

2003

Insuring against Terrorism - and Crime

Saul Levmore

Kyle D. Logue

Follow this and additional works at: https://chicagounbound.uchicago.edu/law_and_economics



Part of the [Law Commons](#)

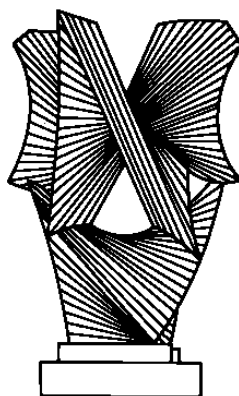
Recommended Citation

Saul Levmore & Kyle D. Logue, "Insuring against Terrorism - and Crime" (John M. Olin Program in Law and Economics Working Paper No. 189, 2003) available at <http://ssrn.com/abstract=414144>.

This Working Paper is brought to you for free and open access by the Coase-Sandor Institute for Law and Economics at Chicago Unbound. It has been accepted for inclusion in Coase-Sandor Working Paper Series in Law and Economics by an authorized administrator of Chicago Unbound. For more information, please contact unbound@law.uchicago.edu.

CHICAGO

JOHN M. OLIN LAW & ECONOMICS WORKING PAPER NO. 189
(2D SERIES)



Insuring against Terrorism—and Crime

Saul Levmore and Kyle Logue

**THE LAW SCHOOL
THE UNIVERSITY OF CHICAGO**

June 2003

This paper can be downloaded without charge at:
The Chicago Working Paper Series Index: <http://www.law.uchicago.edu/Lawecon/index.html>
and at the Social Science Research Network Electronic Paper Collection:
http://ssrn.com/abstract_id=414144

Insuring against Terrorism—and Crime

Saul Levmore* & Kyle Logue**

I. Introduction

The attacks of September 11th produced staggering losses of life and property. They also brought forth substantial private insurance payouts, as well as federal relief for the City of New York and for the families of individuals who perished on that day. The losses suffered in and after the attacks, and the structure of the relief effort, have raised questions about the availability of insurance against terrorism, the role of government in providing for, subsidizing, or ensuring the presence of such insurance, and the interaction between relief and the incentives for future precaution taking. In response to such losses, and in anticipation of others, one might imagine a range of government responses—from nonintervention, to subsidized private insurance, to after-the-fact government payments of a fixed or uncertain kind, and so forth.

It is our claim that the particular mix of responses the government has chosen with respect to 9/11, including the September 11th Victims' Compensation Fund and the Terrorism Risk Insurance Act of 2002, will significantly affect private expectations about the government's response to future terrorist attacks. These expectations will then have consequences for future private actions, ranging from the types of insurance policies that will be written, to the variety of real estate development that will take place (especially in the country's largest cities), and to the level of charitable contributions that will be made following any future terrorist attack. The causal arrow can also point in the opposite direction. Future political actors may look to private responses to terrorism risk in deciding on the character or degree of a government response.

One aim of this Article is to explore the relationships between promised or expected government actions (or inactions) and private decisions regarding terrorism risk. These issues lead to some novel ideas about the role of government in insuring against terrorism—and then against crime more generally. In Part II we begin with some background on the response of the private insurance market and the federal government to the losses resulting from September 11th. Part III looks at the positive question of how government and private actors should be expected to respond to the losses of 9/11 and to the prospect of future such losses. It explores the interactions among government relief

* Dean & William B. Graham Professor of Law, University of Chicago Law School.

** Professor of Law, University of Michigan Law School. We are grateful for comments received from colleagues at faculty workshops at the University of Michigan and University of Chicago, and from Dean Bachus, John Duffy, Tim Mygatt, and Bryan Ray. Portions of the research for this project were generously funded by the Cook and Elkes Funds at the University of Michigan Law School and by the many friends of the University of Chicago Law School.

and charitable responses to 9/11 as well as the existence or absence of private insurance, and draws contrasts between terrorism disasters and natural disasters, as well as between 9/11 and prior terror attacks. Part III also analyzes the circumstances in which episodic relief of the 9/11 variety will lead to (or be replaced by) more permanent, routinized relief, as is available in some other countries.

Part IV takes up the normative question of the optimal mix of government and private relief (including insurance) for terrorism-related losses. It provides a skeptical view of government intervention in property insurance markets, quite generally, and of the particular federal terrorism reinsurance regime that Congress recently adopted. But Part V then broadens the inquiry by asking whether the case for government-sponsored insurance against crime—which is to say a much broader set of crimes than terrorism alone—is at least as sound as that for terrorism-related risks. Part VI concludes. Throughout, we refer to “insurance” and government “relief” because specific programs and reactions have been in the form of insurance market interventions and relief programs. But we often use these expressions to refer to government payments, subsidies, and liability rules more generally. It is the larger questions we are after, and those concern the government’s role in preventing losses and in compensating victims following certain events.

II. Insurance, Relief, and the Events of 9/11

The terrorist attacks of September 11th produced an enormous set of losses, some insured through private markets and some not. Insured loss estimates range from 30 to 100 billion dollars, and include property, liability, workers’ compensation, and life insurance claims.¹ Much of the damage done on 9/11 to private property and private economic interests was insured through policies sold by insurance companies, though substantial damage was inflicted on the New York City subway system and other infrastructure elements in lower Manhattan that were likely underinsured.² To this we add the staggering loss of nearly 3,000 lives, some completely uninsured and many underinsured by any plausible standards of measurement. The total loss dwarfs that of any other single day disaster or insurable event in U.S. history, at least since the major

¹ See, e.g., Tillinghast-Towers Perrin, *September 11, 2001: Implications for the Insurance Industry*, available at <http://www.tillinghast.com/tillinghast/publications/reports> (restricted page, last visited Jan. 23, 2003); Robert P. Hartwig, *The Long Shadow of September 11: Terrorism and Its Impacts on Insurance and Reinsurance Markets*, Insurance Information Institute, at http://server.iii.org/yy_obj_data/binary/687221_1_0/sept11.pdf (last visited April 17, 2003). The largest source of variation in the estimates of insured losses appears to be the widely varying assessments of the amount of tort liability that will ultimately arise out of the events of 9/11. *Tillinghast, supra* at 4 (showing estimates of liability insurance coverage of between \$5 and \$20 billion). See also Edward Wyatt et al., *After 9/11, Parcels of Money, and Dismay*, N.Y. TIMES, December 30, 2002, at A1 (detailing the allocation \$21.3 billion dollar of federal aid to various programs).

² See *infra* notes 8 & 9.

battles of the great wars and the Galveston hurricane of 1900 in which 6,000 people perished; it rivals the losses experienced in the Kobe, Japan earthquake of 1995.³

When thinking about these issues, it makes sense to separate the loss of property from that of life and limb, both because the present mix of private and public insurance, and of relief quite generally, is different for property than it is for persons and because there are design implications based on differences in moral hazard problems. There is also a distinction between private and public property. We consider these important differences below.

A. Losses to Property

The bulk of private property losses suffered in the 9/11 attacks is expected to be covered by private insurers. Some claims remain in dispute, of course, but by and large the assets that were lost, including buildings, aircraft, and office contents, were insured under conventional insurance policies that did not (following conventional practice) exclude losses from terrorism.⁴ The federal government will provide some relief for losses of uninsured private property, but this relief will primarily take the form of subsidized loans and will, in any event, be small in comparison with the role of private insurance.⁵

The picture is likely to be quite different with respect to losses to *public* property. The largest such losses associated with 9/11 in New York City appear to be the damage to the subway system in lower Manhattan.⁶ The Metropolitan Transportation Authority

³ Galveston County Daily News, *The 1900 Storm*, available at <http://www.1900storm.com/> (last visited Jan. 23, 2003); Richard L. Holman, *New Estimates of Quake Damage*, WALL STREET JOURNAL, Feb. 6, 1995, available at 1995 WL 2109467 (estimating damage at approximately \$100 billion); See generally Tillinghast-Towers Perrin, *supra* note 1, at 4.

⁴ This conclusion assumes that the “war risk” exclusion will either not be invoked by insurers or, if invoked, will be found by courts not to apply to the 9/11 attacks. See *infra* note __.

⁵ In general, after a “major disaster” has been declared by the President (which comes only after state and local governments have responded and the Governor of the affected state has requested a declaration from the President), individuals and businesses who have suffered uninsured property losses or temporary job losses as a result of the disaster become eligible for loans from the Small Business Administration (SBA) and, in some cases, modest grants administered by the Federal Emergency Management Agency (FEMA). When homes have been damaged, loans can be issued for up to \$200,000 and loans to replace damaged personal property can go up to \$40,000. Businesses can get loans up to \$1.5 million to repair or replace damaged property. The loans may carry subsidized rates of interest, but they must be repaid. Individuals or families who do not qualify for these loans, who are typically the very low income or individuals with no collateral, can get up to \$14,800 from FEMA in the form of a one-time grant. See generally Federal Emergency Management Agency, *The Disaster Process and Disaster Aid Programs*, available at www.fema.gov/library/dproc.shtm; see also Christopher M. Lewis & Kevin C. Murdock, *Alternative Means of Redistributing Catastrophic Risk in a National Risk-Management System*, in *THE FINANCING OF CATASTROPHE RISK*, at 68-69 (Kenneth A. Froot ed., 1999).

⁶ According to a report of the New York City Metropolitan Transportation Authority, the most substantial damage was to the subway tunnel running underneath the World Trade Center Towers—the Interborough Rapid Transit lines numbers 1 and 9, which will need to be completely rebuilt—and the related stations and infrastructure, as well as damage to the N/R line Cortlandt Street Station. The total property damage to the transit system is estimated at \$855 million. See Metropolitan Transportation Authority, *2002 Combined*

claims that those losses will be covered mostly by private insurance policies, with only relatively small amounts coming from FEMA, and its state equivalent, to fill in the gaps.⁷ However, we suspect that, when all of the insurance claims have been finally settled, and taking into account all of the damages to public facilities (not just the subways), the amounts to be covered by government relief dollars will amount to a sizeable fraction of the total losses.⁸ Indeed, the sheer magnitude of the federal dollars that have already been earmarked for the reconstruction and overhauling of lower Manhattan strongly suggest that the federal government will end up bearing a substantial portion of the losses.⁹

Continuing Disclosure Filings, Appendix A, at A-7, available at <http://www.mta.nyc.ny.us/mta/pdf/2002app-a-v2.pdf>.

⁷ Metropolitan Transportation Authority, *2001 Annual Report*, at 13, 14, 18; *Comprehensive Annual Financial Report for the Year Ended December 31, 2001 and 2000*, at 3. Both are available online at <http://www.mta.nyc.ny.us/mta/pdf/annualreport2001.pdf>.

⁸ This suspicion is based on available evidence. While the total property losses to the subway system are estimated to be \$855 million, the MTA apparently has submitted only \$685 million in insurance claims for 9/11 related property losses. Apparently, the difference there may be attributable to the actual subway cars that were destroyed and that were not insured. Another suggestive (though certainly not dispositive) piece of evidence is that the MTA, on its 2000-2001 financial statements, did not include any amount for expected insurance recovery because the “Authority is pursuing the resolution of various contingencies with the insurance providers.” MTA, *Comprehensive Annual Financial Report*, *supra* note __, at 39. What this means, of course, is that the insurers may interpret the relevant insurance policies somewhat differently than the MTA does. In addition, however, one would expect a general tendency for municipalities to underinsure given the prospect of FEMA (or DOT) relief.

⁹ A total of \$21 billion federal dollars has been allocated for the New York recovery effort. See Press Release, Office of Management and Budget, Updated Summary of Government Expenditures Directly Related to September 11th Attacks (Sept. 10, 2002) available at <http://www.whitehouse.gov/mb/pubpress/2002-61.pdf>. Of that amount, \$5.5 billion is designated for reconstructing, replacing, overhauling, and upgrading the infrastructure damages by the attacks. Press Release, Office of Management and Budget, Supplemental Appropriations Request Provides Resources for the War on Terrorism, Homeland Security and Economic Recovery (Mar. 21, 2002). (Supplemental Appropriations Request Provides Resources for the War on Terrorism, Homeland Security and Economic Recovery). Of that amount, \$4.55 billion will apparently go to transportation related infrastructure expenditures: \$2.75 billion coming from FEMA and another \$1.8 billion coming from the DOT. The money will be jointly administered by FEMA and the U.S. Department of Transportation’s Federal Transit Administration. FEMA-1391-DR-NY-PR-137 (news release Aug. 12, 2002); see generally *Money for Just Some of a Transit Wish List*, NYT, Aug. 13, 2002 (by Edward Wyatt); *Old or New? Debate Rages Over Transit Downtown*, NYT, Oct. 13, 2002 (by Charles V. Bagli and Randy Kennedy). Although much of this money may be used to “upgrade” the subway system in lower Manhattan, such an improvement over New York’s prior transportation situation has to be viewed as partial and incomplete compensation for the economic losses the city has incurred that are never covered by private insurance—such as the huge loss of tax revenues due to the drop in tourism and business flight out of the city. Moreover, the rest of that \$5.5 billion is designated for “restoration and reconstruction” of certain highways and local roads “damaged by the September 11th terrorist attacks” and for to “rebuild utility infrastructure destroyed as a result of the September 11th terrorist attacks” and to assist Lower Manhattan Development Corporation’s efforts to “rebuild Lower Manhattan.” OMB, Press Release, Mar. 21, 2002. The rest of the \$21 billion includes the costs of rescue and recovery immediately following the attacks and the massive cleanup costs in the ensuing months, as well as the anticipated amounts of FEMA and SBA grants and loans. This \$21 billion is separate from the \$5 billion allocated to the Victim Compensation Fund, the \$8 billion allocated to airline subsidies, the \$35 billion for Homeland Security, and the \$30 billion for the “war on terrorism.” OMB, Press Release, Sep. 10, 2002.

Apart from the physical damage to property, many New York businesses also experienced substantial economic losses in the aftermath of 9/11. Focusing only on the businesses in and around the World Trade Center site, the lost profits during the period of recovery and reconstruction were in the billions of dollars. And while private insurance payouts for “business interruption” coverage will be more significant than any other such set in insurance-industry history, amounting perhaps to 30 percent of all private insurance payouts related to the 9/11 losses, and the federal government has provided some grants and loans for these business losses, huge economic losses that can be directly attributed to the attacks will surely go uncompensated.¹⁰ To be sure, some of these losses are private rather than social losses because some of these losses are offset by gains to other businesses located far from Ground Zero. The distinction may matter when it comes to encouraging governments to take precautions, and structuring optimal insurance policies, but it seems safe to proceed with the idea that there were substantial social losses associated with the interruption and destruction of business.

In sum, we might think of the 9/11 physical property losses as having been effectively insured (whether through private insurance or government relief), but regard other (property-related) economic losses as having been only partially insured. This summary, and much of the discussion below intentionally bends the idea of insurance to include government relief. Insurance and relief are obviously not the same; one may be expected by contract while the other depends on politics and circumstances. But inasmuch as governments can subsidize insurance or offer insurance without requiring premiums, and because private parties can come to expect relief in some circumstances, it can be useful to fold insurance and relief into one package.

B. Losses to Life

As for loss of life, it is almost certain that a large number of those killed on 9/11 were uninsured or underinsured. Although there is no publicly available data on this issue, the likelihood that many of the victims had only small life insurance policies, if any, is overwhelming. For one thing, underinvestment in life insurance is a pervasive problem.¹¹ Moreover, the main motivation for the large amount of charitable giving as well as the Victims’ Compensation Fund, discussed below, was the realization that many

¹⁰ See Diane Levick and Matthew Lubanko, *What Price, Terror?; for Insurers, Stalled-Business Claims Complicate Picture*, HARTFORD COURANT, Nov. 25, 2001, at D1 (estimates business interruption claims in the range of \$15-25 billion, compared to the total estimate of all 9/11 claims of \$40-72 billion); Christian Murray, *Adjusting to Disaster Strains Claims Team; Despite heartbreak, some payouts must end*, NEWSDAY (NEW YORK, N.Y.), November 6, 2001, at A42 (industry had received 16.6 billion dollars of business interruption claims to date).

¹¹ See Kyle D. Logue, *The Current Life Insurance Crisis: How the Law Should Respond*, 32 CUMBERLAND L. REV. 1 (2001).

of the victims were un- or underinsured.¹² Still, many of the deceased did have some life insurance or were covered by pension benefits payable upon death (or both).

In addition, immediately following 9/11 there was an unprecedented amount of charitable giving for the purpose of compensating the families of deceased victims.¹³ The other primary source of compensation for the families of victims is the September 11th Victims' Compensation Fund, enacted by Congress shortly after the disaster.¹⁴ Under this unprecedented program, the families of individuals who suffered physical injury or death in the 9/11 attacks can apply for fairly generous benefits.¹⁵ If they elect to do so, however, the payouts they receive from the Fund must, under the collateral offset provision of the statute, be reduced dollar for dollar by the amount of life insurance or other death benefits to which they are entitled—though not by the amount of charitable gifts received.¹⁶ As is customary, however, none of these life insurance policies or pension-policy death benefits that were in effect contained clauses requiring the reduction of death benefits in the event of third-party or other insurance payments. The presence of private insurance therefore reduced or eliminated the payments from the Fund that might have been made to the families of some victims, and in turn may have increased the pool of funds (and thus the payments) available to the families of other victims.

Another unusual aspect of the Fund is the requirement that claimants forego tort litigation with respect to their losses, at least insofar as the most obvious potential domestic defendants are concerned. Thus, a family cannot accept a payment from the Fund and then seek to recover from an airline, an employer, an owner or builder of a collapsed building, engineers who designed the buildings, and so forth.¹⁷ Suits against construction firms or designers of buildings are of course still possible if brought by claimants who do not collect from the Fund, or if brought by the City of New York or by

¹² Of course, the definition of full or adequate coverage is highly subjective.

¹³ American Red Cross, *September 11, 2001: Unprecedented Events, Unprecedented Response*, at http://www.redcross.org/press/disaster/ds_pr/pdfs/arcwhitepaper.pdf, 6 (September 2002) (reporting that the American Red Cross's Liberty Fund had by 9/11/2002 received roughly \$1 billion in donations, approximately \$800 million of which was to be distributed by the end of 2002). Interestingly, according to one news report, the bulk of those funds were designated for the families of firefighters, police officers, and other rescue workers who perished. Thus, according to this story, the average charitable award to the families of slain or severely injured firefighters and rescue workers is just over (and the amount to families of police officers just under) \$1 million. By contrast, the average charitable payout to the families of other victims is around \$146,000. Martin Kasindorf, *Big Gaps Found in 9/11 Benefits*, USA TODAY, Aug. 19, 2002, at 1A. These amounts do not include any amounts received from insurance policies, pension payments, or amounts from the Victims' Compensation Fund.

¹⁴ U.S. Air Transportation and Safety and System Stabilization Act, Pub. L. No. 107-42, 115 Stat. 230 (2001) (Title IV).

¹⁵ See <http://www.usdoj.gov/victimcompensation/payments.html> (updated regularly) (reporting median award as of December 17 of \$1,252,818). Note also the tax relief provided by Pub. L. No. 107-134 (Victims of Terrorism Tax Relief Act), which curiously extends the tax benefits to those injured in both the Oklahoma City bombing and the anthrax attack, but not the victims of the 1993 World Trade Center Bombing.

¹⁶ See 7 C.F.R. Part 104 (September 11th Victim Compensation Fund of 2001, final rule), at 11233-4.

¹⁷ *Id.* at 11235.

businesses or property owners affected by the attack. And suits against foreign organizations and tortfeasors are of course possible, and much in the news.¹⁸

To summarize, the families of individuals who lost their lives in the 9/11 attack may receive payments from one or more (but not all) of the following sources: the Victims' Compensation Fund (assuming they waive their tort rights and, once again, subject to reductions corresponding to amounts recovered under existing life insurance benefits), from third-party tort defendants whom they conceivably sue successfully (either because they choose not to collect from the Fund or because they pursue foreign tortfeasors relentlessly), from charities, and from life insurers (under contracts that conventionally contain no collateral offset provisions).

C. The Effects on the Insurance Industry and the Federal Response

Despite the vast magnitude of the insured life and property losses, there seems to be little doubt that most life insurers and property insurers will be able to meet their financial obligations arising out of the events of 9/11. As for the life insurance market, the number of insured deaths was not so great as to threaten instability among insurers. Nor does the probability of death from terrorism, followed by a reduction in recovery for those with life insurance, seem significant enough to discourage the future purchase of life insurance. To the contrary, although there are no hard data on this, we suspect that the events of 9/11 encouraged a short-term run on trusts and estate lawyers' services and perhaps a temporary surge in the market for life insurance as well.

The property insurance market is apparently more easily ruffled. A few of the less well-capitalized reinsurers may yet become insolvent as a result of 9/11-related property losses (much as some firms collapsed following Hurricane Andrew and the Northridge Earthquake),¹⁹ but the overall solvency of the property-casualty insurance industry is not in doubt.²⁰ The upheaval, or the uncertainty, is with respect to the availability of terrorism coverage in the future and, in turn, the possibility that there will be less building, or less building in some locations and of certain types of properties, not simply because insurance premiums rise accurately in response to newly understood threats but rather because markets do not adjust smoothly to the post-9/11 world.

Immediately following 9/11, a number of commentators and industry officials expressed concerns about an impending "crisis" in terrorism insurance. It was widely reported that international reinsurers were planning to insert broad terrorism exclusions in their new policies and that these exclusions would apply as old policies came up for

¹⁸ See Henry Weinstein, *\$15 trillion 9/11 lawsuit adds Saudi royals as defendants*, CHI. TRIB., Nov. 23, 2002, at 10 (\$15 trillion dollar lawsuit now includes 186 defendants).

¹⁹ Ruth Gastel, *Catastrophes: Insurance Issues*, INSURANCE ISSUES UPDATE, August 2002, available at Lexis ("Eleven property-casualty insurers became insolvent due to Hurricane Andrew (10 in Florida and one in Louisiana) and others were financially impaired").

²⁰ See Tillinghast-Towers Perrin Report *supra* note x.

renewal. Primary insurers would in turn seek permission from state regulators to insert similar exclusions in their policies. The ultimate effect, or so the argument goes, would be to cause disruptions in the mortgage lending and commercial real estate markets. Based on these concerns, Congress enacted the Terrorism Risk Insurance Act of 2002, which, as we will see, is similar to the British system for dealing with terrorism risks.²¹ Under this new regime, the federal government will provide reinsurance for 90 percent of all property-casualty losses attributable to “acts of terrorism” (as determined by the Secretary of Treasury), but only to the extent those losses in the aggregate fall between \$10 billion (rising to \$15 billion over three years) and \$100 billion. This program radically alters the public/private mix of insurance and compensation for terrorism-related property risks. In effect, it makes the federal government the terrorism reinsurer of last resort. As for whether this type and degree of federal intervention was called for, and what the relevant justifications might be, see Part IV below.

III. Terrorism Insurance, Charitable Giving, and Episodic Government Relief

We turn now to the question of what sort of compensation, insurance, and charitable developments should be expected in the event of another major loss from terrorism, given recent events. The question may seem little more than a thought experiment, though there are safe and interesting predictions to be made. Our analysis includes a comparison of terrorism-related disasters with natural disasters and incorporates the interactions among private insurance, public relief, and charitable giving in the two contexts. One of our predictions is that, as with natural disasters, public and charitable relief will more likely be forthcoming if there is (or is perceived to be) less than full private insurance. In this Part we also explore the question why 9/11 brought such unprecedented amounts of relief—especially in the form of the Victim’s Compensation Fund—and whether futures attacks should be expected to do the same. Along the same lines, we consider the unpleasant possibility that, what began as a series of terrorist attacks, might expand into a long-term war and the resulting political pressure that would arise to shift from a system of episodic relief to a more systematized and permanent compensation regime for terrorism and war losses.

A. Private and Public Insurance Response to Another Attack

There is every reason to think that in the event of another attack on U.S. soil, and especially one aimed at a civilian target, significant government-provided compensation will again be forthcoming, even though the attacks experienced before 9/11 did not produce such aid. One reason for this prediction is the Victims’ Compensation Fund itself and the precedent it now represents. It is imaginable that the political and emotional

²¹ See *infra* discussion part III.C.2.

underpinnings of this fund would fail to reappear if terror-related losses became common. Indeed, it is something of conventional wisdom to say that the 9/11 attacks were an historic event of the worst kind, and that the reactions to it should also be understood as singular. But the case seems to be stronger for the idea that the Fund would serve as a kind of precedent for future attacks, much as the substantial federal appropriation that followed the Alaskan earthquake of 1964 is thought to have been the first of what then became a series of relief plans. Legislators who sought disaster relief for their home states in the twenty or so years following that earthquake, readily pointed to the Alaskan example, where there was relief after a significant but not an unprecedented quake. But it is the pattern of relief rather than the legislative history that is impressive.²²

And this pattern of relief should come as no surprise. Natural catastrophes attract media attention and political interest, especially so because their victims are concentrated rather than dispersed. This attention attracts charitable interest as well as governmental funds, although the extent to which the victims will be seen as sympathetic to mainstream voters and hence politicians in other parts of the country depends importantly on the extent of uninsured rather than insured losses. We would expect a similar dynamic to play out, to an even greater degree, if there were to be another terrorist attack or a series of attacks. Terrorism, after all, draws in the entire nation in a way that natural disasters do not. This is because an attack from abroad, including a pronouncement or history of animus toward the country as a whole, is seen as one aimed at the integrity or confidence of all citizens. Thus, just as Pearl Harbor was considered an attack on the entire nation and not just an attack on the state of Hawaii, so too a terrorist attack on U.S. soil would be considered an attack on the U.S. people and our government. It is true of course that seems much less likely than for an enemy assault; after all, hurricanes do not hit Florida *because* it is a part of the United States, whereas terrorists struck New York and Washington precisely for what they signified about our nation.

Indeed, part of what may have motivated the Victims' Compensation Fund was the feeling that those losses were no different from losses caused by the attack of a foreign sovereign, thus putting them in the category of losses appropriately addressed by the federal government.²³ Political parties, economists, and citizens may disagree as to

²² See DOUGLAS C. DACY & HOWARD KUNREUTHER, *THE ECONOMICS OF NATURAL DISASTERS: IMPLICATIONS FOR FEDERAL POLICY* 54-57 (1969).

²³ The Israeli example is instructive here. When the Israeli Parliament first adopted its terrorism compensation regime, discussed more fully below, the primary rationale was the notion that any losses experienced by individuals or particular families as a result of the terrorist war on the Israeli government and people as a whole should be spread across all of citizens. See Hillel Sommer, *Providing Compensation for Harm Caused by Terrorism: Lessons Learned in the Israeli Experience* In. L. J. page 6, available at ? Of course, whereas viewing the attack on 9/11 as an "act of war" against the U.S. government and its people may have increased the willingness of Congress to enact a generous compensation regime, such an interpretation of events would tend to undermine the argument for private insurance coverage for those losses, since most insurance policies contain "war risk" exclusions. Interestingly, almost immediately following the 9/11 attack, several of the largest property-casualty insurers publicly stated their intention not to invoke the war-risk exclusion. This may have been a patriotic gesture. Or it may have represented a savvy legal judgment that, under prevailing case law, the war-risk exclusion would not likely apply in the

the proper scope of the federal government, but national defense is on everyone's list of governmental functions, and it is only one additional step to the idea that the federal government ought to be responsible or generous where losses are incurred because of a failure of this federal function. We do not mean to imply that a government function need always be encouraged by compensation in the event of failure or even disappointment, because governments are often motivated by political checks and other means. But compensation is surely more easily explained or defended where losses are incurred because of government failure, or at least where it is the government rather than a private party that might best have prevented loss. The leap from protection to compensation may be primarily an emotional reaction rather than a logical progression, but it helps to explain the comfort with federal relief following 9/11. Indeed, it is just this sort of reaction to the 9/11 attacks, together with the inspiring example of the rescue workers running into the burning towers (and perhaps the suppression of stories about the misdeeds of a very few rescue workers), that may explain the extraordinary level of charitable giving both in terms of money and volunteer efforts, including blood donations.²⁴ In fact, the only comparable periods in U.S. history would be during times of war, when American citizens rallied together to defend against a foreign enemy.²⁵

The other major factor that would suggest substantial government relief for the victims of terrorism disasters is the link between uninsured losses and public sympathy. We have seen that sympathy is more intense, and hence the political determination to provide relief funds greater, when there are many uninsured victims, for it is these citizens who come to the attention of the public through media coverage, personal relationships, and other means. Thus, the less private insurance is in existence for given disasters the more likely and the more significant will be government relief on those occasions when it is provided.²⁶ There is, therefore, a sense in which private insurance is a "better buy" (from the insured's point of view) for small-scale disasters than for it is for the truly catastrophic disasters, because only the latter are likely to generate public relief. Thus, paying for private insurance for small-scale disasters is worth the price, because no government relief will be forthcoming; whereas insurance large-scale disasters may be worth relatively little, as government coverage would have been provided in any event.²⁷ This phenomenon is what causes government relief programs to produce a particular type of counterintuitive behavior or even moral hazard: the decision not to buy private

9/11 case anyway. See *Pan Am v. Aetna* 505 F.2d 989 (2d Cir. 1974).

²⁴ See Red Cross Report, *supra* note 13.

²⁵ Notably, the attack on Pearl Harbor did not give rise to the enactment of a 9/11-like compensation fund for the victims of that attack. One reason for this might be that there were relatively few civilian deaths and relatively little damage to non-government property.

²⁶ See Saul Levmore, *Coalitions and Quakes: Disaster Relief and Its Prevention*, 3 U. CHI. ROUNDTABLE 1, 18-9 (1996).

²⁷ This conclusion assumes that insurance companies would not be able to lower their price-per-unit of insurance for the large-scale disaster coverage. If they could—and they would in a perfectly competitive market—then both the coverage for the small-scale and the coverage for the large-scale disasters would be priced at actuarially fair rates.

insurance, or to underinsure, is a phenomenon that is linked to (or caused by) a number of existing federal disaster programs. The decision rises to a level of true moral hazard where the expectation of relief changes real behavior in a manner that raised the probability of loss.

For example, the Farm Service Agency and the Small Business Administration offer low interest loans to eligible individuals, farmers, and businesses to repair or replace damaged property and personal belongings *not covered by insurance*.²⁸ In addition, the Federal Emergency Management Agency will provide small grants to cover certain uninsured expenses and serious needs, such as disaster-caused medical or funeral expenses.²⁹ All of these programs are conditioned on an absence of insurance coverage. The overall picture comes with something of a cynical gloss; relief requires a sizeable group of sympathetic beneficiaries—who, ideally, are also politically coordinated or appealing to the media, which increases the likelihood of a major disaster declaration. If a disaster creates victims who are insured, however, there is apt to be less sympathy and therefore a lower probability of monetary relief, because politicians who are considering special appropriations will respond more readily to pleas for help from those who have no other source of compensation.³⁰ If, in turn, these uninsured farmers or small business owners care for their properties in a way that increases the loss from a disaster, then the gloss hardens into one that reflects moral hazard, or the prospect of relief may stimulate not only underinsurance but also greater losses in the event of disaster.

It is possible that there will be a similar perverse interaction between government relief and charitable giving for disaster victims. For example, having observed the magnitude of charitable giving following 9/11, government officials may be inclined to be less generous in the event of a future attack. It may be that the memory of the remarkable outpouring of charity for the victims of 9/11 will dampen the federal government's willingness to appropriate large amounts of relief aid for victims when next terrorism-related disaster occurs. This seems especially likely to the extent the perception is that a number of 9/11 victims' families became wealthy as a result of the combined charity and government relief available after that tragedy. Alternatively, rather than reducing relief payments, Congress might, in a future version of the Victim Compensation Fund, explicitly include charitable contributions on the list of collateral sources to be offset against any relief award.

Of course, the effect may run in the opposite direction as well. Having seen how generous the federal government can be when there is an extraordinary foreign-based attack on American soil, potential donors may reduce their contributions in future cases, counting on the government to do the job once again. And if contributions were to

²⁸ See *supra* note 5 and accompanying text.

²⁹ *Id.*

³⁰ David A. Moss, *Courting Disaster? The Transformation of Federal Disaster Policy Since 1803*, in *THE FINANCING OF CATASTROPHIC RISK* 307 (detailing the growth of the federal budget allocations for disaster relief) (1999).

diminish (or were expected to diminish) in this way, there would be even more political pressure for the government to provide relief. Similarly, one might imagine that charities would then focus their attention on victims whose losses went uncompensated by government relief or private insurance; charities could in this way fill in the coverage gaps and also signal where future government relief might be directed. How all of these interacting influences will ultimately play out, of course, remains to be seen.

Another factor that might lead to a reduction in both government benefits and charitable relief following future terrorism disasters is the perception that, for all the recollections and evidence of tragedy and heroism, a significant number of affected families emerged with more wealth than before the attacks. And there will be stories of outright fraud as well. If such stories remain salient, one can easily imagine that both congressional policymakers and potential donors would be reluctant to replicate the unprecedented generosity following 9/11.

We have already emphasized the importance of the degree of un- or underinsurance to the amount of likely government relief. Given this complementarity, one might reasonably ask how significant the underinsurance problem will be in the future for terrorism-related risks. Of course, the expectation of many experts (and apparently of some members of Congress) was that the problem would be substantial; hence the—although, as we will see, that Act permits individuals to decline coverage and therefore to contribute to the underinsurance-followed-by-relief cycle. We take up this question in Part IV below, suggesting that the problem of underinsurance has been exaggerated—but that the new federal reinsurance program may not be as effective as is desirable. In any event, even if the program were effective (or even if the market were to adjust to provide widespread terrorism coverage), there will, in the event of another major attack, almost inevitably be some substantial number of underinsureds. In short, in the event of a future attack, there will likely be room for a federal program response somewhat along the lines of the response to 9/11. A somewhat different question is raised by the prospect of protracted war with civilian targets, rather than another isolated terrorist attack, and we take up this question in Section C below.

B. What made 9/11 Different from Previous Terror Attacks?

A related but distinct comparative question is why the 9/11 attacks triggered so much more government relief than did previous terrorist attacks. The question is in part I about the unique character and generosity of the 9/11 Fund but it is easily expanded to include the question of why the Fund was not designed to provide benefits to victims of the earlier World Trade Center bombing, the Oklahoma City bombing, or the attack on the U.S.S. Cole which killed a number of sailors.

The first part of this question can be answered with a simple reference to scale. Many more people died on 9/11 than in any of the previous terrorist attacks. More interesting, the earlier attacks were not only smaller but also—in part because of scale—

affected fewer uninsured parties. In the case of 9/11, there was a huge loss of uninsured life, not because of terrorism exclusions but because of simple underinsurance problems due to myopia, overoptimism, bad planning, or passivity on the part of persons who are unlikely to purchase insurance beyond that which is provided through their employment contracts. Even if we set estimates of underinsurance aside, three thousand deaths will generate a significant number of uninsured lives. Traders who worked at the World Trade Center may or may not have been underinsured, but all carried some life insurance. Waiters at the World Trade Center are more likely to have included some who were completely uninsured. And firefighters, who perished in great numbers, are likely to have been underinsured, judged simply by the sympathetic reactions of the citizenry as it learned of their circumstances and families. At the same time, the amount of uninsured and underinsured damage to New York's infrastructure and businesses created immediate and overwhelming (and probably desirable) political pressure on the President and Congress to commit federal funds to rebuild and reinvigorate the city—which in turn may have had an effect on victim relief. Put directly, it might have been politically difficult to transfer large amounts of money for property damage or other economic losses without doing much for the families of those who were killed in the attack. In contrast, the families of the sailors killed on the U.S.S. Cole received some payments from the government in the matter of course, because all members of the armed forces are covered by modest death benefits.³¹ Moreover, in the case of the U.S.S. Cole there was no need to assemble a political coalition to legislate a strategy for replacing the lost property. We can imagine the vessel as being repaired either with funds found in the ordinary budget for naval operations or with a special appropriation because such a repair is obviously a better investment than is the abandonment of the ship. Somewhat similarly, in the Oklahoma City case, there was no large-scale damage to state and local infrastructure, but rather the destruction of a building owned by the federal government itself. It is likely that the lives lost in that tragedy included few that were uninsured, or dramatically underinsured, and also in positions to support families. The 9/11 attacks did great harm to a workplace that naturally had many breadwinners who, in turn, left families that claimed our sympathy. Oklahoma City took the lives of fewer heads of households; the death of children upsets us as much as anything, but it does not produce circumstances that seem much improved by the appropriation of money. In short, it is unsurprising that Oklahoma City families eventually received but modest tax relief, while the 9/11 Fund provided quite substantial, direct payments.³²

³¹ Currently the government will pay a "Death Gratuity" of up \$6,000 immediately to the surviving heirs of military personnel killed in active or in-active duty. See 10 USC §1475. Most military personnel also participate in the Service members' Group Life Insurance program (SGLI), which provides \$250,000 of coverage. The premiums are automatically deducted from the Service member's pay, unless the elect for a lower amount of coverage. See <http://www.afsc-usa.com/sgli.html> (last visited Jan. 24, 2003).

³² Many of those killed in the Oklahoma City Bombing were federal employees who participated in the Federal Employee Group Life Insurance Program (FEGLI). Basic coverage is capped at \$10,000 and most employees are automatically enrolled. Optional coverage is available up to 5 times the employees annual

These distinctions do not completely solve our positive puzzle of the location of after-the-fact relief. The 9/11 Fund might have been expanded to include families affected by the earlier terrorist attacks, with the same collateral offset provisions to limit the coverage to uninsured losses only. In this way the relief would have flowed mostly to sympathetic, uninsured or underinsured families. It is possible that this sort of expansion will yet occur, but it is doubtful if only because of the obvious line-drawing problem. If the benefits were expanded to include the families of the victims of the World Trade Center and Oklahoma City bombings, it seems difficult to justify excluding the U.S.S. Cole victims and then the victims of the contemporaneous Anthrax attacks, and so on. Of course, difficulty in drawing lines is not the same as impossibility, but before going on to suggest expansion it is noteworthy that it is easiest to draw a bright line between pre- and post-9/11 events, so that future terrorist attacks might be treated along the lines of the 9/11 model with no new relief for losses caused before that infamous day.

We do not mean to insist that one can examine tragedies as they occur, and always predict the character and magnitude of subsequent relief. If the 9/11-relief package had required a few more votes in Congress, or a political appeal to the hinterland, one can easily imagine the last-minute inclusion of the families of victims of the Oklahoma City blast, for example. A politician might then have emphasized the expense of constructing a new federal building in Oklahoma City, and while legislating funds for that reconstruction or for a memorial to be built on the site of that blast it might have seemed unfeeling to provide nothing for lost lives.³³ Indeed, it is fascinating that although Oklahoma City victims were not included in the 9/11 package, they were eventually provided with modest assistance through the Victims of Terrorism Relief Act of 2001.³⁴ In the event of another tragedy, and assuming as we are now doing that such a tragedy would give rise to ex-post relief on the 9/11 model, there will likely be attempts of just this sort to include the families of victims of past terrorist attacks, and perhaps the victims of wars and wrongs experienced long ago. These attempts to equate tragedies, in the sense of using one disaster or relief effort as precedent for another, may succeed—but it may also prove to be a strategy that unwittingly brings about the collapse of political

salary. See <http://www.opm.gov/insure/life/FAQs/FAQs-1.htm>. Victims also received modest compensation from the Murrah Crime Victims Compensation Fund. This original ambition of this fund never materialized, and its benefits were limited to \$10,000. See Gary Fields, *Oklahoma City Aid not Reaching Victims*, USA Today, November 15, 1995, at 3A.

³³ In the case of the first World Trade Center bombing, the best case for inclusion would have been one that emphasized the similarity of the attackers.

³⁴ See *supra* note 16; see also Internal Revenue Service, *Publication 3920: Tax Relief for Victims of Terrorist Attacks*, (February 2002), available at <http://www.irs.gov/pub/irs-pdf/p3920.pdf> (IRS publication summarizing tax benefits made available to victims of 9/11, Oklahoma City bombing, as well as to victims of the 2001 Anthrax attacks). Under this provision, the qualifying survivors of those attacks are exempt from income tax for the year of attack and the previous year, with the minimum refund being set at \$10,000. Thus, even those who owed no income taxes will be considered to have paid \$10,000 income tax in 2001, and receive a \$10,000 federal tax refund check. See *id.* at 5. Interestingly, these tax relief checks will not be treated as a “collateral offset” under the 9/11 Victim Compensation Fund. See September 11th Victim Compensation Fund Final Rule, *supra* note x at 11233.

coalitions and, hence, of relief along the lines of the 9/11 Fund. In turn, the prospect of a backlash or of failed coalitions, and perhaps even the prospect of a (yet) more generous episodic relief program, could fuel a political move toward the promise of routinized government-provided terrorism compensation or of subsidized terrorism insurance or reinsurance. We take up these and related issues in the next sections.

In any event, we maintain our basic claim that a future large-scale terrorist event will almost certainly generate ex-post relief of the sort that followed 9/11. Unless some routinized permanent relief scheme is established in the interim (and that is not something we expect), a further prediction is that the precise shape of the episodic relief will, as always, hinge on the pattern of insured and uninsured losses.

There is an alternative explanation for the generous compensation regime that followed 9/11, and it is one that deserves as much respect as that which emphasizes uninsured losses. Recall that beneficiaries who file for benefits under the Fund must waive most of their rights to sue in tort. The primary and intended beneficiary of *that* provision in the law is almost certainly the airline industry. The airline industry was, for obvious reasons, among the hardest hit by the events of 9/11. Demand for tickets dropped, there was an immediate spike in airline insurance premiums, and, by some reports, the available insurance policies removed coverage for losses caused by terrorism. Congressional reactions to this perceived state of affairs, and to the fear of airline bankruptcies and economic disaster, included the Air Transportation Safety and System Stabilization Act's provision of cash transfers, loans, and insurance subsidies to the airline industry, as well as attempts to protect the industry from litigation. Given the generosity of the benefits available to the families of victims through the 9/11 Fund, and the now-familiar requirement that recipients waive the right to litigate, this waiver requirement is of great value to the airlines.³⁵ This is not the place to explore the question of whether, under the principles of our tort system, the airlines ought to have feared the legal aftermath of 9/11. A respectable argument can be made that in the absence of obvious negligence and in the presence of other potential defendants who could have been linked to the 9/11 losses under some theory of negligence or strict liability (focusing on the failure to reinforce cockpit doors or to design buildings in a different manner, for example), the only thing to fear was the inclination of some juries to move money to sympathetic victims. We set this issue to one side, observing only that the waiver notion was indeed thought to be of great value to the airlines. But we do not mean to minimize this explanation for post 9/11 relief. Note, however, that no similar industry-protecting motivation would seem to have been present with respect to the relief that followed natural disasters or terrorist attacks before 9/11.³⁶ And to the extent that the 9/11 Fund is

³⁵ The other protection for the Airlines industry in the Act was a provision limiting the Airlines tort damages arising out of 9/11 to the amount of liability insurance in force at the time of the attacks. *See* Air Transportation Safety and System Stabilization Act, *supra* note 15 at Section 408.

³⁶ Although one can, with respect to Oklahoma City and the World Trade Center Bombing, begin to imagine potential tort defendants, none of those defendants can make as plausible a case as could the airline

seen as nothing more than such an industry-specific, and also episodic, scheme—accompanied by compensation for families in order to maintain appearances perhaps—there is not much to say about future relief. Industry bailouts are episodic in their own way and, in any event, do not suggest a move toward routinized relief.

C. From Episodic Relief to Permanent (Routinized) Compensation

The discussion of public and private responses to future terror attacks has assumed to this point that future attacks would be rare, even if devastating. If, however, the 9/11 attacks prove to be the beginning of a protracted conflict during which there are numerous events involving civilian and property losses on U.S. soil, expectations change. Without doubt, an insurance market can function in the midst of full-scale war, and war-related risks could be covered by private insurers in return for high premiums. But a society that is forced to absorb this scale of loss is likely to find itself with numerous insolvent insurers—and then with customers who do are unwilling to rely on private insurance because of the risk of insurer insolvency. At that point, of course, an unassisted market would likely respond through a consortium of insurers. In turn, however, this solution would likely raise monopoly concerns and lead ultimately to government involvement of some sort.

Thus, if it becomes clear that a long-term war is at hand, involving a substantial risk of recurring strikes on the U.S. mainland, large-scale government involvement in directly providing terrorism insurance seems highly likely. One potential political justification for such government involvement would be the idea of bolstering morale by establishing a framework in which all citizens and taxpayers share in the burdens of war—even though there are inevitably some serious and outlying winners and losers in a war effort. The related, economic objective is to encourage important economic activity and rebuilding as much as possible. In this section we discuss this possibility, drawing lessons from the examples of Britain and, especially, Israel.

1. To What Extent is the Current U.S. Relief Regime “Permanent”?

As mentioned earlier, there already exists a permanent federal program that provides for some relief from the economic losses caused by any “major disaster,” including terrorism-related disasters. That relief comes in the form of loans and grants following property damage, both private and public.³⁷ But these funds are available only after the Governor of the state in which the disaster has occurred declares a major disaster, and the President follows with a similar declaration. In an important sense, then,

industry post 9/11 that an entire and critical industry was in jeopardy—at least in the sense of threatened with enormous transactions costs as firms closed and new owners of old aircraft emerged and so forth.

³⁷ See *supra* note 5.

government compensation for loss of property is largely ad hoc, or episodic as we have called it, except to the extent that these political relief decisions are predictable.³⁸ In addition, there has been some pre-9/11 legislation which provides modest compensation for victims of terrorist attacks. For example, following the Iranian hostage episode and a number of other terrorist attacks in the 1980's, Congress created a regime that pays a small amount of compensation to certain victims of terrorism. For example, those who are held hostage by terrorists receive a stipend of fifty dollars for each day held in captivity, and there is a small death benefit paid to the families of victims who are killed by terrorists. It is interesting and noteworthy that these modest benefits are paid only to individuals with an employment or similar relationship to the U.S. government.³⁹

2. When Terrorism Turns to War: Lessons from England and Israel

Again, however, it is fairly easy to imagine that repeated attacks or a prolonged war on U.S. soil would create enormous pressure to expand these rather paltry terror-compensation regimes. Something like this transition occurred in both Great Britain and in Israel.

In Britain during the Second World War, Churchill famously set forth the notion that the British people should share in the economic hardships imposed by the war. Bombings threatened to demoralize the country, and part of the idea was to reflect the conviction that the entire nation was in the struggle as one.⁴⁰ Of course, no system could really equalize the burdens of war, and no attempt was made to impose equal sacrifice after deaths in a family, whether on the battlefield or in London. But the law that was passed, The War Damage Act of 1943, did provide compensation for war damages to property that occurred between September 3, 1939 to October 1, 1964. Half of the funds for this act came from a new tax on landowners and the other half from general welfare funds.⁴¹ Though the "risk period" during which the act was to apply ended in 1964, the

³⁸ The exception is flood insurance. Under the National Flood Insurance Program (NFIP), there are predetermined floodplain areas in which property owners are eligible to purchase federally subsidized flood insurance. Thus, once such coverage is purchased, there need be no flood disaster declaration for property owners to be able to recover from their policies. If, however, the property owner in a floodplain area fails to purchase flood coverage, or underinsures, and wishes to receive a FEMA grant or SBA loan, the disaster declaration would be necessary, and the episodic label would apply. *See infra* text accompanying notes 48-49 for further discussion of the NFIP.

³⁹ Kimberly A. Trotter, *Compensating Victims of Terrorism: The Current Framework in the United States*, 22 TEX. INT'L L.J. 383, 392 (1987); *see also* Deborah M. Mostaghel, *Wrong Place, Wrong Time, Unfair Treatment? Aid to Victims of Terrorist Attacks*, 40 BRANDEIS L. J. 83, 90-97 (2001).

⁴⁰ Winston Churchill stated that it was "unfair for British society to place the entire burden of the destruction on those unlucky enough to be hit". *See Sommer, supra* note 23 at n.16.

⁴¹ *See Levmore, supra* note __ at n.2. The earliest legislation is the War Risk Insurance Act of 1939, which authorized the Board of Trade to "undertake the insurance of ships and other goods;...[and] for requiring persons to insure goods against certain risks in time of war." S. M. KRUSIN & P. H. THOROLD ROGERS, *THE SOLICITORS' HANDBOOK OF WAR LEGISLATION* 296 (1940) (for examples of specific compulsory insurance orders, *see* page 417, 972-3 of the Volume II of this series). The War Damage Act of 1941 set up the War Damage Commission to oversee the "making of payments in respect of war damage." *Id.* Volume II at 975.

act was eventually repealed in its entirety by the Statute Law (repeals) Act of 1981. The only remaining provision of government property insurance is the “Pool Re” scheme discussed below.

Personal injuries were not forgotten under the British war insurance regime. The Personal Injuries (Emergency Provisions) Act of 1939 was also passed within a month to “make provisions as respects certain personal injuries sustained during the period of the present emergency.”⁴² The scheme was not limited to military personnel, but rather applied to “gainfully occupied persons...and by persons of such other classes as may be specified in the scheme.”⁴³ This scheme is still maintained by the Secretary of State under the Personal Injuries (Civilians) Scheme 1983.⁴⁴

A full-scale war on the U.S. mainland does, of course, seem almost impossible to imagine given the current state of world affairs. But a series of coordinated terrorist attacks on U.S. soil and on U.S. interests and citizens around the world is not as unimaginable. The obvious analogy is to the state of war in present day Israel, and indeed that country has adopted a permanent terrorism compensation regime that seems relevant for our purposes. Israeli law provides for a system of direct compensation by the government for civilian losses of life and limb and for losses of property due to terrorist attack. The level of compensation might be described as middling, much lower than that provided by the 9/11 fund but much more than that expected from charitable collections or from the U.S. legislation which followed the Iranian hostage crisis. Medical care is provided, and lost earnings are partially replaced up to a middle class standard. We might think of the Israeli system for terrorism losses as comparable to our own Worker’s Compensation benefits, but of course we do not presently extend these benefits from the place of work to the place of war.⁴⁵ The Israeli regime grew out of a wartime scheme

The Commission issued a series of ordinances that made participation in this insurance scheme mandatory, but, as the war grew, the act became increasingly complex. Eventually the War Damage Act of 1943 consolidated the various rules of the Commission, but maintained the ordinances promulgated under the earlier War Risk Insurance Act. *Id.* Volume V at 321. Section 1(1)(b) of the new Act required “contributions by persons interested in land towards the expense of making such payments.” MAURICE SHARE & S. M. KRUSIN, *THE SOLICITORS’ HANDBOOK OF WAR LEGISLATION*, VOLUME V 321, 377 (1944) (detailing the various levels of compulsory insurance required from different industries).

⁴² The “period of the present emergency” extended to 9 March, 1946. 33 *Halsbury’s Statutes of England* 374.

⁴³ *Id.*

⁴⁴ Statutory Instrument 1983/686, as amended by SI 2002/672. The payment amounts are modest compared to the Victims’ Compensation fund, amounting at best to a few hundred pounds a week, depending on your degree of disability, and in spite of the fact that the rate schedule is updated annually, the amounts have changed little, if at all, since 1983. The base compensation to a widow or widower is 92 pounds a week. *Id.* at Schedule 2.

⁴⁵ Sommer, *supra* at Section E. The payouts for personal injury or death are generous, compared to other types of social welfare benefits in Israel (or, certainly, in the U.S), but substantially smaller than the benefits offered under the 9/11 Victims’ Compensation Fund. Injured victims receive state provided medical care, disability benefits during the period of treatment and recovery, and additional amounts designed to assist in their reentry into the workplace. The families of victims killed by terrorist attacks receive monthly survivorship benefits (based on the salary of a mid-level government employee) as well as payments for some incidental expenses. With respect to property losses, the Israeli government essentially

which sought to spread the burdens of war across the population. The idea behind the expansion of the war-loss compensation regime was that terrorist attacks were essentially an extension of the wars that Israel had been fighting, and, just as acts of war were directed at Israel as a country (so that the rhetoric or politics of burden sharing was found attractive), acts of terrorism were also directed at the Israeli people as a whole.

American history and politics do not much resemble Israel's, but terrorist attacks, and recent Anthrax and sniper attacks, do have a way of affecting the nation as a whole as most other crimes do not. It is not at all difficult to imagine that more attacks on U.S. soil, producing perhaps salient uninsured losses, would create the will or political opportunity to think of the nation in a protracted war, or simply to expand our familiar scheme for compensating members (and families of members) of the armed services to include all victims of terrorism.⁴⁶ The details of this sort of scheme, and the relative generosity of these imagined, routinized benefits would depend, no doubt, on the mood created by the final precipitating events, on the level of social insurance that is otherwise available⁴⁷ and on the question of whether these routinized benefits are cast as a substitute for, or a supplement to, episodic ex post relief.

3. Expanding Routinized Terrorism Compensation in the U.S.

There is more to be said about what routinized benefits would like if put in place in the U.S. We can expect routinized relief—if it ever appears—to provide *only* for uncompensated, or at least uninsured, losses. This structural spine of a relief system sustains public sympathy even as it serves the function of reducing moral hazard. It is reflected not only, as mentioned above, in the collateral offset provisions of the 9/11 Fund and in the uncompensated-loss requirements of federal disaster relief programs generally (as discussed above), but also in such legal doctrines as the insurable interest requirement. There is, therefore, reason to expect that the adoption of a permanent regime of terrorism compensation would reduce, though not eliminate, episodic relief payouts.⁴⁸ The idea is that once some compensation were expected and known to be in place, there would be relatively little political pressure for after-the-fact relief. The argument extends to private contributions. For example, co-workers may contribute money to form a fund for the benefit of any of their number with sudden family crises or unusual emergencies, but such informal mutual insurance arrangements are rare with respect to illnesses or

acts as an insurance company, paying to replace or repair property damaged or destroyed in a terrorist attack. *Id.*

⁴⁶ See *supra* note 30 reviewing the military compensation scheme.

⁴⁷ In the U.S., of course, we have a variety of domestic social insurance and employment schemes to use for comparison, and other countries have compensation systems that are more directly comparable.

⁴⁸ Somewhat similarly but tangentially, in a workplace with an employee pension fund, it is less likely that a retirement is accompanied by a voluntary and sizeable monetary payment from the employer or from fellow employees. Substantial voluntary payments to retiring employees became a thing of the past once formal and planned retirement plans came into being.

deaths that are known to be covered by insurance provided through the workplace. Similarly, politicians do not sponsor or obtain government payouts for the families of military personnel killed in battle, and these families are known to receive death benefits, however modest.

Still, it is unlikely that a routinized relief would bring ex-post episodic payments to an end, if only because it is impossible to predict the scale of a disaster, so that sympathy and interest group factors can grow to be formidable influences. For example, consider the National Flood Insurance Program, which is a routinized regime of sorts funded in part by U.S. tax dollars (and in part through premiums paid by the insureds) and administered by private insurance companies. Under this program, the U.S. government subsidizes the ex ante cost of purchase of flood insurance by those who live in floodplains.⁴⁹ When a flood occurs, then, there is a permanent, or routinized, regime in place that provides scheduled compensation without regard to the level of sympathy generated by a particular flood. However, a very serious flood may create losses that are uncovered by this insurance—with respect to individuals who purchased insurance as well as with respect to many who did not—and in these instances add-on compensation is possible if public sympathy materializes. In the largest cases, there will be a declaration of disaster, prompting an ex post disaster relief regime to kick in, especially or entirely with respect to uninsured losses as they become known.⁵⁰

There remains the question of when a government or citizenry should be expected to think of attacks as part of a longer-term war rather than as episodic. And when a relief system is expected or instituted, there is the interesting question of whether it will be retroactive to the start of hostilities that may have seemed episodic or even accidental when they occurred. Put differently, one might think of the 9/11 Fund as anticipating other attacks as well as other expenditures to compensate victims and rebuild public properties. And yet one reason not to think of the Fund in this manner is the fact that it offers compensation sufficiently generous as to make it extremely unlikely to be sustained in a long-term conflict with many attacks. A second reason to avoid thinking of the Fund and the new federal reinsurance scheme as pieces of an open-ended and long-term program is that long-term government involvement in war losses is most readily associated with dysfunction in private insurance markets and, as we have seen, much of

⁴⁹ See generally <http://www.fema.gov/nfip/intnfip.htm>; see also Edward T. Pasterick, *The National Flood Insurance Program*, in *PAYING THE PRICE: THE STATUS AND ROLE OF INSURANCE AGAINST NATURAL DISASTERS IN THE UNITED STATES* 125 (1998). Although flood insurance is marketed through private insurance companies, it is underwritten by the federal government and funded out of general tax revenues.

⁵⁰ Since 1994, flood victims in designated floodplains are supposed to get only one free bite at the ex post disaster-relief apple. That is, if an individual applies for flood disaster relief and then does not purchase and maintain flood insurance thereafter, that person is supposed to be. Pasterick, *supra* note 48, at 153; FEMA, *Mandatory Purchase of Flood Insurance Guidelines*, p.4 (1999), found at <http://www.fema.gov/nfip/mandpurl.pdf>. Although there is no data on this question, we would predict that public-sympathy and interest-group pressure would make enforcement of that restriction very difficult. And, of course, to the extent that flood insurance does not cover the full extent of the flood losses, such relief will certainly be forthcoming.

the Fund is directed at losses that were insured; a long-term rescue of a dysfunctional market would likely focus on losses that private insurers could not cover. The government-sponsored reinsurance scheme that is now in place relies on a functioning, primary market, rather than a dysfunctional or unraveling market.

It is painful though interesting to note that the 9/11 Fund creates political difficulties in the event of future and comparable attacks. A government that set about designing relief for a protracted war and in anticipation of numerous large-scale domestic events would invariably reduce the compensation levels from those established by the 9/11 Fund, and this would serve as a pessimistic and alarming signal to an already rattled citizenry. In a sense, the 9/11 Fund was optimistic in its implicit declaration that business would go on as usual, and this opens up the possibility that the government will be forced to concede a modest sort of defeat in the future.

This is not to say that it would have been politically wiser to structure the 9/11 Fund as a permanent Fund for victims of terror, or as one that would last until the President declared the war against terror to have ended. That approach would have made it more difficult to secure the funds for New York's rebuilding effort, and would have immediately raised the vexing question of whether to include only attacks on American soil and American citizens. These and related questions would have distracted from the more important tasks at hand. If these matters must be confronted in the future, it will be during a period of dramatic national mobilization, and interest groups, politicians, and civil libertarians who make too much of the boundaries that are drawn will be more easily marginalized.

The horrible prospect of many more attacks and government-sponsored war insurance—for property certainly, and perhaps for life as well, though it can be difficult to include or exclude members of the armed forces—raises the issue of retroactivity. Relief for a given flood or earthquake does not bring with it serious pressure to return to earlier, perhaps smaller disasters in order to treat victims with equal generosity and sympathy. But once some events are linked together by a common enemy in what is seen as a single conflict, it is unlikely that relief can be kept episodic. Compensation rates might fall as the severity of the encounter is reappraised, but at some point we should expect a uniform policy. This point might well be that at which private insurers no longer exhibit resilience; when insurers fail to adapt and then fail entirely, the government is bound to set up a system of primary insurance.

IV. The Optimal Mix of Government Relief and Private Insurance

We turn now to the more normative side of the terrorism insurance question, in the form of the issue of the optimal mix of government and private relief (including insurance) for terrorism-related losses. A necessary part of this analysis is some discussion of the various justifications for government intervention in the private terrorism insurance market. Included will be our critique of the “insurance crisis”

rationale of the Terrorism Risk Insurance Act of 2002 and our assessment of arguments for subsidizing, in one way or another, the terrorism insurance market.

A. Of Exaggerated Crises, “Uninsurable” Risks, and the Case for (and the Stronger Case against) Government Intervention

We have already described the apparent, or perhaps opportunistic, panic in the insurance industry following the attacks of 9/11 and the claim that those attacks had, absent government intervention, rendered terrorism risks essentially “uninsurable.” These concerns culminated in the enactment of the Terrorism Risk Insurance Act of 2002, which radically alters the public-private mix with respect to terrorism-risk compensation.⁵¹ Some time has now passed since the early and perhaps inevitable prophecies of doom in the insurance markets, and it must now be clear even to those who took the pessimism and doomsaying seriously that terrorism-related property risks have in fact not suddenly become uninsurable. Indeed, even before the enactment of the new legislation designed to stabilize the insurance market, there were private insurers willing to cover terrorism risks, albeit at rates substantially (and understandably) higher than those that prevailed pre 9/11.⁵²

Moreover, past experience and sound insurance theory tell us that any insurance problem produced by 9/11 is in the long run either modest or nonexistent. Whatever insurance-availability problems appeared in the period immediately following the attacks were probably manifestations of temporary capacity constraints caused by the unexpected claims on industry-wide reinsurance capital. Such effects are similar to those that followed the unusually large natural catastrophes in the early 1990’s, which also were temporary.⁵³ As new capital enters the market in response to the new demand for terrorism insurance, coverage should become more readily available and prices should be expected to fall, though obviously not quite down to the level of pre-9/11 premiums.⁵⁴

Of course, it may well be that the terrorism insurance market undergoes permanent change, in the sense that standard commercial property policies may henceforth contain broad terrorism exclusions. Those who wish to secure terrorism coverage for their properties will then need to buy separate and expensive terrorism policies or secure terrorism coverage through existing “political risk” policies.⁵⁵ But such

⁵¹ Terrorism Risk Insurance Act of 2002, Pub. L. No. 107-297, 116 Stat. 2322 (to be codified at 15 U.S.C. § 6701) [hereafter Terrorism Insurance Act].

⁵² *Political Risk: Run For Cover?*, CFO.com, Jan. 22, 2002 (Jennifer Caplan) (“the private political risk market, particularly Lloyd’s, is already offering stand-alone terrorism coverage.”); *U.S. Army turns to Lloyd’s for Cover Against Terror Attacks*, The Independent, Feb. 19, 2002 (Katherine Griffiths); *Insurers Find Profit in New Risk Consciousness*, N.Y. Times, Feb. 24, 2002 (Joseph B. Treaster) (describing new profitability of political risk coverage).

⁵³ Anne Gron & Alan O. Sykes, *A Role for Government?*, 25 Regulation 44, 51 (2003) (arguing against government role in terrorism insurance market).

⁵⁴ *Id.*

⁵⁵ See *supra* sources cited in note 50.

a change is not necessarily a sign of market failure. To the contrary, it might be a sign that the market is working reasonably well. Market segmentation of that sort is common in the insurance industry, such as for earthquake and hurricane risks, and there may be good reasons for it. For example, some insurers may have a comparative advantage in insuring such risks, while others may be particularly ill-suited.⁵⁶ Customers may also prefer choice rather than the bundling of insurance products.

Another lasting effect of 9/11 on property insurance and real estate markets may be a significant increase in insurance premiums and perhaps a reduction in the availability of coverage for certain kinds of properties such as skyscrapers, and certainly for anything built at Ground Zero. This difficulty may reflect the sensible judgment of the market. It is not immediately obvious that the country's morale or the overall economy requires the construction of new one-hundred-story skyscrapers to replace those that were lost. The market may judge such structures to be too attractive a target for terrorists, or for copycat criminals, and there may be no sound reason to overrule this judgment with a subsidy or mandate. It is even possible that the current public debate over the future of the World Trade Center site itself is influenced by a common understanding that it would be foolhardy to reproduce what was there, because it would offer too tempting a target for terrorist attack. On the other hand, nothing stops politicians from intervening in this small market; the government could simply promise insurance at low cost to buildings built at Ground Zero if it deems reconstruction at that location worthwhile for the national psyche or worthwhile because of externalities related to reconstruction of the area, deflection of attention on other landmarks, and so forth.

Existing skyscrapers in New York and in other cities may also be difficult to insure, but this creates a potential wealth effect rather than any sort of inefficiency, inasmuch as these buildings have already been constructed. And this wealth effect may be made worse by the disinclination of tenants to locate or remain in certain skyscrapers. Again, it is difficult to think of this as a market failure except to the extent that the market fails to sort workers rather quickly into firms according to their willingness to be employed in skyscrapers. In any event, insurance is unlikely to solve this problem.

That the uninsurability claim is overstated, and that the move to specialized terrorism insurers is likely an efficient one, does not of course prove the absence of a market failure to which a government might usefully respond. It may well be that the terrorism reinsurance market will bounce back as quickly and as fully as the natural-disaster reinsurance market did following the earthquakes and hurricanes of the 1990's, and this may have happened even in the absence of federal terrorism insurance

⁵⁶ Gron & Sykes note one sort of comparative advantage rationale for this sort of market segmentation. They first observe that, with respect to catastrophic risks (such as earthquakes, hurricanes, and now terrorism), the only insurers who can effectively provide coverage are either those with enormous capital reserves of their own or those with efficient access to reinsurance capital. Thus, they note that AIG, the best capitalized insurer in the world, was the first to come back and offer ground damage coverage for the airlines, a type of coverage that the government had stepped in to supply in the immediate aftermath of 9/11. *Id* at 48-49.

legislation. Such is, indeed, our intuition, as well as the view of other market-oriented commentators.⁵⁷ Terrorism risks may however be different in ways that suggest a potential role for government as reinsurer. Thus, a familiar argument heard in support of the new federal terrorism legislation is that terrorism disasters are uniquely unpredictable, so that intervention is necessary because the pricing of insurance is especially problematic for the private market. Terrorists, unlike hurricanes, according to this argument, intentionally seek to thwart prediction. They exploit the element of surprise not only to avoid capture but also to maximize the destabilizing effect of their attacks.

Although this *is* a difference between terrorist attacks and natural disasters, it may not be an important one for our purposes. There is no reason to expect that the presence of intentional human agents makes the risk inherently impossible to calculate. Many insurance policies cover risks associated with intentionally caused harms, and this does not typically present a problem, so long as the intentional harm is not caused by the insureds themselves. Large, sophisticated insurers can reduce the initial uncertainty associated with terrorism risks by employing terrorism experts, mathematicians, and game theorists to construct models that reduce terrorism risks to something that is calculable.⁵⁸ Competition among insurers would then drive premiums to the correct level. To some extent, this is already being done. Thus, we might be encouraged (rather than merely alarmed) when we see terrorism-insurance premiums skyrocketing for the Golden Gate Bridge and other national landmarks; encouraged, because the focus on these targets may mean that security will improve through competition and government activity, and yet alarmed that these risks are not thought to be insubstantial.⁵⁹

The case for government intervention is fueled by another difference between terrorism and natural disasters, namely the location of expertise and information about these risks. In the case of potential terrorist attacks, the government has powerful intelligence-gathering capabilities that no private insurer can muster. And this is the sort of information that the government will not readily share with insurance companies. Although it is easy to imagine an information-sharing partnership between the public and private sectors with respect to natural disasters (so that meteorological and seismological data might, for example, be exchanged), such an arrangement is inconceivable with respect to terrorism. This difference might at first appear to suggest a reason for

⁵⁷ Jeffrey R. Brown, Randall S. Kroszner, Brian H. Jenn, Federal Terrorism Risk Insurance, *Nat. Tax Journal* (Sep. 2002).

⁵⁸ There is some evidence that the country's mathematicians are beginning to get involved in the business of terrorism prediction, albeit not expressly on behalf of insurance companies. According to an interview on National Public Radio with Stanford mathematician Kevin Devlin, there was a recent meeting of mathematicians in Washington, D.C., to discuss just such types of research. According to Devlin, mathematicians may be able to employ Bayesian inference techniques to narrow down the universe of possible terrorist targets and disaster scenarios. Interview by Scott Simon, *Weekend Edition, NPR*, May 18, 2002.

⁵⁹ According to one report, almost immediately after 9/11, the insurance premiums for the Golden Gate Bridge doubled, even though policy limits were drastically cut. MSNBC, "Paying Terror's Premiums," April 29, 2002, by Jane Weaver found at <http://www.msnbc.com/news/740038.asp>.

government intervention in the manner of the British system, which is to say a system in which the government is a reinsurer rather than primary insurer.⁶⁰ But the reasoning is weakened by the realization that if the government conceals information in the interest of national security, then it is unclear how the government will be able to use that very same information in designing and pricing its own brand of terrorism insurance. Indeed, when the secrecy consideration is added to the history of government-provided insurance, the emerging picture is one in which the government does not even pretend to deploy actuarially based premiums.⁶¹ Observers who value the behavioral effects that market pricing can produce will thus be slow to approve of government involvement in this arena.

On the other hand, there are sound reasons for the government to offer reconstruction encouragements in the post-9/11 world. It is easy to see that once a business district is destroyed (especially if destroyed by terrorism, domestic riots, atrocity, or other causes that may be thought to continue or recur), there will be a disinclination among private investors to be among the first to rebuild. Many businesses thrive on a critical mass of activity. In these circumstances governments can do some good by leading the way with infrastructure and even incentives for early rebuilding.⁶² No doubt this point could be exploited by politicians and private groups that seek special treatment, and in a world with flawed governments and overachieving interest groups the best policy may be to avoid favoring some building plans over others. We will proceed, however, with the presumption that when the destroyed area is near great ports, transportation hubs, accumulations of human capital, and dense residential areas, it is likely that rebuilding is socially desirable, and that the private market might rationally and strategically await government interventions to pave the way. In this context, what appears as uninsurability may, in fact, be nothing more than a reflection of strategic behavior emanating either from the supply side or the demand side or both, as property insurers and real estate interests attempt to induce government aid in their direction. Nevertheless, it is plausible that government money can be efficiently expended to encourage the formation of a critical mass of business activity.⁶³

⁶⁰ On the British system, see Section B. The Israeli example is not a reinsurance scheme. Rather, the coverage is provided directly, and citizens are included involuntarily. See Sommer *supra* note x at

⁶¹ Gron & Sykes make a similar point. See Gron & Sykes, *supra* note __, at 49.

⁶² This was the logic of the now expired Urban Property Insurance Protection and Reinsurance Act of 1968, Federal Crime Insurance Program (FCIP), and other systems promulgated under 12 U.S.C §§1749bbb, to encourage business investment in riot areas. See Eric Neisser, *Charging for Free Speech: User Fees and Insurance in the Marketplace of Ideas*, 47 Geo. L. J. 257, 303. For a fuller discussion of these programs, see *infra* note __.

⁶³ One obvious problem with the new federal terrorism reinsurance program as a response to the first-mover problem, however, is that the program seems much broader than would be necessary to provide a subsidy for the reconstruction of privately owned buildings in New York. Rather, the program could have been limited to reinsuring the risk of terror attacks in New York, if the primary goal were to provide a reconstruction subsidy (rather than a construction subsidy). Of course, there is an obvious political explanation for why Congress would enact a federal reinsurance program that would apply only to one state, when there is at least a plausible case the terrorists will strike next someplace other than New York.

B. The Federal Reinsurance Program

We turn next to a more careful analysis of the Terrorism Risk Insurance Act, which again seems to be based, albeit rather loosely, on the British rather than the Israeli model. The British Government intervened when stepped up IRA bombing caused most reinsurers to leave the British Market in 1993. Their solution was to form Pool Reinsurance Ltd. (“Pool Re”), a mutual reinsurance company set up by the Association of British Insurers and the British Government. Approximately 115 insurance companies and 120 Lloyd’s syndicates are members of Pool Re. The basic scheme is that Pool Re provides insurance coverage above the first £100,000 of damage, which is expected to be covered by companies applying to Pool Re for reinsurance. Companies who wish to purchase Pool Re Coverage must do so for all their properties, thus avoiding potential adverse selection. Funds for Pool Re are collected not only from policy premiums, but from a 3% levy on all household and motor vehicle policies written in Great Britain. If Pool Re has to pay out claims that exceed its premiums paid, there is a “call” on all members to pay an additional equaling 10% of the of the funds in the pool. Any amount beyond this is paid by the British Government.⁶⁴

The U.S. system is somewhat different from its British forbear. As noted, under the federal terrorism reinsurance program adopted in 2002, the federal government will, for a three-year trial period, cover 90% property-casualty insurers’ terrorism-related losses that exceed \$10 billion (with the floor rising to \$15 billion over the three-year period). During this period, there will be a cap on the government’s terrorism reinsurance of \$100 billion. Under this program, insurance companies would be expected to pay off “smaller” claims up to specified fractions of their collected premiums. Specifically, for losses resulting from “terrorist acts,” private insurers will pay an initial deductible equal to a percentage of their earned premiums.⁶⁵ For losses above the deductible, the government would again cover 90% of the losses, with the insurance companies—and their policyholders—bearing the 10% co-payment.⁶⁶ The program also requires all

Such an ex ante program, by its nature, will almost have to be made generally applicable to be politically feasible, since all voting jurisdictions can imagine themselves (rightly or wrongly) needing such a subsidy. This observation is entirely consistent, however, with the provision of ex post relief that is directed at New York only. There the understanding is that, if other states suffer a terrorist attack, they will receive similar relief.

⁶⁴ See William B. Bice, *British Government Reinsurance and Acts of Terrorism: The Problems of Pool Re*, 15 U Pa J Int Bus 441, 441 (1994) (“The British government has agreed to become the “reinsurer of last resort” for losses caused by terrorism on the British mainland”).

⁶⁵ One percent for 2002, 7% for 2003, 10% for 2004, and 15% for 2005. Terrorism Insurance Act, *supra* note ___, at sec. 102(7).

⁶⁶ *Id.* at sec. 103(e). If, for a particular terrorist attack, the sum of the deductibles and copayments made by private insurers is less than \$10 billion, then the federal government will essentially tax the insurers the difference. As a result, the insurance industry will inevitably be on the hook for the first \$10 billion. That is what is meant by the term “Insurance Marketplace Aggregate Retention Amount” in sec. 103(e) of the Act. This retention amount rises to \$15 billion over three years. Between this (rising) floor and the \$100 billion ceiling, the federal government (and federal taxpayers) will act as terrorism reinsurers of last resort. Above

property-casualty insurers doing business in the U.S. to “make available” in their policies terrorism coverage on roughly the same terms, amounts, and coverage limitations as are applied to their non-terrorism coverage, although the price of that coverage remains an open question.⁶⁷ At the same time, however, individual insurance purchasers can decline to purchase the terrorism coverage if they so choose. Insurance is thus available because its offer is mandated, but the purchase of coverage is not required or guaranteed.⁶⁸ The funding for the terrorism reinsurance is expected to come from premiums or surcharges imposed (and determined) by the Secretary of Treasury on property-casualty insurers.

As suggested in the previous section, a good case can be made for the proposition that this legislation was unnecessary (certainly in the long run as new capital enters the terrorism insurance market), except perhaps as a further construction subsidy for lower Manhattan.⁶⁹ Advocates of free markets, for example, will complain that government insurance generally tends to be inefficient.⁷⁰ And although last-resort coverage leaves more space for the private marketplace, it nevertheless intervenes where free market proponents will think intervention unwise or even most unwise. Thus, although the British approach of last-resort reinsurance may be superior to the Israeli approach of occupying the entire market, either approach is unwelcome from the perspective of many observers. In contrast, advocates of a government-centered scheme begin with the idea that it is the government’s role to protect citizens against external attacks and to ease the burdens such attacks create, and they then move quickly to the view that the British approach does not go far enough because war and terrorism ought *entirely* to be the responsibility of the government.

There are other reasons to criticize a reinsurer-of-last-resort type of subsidy, even if one takes some market-based intervention as a given. First, for the regime is to have its desired effect (of encouraging the purchase of commercially provided terrorism coverage), it must involve a real subsidy—and that means a *substantial* cross-subsidy *to* those regions of the country that are the most likely terrorism targets (such as Washington and New York) *from* the rest of the country. It is not enough to require insurers to make

the \$100 billion cap, presumably the risks fall again to the private reinsurance market, although the possibility of ex post government relief cannot be eliminated. For an explanation of the Act, see the Insurance Information Institute summary at <http://www.iii.org/media/hottopics/hot/terrorismact/>.

⁶⁷ Specifically, the Act provides that insurer “shall make available, in all of its property and casualty insurance policies, coverage for insured losses; and ...shall make available property and casualty insurance coverage for insured losses that does not differ materially from the terms, amounts, and other coverage limitations applicable to losses arising from events other than acts of terrorism.” *Id.* at sec. 103(c). The price will be a function of (a) the actuarial market pricing for that portion of the coverage that will not be federally reinsured (though it might be privately reinsured) and (b) the prices that the Treasury Secretary ultimately decides to charge for the federal reinsurance.

⁶⁸ All terrorism exclusions in property-casualty policies in effect on the date of the act were expressly nullified, but, according to the Act, could be reinstated if the insurer receives a written statement from the insured authorizing reinstatement or if the insured fails to pay the increased premiums. *Id.* at sec. 105.

⁶⁹ Again, a narrowly tailored construction subsidy might have limited the application of the Act to insurance in New York state, but such an outcome seems politically unlikely.

⁷⁰ Gron & Syes, *supra* note ___, at 51.

coverage “available.” If the price insurers end up charging is not meaningfully reduced—via subsidy—from what those premiums were pre-9/11, terrorism risks will remain “uninsurable,” at least as uninsurable as they were before the new law. Hence, the subsidy must be real. But the Act, as we have seen, leaves open the amount and nature of the subsidy; the Treasury Secretary’s discretion is a critical feature of the scheme.⁷¹

A second internal criticism of the legislation focuses on the fact that it does not require the purchase of terrorism insurance. The law’s noncompulsory character leaves open the possibility that insureds may opt not to buy coverage—or to buy relatively little coverage—in the hope of receiving ex post government relief upon the occurrence of another terrorism disaster. The pattern might follow that of flood insurance where we have found an optional scheme, succeeded by semi-mandatory and subsidized insurance, with large numbers of nonsubscribers who then appeal for relief in the event of disaster.

That the new Act requires insurers to make terrorism coverage “available,” but does not make terrorism coverage compulsory, may also contribute to a particular sort of political economy, or externality, problem. Recall that the general power to regulate insurance rates lies with state insurance commissioners; there is no general federal regulation of insurance rates. The Terrorism Insurance Act leaves this unchanged, even for terrorism risks, except that the Treasury Secretary is empowered to set the reinsurance premiums that property-casualty insurers must pay if they wish to receive federal terrorism reinsurance. Thus, if insurers seek large increases for terrorism rates in such high-terror-risk jurisdictions as the District of Columbia and New York, the insurance regulators can refuse to authorize the increases and, because of the new law, the insurers will still have to offer terrorism coverage in that jurisdiction, unless they decide to withdraw from the market entirely. In a small jurisdiction, such as D.C., we might expect consumers to receive a major cross-subsidy from policyholders in the rest of the country. In larger markets (defined by single regulatory schemes), such as New York or California, there would be some intrastate cross-subsidization as well.⁷²

In this manner a sufficiently generous subsidy may induce some insureds, who otherwise would not have purchased terrorism insurance, to do so, while others may decide to opt out of such coverage (and to allow insurers to insert exclusions) because of their assessment that federal relief would be forthcoming in the event of a disaster.⁷³ This,

⁷¹ Even after the enactment of the federal terrorism insurance regime, there is some evidence that, in the areas that are considered the most likely targets for terrorist attack, rates for terrorism risk have yet to come down. See, e.g., Spencer S. Hsu, *D. C. Disputes Insurance Study Raising Rates for Terrorism*, Washington Post, January 7, 2003 (District of Columbia insurance commissioner says D.C. will reject large rate increases for terrorism insurance in D.C. recommended by insurance industry ratemaking bureau).

⁷² According to news reports, the D.C. insurance commissioner seems to be taking precisely this approach. *Id.*

⁷³ Given that federal relief for disaster-related property losses generally are quite meager (involving mostly loans with small outright grants in some cases), opting out of private insurance in anticipation of government relief may seem irrational. However, given the high price of private disaster insurance, and given the persistent form of the this-will-never-happen-to-me optimism that seems to afflict many property insurance purchasers, decisions to opt out of disaster insurance coverage are quite common.

in turn, might lead to more uninsured property owners, which then inevitably creates pressure to provide ex post relief as the victims in those gaps become apparent. It is thus easy to see an argument as to why Congress should have taken the further step of actually *requiring* insurance policies to include terrorism coverage (or forbidding them to include terrorism exclusions). Such an outcome, however, was not to be expected. Compulsory insurance, though not uncommon at the state level (for example, for auto liability coverage) is quite rare at the federal level. Even the National Flood Insurance Program, with respect to which there is a fairly strong argument for a compulsory insurance regime, is only *semi-compulsory*⁷⁴—and many people who should purchase the coverage still do not.⁷⁵ Moreover, to make the purchase of terrorism coverage compulsory under federal law for all property owners would have required the enactment of explicit subsidies to fund the purchase of terrorism coverage in the most high risk areas. In contrast, and as we have seen, the approach chosen by the Act produces more hidden, but perhaps no less substantial, cross-subsidies. Finally, note that federally mandated coverage may also have thrust federal regulators into the role of setting primary-level insurance premiums, and this role has traditionally been left to insurers and to state regulators.

C. How Will the Federal Reinsurance Program Affect the Potential Shift from Episodic Relief to Routinized Government Compensation?

It bears restatement that the new federal legislation deals entirely with property losses, and not with personal injury and death—which generate the most ex post sympathy, especially where uninsured breadwinners are concerned. It follows, that even if a federal reinsurance regime would be a good idea for property losses (a claim about which we are skeptical), it would be almost unthinkable for losses of life and limb, in the sense that the adoption of a government-as-reinsurer model, again absent a compulsory

⁷⁴ The purchase of flood insurance since 1994 has been made *mandatory* in only a limited sense. Thus, federally subsidized mortgages are available only to those with flood insurance. Moreover, all private mortgage lenders are now “required” to insist on a showing of flood insurance not only at the time a mortgage loan is issued, but also during the life of the loan. And finally, for those property owners seeking relief aid (SBA loans or FEMA grants) following a flood and who have not purchased flood insurance, the relief aid is made contingent on the purchase and future maintenance of flood insurance; what’s more, for those who fail to buy flood insurance at that point, all future flood relief aid is prohibited. *See generally* Pasterick, *supra* note 48, at 153; and FEMA, Mandatory Purchase of Flood Insurance Guidelines, p.4 (1999), found at <http://www.fema.gov/nfip/mandpur1.pdf>. On the other hand, there are no federal fines imposed on homeowners who fail to purchase flood insurance, as might exist under a serious (though unlikely) compulsory insurance regime.

⁷⁵ Before the changes to the NFIP in 1994, there were studies indicating that under 20 percent of individuals living in floodplain areas and who were supposed to have flood insurance actually purchased such insurance. FEMA, Mandatory Purchase of Flood Insurance Guidelines, p.2. One would expect compliance to have increased since the 1994 amendments to the program, which introduced, for example, the requirement that lenders insist on flood coverage throughout the life of mortgage loans. And it may have; however, it is generally believed that there is still significance underinsurance for flood risks.

insurance provision, would not likely reduce the need and demand for ex post relief along the lines of the 9/11 Fund.

The new legislation, it will be recalled, takes the form of a three-year experiment, and the question of episodic versus permanent relief draws attention to what we might expect in a few years. It is surely the case that the adoption of a permanent regime of routinized relief for terrorism-related losses will become much more likely if terrorist attacks in this country become a familiar, if horrible part of the landscape. In a world where attacks averaged one or two per year, for example, a permanent regime alongside occasional (extra) episodic relief seems likely. The permanent regime would not eliminate episodic relief, but it would likely reduce the size and extent of such relief. The combined outcome may be an overall reduction of total payouts to victims.⁷⁶ That outcome may be perceived by sophisticated or frugal voters as a good thing, and the overall savings may even be communicated to voters at large. To the extent that these voters and taxpayers see themselves as potential victims of terrorism—but also as the group that bears the burden of payouts—they may appreciate the regime as one which deflects the sympathy factor and avoids double compensation and so forth. With perfect private insurance markets in place, taxpayers might well prefer no relief at all, because each taxpayer could exercise choice in the marketplace. But in a world in which disasters beget sympathy and then episodic relief, taxpayers might recognize that some relief is likely, and therefore they might prefer a system with routinized relief in order to minimize the add-on sympathy factor.

If taxpayers and potential victims are overlapping but not identical groups, perhaps because some regions are thought to be primary terrorist targets, the rational actor and political pictures are fuzzier. Those who live in high-risk areas might prefer to rely on episodic relief, as they count on ex post sympathy to maximize their recoveries. The majority of citizens might oppose this plan, but they are too poorly organized to precommit the country to a system with no ex post episodic relief, though they may be able to organize sufficiently to push for routinized relief—with the expectation that episodic relief will be rare once the basic relief package is in place. At the same time, even citizens in high-risk areas will recognize that moderate attacks may not yield ex post relief. The victims of the first World Trade Center bombing may yet get some compensation for their losses, but they have gone many years with no relief. These victims or families may turn out to be worse off than they would have been with a regime of permanent compensation. But if they come to be included in a relief package, or had they been included in the 9/11 Fund as they almost were, they will be better off. In sum, citizens as a whole may favor routinized relief; some because the overall payouts will be

⁷⁶ The other potential benefit of moving from a system of purely episodic relief to a system of permanent routinized compensation (or, more likely, to a blended system) is that if legislation is drafted with no specific victims in view, it is possible that precautions against fraud and other problems are easier to set in place.

lower once sympathy can be reduced, and others because they prefer routinization in order to ensure coverage in the event of unspectacular losses.

Long delays can also contribute to the uncertainty of relief. Consider the episodic relief that eventually came to Japanese-Americans who were interned during World War II. These reparative payments came only after many years, and only when the class of surviving and sympathetic internees was on the verge of disappearance because of natural deaths. The precipitating event seemed to be the age of these survivors or the geographical loyalty or political inclinations of the sitting President rather than the spread of news about the suffering of this class. Moreover, other tragedies and wrongs have of course yielded no relief. In short, generous ex-post, sympathy-enhanced benefits may come at the price of substantial uncertainty and even delay. At some point the delay makes the payments symbolic and political, rather than compensatory or influential, because expected charges are too far off to influence the behavior of any political or other actor.

Much of this will seem familiar to readers who have thought about relief and reparative programs, and so it may be useful to stress that a remarkable thing about the 9/11 Fund is that it offers generous payouts even though most of the persons who were killed could have been expected to carry life insurance, payable even for deaths caused by terrorism. We have already suggested that the destruction of so much un- or underinsured property, along with the desire to insulate the airline industry from lawsuit, are the real keys to understanding the development and scope of the 9/11 Fund. The modest life insurance that most firefighters carry may also have contributed to the sympathy, the charity, and then to the Fund, though of course we do not find similar relief following the death of one or several firefighters in the line of duty. The point is that it might have been politically impossible to establish a Fund that covered property—including such property as New York City's infrastructure—and not persons.

Finally, the firefighter example suggests an alternative regime that strategic taxpayers might prefer. Knowing that large disasters will generate sympathy, taxpayers might design an ex post relief scheme that promised federal relief when the total disaster loss was more than some amount, say \$500 million, or took more than some number of lives in addition to some value of property. The politics of frugality would be to assert that insurance and relief should normally be a matter of individual choice and then of each local (or state) government's concern, but that federal relief would kick in when the scale of the disaster was large. Moreover, the federal legislation might specify more generous relief for states that have themselves legislated ex ante relief (for terrorism or any other disaster for that matter).

Note finally that the federal reinsurance plan may at the margin cause some people to buy insurance. There are several reasons for this conclusion, including the fact that the federal subsidy will be passed on in part to buyers. A second reason is that the probability of sympathetic episodic relief drops a bit because voters will be a bit less

sympathetic when there are fewer uninsured victims and when they have already enacted a plan. And a third reason is that the federal plan makes charitable relief less likely, which in turn makes insurance a more useful purchase. The charity effect derives from the fact, or irony, that when the government provides insurance for large-scale events alone, it runs the risk of discouraging charitable efforts precisely where those are most likely to be successful—because the media coverage accompanying large-scale events advertises the charity’s work and raises its revenues.

D. Other Subsidy Alternatives

Even if one were to accept the need for government intervention in the terrorism insurance market, the superiority of the particular type of subsidy embodied in the federal reinsurance regime is by no means self-evident. It might have been better to use some sort of permanent regime of ex post subsidy for charitable contributions in the event of disasters of a certain size. For example, the government could legislate that when emergencies are designated as “national disasters,” charitable contributions to designated relief agencies qualify for something much more attractive than mere tax deductions. Donors might, for example, be encouraged with 90% tax credits. Private insurance would be discouraged only as it is presently, which is to say that insurance might go unsold to the extent that people expected relief—or (tax) supercharged charitable relief.

There are at least two reasons to prefer a supercharged subsidy for charitable gifts over direct government relief. First, there is the benefit of decentralized private monitoring of the efficiency with which the money is distributed. The idea here is that charitable organizations may be more responsive to efficiency concerns and donor preferences than is the federal government, because charities must continue to earn the support of their donors. To be sure, uncoordinated private donations, as opposed to centrally coordinated government relief, may lead to the over- or under-compensation of some losses, so that government relief remains superior to (better monitored) private relief. The second potential benefit of the supercharged charitable giving approach requires some implicit assumptions about relief and redistribution, including the idea that such an approach may actually lead to more dollars of relief per tax-dollar spent than does direct relief funded through tax increases. There is some evidence that, at least with respect to high-bracket taxpayers, the price elasticity for charitable contributions is greater than one: that is, for every dollar of tax revenue foregone because of the deduction, more than a dollar of charitable transfer is made to the relevant charity.⁷⁷ That this effect seems to be concentrated in high-bracket taxpayers is unsurprising (given the

⁷⁷ CHARLES T. CLOTFELTER, *FEDERAL TAX POLICY AND CHARITABLE GIVING* 274 (1985); (summarizing studies, which consistently found price elasticities greater than one in absolute value for all but the lowest income groups; for low-income groups, the studies were inconclusive); Charles T. Clotfelter & C. Eugene Steuerle, *Charitable Contributions*, in *HOW TAXES AFFECT ECONOMIC BEHAVIOR* 436 (1981) (finding highest price elasticities in higher income groups).

relationship between the value of a deduction and the taxpayer's marginal rate bracket) and suggests why a credit—and perhaps a supercharged credit—might be desirable in some settings.

As another alternative, the government might simply subsidize, through a demand-side deduction or credit or direct cash transfer, all property insurance that covers terrorism risk. Under such a regime, if the risk is significant, then more insurance will be sold—and there will be less pressure for relief in the event of large losses. Recent legislation and current patterns in the insurance market seem to assume that future terrorist strikes will resemble those of 9/11, aiming at large buildings in urban centers—especially those in D.C., New York, and San Francisco.⁷⁸ But other horrors are imaginable, and while there is no need to spell them out here in gruesome detail, it does not take much imagination to see that billions of dollars of economic losses could be suffered through terrorist attacks on transportation networks and various industries such that there would again be a clamor for federal relief, and property insurance would play a smaller role than business interruption or disability insurance, for example. If the war on and with terrorists continues, we should not be surprised to see the question of the structure of federal relief revisited. And, again, an attempt to move expectations away from episodic federal relief seems likely and, under the circumstances, healthy.

E. Does the Expectation of (Episodic or Routine) Relief Internalize Costs?

A different sort of normative question about disaster relief (whether such relief comes predictably, episodically, or even routinely) concerns the behavioral, or cost-internalization, function of expected relief. Our focus is on government actors or on interest groups that influence these actors and their budgets. Extant literature suggests that a government that expects to pay relief in the event of famines and earthquakes, say, might be more inclined to take precautions that would limit the losses to be suffered from major droughts and earthquakes. These natural disasters bring on losses, to be sure, but these losses can be curtailed with good distribution systems, warning mechanisms, building codes, and other items within the government's control. The prospect of large-scale payouts in the aftermath of major losses might, the easy argument goes, encourage government to take cost-benefit justified precautions long before disasters strike. One can either imagine a government that is responsive to an internalization tool (which is how we might think of the budgetary pressure associated with expected relief payments) or, more subtly and convincingly, think of various interest groups as eager to see the government take precautions to avoid large disasters because these interest groups project that expected relief efforts might one day crowd out the government projects they seek.⁷⁹

⁷⁸ See *D.C. Disputes Insurance Study*, Wash. Post, *supra* note ____.

⁷⁹ See Levmore, *Coalitions and Quakes*, *supra* note _____. The term “interest group” normally implies a relatively small and well-organized lobbying unit, and that is how we use the term. Note, however, that the internalization effect of creating an expectation of relief (or a permanent regime of compensation) can also

This argument about disaster relief as an indirect means of encouraging precautions that are in the government's domain is surely a weak one when it comes to post-terrorism relief, or subsidized insurance. First, the probability of large scale attacks is low and, as we have seen, governments and disparate interest groups could reason that most terrorist incidents will not in fact be followed by relief packages because the scale of loss will be small. In anticipation of the argument in the next Part we might say that most terrorism is like most crime in the sense that most incidents impose direct losses on very few victims and businesses, so that there is no political pressure for aid. A graphic murder (or terror attack) might jar a jurisdiction or at least its eager politicians into taking new steps to reduce crime or fright, but it is less likely to create a movement for economic relief, which seems to require a massive scale of loss. A second reason that the prospect of post-terror relief is unlikely to play an important role in encouraging pre-terror precautions is that such precautions are *already* encouraged by political self-interest and, no doubt, by a commitment to the integrity of the country as well. It is hard to imagine that politicians need much of an extra incentive to combat and deter terrorism. Few things attract as much media and public attention, the political repercussions from a successful but preventable or foreseeable attack are enormous, and even politicians appear able to rise to the occasions offered by war and terrorism such that they do what they genuinely think in the interest of the country (or perhaps in the interest of an attractive historical record) rather than in their narrow self-interest, though it may simply be the case that the two converge.

If there is any use in thinking about post-terror relief (or pre-terror insurance and subsidized insurance) in such functional terms, it may be in the division of labor between governments and private property owners. Thus, it is plausible that routinized relief, perhaps along the lines of the British model or the Act now passed, can send signals to property owners as to what their losses might be, and that in turn they will secure buildings more carefully or take other steps that are more in their control than in the government's. This too, though plausible, seems unlikely. The government can and does mandate private security precautions, and even the strongest proponents of privatization typically see the government as having a comparative advantage in this regard. It is worth remembering, for example, that Israel's El Al Airline, which is the only carrier known for taking extra (and, since the 1970s, highly effective) precautions against terrorist attacks, is government owned.

Even if the best explanation for anticipatory promises of relief is not related to precaution taking, it is important to see that relief can be routinized to good effect. The

be driven not by interest groups per se but also by majoritarian politics. This could occur if the issue of large crime-compensation payouts were to become sufficiently salient (or were to be made salient by a so-called issue entrepreneur) such that the "average" voter might even demand a response. Indeed, one might think of the budgetary pressure mentioned in the text above as having that majoritarian quality, in the sense that it might be majoritarian pressure that would create the incentive to prevent crime losses from breaking the bank or putting the budget into deficit.

Israeli example of routinized relief in the face of repeated (but often small scale) terror can be understood as making relief more coherent. It is easy to imagine that the legislation following 9/11 might have promised recovery, albeit of an unfunded sort, to all future victims of incidents that could be defined as similar to the 9/11 event itself. We would not be surprised to see the development of such statutory relief in the future. A future incident that brought on a wave of sympathy and political pressure for relief might well include the promise of comparable relief for future events. When drafted in such anticipatory fashion, it is likely that the average payout is smaller; indeed, one reason for such a legislative move might be to reduce expectations about relief.

The Israeli statute provides modest relief. It does offer a kind of life insurance, some recovery for economic losses, and so forth, but none of these approaches a level of full economic compensation along the lines of the 9/11 Fund. In addition, the Israeli statute offers some instances of improved precaution-taking resulting from the compensation regime. For example, if in Israel a curfew is imposed on an Israeli city, there is some chance of compensation at modest levels to businesses that suffer from the curfew, which is to say the terrorist-fighting strategy itself. An obvious explanation is that it is useful for the government to make the best decision it can as to security without influence or pressure from local merchants who might be too quick to believe that curfews do not survive a cost-benefit analysis.

F. *Summary*

We are skeptical of the recent efforts by the federal government to intervene in the terrorism insurance market for property coverage. We agree with other market-oriented commentators that, if left alone, the market would have been able to provide the necessary coverage, along some useful signals as to the largest outstanding risks and some valuable (if individually painful) cost internalization to individual decision-makers. Of course it may be that, in the absence of such intervention, developers will shy away from constructing very tall skyscrapers, but that result is not patently unreasonable. And it is hard to imagine the government having some positive-externality reason to encourage the very buildings that might impose the most attractive targets. One could imagine a political movement to rebuild the World Trade Center exactly as it was, structural improvements aside. This sort of emotional or political reaction, amounting to a statement aimed at domestic and foreign audiences, might indeed have required some government subsidy or at least a promise of insurance coverage. But by and large the private market is likely to perform well over the long run.

To the extent that some sort of government intervention *was* called for—whether as a construction subsidy or as a potentially desirable redistributive transfer from the rest of the country to the business centers of our major cities—it remains unclear if the particular type of subsidy chosen by Congress will be the most effective approach. And certainly, it should not be expected that the enactment of this program would eliminate

the possibility of future ex post relief payments in the event of another catastrophe on the order of 9/11. So long as insurance is not compulsory, there will be some underinsurance and—as we have argued throughout this Article—pressure to provide relief in the event of large disaster losses, especially in the case of terrorism losses. A serious change in the terrorism war must take place before a routinized permanent regime of terrorism-loss compensation is put in place. And even this sort of regime will not do much in the way of creating improved incentives for government decisionmakers, for political checks are effective.

In sum, the case for public and subsidized insurance covering terrorism risks is surprisingly weak. In contrast—and as we are about to explore—the case for public insurance with respect to the harms of everyday crime is relatively and remarkably strong. The comparison can be put in terms of a positive puzzle: Given the mix of private and public compensation that we have described for disaster losses (terrorism losses in particular), why we do not see a similar mix of private and public compensation for losses of property and life caused by crimes more generally? First-party insurance is generally available for property and lives, but many of these losses are uninsured; and yet there is generally no government relief or government liability following crimes—even if these are crimes that the government might easily have prevented.

The absence of government payments or “relief”—an expression that should now be taken to include government liability for the failure to prevent losses—in the crime setting, taken together with the presence of government relief in the terrorism setting, is especially interesting because a policy or expectation that government will provide relief for crime losses seems somewhat likely to provide a useful cost-internalization effect, or incentive, for government actors. Governments do not seem to need much of a push to battle terrorists, but government’s inclination to prevent crime, and especially crime that affects poorer citizens, appears to be less impressively encouraged by politics as usual. The idea is that governments at every level have a strong political reason to take precautions against terrorism, if only because there is no issue that is as salient to the electorate, and even to the self-conception of leaders. In contrast, some politicians seem to thrive despite rather poor crime-fighting records on their watch. We might say that governments appear to internalize the costs of terrorism more than they do the costs associated with crime. This is the argument that we explore in the next Part.

V. Insuring against Crime

One conclusion that emerges from careful thinking about insuring against terrorism is that there may be more to be gained from a program of government-sponsored *crime* insurance, or a promise of government relief for crime losses, than first meets the eye. The idea of government crime insurance gives rise to both normative and positive observations. As a normative matter, the argument for subsidized crime

insurance, or simply the promise of ex post relief from crime, is better than the argument for government involvement with terrorism risks. As a positive matter, the current absence of a strong federal crime-insurance or crime-relief program is likely attributable to failures of the political process—in the sense that the parties most likely to benefit from such a regime are least likely to overcome collective action problems to lobby for its enactment.⁸⁰ It is worth emphasizing that *neither* form of relief—whether for crime or for terror—may be wise, unless the goal is to express sympathy or engage in opportunistic wealth redistribution. But it is possible that both amount to sensible policies. The argument here is simply that the case for crime relief is probably sounder

⁸⁰ Two efforts at the federal level to provide government-subsidized insurance for crime and government subsidies for general property coverage in high crime areas respectively were the Federal Crime Insurance Program (FCIP), which was created in 1971 and the Urban Property Protection and Reinsurance Act of 1968 (UPPRA). 12 U.S.C. §§ 1749bbb et seq. (2003). Both were adopted in response to the urban riots of the 1960s, which created a concern among private insurers regarding the insurability of inner-city risks, a concern that led to widespread withdrawal of insurance coverage within urban areas and ultimately contributed to decay in urban neighborhoods, or so the argument went. *See, e.g.*, David I. Badain, *Insurance Redlining and the Future of the Urban Core*, 16 COLUM. J.L. & SOC. PROBS. 1, 6 (1980) (asserting that the riots created widespread refusals to insure in urban areas); Alice R. Zimmerman, *What is Fair? An Examination of the Effects of the 'Fair Access to Insurance Requirements' Plan on the Availability and Affordability of Urban Property Insurance*, at 29 (2000) (Special Project Report published by the University of Texas at Austin, Lyndon B. Johnson School of Public Affairs) (noting that the main stated purpose of the federal UPPRA was to “bring stability back to the urban insurance market and reverse the cycle of decline in urban areas.”). Under FCIP, which was administered by FEMA through its Federal Insurance Administration, the federal government provided small amounts of robbery and/or burglary insurance (\$10,000 for individuals and \$15,000 for businesses) in high crime areas. Adrienne C. Locke, *Several Criteria Restrict Crime Coverage Eligibility*, BUSINESS INSURANCE, Sept. 25, 1989, at 35. Premiums were collected to fund the claims, although there was some element of government subsidy as well. Premiums were based on a rough degree of risk assessment and on a showing of lack of affordable private insurance for the risk. *Id.* Thus, the FCIP was a form of direct government insurance for inner-city crime losses. UPPRA was different; it was a program, not wholly unlike the Terrorism Risk Reinsurance Act, under which the federal government agreed to provide subsidized riot reinsurance to private insurers who participated in what are called Fair Access to Insurance (or FAIR) programs run by the states, under which all insurers operating in the states must participate in providing insurance to the residual—riskiest -- market. Ultimately, both the FCIP and UPPRA were eliminated. The former was abolished in 1996. *See FEMA Website*, <http://www.fema.gov/ig/h-09-95.shtm>, (last viewed on April 17, 2003). And the latter was terminated in 1983, 12 USCA §1749bbb(b) (West. Supp. 1984 and West. Supp. 1990), although a number of states continue to operate FAIR plans. As far as we are aware, there is no definitive study on what caused the failures of these federal efforts at subsidizing crime coverage. There is some evidence, however, that one of the problems was lack of adequate marketing. Carla Rivera, *Few In Riot Area Used Federal Crime Insurance*, L.A. TIMES, July 14, 1992, at A1 (asserting that evidence in California also suggests “that residents of riot-scarred communities who might have benefited from the insurance did not know of its availability.”). Another perceived problem was the feeling that the program was essentially a subsidy for New York City, where roughly half of the nationwide FCIP policies were written by 1992. Kevin McKenzie, *Insurance; Government-Backed Protection From Crime Cancelled in Tennessee*, THE COMMERCIAL APPEAL (MEMPHIS), August 23, 1992, at C1. In part due to this perceived unfairness, many states began to opt out of the program throughout the 1980s. *Consumer Credit and Insurance Property, Insurance In Low Income Areas: Hearing Before the Subcomm. On Consumer Credit and Insurance of the Committee on Banking, Finance and Urban Affairs of the House of Representatives*, 101st Congress, May 19, 1994 (statement of Elaine A. McReynolds, member, Federal Emergency Management Agency). With respect to this last problem, one obvious solution would be to make the program compulsory, so that opt-outs of this sort would not occur.

than that for terror relief. Terror can be seen as a subset of crime, so that the argument can also be seen as one which takes the continuing experience with the 9/11 Fund's post-terror relief as an opportunity to think about crime relief more generally. The arguments are simple and build in straightforward fashion on the discussion up to this point.

The best case for government-subsidized or government-provided crime insurance (that is, for crime-caused losses of both life and property) is one that combines a dose of awareness about potential underinsurance problems with internalization and critical mass considerations. The argument gains force if we think that redistribution in favor of less affluent citizens is a good thing; however, we try to set aside this consideration, if only because even those who favor wealth redistribution through law might see that it is generally more efficient to accomplish this goal through unconstrained lump sum transfers rather than through ongoing regulatory or welfare systems.⁸¹ There are, as we will see, surprisingly sound arguments for government-sponsored crime insurance or some comparable compensation or liability regime.⁸²

But then there are counterarguments as well. The most significant of these builds on the concern that subsidized crime insurance or crime relief would create enormous incentives to commit or tolerate crime. It is nothing more than the obvious moral hazard problem that associates payments for death or injury with the danger that we will get more deaths and injuries. Another, perhaps less dramatic, concern is that a legal system that provided government-sponsored crime insurance but *not* government-sponsored terrorism insurance would generate what we might call sorting costs, because of the need to decide whether given crimes were or were not undertaken by terrorists. These concerns are real but not insurmountable. Before turning to these problems, however, it is useful to consider the character of the existing market for crime insurance.

A. *The Crime Insurance Market*

Losses from crime include life and property, and we consider both here if only to parallel our discussion of terrorism coverage. And we are not claiming, as some have done in the terrorism context, that there should generally be government involvement in compensating crime losses due to an uninsurability problem. To the contrary, crime-

⁸¹ For a reconsideration of this question, see Kyle Logue & Ronen Avraham, *Redistributing Optimally: Of Tax Rules, Legal Rules, and Insurance*, Tax L. Rev. (forthcoming)

⁸² The idea of government-sponsored crime insurance has received scant attention in the academic literature on crime. And no jurisdiction of which we are aware—in the U.S. or elsewhere—has adopted the sort of crime-compensation regime that we describe and defend in this Part. Some countries do have government-provided “crime compensation” programs, but those regimes provide minimal benefits above what those countries’ relatively generous social insurance programs already provide. *See, e.g.*, COMPENSATING CRIME VICTIMS: A EUROPEAN SURVEY (Desmond Greer, ed.) (1996) (summarizing crime compensation regimes in European countries). Some U.S. states also have minimal crime-compensation regimes. *See, e.g.*, the Massachusetts regime, described at http://www.ago.state.ma.us/victim_svc/index.asp?head1=Victim+Services§ion=8 (last visited April 17, 2003).

related losses to both life and property can be, and often are, covered under standard insurance policies. In the typical life insurance case, where family members are the beneficiaries of a policy that is written on the life of the primary earner in the family, the death benefit will be paid out whether the insured dies of natural causes or is murdered.⁸³ Life insurance policies generally do not contain murder or foul-play exclusions. Special murder policies—policies that pay out only for murder—are not generally used (and likely would be considered void as against public policy), both because it is thought that standard life insurance policies do the job well enough and because explicit murder policies might be considered too much of an invitation to moral hazard.

Many property insurance policies are equally broad.⁸⁴ Standard property policies tend to cover crime-related property losses, which means that such policies do not generally contain crime exclusions, although there are exceptions.⁸⁵ In addition there are special crime-loss policies; for example, property/casualty insurance companies offer business policies covering robbery and employee theft. Those policies may fill in gaps (perhaps left by the occasional crime-related exclusion) in standard property policies; or they may provide additional or overlapping coverage.

B. *The (Modest) Case for Government-Sponsored Crime Insurance*

1. The Underinsurance Argument

Given that there exists a market for insurance against many of the risks associated with crime, why would we need government involvement? The arguments contain elements of paternalism and market failure, and to some extent repeat those referred to in our earlier discussion of terrorism. One argument in favor of government-sponsored insurance is that additional coverage is desirable because individuals tend to purchase inadequate coverage for a variety of contingencies. This problem of myopia or a disinclination to dwell on unpleasant eventualities would seem to apply most clearly to life-insurance purchases,⁸⁶ but it is plausible for property insurance as well.⁸⁷ And it is an argument that extends rather easily to planning and insuring against crime.

⁸³ This assumes, of course, that the beneficiary is not the murderer, which would amount to a very egregious form of insurance fraud—as well as murder.

⁸⁴ Some property policies contain exclusions for thefts under certain conditions. For example, in an obvious effort to minimize moral hazard, some property policies limit theft coverage to situations in which there is visible evidence of forced entry. *See, e.g., Atwater Creamery Co. v. Western National Mutual Ins. Co.*, 366 N.W.2d 271 (Supreme Court of Minnesota 1985) (interpreting “forcible entry” clause in burglary policy).

⁸⁵ Some property policies contain exclusions for thefts under certain conditions. For example, in an obvious effort to minimize moral hazard, some property policies limit theft coverage to situations in which there is visible evidence of forced entry.

⁸⁶ *See Logue, Current Life Insurance Crisis, supra note __*, at 28 (analogizing problem of underinvestment in life insurance to well known problem of underinvestment in retirement savings).

⁸⁷ A mitigating factor in property insurance markets, however, is the involvement of commercial lenders, who tend to insist on a certain amount of property coverage before approving mortgage loans and who one would expect, because of competitive pressures, to suffer less from myopia and other cognitive biases.

Taken alone, however, the concern with under-investment in insurance would probably not be enough to justify government intervention in crime insurance markets, given the moral hazard concerns discussed below and given that there may be better ways of dealing with a general problem of underinvestment in property and life insurance—if such a problem does indeed exist.⁸⁸ However, there are reasons to suspect that the underinsurance problem is especially significant with respect to crime losses, and thus that a crime-compensation regime or crime-insurance subsidy might be more justified than a similar regime for, say, disaster losses.

Many victims of crime are underinsured. Inner city property owners, including businesses and homeowners, self-insure far more than their counterparts in affluent areas, because of availability problems.⁸⁹ In addition, inner-city property owners and the businesses they deal with often expect crime to lead to insolvency, so that insurance of a sort is accomplished through higher interest rates and less credit with respect to goods and services. And where life insurance is concerned, it is simply not possible for low earners to purchase significant insurance coverage, even though the value of their lives to their families can be substantial in economic terms. Thus, with respect to life insurance and in some cases homeowners' insurance, the underinsurance problem, certainly in inner cities, has a distributional inequity component.

In contrast, although there is no doubt that many of the victims of the 9/11 tragedy were underinsured, there is no reason to think that the bulk of them were *as* underinsured as most crime victims are, given the relative wealth. More interesting, when we turn to our third front (namely, natural disasters), those who receive flood and earthquake relief can be thought of as underinsured in anticipation of government relief. Underinsurance may even be a strategy for seeking relief, and perhaps therefore not an especially powerful normative justification for such relief. Victims of crime, by contrast, have no reason to expect relief because their losses are episodic and not normally of the sort to trigger large-scale relief or charitable efforts. The idea of payments to these underinsured persons thus seems more attractive than comparable payments to victims of floods and earthquakes. One can think of the payments as redistributive, to be sure, but one can also think of them as aiming to encourage economic activity and a residential presence in inner cities and other places where there is much crime and where a population revival

⁸⁸ If underinsurance is a general problem (such as underinvestment for retirement savings is thought to be a problem), then a more general solution would seem to be called for than one which focuses on crime-related risks.

⁸⁹ See, e.g., ROBERT KLEIN, AVAILABILITY AND AFFORDABILITY PROBLEMS IN URBAN HOMEOWNERS INSURANCE MARKETS, IN *INSURANCE REDLINING: DISINVESTMENT, REINVESTMENT, AND THE EVOLVING ROLE OF FINANCIAL INSTITUTIONS* ch. 3 (date) (Gregory D. Squires, Ed.); Gregory D. Squires, William Velez & Karl E. Tauber, *Insurance Redlining, Agency Location, and the Process of Urban Disinvestment*, 26 *URBAN AFFAIRS QUARTERLY* 567 (1991); and Alice R. Zimmerman, *What is Fair? An Examination of the Effects of the 'Fair Access to Insurance Requirements' Plan on the Availability and Affordability of Urban Property Insurance*, at 29 (2000) (Special Project Report published by the University of Texas at Austin, Lyndon B. Johnson School of Public Affairs).

would probably lead to less crime and to greater economic growth. We turn to this justification more fully in the next section.⁹⁰

2. The Internalization Argument

Internalization arguments build on the idea that a party will take the implications of what it does more seriously if it is made to pay for consequences. When firms or governments are made to pay, however, there is room to doubt the internalization logic because there are agency problems and other barriers between the expected payments and that which motivates the actors on the front line who act in the name of the firm or government. And yet there is no doubt that monetary burdens will eventually have an impact on governmental (and other enterprises') actions. If courts raise the compensation level required of governments that take private property for public use, we can, for example, observe these governments taking less property. When we say that liability may *not* be necessary to make government combat terrorism effectively it is not because governments do not care about making payments, but rather because it seems likely that the political repercussions following an incompetently managed war against terrorism are likely to motivate government officials at least as much as any monetary incentives.

In the case of crime fighting or prevention, the argument is that the same governments that might be dismissed by the electorate in the event of failed wars, unchecked epidemics, and other such things, might survive perfectly well even though a minority of the population continues to live in fear of crime and suffers greatly from it. In these circumstances, economic incentives aimed at the government or, in a subtler version of the argument, at interest groups in positions to influence the government, may play an important role. Specifically, a government that pays for crime, or for losses suffered where there are high crime rates, might do a superior job at fighting crime, or budgeting the resources necessary to do so.

This argument is premised on the assumptions that crime can be discouraged and that, while the government is the obvious party, or even the only party, to take both the costs and the benefits of crime prevention into account, it might not have the incentive to do so. In a simple sense, the argument is that the government could be encouraged with economic incentives to do that which is largely in its control. The argument is more compelling the more we think of the government as politically unresponsive to many of crime's victims. This would be most likely to be true of the vast number of *ordinary* crime victims, individuals and businesses whose cases, because they are so numerous, are not reported on in the media and do not thereby garner public sympathy. These victims

⁹⁰ We need not resort to an argument that there is underinsurance for noneconomic losses; the family of a victim may not be made whole by receiving money in return for life, but an important part of the plan, as discussed more fully below, is to give government a budgetary incentive to fight crime, so that the payments for noneconomic losses makes excellent sense.

may not be brought together as a political unit by a single, galvanizing event, as happens with terrorist attacks or disasters more generally, and thus may lack political power.

In sum, to the extent crime victims, or those who live in fear of becoming crime victims, are diffuse and poorly organized, and to the extent that a large part of the population need not share the fear that these victims bear, crime losses may be undervalued by local, state, and certainly federal government officials. Crime rates in some areas will then be higher than is optimal.⁹¹ With imperfect political checks, economic incentives are more valuable. At the very least, interest groups that make claims on the government's resources may take the task of crime fighting more seriously if their own projects are threatened by the payouts that the government would need to make in a world where crime insurance, like much of health care, were the government's concern.

Interest groups would also play an important role if the proposal were structured not as government-provided ex post compensation for crime losses, but as an ex ante subsidy for privately provided crime insurance. This approach, which is more market-based than the direct crime-insurance alternative, would enhance crime-cost internalization by creating a cohesive and potentially powerful interest group—the insurance industry—that would have an interest in crime prevention. Once a number of large property insurers have been induced, via the subsidy, to sell policies on buildings located in high crime areas, those insurers will have an enormous financial stake in seeing that property crime is reduced in that area. Thus, just as auto insurers compose a powerful political force in this country for increased auto-safety standards, so too the property and life insurance industry under this sort of regime would have an interest in encouraging lawmakers to adopt effective crime-reducing measures.⁹²

What would an ex ante crime-insurance subsidy look like? It could appear on the demand side or the supply side. The subsidy could take the form of a tax deduction or credit available to individuals who purchase property insurance on buildings located in high crime areas. Alternatively, the subsidy could be on the supply side, perhaps administered through some sort of government-provided reinsurance for crime-related losses. Such a proposal would be analogous to the Terrorism Risk Insurance Act program, except that the government reinsurance would be provided for acts of crime rather than for acts of terrorism. As with that program, adverse selection problems may give rise to the need for a rule compelling insurers to provide crime coverage (or not to exclude such coverage) in their general property policies. This would be similar to the prohibition on terrorism exclusions in the Act. In addition, the crime-insurance program might go so far as to compel property owners, or even owners in some areas, to purchase

⁹¹ This is a theoretical claim about the structure of incentives for crime prevention. The claim, if right, applies even though crime rates may have gone down in recent years. The point is that, under a crime-compensation regime, crime rates may have decreased even further.

⁹² We would predict that this phenomenon would already be taking place with respect to legislation designed to reduce auto theft, given that many auto insurance policies currently cover such losses.

crime coverage. As mentioned in the previous Part, however, there are practical and political limits to enforcing compulsory-insurance laws.⁹³

3. The Critical Mass Argument (Or the First-Mover Problem)

The critical mass argument applies primarily to property insurance and may provide the strongest basis for government involvement in crime insurance markets. The concern is that efficient economic development might be stifled where private actors wait for one another to move forward. In particular, a high crime area might require a first-mover, or a promise of development, to induce investors to come forward. The collective action problem among business owners, real estate developers, and property insurers is that, whereas business investment in high-crime areas may ultimately be profitable if enough businesses decide to locate there (or decide not to move away), there is relatively little incentive for any single business or insurer to take the first step. Indeed, the underinsurance problem within urban areas mentioned above, especially with respect to property coverage, may be in part attributable to this critical mass or first-mover problem. Therefore, government-subsidized or government-provided insurance in high-crime areas might serve to signal or guarantee that an investment in such an area is better than it seems to private investors who cannot yet observe the influx of other, like-minded investors. Moreover, if one is persuaded by the internalization argument, the announcement of such a government program should credibly signal a renewed commitment to crime prevention on the part of the government, and thus lower crime insurance premiums in the long run.

C. Objections to Government-Sponsored Crime Insurance

1. Sorting Costs

We argued in Part IV above that the case for government-sponsored terrorism insurance is rather weak, at least in the current state of the world. In this Part we have argued that the case for government-sponsored crime insurance is relatively strong. Thus, we might imagine a regime in which crime but not terrorism losses were compensated by the government—or by an insurer who in turn receives subsidies for the government. Under such a regime, then, there would be a need to sort crime losses from terrorism losses. An obvious objection to such an approach would be to raise the specter of sorting costs and to suggest that we can have either relief for terror and crime, or relief for neither, but not for just one of the two. The objection seeks to avoid the litigation and other transaction costs that will be associated with determining whether a death or property loss was caused by terrorist activity or by mere crime. This need to distinguish

⁹³ See *supra* note 48 (discussing difficulty National Flood Insurance Program has had in “compelling” purchase of flood coverage).

terrorism from other crimes arises, of course, in a system of relief or subsidized insurance that covers crime but excludes terrorism losses, just as it does in a scheme that covers terrorism but not other crimes.

It seems fair to assume that this sorting problem is a minor one, especially when evaluated on the scale of the potential costs and benefits from crime insurance. The sorting cost is likely to be modest because terrorists, in more cases than not, take credit for their deeds while most criminals seek to draw less attention to their identities. The 9/11 attacks are an important and perhaps overwhelming counterexample, but it is hardly unreasonable to say that terrorists take credit for their deeds far more often than do ordinary criminals.

It could be otherwise; terrorists might for example seek to advance their causes by over-claiming, taking credit for crimes, such as arsons and deaths, that were not of their doing. In such a case, the information received following a loss event would be virtually useless. The over-claiming phenomenon, which doubtless happens on occasion, would obviously work at cross-purposes with those terrorist organizations that *do* commit the terrorist acts and that wish to maintain the clarity and control of their messages. An obvious response to this over-claiming phenomenon on the part of such terrorists would be for the terrorists to identify themselves before an event rather than soon after, and this they sometimes do. This sort of signaling technique was common, for example, in the case of the Irish Republican Army, though it is either uncommon or unheard of in Israel's *intifada* and in other theaters. The media have regarded advance notice as a humanitarian gesture aimed at saving lives, but we now see that it is possible that it is a strategy for taking credit where it is due.⁹⁴ Another way of ensuring proper credit, of course, would be to disclose details of the attack that have not been made public, and that only the perpetrators would know.

There is no need to dwell on this issue. We are not arguing that there will be no sorting costs. Our point is that those costs should be relatively low and should not be different in kind or magnitude from the sorting costs that are associated with any type of insurance regime. Private insurance contracts, for example, generate huge sorting costs, as policyholders and insurers spend enormous sums litigating the question whether a particular loss is covered or excluded under the policy in question. One strategy from the insurance context for dealing with these costs is to use the burden of proof as part of the sorting process. Hence, in most insurance coverage cases, the burden of proof lies, in the first instance, with the policyholder to demonstrate that a claim is covered under the policy—that the individual is the named insured, that an insured event has occurred, and

⁹⁴ It is also unclear how the prospect of victim compensation or relief affects the motives of terrorists, either in the choice of their targets or their decisions to claim credit or not. Under a regime of compensation for terrorism but not for crime, whether terrorists would want to claim credit would depend on (in addition to their concerns about detection and the like) whether their aim was to inflict uncompensated or under-compensated losses (which might suggest declining to take credit) or to deplete the national treasury (which might suggest over-claiming credit for acts of crime in general). In any event, these sorts of concerns seem quite small when compared with the other sorts of calculations that will come into play.

the like. Once this showing has been made, the burden switches to the insurer to prove the existence of a particular exclusion that obviates coverage.⁹⁵ Thus, under a terrorism compensation regime, insureds or claimants for relief might be given the burden of proving that a loss was caused by terrorists, or under a crime compensation regime that it was not caused by terrorists. It is noteworthy that Israel, which again offers modest relief for victims of terror but hardly for victims of all crimes, has had little difficulty with sorting. In one exceptional Israeli case, the murder of an Israeli by a Palestinian who had been the victim's lover raised the crime-versus-terror question because the claimants argued that animus against Israelis contributed to the perpetrator's motivation.⁹⁶ Such a case seems unusual rather than a harbinger of incessant litigation.

A much more serious sorting problem is between crimes and accidents rather than between (mere) crimes and terrorism. Any system of crime insurance (or other payments) must deal with cases where there is arguably criminal wrongdoing but also a massive tort. Generally speaking, we think that the higher standard for a criminal conviction will serve to police this line. In any event, we might think of the crime insurance plan as beginning with very specific crimes rather than all crimes. Murder and armed robbery might be crimes with which to begin. There is probably little reason to fear that governments will quickly lower these crime rates and allow other uninsured crimes to mushroom. Moreover, all these insurance schemes work best when the government pays for losses after a certain threshold, so that it is high crime rates, rather than all crime, that trigger payments.

2. The Moral Hazard Problem

The strongest argument against government-sponsored crime insurance will already have occurred to most readers. There is a formidable potential for moral hazard associated with compensation for crime-related losses. On the life insurance side, compensation at the high levels provided, say, by the 9/11 Fund could certainly cause an increase in the murder rate. No life insurance company would agree to a million dollars of term or whole life insurance on every citizen of a city at prevailing rates, because the provision of such coverage (even at rates that were initially set by the prevailing market) might well lead to murders or to negligence on the part of likely beneficiaries, and the life insurance market would soon spiral out of control. Companies do agree to sell life insurance to groups, but the amounts are modest in comparison to the known earnings of the members of the group. These insureds are then worth more alive than dead to their beneficiaries. But it would be startling to see substantial amounts of group life insurance offered to a set of unemployed persons. Without the ability to reduce coverage amounts

⁹⁵ 9 Couch on Insurance § 137:5 (3rd ed. 2003).

⁹⁶ *Coca v. the Approving Authority, V.A. (T.A.) 4076/98 Coca v. The Approving Authority Dinim / Dis.Ct. 32(10) (2001).*

or to screen applicants, or even beneficiaries, insurance costs would rise, squeezing out good-faith purchasers. Put differently, insurance companies cannot easily gather information about disaffected relatives or disgruntled business partners, and so they will decline to enter into a contract that make a beneficiary prefer the insured to be dead rather than alive. The moral hazard issue is, if anything, of yet greater concern to the government when it is the insurer, because it cares (or ought to care) about the lives of its citizenry more than any for-profit insurer. For-profit life insurers will seek to prevent murders because murder prevention increases profits; in contrast, the government as life insurer is or ought to be concerned about murder rates for intrinsic as well as for revenue reasons. The moral hazard problem extends to coverage for property crimes (or insurance); full compensation would surely generate an increase in such things as the number of reported thefts, arson, and vandalism episodes.

How might a government-sponsored regime of crime insurance/relief respond to these serious concerns? This question can be considered in connection with direct government relief for crime-related losses or with the crime-insurance subsidy alternative. In both cases, the private insurance market can be instructive.

First, at a minimum, we must imagine that crime relief would provide modest benefits, or amounts that could be shown to represent no more than true economic losses. Much as a jewelry store owner who carries theft insurance collects insurance limited to the actual cost of stolen goods (in order to avoid the moral hazard and then the self-destructive market that we can associate with payments that generate a profit in the event of an alleged theft), so too we must limit the insurance or relief for loss of life to modest amounts in an attempt to reduce temptations.⁹⁷ And yet the very reduction in temptation effected through such cautious coverage might as a political matter doom crime relief from the start. If the families of wealthy or high-earning crime victims can receive larger amounts of relief, while the families of poor victims receive skeleton amounts adjusted to reflect anticipated lost earnings, there is the problem of the government investing more resources in crime fighting in affluent areas than in poor ones. Governments may already allocate resources and political chips in this manner, but the idea of making it more obvious, and even encouraging more protection for lucky lives than for destitute ones, is unimaginable at the political level. It might be attractive if particular classes of victims did not collect, as in the case of a criminal who is murdered by another criminal (and we might also fear making criminal activity more attractive), but it is important as a political matter for the average citizen or store clerk in a high crime area to be the focus of a crime insurance plan rather than a low-end beneficiary. It will be politically unacceptable to find governments balancing their budgets in difficult periods by moving police cars from higher crime poorer neighborhoods to lower-crime affluent ones (in order to economize

⁹⁷ There are other numerous analogies from private insurance markets that would be relevant here. For example, most auto collision policies require repairs actually to be made, that is, they will cut checks only to the party doing the repair—and in some cases only to the repair person picked by the insurer.

on relief costs). Any such relief system would reinforce the politically unattractive idea that the government should internalize earnings power, valuing well-dressed citizens more than struggling ones, so to speak.

Income disparities do appear to be politically acceptable in the operation of the 9/11 Fund both because the recoveries were structured to take the place (at least in theory) of tort recoveries,⁹⁸ which could themselves be income based and which would no doubt have been sought at a greater rate if the Fund offered very modest payment to high earners' families, and because the moral hazard problem was nonexistent inasmuch as 9/11 was an unplanned horror. Murders and traffic accidents may be within the control of victims and their families, and especially so because many are known to go unsolved, but the bombing of lower Manhattan was hardly in the control of the victims. It is of course possible to imagine a future tragedy in which a calculating and very troubled rescue worker dashed into a building with knowledge that, if death strikes, his surviving family will be wealthy. But none of this can be the case with respect to 9/11 itself, for which there was no close precedent.⁹⁹

One method of escaping this set of moral-hazard problems associated with crime relief is to make the required payments more substantial, but then have the payments go not to the victims' families but rather to some third party that is not in a position to exacerbate the hazard. Thus, if the government paid half a million dollars following each murder (or each unsolved murder or each murder above some modest base rate) and transferred this amount to a group of local charities (and perhaps even to a group whose members were not identified precisely at the start of each year), it is unlikely that the crime relief payments would give anyone an economic incentive to commit a crime. A major problem with this plan, however, is that it reduces the idea of crime relief to an academic exercise, since it is difficult to imagine politicians agreeing to a system in which tax revenues must be raised, disbursements undertaken in a manner that advertises the government's own failures with respect to crime, and then the funds go not to voters or victims but rather to parties that are situated outside the political process. Indeed, the funds go to organizations that can be seen as competing with the government. But the basic point is to encourage crime prevention and economic development in high-crime areas by using economic incentives, and yet at the same time to combat moral hazard by directing these payouts to parties that are not in the position to increase the crime rate.

⁹⁸ A quick way to test this feature is to ask whether we expect charitable payments to victims' families to rise with (lost) earnings. We plainly do not, and indeed we might in some contexts expect an income cap for recipients, and this suggests that the lost earnings feature of the Fund's payouts are best understood not as compensatory in the redistributive sense but as compensatory in the sense of making up for missing or strongly discouraged tort recoveries.

⁹⁹ It is also noteworthy that the reduction in 9/11 Fund payouts for life insurance and pension benefits (payable on death) flattens the payouts from the Fund. It is as if high-income families are favored by the formula calling for payments to be a function of lost earnings but, in return, high-income families do worse, both in relative and absolute terms, because insurance recoveries reduce what one receives from the fund, and high earners are extremely likely to have more of this insurance, or collateral source, than low earners.

A palatable alternative may be to combine the two schemes just described. We might seek to influence crime fighting and responsiveness to the citizenry by requiring the larger payments from the government, and we might make these payments uniform, regardless of the earnings of the victim, in order to make the scheme politically and morally acceptable. But then the victims and an outside set of charities might have claims on the payments only as required to avoid moral hazard. The payments could go to a "Crime Fund," and the Fund's manager be instructed to pay victims or their families only so much as necessary to replace provable lost earnings, with a cap of perhaps half a million dollars. The Fund would develop a balance as many beneficiaries would receive less than that amount, and then the Fund's surplus could be distributed to the specified (or, to fight moral hazard yet more, the unspecified) charities on a periodic basis.

The only reason we have not been insisting on per-life payments of the magnitude used in risk management calculations, ranging from perhaps \$1 million to \$5 million, is that moral hazard dangers are present, and political pressures will likely prevent payments to wealthy families that are dramatically greater than those made to poor ones. Moreover, it is not entirely clear that the nonprofit sector (or other recipients of the surplus insurance payouts described above) could absorb large amounts of funding without producing their own inefficiencies. Ideally, the surplus payments would go to other crime fighting causes, but that method of allocation is a topic left for another day.

3. Other Objections

There are, to be sure, other serious objections to a scheme in which the government pays when the crime rate is high. We intend only to introduce an idea here, and to contrast crime insurance (or other payment forms) rather favorably with terrorism insurance. But there is, for example, the danger that a government which is threatened with liability for high crime rates will simply redefine crimes, or so underenforce as to make crime rates look lower simply because victims do not bother to report the crimes in question. At least insofar as crimefighting is concerned, the sort of scheme described here must be put into force by a government (though perhaps one which seeks to monitor a subordinate government unit) rather than brought about through liability that is imposed by courts. Thus, it is plain that if a state means to control a municipality in this way, it cannot allow the municipality to define the crimes in question. We imagine a state-sponsored scheme in which local governments must insure or otherwise pay when they exceed rates set and defined by the state. The state would need to take steps to make sure that citizens could report serious crimes even where the local government preferred to ignore or deny the crime. Alternatively, we can imagine innovative politicians putting such a scheme in effect in order to bind themselves and those who follow them in office.

There is also a danger that crime payments of the sort sketched here would perversely cause an increase in crime. This might occur if government payments drew away funds from the very tools that governments use to fight or prevent crime. Perverse effects are of course possible, but we have some faith that a well drafted and flexible scheme could avoid such unusual effects. Perverse effects of this kind are rare. A government that must pay for military aircraft probably enjoys more aircraft than a government which sought to take aircraft without payment; payments are readily associated with better and fairer decisionmaking, and much less readily with less overall safety—except that a government might contract out crimefighting to another government or to a private entity, but again with no obvious decrease in public safety.

VI. Conclusion

We have encouraged the idea of, or at least a comparison to, and a thought experiment about, government-sponsored crime insurance in the wake of terrorism reinsurance. But our aim has not been to insist that we must try such a scheme, be it local or national in design. Nor has it been to weigh in on the question of federal terrorism coverage. Instead, we have simply suggested that the case for crime coverage is superior to that for terrorism insurance. This is because financial responsibility might well make the government a better crime-fighter; the underinsurance problem is surely greater for crime in impoverished communities than it is for terrorism anywhere; and the likelihood that crime insurance will generate economic externalities is substantial.

At the same time, the political emergence of terrorism coverage but not crime coverage is unsurprising. Our analysis began with the observation that after-the-fact episodic relief often pours forth after catastrophic events, so that disaster insurance can be understood as a way of providing certainty and encouraging modest insurance requirements at low cost. The idea is that since relief payments will be made one way or another, they may as well be marshaled in a way that provides some salutary effects in advance of disaster. In contrast, very few crimes elicit sympathetic, public relief of significant magnitude, if only because few persons or properties suffer in any one event, so that media coverage and political interest are limited. However formidable the normative argument for crime insurance, it is terrorism coverage that we ought first to expect.

We would like to see some experimentation with crime insurance. The moral hazard problem associated with crime insurance could be solved, as suggested, by making partial payments not to victims but to outside parties such as charities. This idea of crime insurance with payments to beneficiaries who are in no position to increase crime rates is a novel one, but real experience with such a scheme is needed in order to judge the success of this solution. We are satisfied that governments fight terrorism with full force even when there is no threat of liability, but real experience for an extended

period of time is needed to assess the claim that financial responsibility will make governments take superior precautions against more mundane crimes. It is thus possible that a useful byproduct of the contemporary inclination to provide insurance against terrorism will in a roundabout way introduce the idea of insuring against crime.

Readers with comments should address them to:

Saul Levmore
University of Chicago Law School
1111 East 60th Street
Chicago, IL 60637
s-levmore@uchicago.edu

Chicago Working Papers in Law and Economics
(Second Series)

1. William M. Landes, Copyright Protection of Letters, Diaries and Other Unpublished Works: An Economic Approach (July 1991)
2. Richard A. Epstein, The Path to *The T. J. Hooper*: The Theory and History of Custom in the Law of Tort (August 1991)
3. Cass R. Sunstein, On Property and Constitutionalism (September 1991)
4. Richard A. Posner, Blackmail, Privacy, and Freedom of Contract (February 1992)
5. Randal C. Picker, Security Interests, Misbehavior, and Common Pools (February 1992)
6. Tomas J. Philipson & Richard A. Posner, Optimal Regulation of AIDS (April 1992)
7. Douglas G. Baird, Revisiting Auctions in Chapter 11 (April 1992)
8. William M. Landes, Sequential versus Unitary Trials: An Economic Analysis (July 1992)
9. William M. Landes & Richard A. Posner, The Influence of Economics on Law: A Quantitative Study (August 1992)
10. Alan O. Sykes, The Welfare Economics of Immigration Law: A Theoretical Survey With An Analysis of U.S. Policy (September 1992)
11. Douglas G. Baird, 1992 Katz Lecture: Reconstructing Contracts (November 1992)
12. Gary S. Becker, The Economic Way of Looking at Life (January 1993)
13. J. Mark Ramseyer, Credibly Committing to Efficiency Wages: Cotton Spinning Cartels in Imperial Japan (March 1993)
14. Cass R. Sunstein, Endogenous Preferences, Environmental Law (April 1993)
15. Richard A. Posner, What Do Judges and Justices Maximize? (The Same Thing Everyone Else Does) (April 1993)
16. Lucian Arye Bebchuk and Randal C. Picker, Bankruptcy Rules, Managerial Entrenchment, and Firm-Specific Human Capital (August 1993)
17. J. Mark Ramseyer, Explicit Reasons for Implicit Contracts: The Legal Logic to the Japanese Main Bank System (August 1993)
18. William M. Landes and Richard A. Posner, The Economics of Anticipatory Adjudication (September 1993)
19. Kenneth W. Dam, The Economic Underpinnings of Patent Law (September 1993)
20. Alan O. Sykes, An Introduction to Regression Analysis (October 1993)
21. Richard A. Epstein, The Ubiquity of the Benefit Principle (March 1994)
22. Randal C. Picker, An Introduction to Game Theory and the Law (June 1994)
23. William M. Landes, Counterclaims: An Economic Analysis (June 1994)
24. J. Mark Ramseyer, The Market for Children: Evidence from Early Modern Japan (August 1994)
25. Robert H. Gertner and Geoffrey P. Miller, Settlement Escrows (August 1994)
26. Kenneth W. Dam, Some Economic Considerations in the Intellectual Property Protection of Software (August 1994)
27. Cass R. Sunstein, Rules and Rulelessness, (October 1994)

28. David Friedman, More Justice for Less Money: A Step Beyond *Cimino* (December 1994)
29. Daniel Shaviro, Budget Deficits and the Intergenerational Distribution of Lifetime Consumption (January 1995)
30. Douglas G. Baird, The Law and Economics of Contract Damages (February 1995)
31. Daniel Kessler, Thomas Meites, and Geoffrey P. Miller, Explaining Deviations from the Fifty Percent Rule: A Multimodal Approach to the Selection of Cases for Litigation (March 1995)
32. Geoffrey P. Miller, Das Kapital: Solvency Regulation of the American Business Enterprise (April 1995)
33. Richard Craswell, Freedom of Contract (August 1995)
34. J. Mark Ramseyer, Public Choice (November 1995)
35. Kenneth W. Dam, Intellectual Property in an Age of Software and Biotechnology (November 1995)
36. Cass R. Sunstein, Social Norms and Social Roles (January 1996)
37. J. Mark Ramseyer and Eric B. Rasmusen, Judicial Independence in Civil Law Regimes: Econometrics from Japan (January 1996)
38. Richard A. Epstein, Transaction Costs and Property Rights: Or Do Good Fences Make Good Neighbors? (March 1996)
39. Cass R. Sunstein, The Cost-Benefit State (May 1996)
40. William M. Landes and Richard A. Posner, The Economics of Legal Disputes Over the Ownership of Works of Art and Other Collectibles (July 1996)
41. John R. Lott, Jr. and David B. Mustard, Crime, Deterrence, and Right-to-Carry Concealed Handguns (August 1996)
42. Cass R. Sunstein, Health-Health Tradeoffs (September 1996)
43. G. Baird, The Hidden Virtues of Chapter 11: An Overview of the Law and Economics of Financially Distressed Firms (March 1997)
44. Richard A. Posner, Community, Wealth, and Equality (March 1997)
45. William M. Landes, The Art of Law and Economics: An Autobiographical Essay (March 1997)
46. Cass R. Sunstein, Behavioral Analysis of Law (April 1997)
47. John R. Lott, Jr. and Kermit Daniel, Term Limits and Electoral Competitiveness: Evidence from California's State Legislative Races (May 1997)
48. Randal C. Picker, Simple Games in a Complex World: A Generative Approach to the Adoption of Norms (June 1997)
49. Richard A. Epstein, Contracts Small and Contracts Large: Contract Law through the Lens of Laissez-Faire (August 1997)
50. Cass R. Sunstein, Daniel Kahneman, and David Schkade, Assessing Punitive Damages (with Notes on Cognition and Valuation in Law) (December 1997)
51. William M. Landes, Lawrence Lessig, and Michael E. Solimine, Judicial Influence: A Citation Analysis of Federal Courts of Appeals Judges (January 1998)
52. John R. Lott, Jr., A Simple Explanation for Why Campaign Expenditures are Increasing: The Government is Getting Bigger (February 1998)

53. Richard A. Posner, *Values and Consequences: An Introduction to Economic Analysis of Law* (March 1998)
54. Denise DiPasquale and Edward L. Glaeser, *Incentives and Social Capital: Are Homeowners Better Citizens?* (April 1998)
55. Christine Jolls, Cass R. Sunstein, and Richard Thaler, *A Behavioral Approach to Law and Economics* (May 1998)
56. John R. Lott, Jr., *Does a Helping Hand Put Others At Risk?: Affirmative Action, Police Departments, and Crime* (May 1998)
57. Cass R. Sunstein and Edna Ullmann-Margalit, *Second-Order Decisions* (June 1998)
58. Jonathan M. Karpoff and John R. Lott, Jr., *Punitive Damages: Their Determinants, Effects on Firm Value, and the Impact of Supreme Court and Congressional Attempts to Limit Awards* (July 1998)
59. Kenneth W. Dam, *Self-Help in the Digital Jungle* (August 1998)
60. John R. Lott, Jr., *How Dramatically Did Women's Suffrage Change the Size and Scope of Government?* (September 1998)
61. Kevin A. Kordana and Eric A. Posner, *A Positive Theory of Chapter 11* (October 1998)
62. David A. Weisbach, *Line Drawing, Doctrine, and Efficiency in the Tax Law* (November 1998)
63. Jack L. Goldsmith and Eric A. Posner, *A Theory of Customary International Law* (November 1998)
64. John R. Lott, Jr., *Public Schooling, Indoctrination, and Totalitarianism* (December 1998)
65. Cass R. Sunstein, *Private Broadcasters and the Public Interest: Notes Toward A "Third Way"* (January 1999)
66. Richard A. Posner, *An Economic Approach to the Law of Evidence* (February 1999)
67. Yannis Bakos, Erik Brynjolfsson, Douglas Lichtman, *Shared Information Goods* (February 1999)
68. Kenneth W. Dam, *Intellectual Property and the Academic Enterprise* (February 1999)
69. Gertrud M. Fremling and Richard A. Posner, *Status Signaling and the Law, with Particular Application to Sexual Harassment* (March 1999)
70. Cass R. Sunstein, *Must Formalism Be Defended Empirically?* (March 1999)
71. Jonathan M. Karpoff, John R. Lott, Jr., and Graeme Rankine, *Environmental Violations, Legal Penalties, and Reputation Costs* (March 1999)
72. Matthew D. Adler and Eric A. Posner, *Rethinking Cost-Benefit Analysis* (April 1999)
73. John R. Lott, Jr. and William M. Landes, *Multiple Victim Public Shooting, Bombings, and Right-to-Carry Concealed Handgun Laws: Contrasting Private and Public Law Enforcement* (April 1999)
74. Lisa Bernstein, *The Questionable Empirical Basis of Article 2's Incorporation Strategy: A Preliminary Study* (May 1999)

75. Richard A. Epstein, Deconstructing Privacy: and Putting It Back Together Again (May 1999)
76. William M. Landes, Winning the Art Lottery: The Economic Returns to the Ganz Collection (May 1999)
77. Cass R. Sunstein, David Schkade, and Daniel Kahneman, Do People Want Optimal Deterrence? (June 1999)
78. Tomas J. Philipson and Richard A. Posner, The Long-Run Growth in Obesity as a Function of Technological Change (June 1999)
79. David A. Weisbach, Ironing Out the Flat Tax (August 1999)
80. Eric A. Posner, A Theory of Contract Law under Conditions of Radical Judicial Error (August 1999)
81. David Schkade, Cass R. Sunstein, and Daniel Kahneman, Are Juries Less Erratic than Individuals? Deliberation, Polarization, and Punitive Damages (September 1999)
82. Cass R. Sunstein, Nondelegation Canons (September 1999)
83. Richard A. Posner, The Theory and Practice of Citations Analysis, with Special Reference to Law and Economics (September 1999)
84. Randal C. Picker, Regulating Network Industries: A Look at *Intel* (October 1999)
85. Cass R. Sunstein, Cognition and Cost-Benefit Analysis (October 1999)
86. Douglas G. Baird and Edward R. Morrison, Optimal Timing and Legal Decisionmaking: The Case of the Liquidation Decision in Bankruptcy (October 1999)
87. Gertrud M. Fremling and Richard A. Posner, Market Signaling of Personal Characteristics (November 1999)
88. Matthew D. Adler and Eric A. Posner, Implementing Cost-Benefit Analysis When Preferences Are Distorted (November 1999)
89. Richard A. Posner, Orwell versus Huxley: Economics, Technology, Privacy, and Satire (November 1999)
90. David A. Weisbach, Should the Tax Law Require Current Accrual of Interest on Derivative Financial Instruments? (December 1999)
91. Cass R. Sunstein, The Law of Group Polarization (December 1999)
92. Eric A. Posner, Agency Models in Law and Economics (January 2000)
93. Karen Eggleston, Eric A. Posner, and Richard Zeckhauser, Simplicity and Complexity in Contracts (January 2000)
94. Douglas G. Baird and Robert K. Rasmussen, Boyd's Legacy and Blackstone's Ghost (February 2000)
95. David Schkade, Cass R. Sunstein, Daniel Kahneman, Deliberating about Dollars: The Severity Shift (February 2000)
96. Richard A. Posner and Eric B. Rasmusen, Creating and Enforcing Norms, with Special Reference to Sanctions (March 2000)
97. Douglas Lichtman, Property Rights in Emerging Platform Technologies (April 2000)

98. Cass R. Sunstein and Edna Ullmann-Margalit, *Solidarity in Consumption* (May 2000)
99. David A. Weisbach, *An Economic Analysis of Anti-Tax Avoidance Laws* (May 2000, revised May 2002)
100. Cass R. Sunstein, *Human Behavior and the Law of Work* (June 2000)
101. William M. Landes and Richard A. Posner, *Harmless Error* (June 2000)
102. Robert H. Frank and Cass R. Sunstein, *Cost-Benefit Analysis and Relative Position* (August 2000)
103. Eric A. Posner, *Law and the Emotions* (September 2000)
104. Cass R. Sunstein, *Cost-Benefit Default Principles* (October 2000)
105. Jack Goldsmith and Alan Sykes, *The Dormant Commerce Clause and the Internet* (November 2000)
106. Richard A. Posner, *Antitrust in the New Economy* (November 2000)
107. Douglas Lichtman, Scott Baker, and Kate Kraus, *Strategic Disclosure in the Patent System* (November 2000)
108. Jack L. Goldsmith and Eric A. Posner, *Moral and Legal Rhetoric in International Relations: A Rational Choice Perspective* (November 2000)
109. William Meadow and Cass R. Sunstein, *Statistics, Not Experts* (December 2000)
110. Saul Levmore, *Conjunction and Aggregation* (December 2000)
111. Saul Levmore, *Puzzling Stock Options and Compensation Norms* (December 2000)
112. Richard A. Epstein and Alan O. Sykes, *The Assault on Managed Care: Vicarious Liability, Class Actions and the Patient's Bill of Rights* (December 2000)
113. William M. Landes, *Copyright, Borrowed Images and Appropriation Art: An Economic Approach* (December 2000)
114. Cass R. Sunstein, *Switching the Default Rule* (January 2001)
115. George G. Triantis, *Financial Contract Design in the World of Venture Capital* (January 2001)
116. Jack Goldsmith, *Statutory Foreign Affairs Preemption* (February 2001)
117. Richard Hynes and Eric A. Posner, *The Law and Economics of Consumer Finance* (February 2001)
118. Cass R. Sunstein, *Academic Fads and Fashions (with Special Reference to Law)* (March 2001)
119. Eric A. Posner, *Controlling Agencies with Cost-Benefit Analysis: A Positive Political Theory Perspective* (April 2001)
120. Douglas G. Baird, *Does Bogart Still Get Scale? Rights of Publicity in the Digital Age* (April 2001)
121. Douglas G. Baird and Robert K. Rasmussen, *Control Rights, Priority Rights and the Conceptual Foundations of Corporate Reorganization* (April 2001)
122. David A. Weisbach, *Ten Truths about Tax Shelters* (May 2001)
123. William M. Landes, *What Has the Visual Arts Rights Act of 1990 Accomplished?* (May 2001)
124. Cass R. Sunstein, *Social and Economic Rights? Lessons from South Africa* (May 2001)

125. Christopher Avery, Christine Jolls, Richard A. Posner, and Alvin E. Roth, The Market for Federal Judicial Law Clerks (June 2001)
126. Douglas G. Baird and Edward R. Morrison, Bankruptcy Decision Making (June 2001)
127. Cass R. Sunstein, Regulating Risks after ATA (June 2001)
128. Cass R. Sunstein, The Laws of Fear (June 2001)
129. Richard A. Epstein, In and Out of Public Solution: The Hidden Perils of Property Transfer (July 2001)
130. Randal C. Picker, Pursuing a Remedy in *Microsoft*: The Declining Need for Centralized Coordination in a Networked World (July 2001)
131. Cass R. Sunstein, Daniel Kahneman, David Schkade, and Ilana Ritov, Predictably Incoherent Judgments (July 2001)
132. Eric A. Posner, Courts Should Not Enforce Government Contracts (August 2001)
133. Lisa Bernstein, Private Commercial Law in the Cotton Industry: Creating Cooperation through Rules, Norms, and Institutions (August 2001)
134. Richard A. Epstein, The Allocation of the Commons: Parking and Stopping on the Commons (August 2001)
135. Cass R. Sunstein, The Arithmetic of Arsenic (September 2001)
136. Eric A. Posner, Richard Hynes, and Anup Malani, The Political Economy of Property Exemption Laws (September 2001)
137. Eric A. Posner and George G. Triantis, Covenants Not to Compete from an Incomplete Contracts Perspective (September 2001)
138. Cass R. Sunstein, Probability Neglect: Emptions, Worst Cases, and Law (November 2001)
139. Randall S. Kroszner and Philip E. Strahan, Throwing Good Money after Bad? Board Connections and Conflicts in Bank Lending (December 2001)
140. Alan O. Sykes, TRIPs, Pharmaceuticals, Developing Countries, and the Doha "Solution" (February 2002)
141. Edna Ullmann-Margalit and Cass R. Sunstein, Inequality and Indignation (February 2002)
142. Daniel N. Shaviro and David A. Weisbach, The Fifth Circuit Gets It Wrong in *Compaq v. Commissioner* (February 2002) (Published in *Tax Notes*, January 28, 2002)
143. Warren F. Schwartz and Alan O. Sykes, The Economic Structure of Renegotiation and Dispute Resolution in the WTO/GATT System (March 2002, *Journal of Legal Studies* 2002)
144. Richard A. Epstein, HIPAA on Privacy: Its Unintended and Intended Consequences (March 2002, forthcoming *Cato Journal*, summer 2002)
145. David A. Weisbach, Thinking Outside the Little Boxes (March 2002, *Texas Law Review*)
146. Eric A. Posner, Economic Analysis of Contract Law after Three Decades: Success or Failure (March 2002)
147. Randal C. Picker, Copyright as Entry Policy: The Case of Digital Distribution (April 2002, *The Antitrust Bulletin*)

148. David A. Weisbach, Taxes and Torts in the Redistribution of Income (April 2002, Coase Lecture February 2002)
149. Cass R. Sunstein, Beyond the Precautionary Principle (April 2002)
150. Robert W. Hahn and Cass R. Sunstein, A New Executive Order for Improving Federal Regulation? Deeper and Wider Cost-Benefit Analysis (April 2002)
151. Douglas Lichtman, Copyright as a Rule of Evidence (May 2002, updated January 2003)
152. Richard A. Epstein, Steady the Course: Property Rights in Genetic Material (May 2002)
153. Jack Goldsmith and Cass R. Sunstein, Military Tribunals and Legal Culture: What a Difference Sixty Years Makes (June 2002)
154. William M. Landes and Richard A. Posner, Indefinitely Renewable Copyright (July 2002)
155. Anne Gron and Alan O. Sykes, Terrorism and Insurance Markets: A Role for the Government as Insurer? (July 2002)
156. Cass R. Sunstein and Adrian Vermeule, Interpretation and Institutions (July 2002)
157. Cass R. Sunstein, The Rights of Animals: A Very Short Primer (August 2002)
158. Cass R. Sunstein, Avoiding Absurdity? A New Canon in Regulatory Law (with Notes on Interpretive Theory) (August 2002)
159. Randal C. Picker, From Edison to the Broadcast Flag: Mechanisms of Consent and Refusal and the Propertization of Copyright (September 2002)
160. Eric A. Posner, A Theory of the Laws of War (September 2002)
161. Eric A. Posner, Probability Errors: Some Positive and Normative Implications for Tort and Contract Law (September 2002)
162. Lior Jacob Strahilevitz, Charismatic Code, Social Norms, and the Emergence of Cooperation on the File-Swapping Networks (September 2002)
163. David A. Weisbach, Does the X-Tax Mark the Spot? (September 2002)
164. Cass R. Sunstein, Conformity and Dissent (September 2002)
165. Cass R. Sunstein, Hazardous Heuristics (October 2002)
166. Douglas Lichtman, Uncertainty and the Standard for Preliminary Relief (October 2002)
167. Edward T. Swaine, Rational Custom (November 2002)
168. Julie Roin, Truth in Government: Beyond the Tax Expenditure Budget (November 2002)
169. Avraham D. Tabbach, Criminal Behavior, Sanctions, and Income Taxation: An Economic Analysis (November 2002)
170. Richard A. Epstein, In Defense of "Old" Public Health: The Legal Framework for the Regulation of Public Health (December 2002)
171. Richard A. Epstein, Animals as Objects, or Subjects, of Rights (December 2002)
172. David A. Weisbach, Taxation and Risk-Taking with Multiple Tax Rates (December 2002)
173. Douglas G. Baird and Robert K. Rasmussen, The End of Bankruptcy (December 2002)

174. Richard A. Epstein, Into the Frying Pan: Standing and Privity under the Telecommunications Act of 1996 and Beyond (December 2002)
175. Douglas G. Baird, In Coase's Footsteps (January 2003)
176. David A. Weisbach, Measurement and Tax Depreciation Policy: The Case of Short-Term Assets (January 2003)
177. Randal C. Picker, Understanding Statutory Bundles: Does the Sherman Act Come with the 1996 Telecommunications Act? (January 2003)
178. Douglas Lichtman and Randal C. Picker, Entry Policy in Local Telecommunications: *Iowa Utilities* and *Verizon* (January 2003)
179. **William Landes and Douglas Lichtman, Indirect Liability for Copyright Infringement: An Economic Perspective (February 2003)**
180. Cass R. Sunstein, Moral Heuristics (March 2003)
181. Amitai Aviram, Regulation by Networks (March 2003)
182. Richard A. Epstein, Class Actions: Aggregation, Amplification *and* Distortion (April 2003)
183. Richard A. Epstein, The "Necessary" History of Property and Liberty (April 2003)
184. Eric A. Posner, Transfer Regulations and Cost-Effectiveness Analysis (April 2003)
185. Cass R. Sunstein and Richard H. Thaler, Libertarian Paternalism Is Not an Oxymoron (May 2003)
186. Alan O. Sykes, The Economics of WTO Rules on Subsidies and Countervailing Measures (May 2003)
187. Alan O. Sykes, The Safeguards Mess: A Critique of WTO Jurisprudence (May 2003)
188. Alan O. Sykes, International Trade and Human Rights: An Economic Perspective (May 2003)
189. Saul Levmore and Kyle Logue, Insuring against Terrorism – and Crime (June 2003)