
BEHAVIORAL PUBLIC FINANCE

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EDITORS

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Chapter 2

Statistical, Identifiable, and Iconic Victims

GEORGE LOEWENSTEIN, DEBORAH A. SMALL,
AND JEFF STRNAD

IN the ideal vision of public finance, each dollar of government spending is allocated to the area where it can do the most good, and taxes are levied and revenues spent to the point where the marginal value of a public dollar is equal to that of a private dollar. Reality falls short of this ideal in many ways. The political system doesn't necessarily aggregate preferences the way a market would; politicians and government workers may be corrupt or have their own personal agendas; and different groups have different incentives and capabilities to coordinate and lobby for their interests.

Here we focus on yet another reason for why taxation and government spending can go awry: human psychology, and specifically the lack of proportionality between human sympathy and the wants and needs of those toward whom the sympathy, or lack thereof, is directed. As Adam Smith observed in the *Theory of Moral Sentiments*, we often feel little sympathy toward people who deserve it. He illustrates the point vividly with the hypothetical case of a European man who gets more upset over losing his little finger than over a calamity that wipes out a large fraction of the population of China. However, the disproportionality can also go in the opposite direction. As Smith also points out, "we sometimes feel for another, a passion of which he himself seems to be altogether incapable," as illustrated by the dismay of the mother of a sick child which, as he puts it, "feels only the uneasiness of the present instant, which can never be great" (1759/2000, 8). Smith adds dryly that "we sympathize even with the dead, who themselves experience nothing" (1759/2000, 8).

Our main focus here is on a specific source of arbitrariness in human sympathy: the disproportionate sympathy and attention to identifiable rather than statistical victims.

Background

Several lines of research have shown that individual cases motivate people more powerfully than statistics, even when the latter are objectively more informative. Eugene Borgida and Richard Nisbett (1977), for example, found that students who were selecting courses paid much more attention to the verbally expressed opinions of a single individual who had taken a class during the previous year, than to carefully compiled statistics about levels of student satisfaction derived from a census of students. Ruth Hamill, Timothy Wilson, and Richard Nisbett (1980) found that subjects reading a vivid description of a single welfare recipient changed their view of welfare recipients (relative to a control group) more than those who received valid statistics about welfare recipients. Laurie Hendrickx, Charles Vlek, and Harmen Oppewal (1989) likewise found that public health and safety warnings changed behavior more effectively when they were linked to people and anecdotes than when they were based on statistics. Melissa Finucane, Ellen Peters, and Paul Slovic (2003) found that people reacted much more strongly to a risk presented as a relative frequency—for example, one out of a hundred—than the same risk represented as a probability—for example, a 1-percent chance. They argued that the frequency representation makes people think more about specific individuals, and hence react more strongly emotionally, than does the probabilistic representation. George Loewenstein and Jane Mather examined the relationship, over time, of public concern about different types of risks and the objective levels of those risks (1990). They found that public concern generally tracked problem severity fairly closely, but that for a number of the risks there were periods of public "panic" during which indicators of fear suddenly spiked, often with no change in the level of the underlying problem. All of the panics that they identified could be tied to specific vivid cases that captured the public's imagination—for example, news that Rock Hudson had contracted AIDS.

Identifiable Victims

One of the best developed lines of research in this area has investigated the "identifiable victim effect," a phenomenon first described by Thomas Schelling. He noted that "the death of a particular person evokes anxiety and sentiment, guilt and awe, responsibility and religion, [but that] . . . most of this awesomeness disappears when we deal with statistical

death" (1968, 142). Schelling might have foretold the 1987 events following the fall of eighteen-month-old Jessica McClure down a narrow well in Texas. Within hours her plight was a national sensation, her face constantly appeared on every news channel, and people reacted with tremendous sympathy, which took the material form of hundreds of thousands of dollars sent to her family to assist in the rescue effort. She was indeed rescued, and her misfortune turned into a fortune: a \$700,000 trust fund to which she will gain access on her twenty-first birthday.

Although casual empiricism, such as the tale of Baby Jessica, supports Schelling's intuitions, until recently there was very little positive evidence for such an effect (see Jenni and Loewenstein 1997). Demonstrating the effect proved difficult because identifying a victim generally means providing information about him or her, and it is always possible that strong reactions to the victim are due to the information provided rather than to identifiability alone. For example, the outpouring of support for Baby Jessica may have stemmed, not from the fact that she was an identified victim *per se*, but because she was a cute identified victim. Deborah Small, and George Loewenstein (2003) circumvented this problem, and provided the first unconfounded empirical demonstration of the effect, by showing that simply indicating that there is a specific victim, without providing any personalizing information, increases caring.

In one study, Small and Loewenstein (2003) created "victims" by giving all subjects in a group \$10 and then having half lose their money. Subjects who had retained their endowment were then given the opportunity to contribute a portion of it to the "victims" who had lost theirs. The only information available to potential donors about the particular victim who would receive the contribution was an ID number assigned to that victim by the experimenters and drawn at random by each potential donor. Victims were identified if the potential donor drew the number *before* deciding on how much to give, and unidentified if the potential donor drew the number only immediately *after* deciding how much to give. This weak form of identification had a large impact on contribution levels. Gifts to identified victims were significantly greater than gifts to unidentified victims, even though participants did not know and would not learn anything about the recipient other than his or her ID number.

In a second study, potential donors were presented with a letter requesting money for a house being built for a needy family by Habitat for Humanity (Small and Loewenstein 2003). The letter described several families on a waiting list to move into homes. Identifiability was manipulated by informing respondents that the family either had been selected or would be selected. In neither condition were respondents told which family had been or would be selected; the only difference between conditions was whether the decision had already been made or was just about to be made. Contributions to the charity were significantly greater

when the respondents were informed that the recipient family had already been determined, demonstrating that the concreteness of a determined family compelled people to give more.

Identifiable Perpetrators

If people are more sympathetic toward identifiable victims, will they also be more punitive toward identifiable perpetrators? Deborah Small and George Loewenstein (2004) applied the research design from their work on the identifiable victim effect to address this question. Participants who had behaved cooperatively in a social dilemma by contributing their funds to a common pool were given the opportunity to penalize another participant who had behaved in a self-interested fashion by refusing to contribute. Contributors who chose to penalize had to pay a fraction of the penalty out of their own pockets. Much like the dictators in the studies of identifiable victims (Small and Loewenstein 2003), contributors made the decision to punish either just before or just after they had drawn the identification number of a noncontributor and had no other information about the noncontributor. Consistent with the victim studies, participants levied greater punishment, at their own expense, on identified non-contributors than on unidentified non-contributors.

Beyond generalizing the earlier work to a different target (perpetrators instead of victims), Small and Loewenstein (2004) also examined whether differences in punitiveness toward identifiable and unidentifiable perpetrators were associated with different affective reactions. Participants reacted with greater anger and blame toward an identified perpetrator than toward an unidentified perpetrator. Furthermore blame and anger mediated the relationship between identifiability and punishment: Although identification is positively related to punishment, almost all of the variation in the decision to punish is explained by blame and anger after controlling for whether the victim is identified. More specifically, in a regression of the decision to punish on an identification variable and a measure of blame and anger, the blame and anger measure is strongly significant, but the identification variable is not.

This research suggests that the identifiable victim effect is a special case of a more general identifiable other effect whereby any identifiable target evokes a stronger emotional and moral reaction than an equivalent, but unidentifiable target.

Are Identifiable Other Effects Good or Bad?

The Baby Jessica episode raises the specter of potentially large efficiency losses flowing from the disproportionate influence of identifiable others on public attitudes and sympathies. On the victim side, the danger is that

available charity and government dollars will flow to particular high profile individuals while the mass of statistical victims will be short-changed. It is hard to come up with any coherent theory of allocation that would support Baby Jessica receiving \$700,000 upon reaching adulthood when 16 percent of American children continue to live in poverty, unrelieved by government spending or charity. It might seem that identifiable other effects are pernicious, leading to a misallocation of social resources. However, a general conclusion along those lines may be quite wrong.

An initial question is whether those who are moved by identifiable other effects are making correct or desirable assessments. In some contexts, there is a strong argument that such effects play a critical role in guiding behavior in the proper direction. For instance, many scholars have suspected that the extreme violence of modern warfare and the mass atrocities of the past century stem, at least in part, from the lack of identifiability of the victims (Lorenz 1966; Morris 1967; Glover 1999). Suppose a soldier pushes a button to drop a bomb in an urban area that kills a group of enemy troops but also kills and maims innocent bystanders. Would the same act occur if the soldier engaged in it had to kill and maim both the troops and bystanders individually and face-to-face? Dropping a bomb in an urban area involves a degree of identifiability far weaker than in the unidentified conditions of the studies we just discussed. The soldier who pushes the button knows that innocent civilians may die or be injured but does not know the exact number or identity of such victims.

It is possible that identifiable other effects serve as an important component of what Cass Sunstein (2005) describes as “moral heuristics—moral short-cuts, or rules of thumb, that work well most of the time, but that also systematically misfire.” In the case of warfare, identifiability may reduce the tendency for noncombatants to be killed or injured. Even if, consistent with the studies discussed earlier, soldiers experience an enhanced desire to kill identifiable enemy troops because they are seen as perpetrators, the soldiers will feel offsetting inhibitions if a by-product is the death or injury of civilians perceived to be innocent. The end result may be a military strategy that reduces civilian casualties. This strategy has a strong connection to explicit moralizing in the West because reducing such casualties is an important element of the just war doctrine, one of the two most widely held theological positions toward war—the other being pacifism. As Konrad Lorenz (1966) and Desmond Morris (1967) suggest, it may be that human mechanisms for making moral judgments are designed for face-to-face interactions in small groups and are not able to function well in situations, such as modern warfare, that involve anonymous and statistical lethal attacks on other human beings. In such contexts, identifiable other effects would tend to restore our true moral-

ity—that is, our morality as it tends to manifest itself in small group, face-to-face, settings. In modern societies, although identifiable other effects may result in systematic overcompensation of high-profile victims (such as Baby Jessica), it is possible that they do in fact propel behavior in a “desirable” direction most of the time.

The central problem in the Baby Jessica case is the failure to equate marginal benefits per dollar of aid expended. Shifting some of the aid dollars from Baby Jessica to other more desperate victims would improve social welfare. However, the failure to equate marginal benefits per aid dollar may be consistent with a second best optimum. Suppose, for example, that we would provide massive aid to individuals suffering from hunger if we were able to experience the condition of each victim. In this situation, highlighting the plight of individual victims would trigger identifiable other effects that would tend to reveal the correct preferences toward such victims. Consider three outcomes:

1. Charities exploit identifiable other effects to induce tax-subsidized donations. As a result, the charities are able to save 10 percent of the hunger victims. The other 90 percent die of starvation.
2. Charities apply the same fiscal resources (including the revenue cost of the tax subsidy) used to save 10 percent in the first situation in the most efficient manner. As a result, 20 percent are saved instead of 10 percent.
3. All the victims die because no aid is given.

Although situation two is better than situation one, the real (second best) choice may be between one and three. Exploitation of identifiable other effects in situation one resulted in 10 percent being saved. The same money resources could save more statistical lives in theory, but there is no impetus to do so in the absence of the identifiable other effects. Small, Loewenstein, and Slovic (2004) demonstrate that this dilemma may be quite common. They elicited donations for a cause—Save the Children’s battle against hunger in Africa—using either a pitch that emphasized statistics about the problem or that showed a picture of a single charismatic victim—a Malawian girl. Crossed with this experimental treatment, they instructed half of the subjects about the identifiable victim effect in generic terms that did not take a position (about whether identifiable victims elicit too much sympathy or statistical victims too little) before they elicited a contribution. Providing this information had a negative impact on donations in the identifiable (photograph) condition, driving donations down to the level obtained with statistics.¹ Although Save the Children may be somewhat hamstrung when they raise money for specific victims, it is likely that the money they raise aids

many more people than those featured on the Save the Children Web site. Thus, even if raising money for specific victims distorts aid allocation somewhat, it may very well provide a better outcome than soliciting aid purely on the basis of statistics.

Furthermore, the government might not be able to do any better than charities. The political impetus to provide aid may depend on parading high-profile victims before the public, thus exploiting identifiable other effects in exactly the same way as a charity campaign would. This approach, however, might then constrain the government to favor the same more limited set of victims with the same result—saving 10 percent instead of 20 percent from starvation. It also might be true that charities are much better than the government at identifiable other campaigns. The government alternative might result in a higher death rate. It also is worth noting that charities and donations to charities receive very large tax subsidies in the United States and in some other developed countries. In addition, the associated tax rules condition eligibility for such subsidies both on the nature of the charitable activities and on the mode of operation of the charities. The extent, content, and operational methods of charitable activities are thus shaped substantially by tax policy, and the charitable sector is very much part of the scheme of public finance in these countries.

In sum, the normative implications of identifiable other effects are subtle and depend on context. Despite the Baby Jessica case, these effects are not necessarily pernicious. In some situations, outcomes will deviate sharply from deep and noble human desires absent the prompts that arise from identification. With these considerations in mind, we examine more closely the role of identifiable other effects in public finance.

Identifiable and Iconic Victims and Perpetrators in Public Finance

So far, we have discussed cases that would fall on the spending side of the public finance equation: allocation of aid among victims of hunger or poverty. But identifiable other effects can have a strong influence on the tax side also, even in areas that are technical and not familiar to the public.

Hidden Taxes

Ultimately, all money raised by taxes, or by any other means, has to come out of someone's pocket. The incidence of any particular tax may not be obvious because price changes induced by the tax may shift the burden from the nominal payor (the entity or individual who remits money to the government) to someone else. Economists traditionally have studied

the actual incidence of different taxes and have not attached much importance to the identity of the nominal payor. However, the psychology and thus the politics of taxation may turn on who appears to pay the tax rather than who actually bears the burden. The public tends to ascribe the burden to the nominal payor and to ignore taxes that they do not explicitly pay. For example, to most consumers, the VAT tax is simply part of the purchase price of an item. The nominal payors are businesses. One argument against adopting a VAT tax in the United States has been the worry that there would be too little resistance to raising taxes exactly because it is hidden.

Similarly, it is well known that wage withholding increases the palatability of an individual income tax. Because individuals do not make direct payments to the government equal to the withheld amounts, they tend to think of the withheld portion as not being theirs in the first place. McCaffery (1994a) points out that corporate income taxes are a classic example of a hidden tax. The short-run incidence of these taxes is unclear, but corporations are the nominal payor. For most of the public, it may seem obvious that corporations (that is, shareholders) pay the taxes, but many economists believe that the long-run incidence falls largely or entirely on labor, and even the short-run incidence may fall partly on labor and consumers as well as on shareholders. Russell Long, one of the most powerful and influential tax legislators in his long reign as chairman of the Senate Finance Committee, summed up the psychological appeal of hidden taxes in his very famous and often-quoted aphorism: "Don't tax him, don't tax me, tax the man behind the tree."

It is important to note that the concept of a hidden tax hinges on psychology and appearance. Consider the classic example, the corporate income tax. This may fall on consumers, on various factors of production (such as labor or raw goods suppliers), or on shareholders. In one perceptual state of the world, each of these groups might believe that it bears the entire burden of the tax. In this situation, the tax certainly is not hidden. The polar opposite case, where each individual believes that the tax falls on some other individual or group is the paradigmatic case of a hidden tax. Thus, the defining characteristic of a hidden tax in its pure form is that all of the possible ultimate payors believe that someone else (or some other group) is paying the tax. Similarly, we might say that a tax is hidden with respect to a particular group if that group believes, perhaps counterfactually, that some other group bears the entire burden. It is obvious from these definitions that whether a tax is hidden is an empirical issue. Psychology and perception play a critical role. A VAT may be hidden with respect to consumers, despite being enumerated on their sales receipts, if consciously or unconsciously they believe that it is in fact being paid in its entirety by other groups such as the owners of the businesses that sold them the goods or services.

Estate Taxes

If one followed the usual tenets of political economy, the estate tax should be wildly popular among the American electorate. Historically, the tax has been levied on only a tiny fraction of the population, and it certainly appears to be a source of several billion dollars of revenue, thus apparently reducing the tax burden on everyone else.² The reason for its lack of popularity has been the topic of considerable speculation and debate.

One explanation is that many people expect to become wealthy, and that, as a result, far more people think they will be negatively affected by the estate tax than will be. Nonetheless, it is hard to imagine that this delusion affects a large enough proportion of the population to create the existing and historical level of discomfort with the estate tax. An at least equally salient explanation involves clever marketing by individuals whose heirs really stand to lose from the estate tax. Michael Graetz (1983, 284), attempting to explain the mysterious unpopularity of the tax, observes that "it is often said that opponents of tax increases hide behind selected widows" and that "when one considers estate taxation, both widows and orphans are readily at hand." He also notes that "the objections of owners of small businesses and farms" are an "important political obstacle to estate taxation" despite the fact that the assets of these individuals comprise a very small portion of the base for the tax. The specter of individual small business owners or farmers being forced to sell out what their parents built up solely to pay estate taxes created a politically compelling victim scenario entirely separate from the political power of these groups as such.

Even more perversely, as Adam Smith pointed out in the *Theory of Moral Sentiments*, there seems to be a natural tendency to reserve some of our most profound sympathy for the high and mighty rather than for the poor and unfortunate who so much more deserve it:

When we consider the condition of the great, in those delusive colours in which the imagination is apt to paint it, it seems to be almost the abstract idea of a perfect and happy state. It is the very state which, in all our waking dreams and idle reveries, we had sketched out to ourselves as the final object of all our desires. We feel, therefore, a peculiar sympathy with the satisfaction of those who are in it. We favour all their inclinations, and forward all their wishes. What pity, we think, that any thing should spoil and corrupt so agreeable a situation! It is the misfortunes of kings only which afford the proper subjects for tragedy. (1759/2000, 72)

Smith's description brings another, more recent Briton, Princess Diana, to mind.

Taxpayer Compliance Measurement Program (TCMP)

For many years, the federal government engaged in annual comprehensive TCMP audits of 50,000 lucky taxpayers chosen quasi-randomly. The word comprehensive was taken seriously. The audit covered all items on the tax return and included requests for taxpayer documentation for all such items. For example, the auditor asked for cancelled checks or other evidence for every charitable contribution. Although TCMP audits were very painful for the taxpayer, TCMP audit data was invaluable for the government. Using the data, it was possible to adjust the government's audit strategy (via DIF scores) to be much more precise in collecting missing revenue and policing noncompliance.

It appears that the program met its demise largely because "victim" concerns became salient. The experiences of various audited individuals became public, exposing the comprehensive (and painful) nature of the audit and emphasizing that it fell at random. As a result, the audit picked up the descriptor "audit from hell" and was an early and prominent casualty of the taxpayer rights movement. The IRS halted the program in 1995. From a policy perspective, this result—given the obvious benefits of the program—is curious. Part of the problem seems to have been a strong reluctance on the part of the IRS to compensate the "victims" of the audits with monetary payments or otherwise in the face of a public belief that those audited richly deserved such compensation.

This pattern and the subsequent history of the TCMP suggest that identifiable other effects may have been decisive. For several years after the demise of the TCMP, the IRS did not run any programs to generate data. Finally, in 2002, it implemented the National Research Program, which involves examining about the same number of returns as under the TCMP audit scheme, but with a less uniform approach. There is no standard NRP audit. Some returns are examined by information check, some by correspondence, some by a sit-down but not line-by-line audit, and some (but only very few) by line-by-line audits. This nonuniform approach makes the victim designation much less applicable. Instead of fifty thousand identifiable instances, each of which is a standardized "audit from hell," the whole situation is quite murky, with many taxpayers receiving quite lenient and "polite" treatment. Iconic victims are lacking. If an individual does go public with what might seem like mistreatment, the IRS can argue that the instance, though perhaps unjustified and mistaken, is exceptional rather than representative of the process.

The Political Origins of Alternative Minimum Tax

Potential examples of psychological phenomena from real life lack the clarity of experimental results. It often is easy to posit alternative expla-

nations. We conclude this section with an example that is particularly hard to explain without resorting to identifiable other effects. In addition, at the normative level, the example raises the general set of issues concerning the beneficial or detrimental nature of the effects in a very clear manner.

The Alternative Minimum Tax (AMT) ensures that high-income taxpayers pay a certain minimum amount of tax on income that excludes many of the preferences and deductions available under the normal tax rules. To the extent that these preferences and deductions create incentives for socially valuable activities, the AMT is harmful because it blunts these incentives. On the other hand, it ensures that high-income taxpayers cannot abuse the preferences and deductions to pay little or no tax.

Much of the economic debate about the AMT turns on the degree to which tax preferences are capitalized. For example, if the highest tax bracket is 40 percent and tax-exempt state and local bonds yield 5 percent along with taxable alternatives such as Treasury bonds or corporate bonds, then high-income individuals who invest in the tax-exempts receive a 2-percentage-point subsidy. At the same time, the state and local government issuers, who are the intended beneficiaries of the exemption, do not receive preferential lending rates compared to corporate and federal issuers. On the other hand, if competition among high-income individuals to hold tax-exempt bonds drives the yield on those bonds down to 3 percent (versus 5 percent for Treasury and corporate bonds), then high-income taxpayers receive no after-tax benefit. In that case, the entire subsidy (in the form of the national government's revenue loss) flows to state and local government issuers. The tax benefit is fully capitalized and therefore it is not a matter of concern if a high-income individual reduces his or her taxes to zero by earning income solely from tax-exempt sources. That individual's pre-tax income will be lower by an amount equal to what the tax would have been. In effect, the individual is subject to an implicit tax at the full statutory rate. Depending on individual perceptions, this implicit tax may be at least partially hidden from both the victim payors and members of the public who might have sympathy for those payors.

The precursor of today's AMT passed in 1969, but serious AMT-like proposals had been floated much earlier. Russell Long, the powerful chairman of the Senate Finance Committee quoted above, proposed and was pushing just such a proposal in the mid-1960s, but it did not catch on. An incredibly powerful identifiable other event in early 1969 almost certainly triggered enactment. Michael Graetz and Deborah Schenk (2002) describe this event and its aftermath in detail.

In the last few weeks of the Johnson administration, Joseph Barr was serving temporarily as secretary of the Treasury. In January 1969, only

days before the Nixon administration took the reins at Treasury, Barr made a public statement that 154 taxpayers had adjusted gross incomes of \$200,000 or more (approximately \$800,000 in 2004 dollars) but taxable incomes of zero. This announcement generated more letters to Congress during 1969 than the Vietnam War, the principal and most passionate political issue of the day. Before the end of that year, Congress passed a 10 percent add-on tax applicable to certain preferences, the precursor of the current AMT. It is hard to avoid the conclusion that Barr's identification of the 154 taxpayers was critical in ensuring passage. Before 1969, it was clear and public that several generous deductions and preferences in the tax code permitted high-income taxpayers to reduce their tax burdens substantially. Nonetheless, the earlier AMT-like proposals, such as the one championed by Russell Long, did not pass or even achieve much political salience despite strong support from key politicians and policy makers. Furthermore, passage of AMT in 1969 occurred in the face of a new Republican president, an individual much less likely to support such measures than his populist Democratic predecessor.

Assuming, as seems to be the case, that identifiability effects were critical in bringing the AMT into the tax code, the question arises as to whether this influence was beneficial or pernicious. Not surprisingly, the answer depends heavily on one's view of the AMT, and radically different characterizations of Barr's political act are conceivable.

On the negative side, the AMT may be viewed as blunting the impact of deductions and preferences that make policy sense and adding considerable unnecessary complexity to the tax code. This view is particularly salient if the deductions and preferences are largely capitalized into asset prices. If they are, the high-income recipients actually receive little or no benefit but are subject to implicit taxes in the form of lower pre-tax returns. The hidden nature of the implicit taxes may have provided necessary political support for the system—a beneficial application of the identifiable other effect. Under this scenario, Barr's public statement appears pernicious, severely hampering a smoothly functioning political and economic arrangement by exploiting a detrimental version of the identifiable other effect in a demagogic and McCarthy-esque way during the dying days of a defeated administration.

On the positive side, the AMT may be viewed as offsetting the unintended distributional consequences of preferences and deductions. This view is enhanced if some of the deductions and preferences themselves are of questionable efficacy as public policies or are not offset by lower pre-tax returns, or both. This perspective leads to a very different characterization of the Barr episode: Barr's heroic and politically brilliant application of the identifiable other effect allowed the general public to see what was really happening in a concrete way. True human aspirations, so apparent in small group interactions but often lost in the

anonymous and ponderous operation of modern societies, triumphed as a motivated populace galvanized politicians to undertake curative political action.

Conclusions

Strong identifiable other effects, involving both victims and perpetrators, emerge unmistakably from experimental research. This research shows that only a very weak degree of identifiability results in significant effects. Individuals, drawing from their own resources, will be substantially more beneficent toward victims and more punitive toward perpetrators if they know that a particular victim or perpetrator is involved, even if they know nothing about that victim's or perpetrator's identity or history.

Identifiable other effects play a potentially important role in diverse domains, and public finance is no exception.³ We have detailed some important tax and spending phenomena that are difficult to explain without invoking such effects. These instances arise from masking identifiable targets through hidden taxes as well as from making them more salient in various ways to the public and the political process.

Although it seems clear that identifiable other effects are important for public finance, our discussion leaves unresolved whether such effects are (in the net) beneficial or detrimental to the functioning and structure of public finance systems. Due to the intellectual association of such effects with the psychological literature concerning behavioral and cognitive errors, it is easy to presume that the net effects are detrimental. However, though they sometimes may lead to deficient outcomes, a case can be made that identifiable other effects function as an important component of moral intuition. This role may be particularly significant in the modern world, allowing human beings designed to function in small-group and face-to-face situations to attach appropriate salience to the statistical or anonymous processes generated by governments and other large organizations. Not surprisingly, answering the question of detriment in particular instances turns out to depend on the factual and political context.

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Notes

1. They obtained a similar result when, rather than explicitly teaching subjects about the effect, they accentuated the difference between the two appeals by presenting both types of appeals—statistics and the photograph—together.
2. McCaffery (1994b) discusses evidence that the tax actually may lose revenue when certain subtle interactions with the rest of the tax system are taken into account.
3. There are a myriad of examples from contexts other than public finance. For instance, Guido Calabresi and Philip Bobbitt (1978, 138) discuss the significant role of Franklin Delano Roosevelt as high profile victim in prompting the relatively high (almost entirely private rather than government) expenditures on eradicating poliomyelitis that are hard to explain in terms of risk of equivalent harm.

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Chapter 3

Distinguishing Between Cognitive Biases

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ECONOMISTS have recently taken increased interest in a number of cognitive biases and heuristics first documented by psychologists.¹ In theoretical studies, economists typically introduce such biases and heuristics into stylized models with a goal of understanding how small, but psychologically relevant, deviations from the standard economic framework can influence decisions such as saving and consumption (Harris and Laibson 2001), investment (Barberis and Huang 2001), and labor supply (Fang and Silverman 2004a). In empirical studies, economists have followed two basic strategies. The first is to derive distinctive empirical implications from a model of a particular bias or heuristic and then check if the data are qualitatively consistent with the bias model's predictions but inconsistent with the standard model's (see, for example, Babcock et al. 1997; Genesove and Mayer 2001; Della Vigna and Malmandier 2004). The second involves estimating structural models that allow a particular bias and attempt to measure the degree of that bias and its implications (Fang and Silverman 2004b; Paserman 2004). It, unlike the first strategy, assumes an explicit model that permits simulations of the behavioral and welfare consequences of counterfactual policy experiments.

An important motivation for incorporating cognitive biases and heuristics in economic analyses is public policy. When a public economist evaluates a policy, the typical first step is to consult the formalization of Adam Smith's invisible hand in the first fundamental theorem of welfare. According to this theorem, when competitive markets exist and their participants share information commonly, the allocations of those