# Local Public Finance in the Aftermath of September 11

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The terrorist attacks of September 11, 2001, present significant challenges for policymakers at all levels of government. Since terrorism seems to present particularly acute risks for core urban areas, it may influence economic and policy decisions in ways that affect the spatial distribution of population and economic activity. These impacts, however, will depend importantly on the assignment of responsibilities among federal, state, and local governments for dealing with terrorism and on the distribution of the costs of these responsibilities. The policy interactions among different levels of government, and between the private and the public sectors, should provide students of political economy with much insight into the nature of the policy process in the American federation. © 2002 Elsevier Science (USA)

# 1. INTRODUCTION

It is too early, by far, to arrive at a well-informed and balanced assessment of the economic and policy consequences of the terrorist attacks of September 11, 2001. These events do, however, have potentially far-reaching implications for urban areas in the United States and throughout the world and deserve the attention of economists interested in urban issues, local public finance, and related topics. The following remarks seek to outline some of the potential economic and policy effects and issues that arise in connection with these attacks.

To begin with, the possible effects of the attacks include both market and policy responses. What happens to the market for real estate in lower Manhattan, for example, is likely to depend importantly on the policies chosen by the city government of New York, the state government, and the Federal government. The city must divide its limited fiscal resources among many competing demands, including the restoration of transportation capacity, urban social services, and public safety. The state government of New York may or may not inject large amounts of fiscal resources into the city government or into the provision of public services for city residents. The Federal government may absorb little, much, or all of the cost of the demolition and rebuilding of damaged sites. The policy responses of the city and state governments are likely to depend on the behavior of the Federal government. In short, the terrorist attacks have triggered a complex process of simultaneous adjustment in markets and in the policies of several levels of government.



0094-1190/02 \$35.00 © 2002 Elsevier Science (USA) All rights reserved. The policy adjustments made by different levels of government can be examined from a positive or predictive viewpoint as well as from a normative perspective. As is often (perhaps always) the case, useful normative analysis must build at least partly on positive analysis. Whether and how the Federal government should subsidize and regulate households, firms, and lower-level governments depends on the ways in which these agents respond to policy choices. Much of the discussion below is therefore devoted to a consideration of the incentives facing market and public-sector decisionmakers in this environment.

One can hope that the terrorist attacks were a one-time aberration and that there will never again be individuals or groups that would wish to wreak such destruction on civilian targets in the U.S. or elsewhere. If this could be known to be true, the effects of the September 11 attacks, on markets and on policies, would derive from the destruction occasioned by these attacks themselves. These effects would then be localized in nature and probably somewhat transitory.

Unfortunately, terrorism cannot be expected to disappear spontaneously of its own accord. At best, one might hope that active efforts by national security authorities, both in the domestic and foreign arenas, might disable terrorist groups and make it impossible for them to perpetrate major attacks in the future. Of course, this points directly to some of the key policy issues to be decided: What actions *can* governments take to forestall future attacks, how effective will these actions be, how much will they cost, and what costs will or should be incurred in an effort to eradicate or protect against terrorism? Experts in domestic or international security affairs might somehow devise relatively costless means by which terrorism can be stopped, but it seems most probable that the cost of fail-safe security would be prohibitive and that the U.S. and other societies must therefore make difficult trade-offs between cost and security.<sup>1</sup> The future, therefore, holds the realistic prospect of significant costs to be incurred in an effort to counter terrorism as well as the prospect that counter-terrorism efforts will not succeed completely in stopping terrorist attacks. This at least is the premise under which the following discussion proceeds, and it carries important implications. First, it means that minimization of the costs of anti-terrorism policies is an important policy issue. Second, however, the costs of anti-terrorism efforts, even if held to a minimum, will be nontrivial and will fall, directly or indirectly, on economic agents. The distribution of these costs will have important incentive effects. Third, decisionmakers in both the private and the public sector can be expected to adjust their behavior in view of the risks of future terrorist attacks, some of which may result in significant damage and loss of life.

<sup>&</sup>lt;sup>1</sup>There have been many studies, reports, and recommendations in the past decade that have drawn attention to the threat of terrorism, as discussed in [6]. The costs of anti-terrorism and other security policies are indirectly revealed by the limited degree to which these policies have actually been implemented.

# 2. RESPONSES TO TERRORISM: PRIVATE, LOCAL, AND FEDERAL

Local governments operate in a market environment, and changes in market conditions—population movements, economic development or decline, changes in the size of local tax bases—affect both the demand for local public services and the ability of local governments to finance their expenditures. They also operate within a federal system in which the assignment of public-sector responsibilities is divided among national, state, and local governments. These levels of government are linked through systems of intergovernmental fiscal transfers and regulatory structures. Furthermore, local governments operate in a spatial context in which they compete with one another for productive resources. The September 11 attacks are likely to trigger a complex series of simultaneous adjustments that reverberate throughout this entire system of private and public decisionmaking.

### 2.1. The Direction of Market Forces

Most of the threats of future terrorism do not apply uniformly across space; rather, they generally seem to pose much greater threats for high-density urban areas. "Narrow" attacks directed at specific buildings or installations (perhaps a major train station, a major office building, or a particular tunnel) would presumably focus on core urban areas or facilities of high symbolic importance. Attacks like the Oklahoma City bombing and the first World Trade Center attacks are illustrative. Suburban strip malls, low-density residential housing, and other rural/suburban locations are presumably not likely targets of terrorist attacks. Given the vast number of such locations, the probability of any one such location coming under attack by terrorists is very small.

There is also, of course, the possibility of "broad" attacks that would affect large areas within cities or perhaps entire regions. Radiological weapons ("dirty bombs") have been mentioned as one means by which large areas of a city can be contaminated. Anthrax may not be an effective weapon for mass killing, but it appears quite feasible to contaminate buildings or possibly larger portions of an urban center with enough anthrax to interrupt facility utilization. In an era of heightened security awareness, there seems to be substantial potential to disrupt urban life merely by the communication of threats (for example, by leading authorities or the public to believe that a particular building or bridge is about to be destroyed). Even attacks involving contagion (smallpox, for example) would probably fall most heavily on densely-populated urban areas, with much more limited effects on remote locations, both because of reduced communicability and because of lengthened response times in the event of an attack. Let us assume, therefore, that core urban areas, prominent transportation chokepoints (bridges and tunnels), energy and communications infrastructure (nuclear power plants, major nodes in natural-gas, electricity, and telecommunication networks), and other high-profile facilities and locations are now at increased risk of terrorist attack or at least are believed to be so by market participants. What incentives does this environment create?

Most obviously, the uneven spatial distribution of threats creates incentives for spatial deconcentration. The very tallest office buildings, the most visible bridges and tunnels, the most prominent urban centers are made less attractive than would otherwise be the case. The tension between economies and diseconomies of agglomeration is of course familiar to urban economists, as is the role of transportation costs in shaping urban form. Standard urban and regional models can be utilized to obtain predictions of the consequences of changes in the productivity of urban centers relative to less central locations and of increases in the costs of urban transportation in general or via particular modes.

Broadly speaking, threats to the security of life and property in urban core areas, like commonplace urban crime, would be expected to lead to reductions in the density of development, in land rents, and in employment, output, and income in these areas. Relocation of economic activity and population to suburbs, smaller urban areas, and to previously-undeveloped rural areas would have the opposite effects in those regions. Furthermore, the micro-spatial structure of urban areas may be affected by risks associated with particular forms of transportation. For example, locations within metropolitan areas that depend critically on bridge or tunnel links with few substitutes or on specific transportation modes (especially fixed-rail in areas with very high traffic congestion) would become less attractive relative to locations with many access routes.

In addition to these overall effects, the composition of economic activity within urban areas would be expected to change as the comparative advantage of central and peripheral locations varies. For example, urban office towers might be utilized by smaller numbers of employees, with more labor-intensive tasks shifted to more remote locations.

The adjustment of urban spatial structure is a costly process. Prices can usually move faster than quantities, and asset prices, in particular, can respond significantly to shocks. Urban land and property values are likely to be early indicators of any significant reductions in the desirability of central locations. Of course, reductions in asset prices can be very costly to asset owners, and they may be motivated to lobby public-sector policymakers for protection against windfall losses. Existing asset values reflect market estimates both of current and future economic fundamentals and of current and future policies. Some initial indications of the price effects of the September 11 attacks are becoming available. The situation in Manhattan is of particular interest, since the attacks caused a significant shock to the supply of office space there. According to CB Richard Ellis [4], approximately 30 million square feet of office space—8% of Manhattan's total office stock and more than 25% of the lower Manhattan market—were destroyed or damaged as a result of the attacks.<sup>2</sup> A strong negative supply shock might be expected to tighten the market for office space, but it appears that the negative supply shock has been accompanied by an even stronger negative demand shock, as the vacancy rate rose from 7.2% at the end of August to 8.1% at the end of September and the average asking rent fell by approximately 2%. The fact that spot prices for real estate have fallen in Manhattan does not necessarily mean that asset prices have fallen, of course, since a temporary reduction in rent may be offset by increases in anticipated future rents.

# 2.2. Issues Facing Local Governments

Local governments play an important role in public safety and local transportation. Demand for additional public expenditures in these areas is likely to rise as efforts are made to "harden" existing and future facilities and services and to improve the capacity of police, fire, and emergency-response institutions to deter, detect, and respond to terrorist attacks. These additional expenditures may to some extent be induced or mandated by higher-level governments and to some extent may be driven by demands from local residents and firms. How can such expenditures be financed? There are several possibilities.

One possibility is to increase general local taxes, such as property taxes. In addition to or perhaps instead of tax increases, a second option is to increase user charges, traditionally an important source of local finance in the U.S. For example, users of public transportation could absorb the costs of additional security personnel in the form of higher fares, and the owners of particularly vulnerable buildings or plants could be required to pay for the financing of additional security patrols, hazardous-material remediation services, and the like. A third possibility is to redirect public expenditures away from other uses (schools, social services) in order to increase security-related funding. A fourth option is to use local regulations in order to shift the burden of expenditures to regulated households and firms, for instance by prohibiting uses of land that are now perceived to be more hazardous or by requiring property owners to install safety and security features (security barriers, enhanced evacuation arrangements, greater facility set-back requirements, fire-suppression systems, etc.) that reduce the need for the use of public-safety resources. Finally, transfers from higher-level governments may be used to finance increased local public-safety expenditures.

As noted above, changes in market conditions affect the ability of governments to raise revenues. Just as high crime rates have contributed to a flow of resources from central cities to suburbs, similarly the risk of terrorism in core urban areas can lead to shifts in employment, investment, shopping, and other taxable economic activity toward less densely-populated parts of metropolitan

<sup>&</sup>lt;sup>2</sup>In absolute terms, the lost office space in lower Manhattan is approximately equal to the total stock of office space in the city of Miami and Dade County, Florida ([5]).

areas. In the absence of support from higher-level governments, a combination of higher demands for public safety coupled with reduced fiscal capacity would force difficult choices on policymakers in urban centers and lead to fiscal incentives that would work in the same direction as underlying market incentives, in favor of movement away from higher-risk central locations toward more peripheral locations and toward smaller metropolitan areas.

## 2.3. The Intergovernmental Dimension

Local governments depend heavily on higher-level governments for the financing of many of the services that they provide. Furthermore, the provision of public services by Federal or state governments can relieve local governments of costs that they would otherwise bear (i.e., higher-level governments can "crowd out" local governments). The problem of terrorism, which raises issues ranging from international relations and national defense down to the deployment of local fire and police personnel, presents a challenge for a federation like that of the U.S. Students of federalism will watch with interest as the lines of responsibility and the assignment of expenditures and financing among levels of government are adjusted over time. To illustrate the intergovernmental dimensions of the public-sector response to terrorism, the following paragraphs discuss selected current and prospective Federal government policies.

*Explicit Subsidies.* To begin with, the Federal government has been called upon to provide subsidies to a wide range of groups immediately affected by the September 11 attacks. Perhaps most noteworthy was the Air Transportation Safety and System Stabilization Act, providing \$15 billion in financial relief for the airlines.<sup>3</sup> Aside from subsidies to private-sector groups, there are many proposals for fiscal transfers to subnational governments. Some of these are envisaged as compensatory transfers to New York City and Washington, D.C. The city of New York has estimated the total loss from the attacks, during the period 2001–2002, will be in the range \$90–105 billion [9], and political leaders from New York have asked for assistance from the Federal government of more than \$50 billion.

Other states and localities are likely to seek or be offered fiscal transfers as accompaniments to various initiatives aimed at enhancing the capabilities of state and local authorities in antiterrorism activities. A variety of regulatory approaches to the problem of terrorism can also be anticipated. New regulations for security at airports and other transportation hubs, for businesses involved in the production and use of hazardous materials, and for the coordination and

<sup>&</sup>lt;sup>3</sup>This bill was passed by Congress 11 days after the attacks, a remarkably short time for Congressional action. An instructive account of the political maneuvers leading to this bill can be found in [14].

control of emergency-response and public-safety systems are likely to be considered, as well. Such policies are frequently accompanied by intergovernmentalgrant programs so that program costs are shared between Federal and subnational governments. This issue is discussed further in Section 3.

Implicit Subsidies: Insurance. Recent policy debates and press reports have drawn attention to the problem of "terrorism insurance" for buildings and other assets. The claims on insurers for losses incurred as a result of the September 11 attacks are estimated to be in the range \$40-70 billion, a nontrivial but hardly devastating loss for an industry with some \$300 billion in capitalization [11]. It has been argued that the losses suffered by insurance companies in the event of an attack need to be capped so that losses are not "excessive." If the Federal government does not absorb such losses, insurers will be "unwilling" to provide insurance against terrorist attacks and financial institutions will be "unwilling" to offer loans for building purchases in the absence of such insurance. These claims can hardly be accepted at face value, of course, and bear the hallmarks of crisis-oriented political language intended to loosen public-sector purse strings. For instance, the editorial page of the Wall Street Journal [13], supporting Federal protection of the insurance industry, asserted that "the risk of more terrorist attacks cannot be quantified at the moment, thus premiums for terror coverage can't be priced" and that "without insurance, the real estate, construction, and shipping industries would be moribund." Comments of this sort seem to neglect the possibility that insurance may simply become more expensive, rather than cease to be offered at all, or that some activities, such as the provision of real estate, might proceed even without certain types of insurance. As to the feasibility of pricing terrorism coverage, early indications [11] are that commercial and industrial insurance premia have risen by more than 20%, and in specific lines of insurance have risen by 100% or more. Airline insurance premia have risen by 200-400%, though it seems likely that these increases are at least partly attributable to the airline industry bailout, under which (Title II of the Air Transportation Safety and System Stabilization Act) increases in the cost of insurance will be absorbed by Federal taxpayers. According to press accounts [11], "[i]nsurance stocks have jumped 7% since the attacks, outpacing the broader market, and the atmosphere in the industry is one of eager anticipation" as new ventures are launched that can take advantage of new business opportunities.

To the extent that the Federal government absorbs "terrorism risk," the value of assets with significant exposure to such risk is increased relative to other assets, and activities with such risk achieve relatively higher rates of return. Since assets and activities with high terrorism risk are not distributed uniformly over space, a Federal insurance program of this type, like the well-known Federal flood insurance programs, would be expected to result in higher levels of economic development and activity in high-risk locations and industries. One plausible policy dynamic would be for Federal policymakers to offer insurance for the insurance industry, incurring contingent liabilities with little immediate budgetary consequences, to be followed by regulatory interventions to offset various forms of moral hazard. (A potentially interesting topic for future empirical study will be to determine to what extent Federal insurance guarantees merely displace or crowd out private insurance, including particularly reinsurance.)

*Border Controls.* Many urban areas in the U.S. have large immigrant populations, and many are heavily dependent on international commerce. This is true not only of the major urban centers along the Atlantic, Pacific, and Gulf coasts but of interior cities as well. With attention now focused on external terrorist threats, border controls—largely a Federal government responsibility—are receiving renewed attention.

Achieving a high degree of control over the movement of people and commodities across national borders would be a dramatic departure from past practice in the U.S. According to recent government estimates [10], annual consumption of cocaine in the U.S. ranged between 269 and 401 metric tons during the period 1988–1998. Almost all cocaine is imported, and significant efforts have been devoted during the past decades to stopping the flow of cocaine into the country. To erect border controls sufficient to prevent the introduction of one or two tons of other contraband (such as materials for biological or chemical weapons) would presumably impose costs that vastly exceed those that have been devoted to the control of drug imports. The same can be said concerning the movement of people. The number of illegal immigrants in the U.S. is estimated to number in the millions (figures of 5-7 million are commonly quoted), with annual inflows of around 275,000 [7]. U.S. border controls, like those of many other countries, are evidently less than fully effective. Of course, even limited border controls can sometimes stop criminals; in one widely-reported instance, a planned terrorist attack during the millennium celebrations was thwarted due to a border inspection. Nevertheless, border controls that would reduce the number of illegal entrants into the U.S to, say, fewer than 50,000 people per year would again impose costs well beyond those incurred in the past.4

Border controls sufficiently stringent to create major new impediments to the efforts of international terrorists would thus appear to entail significant costs,

<sup>4</sup>Intensified efforts to monitor shipments into the U.S. since September 11 may have the side effect of inhibiting the importation of illegal drugs. Similarly, the number of illegal immigrants to the U.S. could conceivably fall due to stricter border controls. The street price of cocaine in coming months and years may provide a good indicator of the impact of border-control enhancements, though of course it is necessary to control for other demand and supply factors. (Heroin prices are probably less suitable for this purpose in part because military action in Afghanistan, a major supply source, may lead either to supply disruptions or to inventory liquidation.) The impact of tighter immigration restrictions would presumably be more difficult to detect except in certain submarkets in which immigrant workers or consumers play particularly important roles.

both in terms of direct expenditures by Federal authorities for enforcement of customs and immigration policies and in terms of barriers to trade and immigration. The impacts of such controls would likely fall differentially on different regions, urban areas, and sectors of the economy. Since state and local governments play important roles in law enforcement, attempts to tighten border controls are likely to entail additional costs for subnational governments as well, a possible source of additional intergovernmental tension.

# 3. ISSUES FOR FURTHER ANALYSIS

The preceding discussion has outlined some of the possible directions of policy response to the terrorist attacks. Policies are only now taking shape and serious policy analysis will have to await future developments. The present section identifies just two of many possible topics that may warrant closer attention from scholars and policy analysts.

### 3.1. Fiscal Competition in the New York Metropolitan Area

Business and employment relocation from New York City to surrounding areas, especially of institutions and activities associated with the financial sector, has been a frequent subject of discussion in recent years. Since the terrorist attacks struck at the heart of the financial district, the question of whether they may trigger further exodus naturally arises. In the short run, the destruction of important office real estate and the disruption of transportation and communications infrastructure has led financial-sector firms to shift some of their activities to neighboring areas of New Jersey and Connecticut.<sup>5</sup> In the longer term, it is an open question whether there will be additional movement of financial-sector activity out of lower Manhattan into other areas, whether nearby or more distant. Local public policies, including fiscal policies, are among the factors that influence the location decisions of firms and households.

Although fiscal competition has been studied quite intensively in the past decade or so, the political economy underlying specific local economic development initiatives is not well understood. Governments can of course compete for new investment generally by offering a fiscal climate with low tax rates and high levels of public expenditures that raise the rate of return on investment. Many of these policies, such as corporation income taxes, local property taxes, the quality of highway networks, and the prices of electricity and other public utilities, are determined on a relatively uniform basis for broad categories of

<sup>5</sup>"In the eight days immediately [after 9/11], displaced companies snatched up more than three million square feet of commercial real estate space in Northern New Jersey .... 'Even in a hot market, leasing that much space would normally occur over a six-month time frame,' according to a local real estate expert'' [8]. To put this figure into perspective, each of the two towers contained 4.8 million gross square feet of floor area and the entire World Trade Center complex contained approximately 12 million square feet of office space [16], and, as noted above, approximately 30 million square feet of office space in lower Manhattan were damaged or destroyed.

investment. Other policies seem to be more particularized: special tax incentives for particular types of firms, special relocation-assistance services for individual firms, and special infrastructure-improvement efforts are frequently applied on a much more narrowly targeted and discretionary basis.

In designing fiscal and other business relocation incentives, economic development authorities inevitably operate under budget constraints, although the means by which these constraints are imposed may be rather opaque. One might hypothesize that development policies are designed to increase various development indicators, such as investment, income, or employment, while limiting fiscal losses from direct expenditures or foregone tax revenues. If so, and if exogenous factors make a region or locality more attractive to new investment, one might anticipate that the region might reduce the level of incentives offered. The logic of such a response is similar to that found in models of strategic tax competition. While policy reaction functions are difficult to characterize in general (e.g., [15]), empirical studies such as Brueckner and Saavedra [2] and Buettner [3] (see [1] for a survey) have found that higher taxes in one locality result in capital outflows and higher tax rates in neighboring jurisdictions. In the case of New York City, the destruction of property has increased the demand for space in substitute locations nearby, and it could therefore be in the interest of neighboring jurisdictions to extract some of the (quasi-)rents resulting from this demand shift. Whether such a response will in fact occur must be the subject for future empirical investigation, but the following remarks from a press report are suggestive:

Neighboring cities and states, who have long sought to woo businesses away from New York, don't want to be seen as taking advantage of a tragic situation. A spokeswoman for the New Jersey Commerce and Economic Growth Commission, the state's chief economic-development agency, said: "We are not poaching, and we have no intention of poaching or taking advantage of this in any way, shape, or form whatsoever." New Jersey isn't offering any new incentives to lure tenants to the state, although since 1996 the state has offered relocating companies grants equivalent to between 10% and 80% of their employees' income taxes for as long as 10 years... Economic-development officials in Connecticut are bending over backwards to show they aren't trying to benefit from the crisis. While they are rushing to compile lists of available space, state officials say that they are discontinuing the use of many tax breaks and other economic incentives they used to dangle in front of New York businesses. "Connecticut is standing by to help, but not profit," said ... [the president of] the business council of Southwestern Connecticut." [12]

# 3.2. Mandates: Funded or Unfunded?

Higher-level governments frequently impose regulatory constraints on subordinate governments. A perennial question is whether these "mandates" should be accompanied by financial resources that would enable the regulated entities to meet regulatory requirements. In its efforts to improve security throughout the nation, the Federal government might insist on costly security upgrades for subway systems, nuclear power plants, harbor and port facilities, and the like. Will or should these mandates be subsidized by the Federal government?

One view of unfunded mandates is that they offer policymakers the opportunity to impose "undocumented" costs on regulated parties. To require a regulated individual or group to bear a particular burden is roughly equivalent to imposing a personalized tax and using the revenue in a particular way. (For instance, requiring a subway authority to install more secure ventilation systems would be equivalent to imposing a tax equal to the costs of those systems and their installation.) On political economy grounds, unfunded regulations can have important advantages to policymakers because they do not appear in the fiscal accounts. This lack of transparency may of course make such policies unappealing on normative grounds. On the other hand, mandates that are "funded" are normally funded at the expense of taxpayers in general. They differ from "unfunded" mandates not only in their visibility from an accounting standpoint but also in the ways that they distribute the costs of compliance.

By way of illustration, an unfunded Federal mandate requiring cities to make security improvements to all large bridges would impose no costs on cities lacking in large bridges, such as those in inland locations, but would impose significant costs on cities with topographies that have made large bridges very important elements of the local transportation network. Such policies would encourage economic development in the former types of localities and discourage economic development in the latter. Similar remarks would apply to policies that require security improvements in port facilities near major urban centers but that impose less stringent standards on facilities that expose fewer people to hazards in the event of attacks. Alternatively, the Federal government could bear the entire cost of all security upgrades in all locations. It might even attempt to offset market-driven declines in economic activity (reductions in investment, employment, etc.) in areas with particularly high security risks by providing larger subsidies to governments in those areas or by absorbing the costs of security measures by assigning to itself certain functions that would otherwise have to be provided and financed at the local level.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup>To pose this issue in the context of airline security, imagine three alternatives: (i) a Federal subsidy to airlines or airports to pay for personnel used in baggage inspection, (ii) a Federal tax on tickets—or, better, on baggage—that would be used for the same purpose, or (iii) the replacement of security personnel paid for by airlines with personnel paid for by the Federal government. Note that this issue is distinct from that of determining the quality of baggage inspection services, which could be required to meet high standards if desired.

On efficiency grounds, which of these outcomes is preferable? The use of unfunded mandates would appear to create incentives for resources to flow from uses that are costly to secure toward uses that are cheap to secure, whereas the funding of mandates or, roughly equivalently, the upward reassignment of public-sector functions from lower-level to higher-level governments would protect the returns to resources that are used in higher-risk environments. Students of political economy will find fertile ground for analysis as the interests of private agents and of local and state governments are brought to bear on Federal policymakers. The resolution of these political issues will determine the spatial and sectoral distribution of the costs of improved security and thus, indirectly, the market-determined allocation of resources.

### 4. CONCLUSION

The September 11 attacks struck at the heart of the nation's leading city, the world's leading financial center. It is impossible to know whether these attacks will prove to be an isolated, one-time event or the first of a series of assaults on urban areas in the U.S. and perhaps other countries. In any event, they will inevitably trigger highly interrelated policy and economic adjustments. From a normative viewpoint, it is important for society to respond to these attacks and to the threat of future terrorism in ways that are economically efficient and that satisfy appropriate norms of fairness and equity. From a purely scientific viewpoint, the evolution of policy in the aftermath of September 11 will offer unique opportunities for public and urban economists to learn more about the nature of urban economies and the workings of the federal system of government in the United States. There is much fertile ground for additional research on these issues and much opportunity for this research to contribute to rational discourse on policy and, ultimately, to better policy outcomes.

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