moral culpability.

In short, the law grades and punishes offenses based on only part—the easily measured and anticipated part—of the harm done in any case. The problem with this approach is that the total harm caused by two legally "identical" offenses—two grand larcenies involving $100,000 (market value) in property, for example—may differ considerably. The amount of objectively verifiable and foreseeable harm is not a good proxy for the total harms caused by an offense. The types of harm the law does consider for grading and sentencing purposes (e.g., pecuniary losses) are not necessarily linked to the harms the law ignores (e.g., the destruction of sentimental value): property worth $1,000 on the market, for example, may carry more or less sentimental value than property worth $1,000,000 on the market. It follows that shifting crime—even the same crime, as defined by the legal code—from one victim to another may reduce the societal costs of crime, because some victims of the crime suffer relatively less (they lose less sentimental value, and so on). The next three Sections discuss in greater detail some of the harms that are ignored by the law in both defining and punishing crime, thereby demonstrating the law's limited usefulness as a proxy of the total harm suffered in individual cases.


60. See generally Stephen J. Schulhofer, Harm and Punishment: A Critique on Emphasis on the Results of Conduct in the Criminal Law, 122 U. PA. L. REV. 1497 (1974). See also 1 WAYNE R. LAFAVE, SUBSTANTIVE CRIMINAL LAW § 6.3(e) (2d ed. 2003) ("[T]here is no basis for imposing on a defendant either the label or the sanctions applicable to one who intentionally caused the results which the defendant fortuitously caused while intending some lesser degree of harm. In short, the better result when the actual harm exceeds the intended harm is to deal with the actor's conduct in terms of harm intended.") (citation omitted).

61. The discussion of the harms ignored by the law is not meant to be exhaustive; rather, it focuses on a handful of important types of harm that often do not correspond to any benefits obtained by criminals—an important distinction, as discussed below in Section II.C.
1. The Loss of Sentimental Value

People attach sentimental value to a variety of possessions, such as family heirlooms and mementos. Indeed, some possessions are prized more for their sentimental significance than for their objective value. Nonetheless, the law ignores sentimental value in grading and punishing crime. For example, in distinguishing between grand and petty larceny, and in determining the sentence for crimes of larceny, the law typically calculates the victim's loss based exclusively upon the market value of the property that was taken. Juries may not consider the special value a victim attached to her property, nor may the victim testify as to such value, in a criminal trial or sentencing hearing. Hence, the theft of, say, a $10,000 wedding ring is treated no differently than the theft of any other $10,000 piece of jewelry.

It is easy to see why—if we ignore sentimental value—society has no reason to care whether a thief steals property of identical market value from victim A or from victim B. Since either victim could replace the property, the loss incurred by the theft is equal to the item's replacement cost, which is presumptively identical for each victim. Suppose, for example, that A and B each own a similar ring valued at $10,000 on the market, and that a thief is plotting to steal one of the rings. Society gains nothing if B takes a precaution that displaces the crime onto A; even if B values her ring at, say, $30,000, and A values her ring at only $10,000, the loss is the same for both victims, since either could restore the lost value (whether $10,000 or $30,000) by purchasing a new ring for $10,000 on the market.

When a victim loses property to which she attaches sentimental value, however, the replacement cost no longer caps her loss from the crime. The sentimental value is destroyed by the theft, for it is not transferred to the thief and it cannot be restored by replacing the property. Suppose, for example, that two-thirds of the value B attaches to her ring ($20,000) represents "sentimental value." Society now has a reason to prefer that the thief take A's ring instead of B's—B stands to lose $20,000 more from this crime—even though the law would treat the two thefts identically.

Indeed, the same problem arises when an owner values her property at more than its replacement cost and cannot afford to replace it if it is stolen. Suppose, for example, that a thief steals a car from B, who needs the car to commute to work, run errands, and so on. The car has a market value of $10,000, but B would gladly pay $30,000 for it or any similar vehicle. If B can afford to replace the car, the loss from this theft is only $10,000, i.e., the price of a comparable car on the market. If, however, B does not have car

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62. *E.g.*, U.S. Sentencing Guidelines Manual § 2B1.1, cmt. (n.3(C)(ii)) (2005) (loss is determined by "fair market value" of property taken); id. at cmt. 3(A)(iii) (pecuniary harm excludes "emotional distress, harm to reputation, or other non-economic harm"); see also 50 Am. Jur. 2d Larceny § 50 (2001) (fair market value used to grade larceny offenses).

theft insurance and is otherwise too poor to afford to buy another car, her loss (and by aggregation, society’s) is $30,000.\textsuperscript{64}

2. Search Costs

When property is stolen or destroyed, the owner may seek to replace it. In so doing, she will incur a variety of costs in addition to the cost of the item itself, such as the time spent finding a replacement or negotiating with the seller.\textsuperscript{65} Suppose that B, the victim of a car theft in the previous hypothetical, can afford to replace her stolen car for $10,000. In addition to paying $10,000 to the seller, however, B must also spend twenty hours of her time finding a new car—researching, traveling, negotiating, filling out forms, and so on—time which she values at $100 per hour. The value of B’s time, an additional $2,000, should be considered as part of the total cost of the car theft; after all, but for the theft, B would have spent her time doing something else she enjoyed. Yet, with few exceptions, the law ignores search costs in grading and punishing crime.\textsuperscript{66} As explained above in Section A.1, the law grades and punishes theft offenses based on the fair market value of the property that was stolen; fair market value represents the price a reasonable buyer would pay to a reasonable seller, and does not include any costs the buyer incurred in finding the item (nor any sentimental value the buyer or seller attaches to it).\textsuperscript{67}

Ignoring search costs in defining and punishing crime is problematic. Search costs vary, sometimes considerably, for different victims of the same crime. For one thing, some victims are more knowledgeable about the market and thus do not have to spend as much time and effort to find a replacement for property that is stolen or damaged. Suppose that a thief

\textsuperscript{64} Cf. Jack Goldsmith & Sharon S. Goldsmith, Crime and the Elderly 2 (1976) ("The loss of a relatively few dollars—although it might be classified by authorities as a petty crime—can have a very dramatic or tragic effect on the life of an older person who is without financial resources to replace money needed for food, medicine, rent, and other necessities.").

\textsuperscript{65} For a discussion of search costs, see P. Diamond, Search Theory, in 4 The New Palgrave: A Dictionary of Economics 273 (John Eatwell et al. eds., 1987). Generally, Diamond and the many scholars who have analyzed his work have not examined situations in which search costs vary across consumers—an essential point in this Section. For a notable exception, however, see Hal R. Varian, A Model of Sales, 70 Am. Econ. Rev. 651 (1980) (presenting a model in which consumers face different costs of acquiring information).

\textsuperscript{66} See, e.g., United States v. Izydore, 167 F.3d 213, 223–24 (5th Cir. 1999) (holding that loss is limited to the value of the property taken and does not include consequential damages, such as $210,157 in trustee’s fees that were incurred as a result of defendant’s fraud). The Sentencing Guidelines do provide for an exception in product substitution and procurement fraud cases. USSG § 2B1.1, cmt. (n.3(A)(v)(I)) (loss in product substitution cases includes "reasonably foreseeable costs of making substitute transactions"); id. at cmt. n.3(A)(v)(II) (loss in procurement fraud cases includes "administrative costs . . . of repeating or correcting the procurement action affected").

\textsuperscript{67} It is puzzling why the law has neglected search and other replacement costs, but it may have something to do with the fact that—like the loss of sentimental value—such consequential damages are both difficult to quantify and often vary for reasons that have no bearing on the criminal’s culpability. In addition, in some cases, search and replacement costs will be small in comparison to the value of the property. Cf. United States v. Silver, 245 F.3d 1075, 1081 (9th Cir. 2001) (noting that search and replacement costs are often "substantial" in procurement fraud and product substitution cases—the only instances in which the Guidelines take them into consideration).
steals an identical camera from two different victims, A and B. B is visiting
town on vacation, whereas A is a long-time resident. Comparing these two
victims, it seems reasonable to expect that it will take A less time to replace
his camera. A is probably already familiar with local shops, knows where
they are located, the brands they stock, and so on. B, on the other hand, will
have to start from scratch; before he makes his purchase, he will need to
locate a suitable seller, and that takes time.

The value of the time spent finding a suitable replacement may also vary
by victim. To replace an item, a victim must forego other opportunities, such
as watching a movie or reading a good book; in economics terms, the value of
these foregone opportunities represents the victim's opportunity cost of time.
Suppose B, our hapless vacationer, is familiar with the camera shops in the
community. Thus, it may take him no longer than A to obtain a new camera.
Nonetheless, B may value his time more than A, given that he is on vacation.
The opportunities that B must forego (seeing new sights, visiting distant
friends, and so on) may be worth more than the opportunities that A will sacri-
fice (watching television, spending an evening with co-workers, and so on) to
replace the camera. Hence, the theft of B’s camera is more costly—to society,
and not just to B—than the theft of A’s camera, even though the cameras
themselves are identical and the law would treat the two thefts identically.

There is a third type of search cost associated with replacing a good that
may vary among potential victims: the cost of negotiating. This refers not
to the cost of becoming informed or the opportunity cost of time, but to the
dislike of the negotiating process itself. Simply put, some buyers dislike
dealing with sellers. For example, a J.D. Power & Associates survey in 1992
found that sixty-eight percent of car buyers “dread” the process of buying a
new car. That is, many consumers would gladly pay to avoid the negotia-
tion process because it makes them uncomfortable. And it is safe to say that
some consumers “dread” negotiating more than others do. For example, one
study found that women were willing to pay much more ($1,350) compared
to men ($666) to avoid negotiating over the purchase of a car. The amount
someone would be willing to pay to avoid negotiations may represent the
disutility of negotiations. The women in the aforementioned study found car
buying particularly painful because they felt mistreated by car dealerships;
by contrast, some men actually enjoyed the process, viewing it as a game.

68. See James M. Buchanan, Opportunity Costs and Legal Institutions, in 2 THE NEW PAL-
GRAVE DICTIONARY OF ECONOMICS AND THE LAW 710 (Peter Newman ed., 1998), for a discussion
of the concept of opportunity costs.

69. See generally Richard Thaler, Mental Accounting and Consumer Choice, 4 MARKETING
Sci. 199 (1985) (introducing the concept of transaction utility).


71. LINDA BABCOCK & SARA LASCHEVER, WOMEN DON’T ASK: NEGOTIATION AND THE GEND-
ER DIVIDE (2003). The authors claim that society imposes gender-based standards of behavior;
women are supposed to be modest and unselfish, and if they ask for things, they are perceived as “pushy”
or worse. Hence, they say, many women struggle with “intense anxiety” in negotiations. Id. at 11.

72. See id. at 116; see also Uri Gneezy et al., Performance in Competitive Environments: Gender Differences, 118 Q.J. ECON. 1049, 1071 (2003) (suggesting that gender differences in
It follows that the theft of an item from a person who dislikes negotiating, for whatever reason, would cost more to society than the theft of an identical item from a person who enjoys the bargaining process, or at least does not mind it.

In short, when victims of crime must replace some good that has been stolen or destroyed, their costs are likely to vary, even if the good itself does not. Differences in search costs will not be reflected by the way the law treats cases. The loss, according to the law, is equal to the fair market value of the property. Thus, two thefts may be treated identically by the law, even though one imposed much higher search costs on the victim—and was thus more harmful to society—than did the other.

3. Unforeseeable Harms

Crimes often cause more harm than anticipated by the perpetrator. Suppose, for example, that X robs a convenience store, expecting to do no harm to the store clerk; the clerk, however, has heart disease, suffers a massive heart attack because of the shock, and dies. Or suppose X snatches a purse and finds, much to his surprise, that it contains a $100,000 diamond ring, and not just the small bills he was expecting.

The law’s approach to grading and punishing offenses that cause unforeseeable harms varies by jurisdiction. One approach taken by many jurisdictions is to hold a defendant accountable for all the harms caused by his offense, foreseeable or not. In the first hypothetical above, X is guilty of felony-murder, even if he neither intended nor could have foreseen that the store clerk would die in the course of the robbery. Similarly, in the second hypothetical, X is guilty of felonious theft, and not just petty theft (the

performance in competitive tournaments may be attributable to differences in perceptions of competence, which are influenced by societal norms).

73. For purposes of this Article, “unforeseeable harm” includes any amount of harm that was greater than the amount the criminal knew, or should have known, would result at the time the offense was committed, or any harm that was different in kind from what the criminal knew, or should have known, would result.

74. This is analogous to the rule in torts that an injurer takes the victim as she finds him. RESTATEMENT (SECOND) OF TORTS § 461 (1965).

75. See, e.g., Stewart v. State, 500 A.2d 676, 683 (Md. Ct. Spec. App. 1985) (hotel clerk died of heart attack two hours after four defendants, who were unarmed, handed her a note demanding cash; court upholds felony-murder conviction); see also United States v. Mitchell, 366 F.3d 376, 379 (5th Cir. 2004) (bank customer suffered stroke during robbery; court upholds six-level enhancement to defendant’s base offense level under federal sentencing guidelines, even though the injury was “unforeseeable”). For a discussion of the ways in which the criminal law does—or does not—hold defendants accountable for unforeseeable harms, see DRESSLER, supra note 35, § 14.03, and 1 LAFAVE, supra note 60, § 6.4(f)(7).

The felony-murder rule provides that a death that results from the commission of a felony constitutes murder. The death need not have been foreseeable, though most jurisdictions limit application of the felony-murder rule to felonies that are “inherently or foreseeably dangerous” to human life. Erwin S. Barbre, Annotation, What Felonies are Inherently or Foreseeably Dangerous to Human Life for Purposes of Felony-Murder Doctrine, 50 A.L.R.3d 397 (1973).
charge normally applied to purse snatchings), even though he had no prior knowledge of the contents of the purse.76

Not surprisingly, this first approach has generated considerable controversy. As discussed above, some critics argue that unforeseeable harms have no bearing on a defendant's moral culpability.77 They say a defendant should not be condemned or punished for what amounts to sheer "bad luck." Utilitarians argue as well that taking unforeseeable harms into consideration in grading and punishing an offense does not enhance deterrence.78

For these reasons, some jurisdictions follow the Model Penal Code (MPC) approach and disregard at least some unforeseeable harms in grading and sentencing decisions.79 Under the MPC, for example, a defendant is guilty of an aggravated assault if he "purposely, knowingly, or recklessly" causes "serious bodily injury" to another.80 If the defendant intended to cause only "bodily injury," he is guilty of simple assault, even if the injury he inflicted was, in fact, "serious." Suppose that X shoves B; unbeknownst to X, B has an "eggshell skull" and suffers permanent brain damage in the assault. X is guilty of simple assault, and not aggravated assault, as long as he did not "purposely, knowingly or recklessly" cause B's brain damage.81


77. See supra note 60 and accompanying text.

78. See supra note 59 and accompanying text.

79. The MPC accomplishes this by including a mens rea requirement for every element of an offense. MODEL PENAL CODE § 2.02(1) (1962) ([A] person is not guilty of an offense unless he acted purposely, knowingly, recklessly or negligently, as the law may require, with respect to each material element of the offense). See DRESSLER, supra note 35, § 14.04, for a discussion of the MPC's approach to unforeseeable harms.

80. MODEL PENAL CODE § 211.1 (1962):

(1) Simple Assault. A person is guilty of assault if he:

(a) attempts to cause or purposely, knowingly or recklessly causes bodily injury to another . . . .

Simple assault is a misdemeanor . . . .

(2) Aggravated Assault. A person is guilty of aggravated assault if he:

(a) attempts to cause serious bodily injury to another, or causes such injury purposely, knowingly or recklessly under circumstances manifesting extreme indifference to the value of human life . . . .

Aggravated assault under paragraph (a) is a felony of the second degree . . . .

See also MONT. CODE ANN. § 45-5-202(1) (2005) ("A person commits the offense of aggravated assault if the person purposely or knowingly causes serious bodily injury to another"); id. § 45-2-101(35) (person acts "knowingly" if the person is "aware that it is highly probable that the result will be caused by the person's conduct").

81. Cf. State v. Battle, 507 A.2d 297, 299 (N.J. Super. Ct. App. Div. 1986) (reversing conviction for aggravated assault because defendant lacked the "intent, plan, design or purpose" to inflict serious bodily harm on elderly woman who was thrown to the ground in course of purse snatching); Commonwealth v. Robinson, 817 A.2d 1153 (Pa. Super. Ct. 2003) (reversing conviction for aggravated assault because defendant's accomplice had not intended to inflict serious bodily injury when he struck the victim in the back with a gun during the course of a robbery); see also 6 AM. JUR. 2D Assault and Battery § 36 (1999) ("Generally, in order to support a finding of aggravated assault, it must be proved that there was an intentional infliction of injury by the defendant . . . or that the
Similarly, in calculating the victim’s loss for purposes of sentencing larceny offenses, the federal sentencing guidelines instruct courts to include only “reasonably foreseeable pecuniary harm,” that is, “harm that the defendant knew or, under the circumstances, reasonably should have known, was a potential result of the offense.”\footnote{82} Suppose that X steals $10,000 in cash from B; although X did not know it at the time, B was planning to invest this money in a particular security that quickly tripled in value. In sentencing this crime, the court will ignore the fact that, but for X’s crime, B would have made a $20,000 profit on the stock market.\footnote{83}

The main insight of this Section is that when the law ignores unforeseeable harms—as it clearly does, in many instances—the law is not an accurate proxy for the total harm actually caused in individual cases. If we compare a “simple assault” against B to a “simple assault” against A, for example, we may find that B suffered more harm than A, even though the law graded and punished the offenses identically. To be sure, it may be fair to ignore B’s extraordinary harms for purposes of grading and sentencing the offense, but it is misleading to ignore such harms when evaluating victim precautions against crime. As discussed in Part III below, victims surely know more—than criminals ex ante, or courts ex post—about the losses they would suffer from crime. Thus, eggshell victims (like B), who usually know they stand to lose much more from crime, may take more precautions against it. It follows that, even if an eggshell victim takes a precaution that only displaces a crime onto another victim, society still gains something in the process.

B. The Law Ignores Variances in the Degree of Harm

The law ignores some types of harm altogether; the loss of sentimental value, the costs a victim incurs to replace property, and any harms that were not foreseeable at the time an offense was committed, play no (or very little) role in grading and punishing offenses. Still, crimes are graded according to other harmful results, such as pecuniary loss, physical injury, or psychological trauma, and the sentence imposed is often linked to such harms.

defendant committed an act which is productive of violence likely to result in the destruction of life.”) (citations omitted).

82. \textit{U.S. Sentencing Guidelines Manual} § 2B1.1, cmt. (n.3(A)(iv)) (2005). The foreseeability of the harm is also an important consideration in deciding upon the extent of an upward departure on account of death, physical injury, or extreme psychological injury to the victim. \textit{Id.} § 5K2.1-.3 (court should consider whether such injury was “intended or knowingly risked”).

83. \textit{See id.} § 2B1.1, cmt. 3(D)(i) (loss shall not include “[i]nterest of any kind”). Members of the Federal Sentencing Commission recognize that the “[l]oss of the time value of money is, from an economic point of view, indisputably a ‘harm’ suffered by the victim of a fraud.” Frank O. Bowman, III, \textit{The 2001 Federal Economic Crime Sentencing Reforms: An Analysis and Legislative History}, 35 \textit{Ind. L. Rev.} 5, 54 (2001). Nonetheless, the Commission decided that courts would have difficulty calculating the time value of money for different victims, and the size of the loss suffered by a victim would depend on factors—such as the length of time between the offense and sentencing—beyond the defendant’s control. \textit{Id.} at 56; \textit{see also} United States v. Bae, 250 F.3d 774 (D.C. Cir. 2001) (basing loss in fraud upon purchase price of stolen lottery tickets rather than their redemption value; tying the sentence to the redemption value of the tickets would result in arbitrary and capricious sentences).
Within broad limits, however, the law ignores the exact degree of harm caused. To illustrate, in most jurisdictions, the theft of $20,000 constitutes a more serious offense, carrying a longer sentence, than the theft of, say, $1,000, but it does not necessarily constitute a more serious crime—or trigger a longer sentence—than the theft of $2,000, even though the harm involved is ten times greater. Cases involving a wide range of harmful results are grouped together for grading purposes because the law recognizes only a limited number of distinct crime types (grand and petty larceny, for instance), each of which is used to grade individual offenses causing a range of harmful results. Cases are sorted again at sentencing, but the way the law treats a case remains at best a rough proxy for the total harm suffered by the victim in that case.

In theory, the law could grade and punish every criminal case according to the precise amount of harm done in that case. The theft of $1,000 would be labeled differently and punished slightly more sternly than the theft of $999, the theft of $999 would be labeled differently and punished slightly more sternly than the theft of $998, and so on. In such a regime, the law’s treatment of each offense would correspond precisely to the actual harm caused by each wrongdoer. If we assume—contrary to the discussion above in Section II.A.—that the law also defined harm expansively to include all types of harm, then shifting any given crime, as defined by this exhaustive code, would indeed generate no societal benefit.

In reality, however, an exhaustive legal code that made such fine distinctions between offenses would be nearly impossible to administer. Judges

84. 1 LaFave, supra note 60, § 6.3(e); Robinson, supra note 35, at 901–05; Yellen, supra note 38.
85. See infra note 94 and accompanying text.
86. The Model Penal Code, for example, sorts crime into only six different grades of seriousness: first, second, or third degree felony, misdemeanor, petty misdemeanor, or violation. Model Penal Code §§ 1.04, 6.01 (1962).
87. See generally Douglas A. Berman, Distinguishing Offense Conduct and Offender Characteristics in Modern Sentencing Reforms, 58 Stan. L. Rev. 277 (2005) (discussing the role of victim harms, inter alia, in federal sentencing). For example, at the grading stage, an assault involving “serious bodily harm” is labeled an “aggravated assault,” and thus distinguished from an assault involving mere “bodily harm,” which is labeled a “simple assault.” At the sentencing stage, this aggravated assault may trigger a longer sentence than another aggravated assault if the serious bodily injury was more costly in the former than in the latter.

It is questionable whether it is even necessary to consider the sorting that takes place at the sentencing stage. The crime displacement literature assumes that the grade of a crime alone is an accurate gauge of harms. Thus, for example, empirical studies of crime displacement compare the number of offenses of a certain type (say, burglaries) that occurred before and after some precaution was taken, paying no heed to the lengths of the sentences that were imposed (if any) or the amounts that were taken in the two periods. In any event, the sentence that would be applied to a particular crime is often not known, given that many crimes are never solved and many defendants never convicted or sentenced. In 2002, for example, only twenty percent of all reported crimes of types monitored by the FBI resulted in an arrest and charges. Fed. Bureau of Investigation, Crime in the United States, 2002, http://www.fbi.gov/ucr/cius_02/html/web/offreported/02-crimeindex01.html (last visited Aug. 7, 2006).

88. In addition, a complex code would be more difficult to understand, thus undermining one of the primary functions of the criminal law—to inform the public as to what conduct is prohibited. See Robinson, supra note 35, at 857 (explaining that criminal law performs three functions: it
would need to master a set of complex legal rules and would need to calculate harms with exactitude in every case, at tremendous cost. Such a system clearly has its benefits; not only is it more just, but it arguably does a better job of deterring inefficient crimes as well. Nonetheless, at some point, the costs of the added complexity clearly outweigh the benefits. Hence, lawmakers must sacrifice a degree of precision to ensure that the criminal code remains workable in practice. As the United States Sentencing Commission surmised, "a sentencing system tailored to fit every conceivable wrinkle of each case can become unworkable"; thus, since it found "no practical way to combine and account for the large number of diverse harms arising in different circumstances," the Commission had to strike a balance between a "broad, simple categorization" model and a "detailed, complex subcategorization" model in formulating the federal sentencing guidelines.

In short, two criminal offenses may be graded and punished alike by the law, even when it is known that they caused different degrees of harm. It is thus not safe to assume, for example, that an "aggravated assault" on victim A inflicted the same amount of pecuniary, physical, or psychological harm as an aggravated assault on victim B, even if identical sentences were imposed in both cases. The following three Sections discuss the role that pecuniary losses, physical injuries, and psychological injuries play in grading and sentencing crimes. These Sections demonstrate that the amount of such harms can vary without necessarily affecting the way the law grades or punishes an offense; the law does not accurately reflect the harms inflicted in individual cases, and hence, should not be used to judge conclusively the societal value of precautions that displace crime.

1. Pecuniary Losses

Consider first, the way the law grades and punishes theft offenses according to the magnitude of the pecuniary loss involved. The pecuniary loss (1) announces rules of conduct; (2) determines whether violation of those rules is blameworthy; and (3) assesses punishment for blameworthy violations).

89. Cf. Kaplow, supra note 59, at 312–16 (discussing the tradeoffs between awarding accurate versus average damages in tort cases). To see why, contrast the effects of two approaches to sentencing. Under the first approach, crimes are punished with a fine equal to the harm done in each case; under the second approach, crimes are punished with a fine equal to the average harm done across all cases. Suppose a criminal is plotting three separate offenses that would cause $100, $200, and $300 in harms, respectively. Assume, for simplicity's sake, that the criminal will be caught and convicted if he follows through with his plans. A court following the first approach would impose a fine of $100, $200, or $300 in each case, depending on the harm done; this approach will deter the criminal from committing an inefficient crime—one for which the criminal's gain is smaller than the harm—but would not deter efficient crimes. A court following the second approach would impose a fine of $200 in each case, a fine that equals the average harm done. This approach will not deter all inefficient offenses; if the criminal would gain more than $200 but less than $300, he will commit the crime, even though it might cause $300 in damage. But it will deter some efficient crime (assuming, of course, society recognizes such a concept). If the criminal gains more than $100 but less than $200, he will not commit the offense, even though it might cause only $100 in damage.

90. U.S. SENTENCING GUIDELINES MANUAL § 1A.1, cmt. (n.3) (2005).

91. Id. at cmt. n.4(a).

92. Id. at cmt. n.3.
suffered in a theft is relatively easy for a court to calculate. The size of the loss thus plays a central role in determining the grade of the offense, that is, whether it will be called “grand” or “petty” larceny, as well as the sentence that attaches to it.93

Nonetheless, thefts involving a wide range of pecuniary harms may be graded and punished the same way. The reason is that the grade and sentence applied to a theft offense typically correspond to a range of harmful results (the theft of any amount between $1,000 and $10,000, for instance), rather than one specific loss figure (the theft of $1,000). In the state of Texas, for example, the criminal code sorts all theft offenses, involving losses that range from a few dollars to hundreds of millions of dollars, into just seven distinct grades, escalating in seriousness from a Class C misdemeanor to a first degree felony as the amount of the pecuniary loss grows. Table 1 below details the range of harms that are associated with each grade of theft under Texas law, as well as the sentence that applies.94

<table>
<thead>
<tr>
<th>Pecuniary Loss</th>
<th>Grade</th>
<th>Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $50</td>
<td>Class C misdemeanor</td>
<td>$500 fine or less</td>
</tr>
<tr>
<td>$50-$500</td>
<td>Class B misdemeanor</td>
<td>180 days or less</td>
</tr>
<tr>
<td>$501-$1,500</td>
<td>Class A misdemeanor</td>
<td>1 year or less</td>
</tr>
<tr>
<td>$1,501-$20,000</td>
<td>State jail felony</td>
<td>180 days to 2 years</td>
</tr>
<tr>
<td>$20,001-$100,000</td>
<td>3rd degree felony</td>
<td>2–10 years</td>
</tr>
<tr>
<td>$100,001-$200,000</td>
<td>2nd degree felony</td>
<td>2–20 years</td>
</tr>
<tr>
<td>&gt; $200,000</td>
<td>1st degree felony</td>
<td>5 years to life</td>
</tr>
</tbody>
</table>

Hence, separate thefts involving significantly different pecuniary harms may be treated alike under the Texas code. For example, the theft of $2,000 and the theft of $20,000 are both classified as a “state jail felony,” though the latter clearly involves much greater harm than the former.

To be sure, the amount of pecuniary loss is also considered at sentencing. But increases in the magnitude of the pecuniary loss do not always increase the length of the sentence, or at least, they do not increase it in similar proportion. For instance, the federal sentencing guidelines use pecuniary loss to help determine the sentencing range for all larceny offenses. For a defendant with no criminal history, the theft of, say, $400,000 draws the same recommended sentencing range—thirty-three to forty-one months


94. TEX. PENAL CODE ANN. § 31.03(e)(1)–(7) (Vernon 2003) (grading theft offenses); id. § 12.21–23, .32–35 (sentencing). Other factors, such as the defendant’s criminal history and offense conduct unrelated to the pecuniary loss, may also play a role in grading and sentencing decisions. Id.
imprisonment—as the theft of more than twice that amount, up to one million dollars.\(^95\) Of course, the court has discretion to impose a sentence at the lower end of the range (thirty-three months) in the former case, and a sentence at the higher end of the range (forty-one months) in the latter case. But nothing compels a court to do this.\(^96\) In any event, the harsher sentence is still only eight months longer than the more lenient sentence, a roughly twenty-five percent increase in punishment for a crime that inflicted two-and-one-half times as much pecuniary harm.

In sum, pecuniary harms are not ignored by the law; to the contrary, they play an important role in grading and sentencing crimes. However, the grade and sentence the law applies to any given offense indicates only that a certain range of pecuniary harm was inflicted. Offenses that are graded and punished the exact same way may have inflicted similar, but not necessarily identical, harms. Therefore, it is mistaken to assume that any two thefts necessarily involved the same pecuniary loss just because (1) the law graded them the same way, and (2) the law punished them identically.

2. Physical Injuries

In the same way, the law does an incomplete job of grading and punishing crimes based on the amount of physical harm inflicted. The way the law grades assaults typifies the way it ignores disparities in the degree of physical injuries, such as broken bones, cuts, bruises, and the like, across cases. As discussed above in Section I.C, the law makes a distinction between aggravated and simple assault, based on the extent of the victim's injuries. An assault that causes bodily injury is graded as a simple assault, whereas an assault that causes serious bodily injury is graded as an aggravated assault. On the one hand, it seems safe to say that an aggravated assault causes more physical harm than a simple assault. On the other hand, it does not follow that all aggravated assaults necessarily cause the same amount of harm.

A wide range of injuries satisfy the definition of serious bodily harm. In one case, for example, a state court upheld an aggravated assault conviction, finding (to no surprise) that the victim, who endured internal bleeding, two heart stoppages during emergency surgery, a collapsed lung, broken palate,
fractured rib, and more than five months of rehabilitation following a brutal beating, had suffered "serious bodily injury."\(^{97}\) The same court upheld an aggravated assault conviction in another case, ruling that the loss of three teeth and a scarred lip also constituted "serious bodily injury."\(^{98}\) Clearly the first victim suffered more harm than the second, but a court still graded the crimes the same way. (At some point, of course, the degree of physical harm will increase enough to warrant a higher grade; if the first victim had died, for example, the crime would be considered homicide, and not assault.)

The sentence the law imposes may provide additional information about the degree of physical harm that was done in a case (assuming, of course, that the defendant was caught, convicted, and sentenced). But sentencing on the basis of physical injuries, like pecuniary losses, is imprecise. Ironically, in the assault cases discussed above, the defendant who caused the more serious of the two sets of injuries received the lighter sentence—a suspended sentence versus a three year prison term.\(^{99}\) In short, neither the grade given nor the sentence imposed in a criminal case indicates precisely the degree of physical injury that the victim suffered.

3. Psychological Harms

The law is even less precise when it comes to grading and punishing an offense according to the degree of psychological harm inflicted (though the law clearly does take such harm into consideration). Crime inflicts a heavy psychological toll on its victims. These psychological harms are distinct from the physical injuries discussed above, and include a variety of mental and emotional injuries, such as depression, emotional distress, and Post-Traumatic Stress Disorder (PTSD), to name a few.\(^{100}\) By some estimates, personal crimes alone inflict the equivalent of over $345 billion annually in "intangible" costs, including psychological harms, compared to $105 billion in "tangible" costs, such as pecuniary losses and physical injuries.\(^{101}\)

\(^{97}\) State v. Scholten, 445 N.W.2d 30, 31–32 (S.D. 1989) (several defendants kicked victim's head and body repeatedly, like a football); see also Tracy A. Batemen, Annotation, Sufficiency of Bodily Injury to Support Charge of Aggravated Assault, 5 A.L.R.5TH 243 (1992) (discussing harms that qualify as "serious bodily injury").


\(^{99}\) Scholten, 445 N.W.2d at 33 (noting that defendant's sentence was suspended on condition he pay victim's medical bills); Bogenreif, 465 N.W.2d at 779.

\(^{100}\) One study found, for example, that the psychological cost of a non-fatal rape (equivalent to more than $80,000) was roughly sixteen times larger than the tangible costs (around $5,000 including medical care, lost wages, and the like). Ted R. Miller et al., Nat'l Inst. of Justice, Victim Costs and Consequences: A New Look 15 (1996); see also Mark A. Cohen, Pain, Suffering, and Jury Awards: A Study of the Cost of Crime to Victims, 22 Law & Soc'y Rev. 537 (1988) (noting that out of pocket expenses often pale in comparison to the cost of pain and suffering, which is nonetheless frequently ignored as a part of the overall cost of crime).

\(^{101}\) Miller et al., supra note 100, at 1 (figure calculated using jury awards in comparable tort cases).
Furthermore, the degree of psychological harm associated with any given crime often varies across victims; that is, some victims suffer more psychological trauma than do others, even when the offense conduct is comparable. To cite one example, clinical psychologists have found that some victims of crime are more prone to experience PTSD, a psychological malady that can impair a person's daily life, and that some victims of PTSD recuperate more quickly than others.\textsuperscript{102} For a number of reasons, victims may experience different levels of psychological trauma following similar criminal incidents. Studies have shown, for instance, that elderly victims of crime often suffer more psychological trauma than younger victims, even if other circumstances—the offender's conduct and the tangible physical injuries—are identical. One explanation is that being victimized may reinforce preexisting doubts about health and independence that are much more prevalent among the elderly than the young.\textsuperscript{103} More controversially, some commentators argue that crimes that are motivated by hatred of the victim's race, sexual orientation, or religion, cause more harm than do similar crimes motivated by other factors (e.g., greed).\textsuperscript{104} For example, they say that an act of vandalism inflicts far more distress if it evinces the vandal's hatred (imagine a swastika painted on a synagogue door), as opposed to his or her immaturity (imagine a teen's nickname painted in the same place). A variety

\textsuperscript{102} Christine A. Harrison & Stuart A. Kinner, Correlates of Psychological Distress Following Armed Robbery, 11 J. TRAUMATIC STRESS 787, 788 (1998); John H. Laub, Patterns of Criminal Victimization in the United States, in VICTIMS OF CRIME 9 (Robert C. Davis et al. eds., 1997); see also Natalie Taylor & Pat Mayhew, AUSTRALIAN INST. OF CRIMINOLOGY, FINANCIAL AND PSYCHOLOGICAL COSTS OF CRIME FOR SMALL RETAIL BUSINESSES 5 (2002) (in survey of 4,000 small businesses in Australia, authors found that only ten to thirty-three percent of store owners who had been burglarized or robbed experienced such symptoms as nightmares, flashbacks, or had difficulty showing up for work).

\textsuperscript{103} Letitia T. Alston, CRIME AND OLDER AMERICANS 99–100 (1986); Miller et al., supra note 100, at 15.

\textsuperscript{104} E.g., Lawrence, supra note 57, at 61–63; see also James Garofalo, Hate Crime Victimization in the United States, in VICTIMS OF CRIME 134, 141 (Robert C. Davis et al. eds., 2d ed. 1997) (finding that victims of hate crimes were more likely to characterize their crimes as "very serious" and report that they had a "great deal of effect" on their lives); Jack McDevitt et al., Consequences for Victims: A Comparison of Bias- and Non-Bias-Motivated Assaults, 45 AM. BEHAV. SCIENTIST 697, 698 (2001) (reporting study results showing that victims of hate crimes suffered more severe and longer lasting psychological harm than victims of similar, non-biased motivated crimes). But see Heidi M. Hurd & Michael S. Moore, Punishing Hatred and Prejudice, 56 STAN. L. REV. 1081, 1088 (2004) (reviewing literature and rejecting claim that hate-motivated crimes inflict more psychological (or other types of) harm).

Some commentators have criticized hate crimes legislation on other grounds, suggesting, for example, that whether or not hate crimes "hurt more," criminals who are motivated by hate may not be any more reprehensible than criminals who are motivated by other considerations. E.g., Dan M. Kahan, Two Liberal Fallacies in the Hate Crimes Debate, 20 LAW & PHIL. 175, 187 (2001); Hurd & Moore, supra. This Article remains agnostic on the normative question whether greater harms alone justify treating hate-motivated crimes more sternly. For present purposes, it is enough to suggest that some arsons, assaults, vandalisms, and so on, cause more harms than others, because of the offender's motivation.
of other factors may also play a role in exacerbating (or diminishing) the psychological costs of crime for some victims.\textsuperscript{105}

For some crimes, the law disregards any psychological harm experienced by the victim. Hence, the federal sentencing guidelines do not enhance the sentence for a larceny offense when it causes emotional distress to the victim.\textsuperscript{106} And until recently, many jurisdictions declined to treat bias-motivated crimes as more serious offenses, even though they arguably cause more psychological trauma than identical crimes motivated by other factors.\textsuperscript{107}

It is common, however, for the law to recognize that some crimes cause psychological, as well as physical and pecuniary harm, and to grade and punish such crimes accordingly. Hence, many crimes associated with a high degree of psychological harm, such as rape, residential burglary, and hate-motivated defacement of property, are graded and punished more sternly than other crimes that can inflict comparable physical or pecuniary injuries, such as aggravated assault, commercial burglary, and vandalism.\textsuperscript{108}

Yet it is rare for the law to distinguish among crimes of the same type—rape, residential burglary, or hate crime—based on the degree of psychological harm inflicted (or not inflicted) in individual cases. To put it another way, the law assumes that victims of each of these crimes all suffer the same degree of psychological harm. For example, the federal sentencing guidelines distinguish between the burglary of residential and commercial property. A residential burglary receives a five-level enhancement, translating into an additional fourteen to twenty-six months of incarceration, because residential robberies carry an increased risk of psychological injury.\textsuperscript{109} The same enhancement applies to every residential burglary,\textsuperscript{110} even though some residential burglary victims clearly suffer more. Compared to a young childless couple, a single parent is likely to be far more disturbed by

\begin{footnotesize}
\textsuperscript{105} Harrison & Kinner, supra note 102, at 788 (noting that marital status, socioeconomic status, and preexisting psychological trauma influence the degree to which victims will suffer psychological harms from crime).

\textsuperscript{106} U.S. SENTENCING GUIDELINES MANUAL § 2B1.1, cmt. (n.3(A)(iii)) (2005) (court may not consider “emotional distress” for purposes of sentencing larceny offenses).

\textsuperscript{107} See generally LAWRENCE, supra note 57 (discussing the history of hate crimes legislation).


\textsuperscript{109} USSG § 2B2.1, cmt. (backg’d).

\textsuperscript{110} Id. Many states take the same approach with respect to hate crimes. The states grade and punish crimes more sternly when they are motivated by hatred of the victim’s race, religion, disability, or sexual orientation. E.g., WIS. STAT. ANN. § 939.645 (West 2004) (providing, for example, that a bias motivation changes a crime ordinarily treated as a class A misdemeanor into a felony, with a corresponding increase in punishment). The same enhancement is applied to all hate-motivated crimes, regardless of the impact on the victim. See id.; see also POSNER, supra note 57, at 234–35 (suggesting that not all victims of hate crimes suffer special psychic harms, and that hate crime legislation, as currently formulated, fails to target the more harmful cases); Hurd & Moore, supra note 104, at 1089 (suggesting that some hate crime victims “may not suffer any greater psychic trauma than the typical victim of an otherwise-motivated assault”).
\end{footnotesize}
a residential burglary, particularly if his children are young and spend time alone in the home. Still, as long as the offense conduct and pecuniary losses are similar, these burglaries would trigger the same sentences under the Guidelines. The fact that one burglary inflicted, say, the equivalent of $100,000 in psychological harm, while the other inflicted only $10,000 in psychological harm, usually does not affect the law’s characterization of the offenses. At the very least, the law will not sanction or otherwise treat the former crime ten times more severely. The same crime may thus inflict different levels of psychological harm on different victims. From an economic perspective, protecting individuals who would suffer relatively more psychological harm (the eggshell victim) could prove beneficial even if it meant simply displacing such crimes onto other, hardier victims.

C. Distinguishing Victim Harms and Offender Benefits

So far, this Article has demonstrated that the law does an imperfect job of grading and punishing individual offenses according to the harm done in each case. The assumption that all crimes of a given sort necessarily involve the same amount of total harm is unrealistic and misleading, for if victims are heterogeneous, a displaced crime may not be as harmful, in the economic sense, as the one that otherwise would have occurred.

But the assumption that crimes of the same type necessarily inflict the same amount of harm, regardless of the identity of the victim, also has a theoretical foundation. Recall that, for a precaution to merely displace a crime, it must not diminish the criminal’s incentive to commit the offense. This means, in effect, that potential victims must be perfect substitutes in the eyes of the offender. If a criminal prefers one victim over another, and only the preferred victim takes a precaution, the criminal may abandon the effort, rather than settle for a less appealing target. In other words, if victims appear heterogeneous to criminals, precaution-taking seems likely to deter crime, and not displace it. The corollary is that if precaution-taking merely displaces crime, then victims must all be the same, in the eyes of the offenders. Put simply, precautions cannot displace crime and reduce the cost of crime.

111. The guidelines authorize an upward departure for extreme psychological harm, but the standard for applying it is set very high. USSG § 5K2.3 (departure for exceptional psychological injury); United States v. Lara, 975 F.2d 1120, 1128 (5th Cir. 1992) (reversing application of upward departure by finding that victim, a fifteen-year-old illegal immigrant who had been smuggled into the country, ordered to work as a prostitute to pay off her debts, and threatened at gunpoint after she tried to flee, had not suffered enough psychological trauma to warrant departure).

112. This assumes, of course, that the most attractive targets take precautions. See infra Part III for a discussion of victim incentives to take precautions.

113. Cf. Derek B. Cornish & Ronald V. Clarke, Understanding Crime Displacement: An Application of Rational Choice Theory, 25 CRIMINOLOGY 933, 943 (1987) (arguing that it should not be assumed that a criminal, foiled in an effort to commit one crime, will necessarily decide to commit another one).
The flaw in this line of reasoning is that criminals do not always gain in direct proportion to what victims lose from crime. One victim may be a perfect substitute for another, in the eyes of the offender, and yet suffer significantly less harm from the same crime. The reason is that inflicting many of the harms discussed above in Sections II.A-B does not confer any benefits on criminals. The burglar (usually) gains nothing extra by stealing personal property with sentimental value to the victim, nor does the criminal generally care whether it costs very much or very little for the victim to replace the property, and the robber is not, of course, motivated by the various "unforeseeable" harms that might occur in the course of her heist. Similarly, to the criminal, physical injury and psychological harm may be an unfortunate side-effect of crime, and not the reason for committing it. For instance, the residential burglar may not care whether his victim suffers psychic trauma—he may even prefer that his victims not suffer harms extraneous to him, all things considered. Hence, some of the most important and variable costs of crime have no bearing on the incentives of criminals. Since eggshell victims do not necessarily represent more attractive targets to criminals, it is possible that precautions will displace crime from eggshell victims onto hardier, lower-harm victims, without affecting the crime rate. In short, there is no theoretical reason to expect displaced crimes to have the same societal harm as those which otherwise would have been committed.

Of course, some types of harm clearly matter to the criminal. It is one thing to say that a burglar does not care about psychological trauma; it is quite another to say the burglar does not care about how much pecuniary loss his victim suffers. Still, even when the criminal cares about the magnitude of the victim's loss, precaution-taking by high-harm eggshell victims may result in some displacement of crime, for two reasons. First, the difference between the eggshell victims and low-harm victims may not be large enough to cause any criminals to forego the crime altogether. Suppose that thief prefers to rob B, who has $1,000 in property, as opposed to A, who has $900 in property. If B takes a precaution, thief may rob A instead, as long as the $900 gain exceeds thief's costs (lost opportunities, expected penalties, and so on).

Second, precaution-taking by eggshell victims may deter some criminals at the margin, but other criminals may continue their efforts and turn to low-harm victims instead, because, e.g., these criminals are more skilled or have fewer opportunities for legitimate gainful employment. To illustrate, suppose that two burglars, X and Y, prey upon a community with 100 households. The cost to commit each burglary is $6,000 for X and $3,000 for Y (suppose Y has fewer other career opportunities or is better at not getting caught than X). Some households are more attractive targets because they have more to steal. Suppose twenty households have $10,000 to steal and the remaining eighty households have $5,000 to steal. The burglars have perfect information on the value of property in each household. Assume that, absent precaution-taking, each burglar would have enough time to commit ten offenses. The societal cost of burglary in this community will be $200,000 (presumably, the burglars will focus on the 20 wealthiest

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households). But suppose that the twenty households with $10,000 in property take a precaution that is effective at thwarting a burglary; the other eighty households do not take the precaution. X will be deterred by the precaution; he will not find it worthwhile to burglarize the unprotected households (his cost per household, $6,000, exceeds the gain from the crime, $5,000). Y, however, will remain a burglar, and commit ten burglaries in the low-harm households. The precaution generated two distinct social gains. It deterred ten burglaries against eggshell victims, for a gain of $100,000 (if we do not count the burglars' utility as part of social welfare). It also reduced the severity of the ten burglaries that were displaced; the societal cost of those burglaries was reduced from $100,000 to $50,000. We would underestimate the social utility of the precaution if we were to ignore this second effect.

The point is that, even when criminals do not view different victims as perfect substitutes, precaution-taking by more attractive, eggshell targets may still displace crime onto other, low-harm targets. Existing scholarship underestimates the value of precautions that both deter and displace crime, by overlooking the possibility that displaced crimes may be less harmful than those that would have otherwise occurred, even though the law treats them no differently.

D. Summary

The way our existing legal codes grade and punish criminal offenses is, at best, an imperfect indicator of the total harm suffered by crime victims, and by aggregation, society. For one thing, the law ignores certain types of harm, such as the loss of sentimental value, in making liability and sentencing decisions.\(^3\) In effect, decisions, such as what to call a particular offense (simple or aggravated assault, for instance) and what sentence to impose, are made on the basis of only part of the harm done—usually the part that is most easily quantified by a court. What is more, the law also disregards some variations in the magnitude of harm done. The number of crime types is limited, so offenses involving dissimilar harms are, of necessity, grouped together. For both reasons, as an empirical matter, the victim of a given crime, as presently defined, may have suffered a range of harmful results. Moreover, since criminals do not always reap more rewards by inflicting greater harms, there is no theoretical justification for assuming that two instances of the same crime necessarily cause identical amounts of harm.

This is not meant as a criticism of the law per se. As discussed above, there are defensible justifications for ignoring certain harms and grouping dissimilar cases together. Some harms, such as the loss of sentimental value,

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114. The law ignores a variety of other types of harms, in addition to those discussed above. E.g., USSG § 2B1.1, cmt. (n.3(D)(i)) (loss shall exclude "[i]nterest of any kind, finance charges, late fees, penalties . . . or other similar costs"). Moreover, criteria other than harmful results—offender characteristics, for example, and offense conduct unrelated to actual harm—also play an important role in grading and sentencing crime, and may further distort the signal the law sends about the harms inflicted in individual cases. Cf. Berman, supra note 87.
are difficult for courts to verify or quantify. Other harms arguably have no bearing on a criminal's culpability, and hence should not play a role in how society chooses to punish the offense ex post. Indeed, many commentators have argued that the law should focus even less on harmful results than it does now. Moreover, there are practical limitations in terms of the number of distinctions courts can make across cases. The criminal code must be simple enough to administer, and that means not all types or degrees of harm can be considered.

We may not be able to or want to do anything about these shortcomings in the law. Yet it is important to recognize the law's limited value as an indicator of harm, for otherwise we are prone to make erroneous assumptions about the social utility of crime-prevention efforts that fail to reduce the crime rate. In particular, the notion that the victims of crime are heterogeneous, that some victims—eggshell victims—suffer more than others, undermines the conventional wisdom regarding crime displacement. It is possible that shifting crime may be socially beneficial. Indeed, the next Part explains that precautions will reduce the cost of crime, whether or not they affect the crime rate. Precaution-taking that merely displaces crime is not rent-seeking behavior, as the conventional wisdom suggests.

III. A Theory of Beneficial Displacement

This Part builds on the critique of the conventional wisdom to develop a new theory of beneficial crime displacement. It suggests that when precautions displace crime, they are likely to reduce the cost of crime. Section III.A explains that eggshell victims have an incentive to take more precautions than do low-harm victims. Hence, criminals will gravitate toward low-harm victims. Section III.B discusses three factors that may distort this market for private precaution-taking: wealth constraints, misinformation, and domino effects. Section III.C analyzes how the insights generated in this Article may affect decisions as to how or even whether to regulate private precautions against crime.

A. Displaced Crimes Are Generally Less Harmful Crimes

This Article proposes that private precautions do not displace crime randomly. Instead, precautions, if they displace crime at all, will tend to displace it from eggshell (i.e., high-harm) victims onto lower-harm victims. The reason is that eggshell victims are more likely to take precautions in the first instance; because they have more to lose from a given crime, they also have more to gain by taking precautions. By contrast, low-harm victims

115. See sources cited supra note 60.
116. See Alston, supra note 103, at 113 (noting that groups who are most likely to strengthen home defenses include women, the elderly, and minorities, who also face higher risks or losses from crime); Anderson, supra note 3, at 625 ("[T]hose who suffer the least from the risk of injury or death are more prone to enter into or live in proximity to crime."); cf. Clotfelter, supra note 12, at 399 (building a demand curve for precautions).
will spend less on precautions, making them more attractive targets for criminals, and hence, the more likely victims of displaced crimes. As long as some low-harm victims refrain from taking precautions—and empirical evidence suggests that few precautions are taken by the entire (or even the majority of the) population—displacing crime will reduce the societal cost of crime.\textsuperscript{117}

Recall that an individual will take a precaution against crime as long as its cost ($C$) is less than the reduction in the expected cost of the crime, which is a function of the crime rate—both before ($p$) and after ($p_C$) taking the precaution—and the harm associated with the crime ($H$). The crime rate determines, but only in part, the expected loss from a crime; the higher the crime rate, the higher the expected losses. Studies have shown that, when the crime rate rises, citizens tend to take more precautions, \textit{ceteris paribus}.\textsuperscript{118} But the crime rate is only part of the story.

It seems reasonable to expect that victims also consider the magnitude of the loss they would suffer in deciding whether to purchase a precaution against crime. Hence, eggshell victims—for whom the harm from crime ($H$) is larger—will purchase more precautions than low-harm victims do, for any given crime rate. And victims are likely to consider not only the tangible, financial costs of crime, but also the other types of harms, such as those discussed above in Part II, that the law tends to ignore or average. For example, the vacationer, knowing that losing her camera (or wallet, etc.) while on holiday would prove especially costly, may take extra steps to avoid theft, compared to someone else who is not on vacation. Similarly, individuals often take precautions to safeguard possessions that, to a stranger, do not seem particularly worthy of protection, such as family heirlooms or trinkets carrying sentimental value.\textsuperscript{119} The point is that victims consider the full range of burdens crime imposes; the larger the burdens, broadly defined, the more victims spend on precautions. Hence, crime is not likely to be displaced randomly—to and from eggshell victims, for example; instead, it will tend to be displaced from those who are harmed more by crime, onto those who are harmed relatively less by it.

To illustrate the theory, imagine a community with a hundred risk-neutral residents. In any given year, ten of these residents chosen at random will suffer a burglary (i.e., the crime rate is ten percent). Imagine that the

\textsuperscript{117} And if all victims do take a certain precaution, it is unlikely to displace crime in the first instance. See Shavell, \textit{supra} note 6, at 124.

\textsuperscript{118} \textit{E.g.}, Ann P. Bartel, \textit{An Analysis of Firm Demand for Protection Against Crime}, 4 J. \textit{LEGAL STUD.} 443 (1975) (finding that firms in high crime areas spend more on precautions than do firms in low crime areas); Charles T. Clotfelter, \textit{Urban Crime and Household Protective Measures}, 59 \textit{REV. ECON. & STAT.} 499, 501 (1977) (reviewing empirical data showing that precaution-taking is responsive to crime rate); \textit{Lott, supra} note 41, at 62 (suggesting that women who are more likely to be targets of crimes are much more likely to carry handguns than are women in general); Philipson & Posner, \textit{supra} note 2, at 408–09 (arguing that precaution-taking responds to crime rate—higher crime rates result in more precaution-taking, lower crime rates result in lower precaution-taking, resulting in a self-correcting cycle).

\textsuperscript{119} Consider, for example, the measures people take to protect a family pet—people will often post rewards for the lost family dog that eclipse the cost of replacing the dog.
harm from a burglary varies across victims. In particular, the total harm to ninety of the citizens in a burglary would be $10,000; ten citizens, however, would suffer a much larger loss—$30,000. Suppose as well that these eggshell victims are not necessarily more attractive targets for burglars—they suffer more because they would lose property with sentimental value, they would incur higher search costs in replacing property, and so on. Suppose that any of these citizens could purchase an alarm system for $1,500 that would eliminate the odds that the citizen would suffer a burglary. It would not, however, reduce the odds that anyone else would suffer a burglary. Indeed, suppose that precaution-takers advertise their status as such—say, by posting signs reading “This house protected by alarm!” Citizens who buy the alarm would actually increase the odds that other citizens would suffer a burglary, unless they too installed the alarm.

In this scenario, only the ten eggshell victims will take the precaution. Incurring the cost of $1,500 is worthwhile to them individually, given that the alarm eliminates an expected loss of $3,000. Precaution-taking among eggshell victims increases the risk of crime for other, lower-harm victims (to 10/90, or roughly eleven percent). However, the other, lower-harm victims, will not take the precaution; its cost is more than its benefit (only $1,000), even after they have become more likely targets (10/90 * $10,000 = $1,111) compared to the eggshell victims. The precaution did not reduce the number of burglaries; it only displaced those burglaries. But it still reduced the societal cost of the crime. Without taking the precaution, the expected societal cost of the thefts (disregarding any gains to the burglars) is $120,000. If the precaution is taken, however, the societal cost of the thefts (disregarding for the moment the cost of the precaution) is only $100,000. The precaution reduced the cost of crime by $20,000, for a cost of only $15,000 in precautions, a net gain to society of $5,000. To be sure, the losses of these crimes have been redistributed; they now fall exclusively upon lower-harm victims. But in efficiency terms, society as a whole is ahead.

One of the more important insights of this Article is in demonstrating that victims can do what the police, prosecutors, and courts cannot; victims can finely tune the level of crime protection to achieve a more efficient distribution of crime in society. As discussed above in Part II, the law attempts to grade and punish crime according to some of the harms done; crimes inflicting more serious financial or physical harms are typically graded and punished more seriously than crimes inflicting lesser harms. The police also tend to prioritize their scarce enforcement resources on the most harmful crimes (murder, rape, etc.). But public authorities are limited in the extent to which they can tailor grading, punishment, and enforcement

120. The expected loss is a function of the number of burglaries committed (10) times the expected societal cost of each burglary (9/10 * $10,000 + 1/10 * $30,000).
121. Cf. Seidman, supra note 4, at 344 ("[P]rivate enforcement levels allow individual potential victims to fine-tune the level of protection according to the value they set on crime avoidance.").
122. This reflects the theory of marginal deterrence—the notion that the law should be designed to discourage criminals from committing more serious offenses.
decisions to reflect the harms—particularly the idiosyncratic harms—that individual victims of crime experience. For example, the government lacks the information necessary to focus police resources on protecting ex ante property that has high sentimental value, or even to punish more sternly ex post the taking of such property; hence the law follows a second-best approach—it ignores sentimental value altogether, and focuses instead on the market value of property, which is easier to observe and quantify. Thus, when the government displaces crime, e.g., by targeting crime hot spots with additional police patrols, there is no reason to expect that it has reduced the societal cost of crime. Victims, on the other hand, know more about their idiosyncratic crime losses ex ante, and they can act on that information by taking more or less private precaution, as the situation dictates.

The theory of beneficial displacement developed here also does a better job of explaining the behavior of crime victims. One shortcoming of the conventional wisdom regarding precaution-taking is that it fails to explain why, given their assumed similarities, some victims do not take precautions—a necessary condition for displacement to occur in the first instance. If two victims really are identical, i.e., they experience identical harms, we should be surprised if only one of them takes the precaution, particularly since doing so makes the other victim an even more likely target of crime. Yet particular precautions are rarely adopted by all potential victims, even when they live in close proximity and appear to face similar crime risks. But this behavior can be explained, in economic terms, by recognizing that victims do not suffer identical harms after all. Variations in the magnitude of crime losses may explain why many types of precautions are not used universally as the conventional wisdom would seem to predict.

123. Consider New York City’s efforts in the 1970s to fight subway crime. Studies revealed that placing police in certain high-crime subway stations did not reduce the rate of crime; instead, crime simply migrated to other areas where there were fewer police. E.g., Jan M. Chaiken et al., The Impact of Police Activity on Subway Crime, 3 J. URB. ANALYSIS 173 (1974). It is implausible to think that the government somehow succeeded in steering crime away from eggshell victims and toward lower-harm victims—e.g., there is no reason to expect that passengers at subway stations that were protected by the police would have lost more than passengers at stations that were not protected by the police.

124. See Charles T. Clotfelter & Robert D. Seeley, The Private Costs of Crime, in THE COSTS OF CRIME 213, 221 (Charles M. Gray ed., 1979) (reporting results of a Washington D.C. crime survey: only 15.1% of residents carry something for protection; 84.4% lock apartment; 65.7% leave lights on when away; and 6% installed bars on windows); Nelson B. Heller et al., NATIONAL INST. OF LAW ENFORCEMENT AND CRIMINAL JUSTICE, OPERATION IDENTIFICATION PROJECTS: ASSESSMENT OF EFFECTIVENESS 7 (1975) (finding that, even after intensive public advertising campaign, few communities had more than ten percent of residents participate in anti-burglary property identification program).

125. Many extant models of precaution-taking avoid the paradox by concluding that all victims do, in fact, take precautions. See Dharmapala & Garoupa, supra note 33, at 199 (in model all victims take avoidance activities because they are all identical; hence, these activities have no effect upon the probability of being victimized). This is empirically false—as demonstrated below—but it also raises a second troubling question. If all victims take precautions, why wouldn’t the precautions deter crime? At least some criminals will abandon their schemes if all victims—and not just a few—have become more costly targets. Cf. Shavell, supra note 6, at 124 (suggesting that precautions become more effective at deterring crime as more victims take them).
In summary, victims who stand to lose more from crime will spend more to protect themselves. Hence, we should expect that displaced crimes will also be less harmful crimes—no matter how the law grades and punishes them. To be sure, displaced crimes are still externalities, and precaution-taking that displaces crime may yet be inefficient, but such precaution-taking has a societal benefit that has gone unrecognized in the literature and policy discourse. Precaution-taking that redistributes crime is not rent-seeking behavior. It has a benefit that must be considered in the debate over victim precautions.

B. Potential Market Failures

Of course, there is no guarantee that precautions will only displace crime onto lower-harm victims. Three factors may distort the “market” for private precautions. Wealth constraints may prevent some eggshell victims from taking precautions; misperceptions of the risks of crime may cause some citizens to take precautions that displace crime onto similarly situated citizens; and displacement by eggshell victims may trigger a domino effect, causing lower-harm victims to also take precautions.\(^{126}\) Each of these possibilities is discussed below.

1. Wealth Constraints

As explained above, we expect eggshell victims to take more precautions; thus, if a precaution merely displaces crime, it should displace it onto low-harm victims, and in the process, reduce the total cost of crime. A problem arises, however, when some eggshell victims cannot afford to take precautions. They may become the victims of crimes displaced by wealthier citizens. To the extent crime is displaced from one eggshell victim to another, the total cost of crime remains the same and precaution-taking is necessarily wasteful, as the conventional wisdom suggests.

Without a doubt, lower-income families cannot afford some precautions that might benefit them. The LoJack anti-theft device, considered one of the most effective precautions against car theft, costs roughly $600 per vehicle, only part of which is covered by insurers.\(^{127}\) Sophisticated home security systems, which include motion sensors, alarms, and quick response teams, can cost $10,000 or more. Lower-income families that might be willing to pay for such protection (because they would suffer the loss of sentimental value, and so on) may lack the means to do so. Indeed, Professor John Dilulio has suggested that one of the reasons residents of impoverished inner-city neighborhoods are victimized much more often than their suburban counterparts is that they cannot afford to spend nearly as much on private

\(^{126}\) This list is not meant to be exhaustive. Other factors, such as heterogeneity in the risk preferences of potential victims, may also distort the market for precautions and the direction of displacement.

\(^{127}\) Ayres & Levitt, supra note 25, at 47–48.
precautions against crime. Generally, the wealthy are also better able to exit high-crime areas and relocate to safer neighborhoods that are beyond the reach of some criminals. Thus, it is possible that some crimes are displaced from wealthier eggshell victims, who can afford to protect themselves, onto poorer eggshell victims, who cannot.

Nonetheless, the magnitude of the distortion caused by wealth constraints will be limited, for three reasons. First, the poor are less attractive targets for criminals interested in strictly financial gains—by definition they have less to steal. Thus, precaution-taking by wealthy households is unlikely to displace property crime onto poor households, even ones that are more vulnerable. (Recall that in order to displace crime, victims must be good substitutes in the eyes of criminals.) It seems more likely that precaution-taking by some wealthy households will displace crime onto other wealthy households—namely, the households of wealthy low-harm victims who take fewer precautions. Second, even if the wealthy do shift some crimes onto poor victims, they will not necessarily shift those crimes onto poor eggshell victims. Since eggshell victims do not necessarily represent more attractive targets for criminals, some crimes will be displaced onto low-harm victims (rich or poor) instead. Third, some precautions, such as The Club (roughly $20) or door locks, are relatively cheap, and are within the means of many citizens. Indeed, some precautions that require heavy time commitments, such as neighborhood watches, may actually be more affordable to the poor than to the wealthy, assuming they have a lower opportunity cost of time. Hence, wealth constraints will not prevent underprivileged eggshell victims from taking at least some (and perhaps even most) types of precautions. Thus, although wealth constraints may allow some rent-seeking precaution-taking to occur, it is unlikely to happen frequently enough to alter the underlying case for beneficial displacement.

A related distortion arises when governments either subsidize or mandate that certain precautions be taken by private individuals or firms. Because victims do not internalize the cost of taking subsidized precautions, there is no assurance that eggshell victims will take more precautions than low-harm victims. Suppose, for example, that the police offer free property marking services to all residents of one particular neighborhood; suppose further that this service merely displaces burglars into the neighboring


129. Assuming, however, that a criminal is interested in something other than financial gain or that a rich and a poor target own comparable goods, precaution-taking by the wealthy may shift crime onto poor households and may be undesirable, from an economic perspective. After all, the poor attach sentimental value to their property, suffer psychological trauma, and so on.


131. Clotfelter and Seeley suggest that poorer households are more likely to take time-intensive precautions, such as staying home at night, due to their lower opportunity cost of time. Clotfelter & Seeley, supra note 124, at 228 (finding, in survey of D.C. households, that wealthy were more likely than poor to install additional locks and that poor were more likely than wealthy to stay home at night because of crime).
community. There is no reason to suspect here that the burglaries have been displaced onto lower-harm victims; quite the opposite may be true. The individuals who took the precaution may have done so not because they had more to lose from the burglaries, but because they had to pay less for protection. To the extent the crime still occurs, society has not necessarily gained anything, for the victims may be alike; or worse yet, the victims of the displaced crimes may suffer comparatively more. Similarly, when governments require that certain precautions be taken, some victims will respond to the threat of legal sanctions, and not the economic incentive to minimize their crime losses.

Governments encourage or require private precaution-taking in a variety of ways. Some cities require taxi cabs to install bulletproof barriers between the passenger compartment and the driver; many state and city governments require banks to install lighting and control access to automated teller machines; police departments around the country promote the use of property marking, neighborhood watches, and so on. Several European nations even issue fines when motorists fail to lock their vehicles upon parking. These efforts may be aimed at addressing the problems mentioned earlier—that some precautions generate positive externalities or (in the case of subsidies) that the poor cannot afford protection—but unless they reduce crime, they are more suspect than private precaution-taking that is done free of government inducements or encouragement.

To summarize, we expect individuals who stand to lose more from crime—so-called eggshell victims—to take more precautions. This means that precautions should normally displace crime (if at all) from these eggshell victims onto lower-harm victims, resulting in some gain to society. A problem arises, however, when eggshell victims are unable to afford precautions. They may become the victims of displaced crimes. Similarly, when governments subsidize or require precaution-taking, demand for precautions will be influenced by factors other than expected crime losses. It is no longer safe to assume that displacement reduces the cost of crimes that occur.

2. Information Distortions

Another distortion occurs when citizens are misinformed about the risk of crime. A low-harm victim who overestimates her chances of being victimized may take a precaution that displaces crime onto other low-harm victims. Conversely, an eggshell victim who underestimates her chances

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132. Gardiner and Balch identify four distinct strategies governments have adopted to encourage precaution-taking: public information campaigns, in-kind public assistance (such as police recommendations regarding how better to protect property), mandates accompanied by sanctions for non-compliance, and subsidies. John A. Gardiner & George I. Balch, Getting People to Protect Themselves, in POLICY IMPLEMENTATION: PENALTIES OR INCENTIVES? 113, 119–20 (John Brigham & Don W. Brown eds., 1980).

133. See id. for a discussion of examples of policies adopted by governments.

134. Philip J. Cook, The Demand and Supply of Criminal Opportunities, 7 CRIME & JUST. 1, 23 (1986).
of being victimized may decline to take a precaution, thus leaving her vul-
nerable to crimes displaced from other, better-informed eggshell victims.
In both scenarios, precaution-taking shifts offenses without reducing the
total cost of crime.

To illustrate, return to the scenario discussed in Section A above, in
which each of a hundred citizens must decide whether to take a precaution
(costing $1,500) against a ten percent risk of burglary. Ninety of the citi-
zens would lose $10,000 in the burglary; the other ten would lose $30,000.
Above, we found that only the eggshell victims would take the precaution;
the others would not find it worthwhile to spend $1,500 to fend off an ex-
pected loss of $1,000 (or even $1,111, after the eggshell victims take the
precaution). But suppose that one of the low-harm victims mistakenly be-
lieves that she faces a thirty percent chance of a burglary. This citizen will
now take the precaution. It still costs $1,500, but its perceived value has
risen from $1,000 to $3,000. Once again, however, the precaution has not
deterred the burglar; he still has eighty-nine targets from which to
choose—the other low-harm victims, being better informed about the risks
of crime, still do not take the precaution. The low-harm victim has merely
displaced the risk of crime onto other similarly situated victims. Since the
cost of the crime has not changed, the cost of the precaution ($1,500)
taken by this low-harm victim is indeed a deadweight loss to society.

Citizens may misjudge the risk of crime for a variety of reasons. For
one thing, the way the media portrays crime stories—in both news and
entertainment programs—distorts reality. Some studies suggest, for exam-
ple, that local news broadcasts inflate the audience’s fear of crime,
because they allocate so much airtime to stories about crime.135 When ex-
posed to constant media coverage of crime stories, citizens may
overestimate the number of violent crimes that actually occur, and hence,
the risk that they will become victims of such crimes. In addition, firms
that market precautions have an incentive to try to make the public feel
more vulnerable to crime, thereby boosting demand for their products or
services. For example, one of the leading providers of home security sys-
tems in the United States warns visitors to its website: “DON’T BECOME
A STATISTIC. In the time it takes you to read this sentence, one burglary
will be committed in the U.S.”136 Although the information contained in

135. See, e.g., Vincent F. Sacco, Media Constructions of Crime, 539 ANN. AM. ACD. POL. &
Soc. Sci. 141, 150–53 (1995) (surveying studies analyzing the link between news coverage of crime
and perceptions of crime risk, but noting that results of such studies are mixed). In the chaos that
followed hurricane Katrina, several media outlets reported that gangs were roaming the streets of
New Orleans and committing horrible crimes. The reports provoked fear of crime in the community
and among relief workers. Later, however, a New York Times investigation revealed that most of the
stories of violent crime in New Orleans were simply false or had been grossly exaggerated. Jim
Dwyer & Christopher Drew, Fear Exceeded Crime’s Reality in New Orleans, N.Y. Times, Sept. 29,
2005, at Al. While the media was not entirely to blame—the police had passed along many errone-
ous crime reports—the episode highlights the power of the media to affect public perceptions of
crime risks.

about_security/ (last visited Aug. 8, 2006).
the advertisement is accurate, the way it is framed—a burglary every few seconds—may cause consumers to overestimate the risk that they will fall victim to this crime.

In brief, some consumers may take too many (or too few) precautions because they misperceive the risk of crime. It does not necessarily follow, however, that misperceptions regarding the risk of crime necessarily undermine the theory of beneficial displacement. If all consumers are equally misinformed, say, they all double their assessment of risk, displacement is still likely to have some societal benefit—eggshell victims are still more likely to take the precautions (even though, for some of them, doing so may be wasteful) and thus displace crime onto lower-harm victims. A problem arises only if some, but not all, victims are misinformed. Suppose that some low-harm victims overestimate their risk of crime. These victims may purchase precautions that displace crime onto other low-harm victims who are better informed. But the best response to this problem may be to address the underlying cause of the distortion—the misperception of risk, rather than to regulate precaution-taking.

3. Domino Effects

A final problem may arise if precaution-taking by eggshell victims causes low-harm victims to take the precaution as well. When a precaution displaces crime, it increases the crime rate for everyone who does not take it. This raises the expected benefits of taking the precaution and may entice other victims to take it. Under extreme conditions, once some citizens take a precaution, all others may end up following suit.137

To illustrate how precaution-taking by some may cause a domino effect, contrast two scenarios involving the same precaution. In both, there are ten individuals, each of whom can take a precaution that would eliminate a ten percent risk of burglary. Nine individuals would lose $500 from the burglary; the tenth would lose $1,500. In the first scenario, suppose the precaution costs $75. Only one victim would take it. By doing so, she has reduced the community's total (expected) cost of crime, even if she has not reduced the crime rate. The expected loss from the crime, which was $600, has been reduced to only $500. Indeed, the precaution is efficient even when taking into consideration its cost ($75), though this will not always be the case.

In the second scenario, however, suppose that the precaution costs only $51. Assuming they are risk-neutral and perfectly informed, the nine citizens who would lose only $500 in the event of a burglary would prefer not to take the precaution. But once the eggshell citizen takes it, their odds of being robbed have increased from ten percent to roughly eleven percent, a small increase, but one that is sizeable enough to cross the tipping point:

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137. Clotfelter, supra note 12, at 395 (noting that crime displacement may lead to a tipping or unraveling effect in which all citizens eventually take a precaution); Hui-Wen & Png, supra note 33, at 89–91 (suggesting that if one target increases spending on precautions, other targets are more likely to do so as well).
all citizens will now take the precaution. The benefit of the precaution to each low-harm victim is now approximately $55—just slightly more than the cost of the precaution. The entire community will spend $510 on this precaution; because all citizens will take it, the crime does not occur.138

However, as an empirical matter, it is quite rare that all—or even most—victims take all available precautions, even though crimes are more likely to be committed against those who do not take measures to protect themselves. Even such simple precautions as locking one’s door are not taken by all citizens.139 In theory, it is possible that stark differences among groups of potential victims—in terms of the values they attach to their goods, the search costs they face in replacing goods, the psychological costs of crime, and so on—could forestall the domino effect.140

Further, even if the domino effect occurs, it is impossible to say that it will be undesirable. On the one hand, the cascade may prove beneficial: after all, if everyone takes the precaution, it might deter crime, rather than displace it.141 So long as the costs of the precaution do not exceed the benefits of the reduced crime rate, the domino effect is actually desirable, from a social point of view.

C. Rethinking the Regulation of Private Precautions

As discussed above in Section I.D, the threat of displacement has been used to rationalize policies designed to curtail precaution-taking, or even ban precautions outright (e.g., by denying permits required to build gates, etc.), on the theory that such precautions have no social utility whatsoever. The theory of beneficial displacement offered above changes fundamentally how or even whether society should respond to displacement effects.

To begin, it suggests that concerns over displacement in the private war on crime are overstated, not because displacement does not occur—it certainly does, at least to some degree—but because displacement is not always socially wasteful. To be sure, displacement remains an externality—a cost that precaution-takers do not consider. However, since displacement also reduces the harm of crime, the waste associated with precaution-taking is much less significant than previously thought. The conventional wisdom overlooks the possibility—and indeed likelihood—that displaced crimes are less harmful crimes, regardless of how the law

138. Whether or not the precaution has a net societal benefit in this instance depends on whether one counts the gain to the thief as part of social utility. If we count the gain to the thief (say, as $500), the precaution has only reduced the cost of crime by $100, but it cost the community $510, for a net loss of $410. However, if we do not count the gain to the thief, the precaution eliminates an expected $600 loss, at a cost of $510, resulting in a net gain of $90.

139. See supra note 124.

140. In economic terms, if the demand curve for precautions resembles a step function more closely than it does a linear function, a slight increase in the risk of crime occasioned by others using a precaution will not lead more victims to take the precaution; the increase in the crime rate would have to pass a certain threshold before more victims would find it worthwhile to protect themselves.

141. See Shavell, supra note 6, at 124.
might categorize them. It follows that there may be no pressing need to regulate private precautions, as some have suggested, particularly when displacement is far from total. Displacement is just not as costly as commonly asserted.

Second, the possibility that displacement may be beneficial also suggests that we should modify the way governments regulate precaution-taking. Consider first outright bans on precaution-taking—such as denying permits to developers of gated communities. The conventional wisdom suggests that precautions that merely displace crime have no social utility; outright bans were thus justified on purely economic grounds. But once we recognize that such precautions can reduce the societal costs of crime, even without reducing its incidence, it becomes clear that some level of precaution-taking may be socially desirable. An outright ban is an excessive, and potentially costly, response.

A more nuanced approach would be to tax precaution-taking that displaces crime. Some scholars have suggested imposing a fee on the use of precautions that displace crime; the fee would be equivalent to the societal cost of the crime, discounted by the precaution’s effect (if any) on the probability that the crime will occur. Under the theory of beneficial displacement, imposing a tax on precautions that displace crime remains an attractive, albeit politically difficult, policy response. Fees could be used to force precaution-takers to consider the costs of displaced crimes. However, the theory suggests that calculating such a fee may be more complex than originally thought, given that crimes inflict variable harms. The size of the fee imposed should depend on the cost of the crime to displaced victims, but as demonstrated above, that cost is not the same as the average cost to all victims.

The theory of beneficial displacement also has important implications for public efforts to encourage precaution-taking. When the government encourages or mandates precaution-taking, it may distort the market for precautions. It is possible that such precautions will displace crime onto higher-cost or similarly situated victims. Hence, policy makers should remain skeptical of efforts to encourage precaution-taking that merely redistributes crime in society.

CONCLUSION

This Article has identified a flaw in the way the academy has analyzed the displacement of crime occasioned by the use of private precautions. The conventional wisdom suggests that precautions that displace crime

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142. For a discussion of various proposals to regulate precaution-taking, see Gardiner & Balch, supra note 132. Scholars have devised novel means by which to “tax” precaution-taking. One proposal would adjust the sanction imposed on criminals according to the victim’s precautionary behavior; for example, if the victim takes the socially optimal level of precautions, the sanction imposed on the criminal will be higher than if the victim takes too much precaution. Ben-Shahar & Harel, supra note 6. This would discourage excessive precaution-taking because it would make victims who take excessive precautions more attractive targets to criminals.
only redistribute crime losses but do not reduce them. The implication is that such precautions are necessarily inefficient, from a social point of view.

The problem with the extant scholarship is that it has overlooked how the same crime may affect victims differently. The law does an imperfect and incomplete job of grading and punishing crimes according to the harm done in individual cases. One of the key insights of the article is in taking a fresh look at the burdens crime imposes on individuals, and by aggregation, on society. The law grades and punishes criminal offenses in a way that focuses almost exclusively on tangible harms, while neglecting to consider various intangible harms that vary from victim to victim. Some victims suffer the loss of sentimental value, higher search costs, and unforeseeable harms. Once we recognize these costs as important components of the total costs of crime—in spite of the law’s inability to take them into account—we can see that the same criminal act may harm different individuals in different ways and to different degrees; some victims will be burdened more, some less, by the same crime. Society is thus better off when crime is committed against low-harm, as opposed to eggshell, victims.

The Article does not claim that displacement is necessarily efficient. Any displaced crime, of course, remains an externality, a cost the precaution-taker will not consider. Rather, the main thesis of the Article is that displacement is not as wasteful as the conventional wisdom suggests. The externality involved—the displaced crime—is likely to be smaller than the benefit to the precaution-taker. This means that society gains something when citizens take precautions that displace crime and do not reduce it. To be sure, these precautions may be efficient; the reduction in the harmfulness of the crime may easily exceed the cost of the precaution, even for the last (marginal) precaution-taker. But even if such precautions are consumed at excessive levels, from a social perspective, they are not nearly as costly to society as once believed. In short, the economic case against displacement has been exaggerated. This insight is perhaps most significant when considering the desirability of precautions that both deter and displace crime. The presence of even some displacement has been viewed as a significant drawback, often outweighing any societal gain from the deterrence effect. Once we recognize that displacement has societal benefits too, however, this unwanted side effect appears less significant, thereby potentially altering our assessment of precautions with mixed deterrence and displacement effects.

The normative debate over the desirability of private precautions that displace crime will not, of course, end here. But this theory of beneficial displacement is likely to reshape the debate in an important way. By questioning the consensus view that displacement is necessarily wasteful, the theory suggests that other considerations, besides economic efficiency, may play a larger role in the scholarly discourse in the future. In particular, the question whether it is "fair" to allow private parties to shift crime
onto other citizens has suddenly become more relevant, given that displacement may not be economically wasteful after all.

143. One could argue, for example, that eggshell victims suffer more than other victims, and hence, should be allowed to shift crime onto lower-harm victims, in order to equalize the burdens of crime in society. Cf. Alon Harel & Gideon Parchomovsky, *On Hate and Equality*, 109 *Yale L.J.* 507, 510 (1999) (positing that society should strive to equalize the burden of crime, which is a function of not only the crime rate, but also the cost of crime). On the other hand, one could argue that displacement is often unjust, because citizens do not have equal access to precautions. Cf. Dilulio, *supra* note 2, at 11. This Article highlights such issues, but does not take a position on them.