IRET POLICY BULLETIN

July 3, 1992
No. 56

EXCISES, SOCIAL COSTS, AND THE MYTH OF EFFICIENT TAXATION: THE CASE OF CARBON TAXES

The primary function of [pollution] taxes is to make the economy function more efficiently. Through their use we have the opportunity to employ the tax system, not only to raise revenues but also to enhance the operations of the economy.[1]

With the dual public policy concerns of increasing federal revenues and rectifying perceived environmental problems vying for the attention of lawmakers, the view expressed by economist Wallace Oates has been steadily gaining attention and acceptance. According to this view, the use of excise taxes to address problems related to the environment offers the best of all worlds. It allows the government to reduce the "social costs" associated with certain production activities while enhancing both economic efficiency and revenue flows to the treasury. What better policy tool could a politician ask for?

...pollution taxes may raise revenues, but they will not "enhance the operations of the economy." Political considerations not economics, dictate the imposition of these taxes.

In fact, pollution taxes may raise revenues, but they will not "enhance the operations of the economy." Political considerations not economics, dictate the imposition of these taxes. The most likely outcome of levying a pollution tax is the same as that of any other tax. There will simply be a transfer of resource claims from the private to the public sector and a reduction in efficiency and

[1] Wallace E. Oates, "A Pollution Tax Makes Sense," in Herbert Stein, ed., *Tax Policy in the Twenty-First Century*, (New York: John Wiley and Sons) 1988, p. 254.

Institute for Research on the Economics of Taxation

IRET is a non-profit, tax exempt 501(c)3 economic policy research and educational organization devoted to informing the public about policies that will promote economic growth and efficient operation of the market economy.

1730 K Street, N.W., Suite 910 • Washington, D.C. 20006
(202) 463-1400 • Fax (202) 463-6199 • Internet www.iret.org

economic growth. Carbon taxes, which are currently being called for as a tool for countering the alleged social costs associated with global warming, illustrate these consequences.

The Social Cost Problem

Economists argue that an activity or production process generates social costs when those who enjoy the benefits, either producers or consumers, of that activity do not also bear the full costs. The most commonly invoked examples of such "negative externalities"[2] relate to pollution. Imagine a community in which a cement factory is located and the factory generates air pollution in the form of cement dust.[3] If the dust landed on people's cars or laundry or caused respiratory problems for people in the community, it could be argued that the factory's operations impose social costs on those in the community affected by these problems.

The analysis is typically cast in terms of the effects that the social costs have on the efficiency of market outcomes. The problem is that the production process generates some costs that are shifted to third parties, i.e., those who neither purchase nor sell the product. Because these costs are not borne by the producer, the price of the product does not reflect the product's full production costs. Therefore, some information regarding the costs of production is not being considered in the firm's production plans, which distorts market outcomes. If the pollution costs associated with production were fully borne by the producers, the product's price would be higher and output and purchases would be lower.

...an activity or production process generates social costs when those who enjoy the benefits, either producers or consumers, of that activity do not also bear the full costs.

From the perspective of economic efficiency, it is argued that some of the resources devoted to the production in this case, of cement would be more productively used elsewhere. If the price and output of cement reflected the full costs of its production, fewer resources would be used for cement production and more would be used for the production of other goods and services. The crucial assumption, on which the economic analysis and the justification for excise taxes hinges is that these other goods and services would be more highly valued by market participants. Given the complexity

[2] "Negative externality" is the more formal term for social costs used in the economics literature.

[3] This example is inspired by real world social cost case, Boomer v. Atlantic Cement. In this often studied case in tort law Atlantic Cement Co. was generating the kinds of social costs discussed in this example in communities in up-state New York. See Richard Epstein, Charles O. Gregory, Harry Kalven, *Cases and Materials on Torts*, 4th ed., (Boston: Little Brown), 1984.

of the market information, however, this is an unverifiable assertion in any kind of real world public policy setting.

This analysis is often extended beyond production and exchange activities to include individual behavior that allegedly generates social costs. For example, if it is determined that cigarette smoking generates social costs by creating either health risks or just an annoyance to non-smokers in a smokey environment, it could be argued that there is an "overconsumption" of cigarettes. A second example, frequently cited is the costs imposed in automobile accidents for which people driving while intoxicated are responsible. Leaving aside, for the moment, the issue of whether this analysis is correct, it is argued that the prices of alcoholic beverages are too low because they don't take account of these costs.

...excise taxes distort the information about costs and preferences that is provided by the price system. When social costs are present however, it is argued that the market itself generates "false" price signals and that an excise tax can correct for this "market failure."

The Excise Tax Solution

While several different "remedies" for social cost problems have been developed, the approach most commonly cited is that endorsed by Oates, the excise tax. While this approach may be theoretically and technically elegant, in reality it cannot be implemented in a way that is consistent with the theory. As is often the case, the technical economics provides a veneer of scientific justification for what, in reality, amounts to an inefficient intrusion into individual decision making, impairing the market process.

A. The Case for Using Excise Taxes

Generally speaking excise taxes distort the information about costs and preferences that is provided by the price system.[4] When social costs are present however, it is argued that the market itself generates "false" price signals and that an excise tax can correct for this "market failure." The argument for excise taxes is that a correctly calculated and appropriately imposed tax can induce those who are generating the social cost to "internalize," i.e., bear those costs, and revamp their production decisions accordingly.

[4] For a detailed analytical discussion of some important issues surrounding this point see Milton Friedman, "The `Welfare' Effects of an Income Tax and an Excise Tax" in *Essays in Positive Economics*, (Chicago and London: University of Chicago Press), 1953.

On a purely theoretical level, the efficient output will be produced if the cost imposing-parties are taxed by an amount that is equivalent to the costs borne by society--the social cost. In the example above, if the cement company were taxed by an amount equivalent to the costs that its production activity imposed on those living in the community, the factory's output would be reduced to an efficient level. It is argued that, in the absence of the tax, there is an "over" production of the good, in this case cement, due to the social costs that its production generates. The reduced output brought about by the tax would release resources to produce more highly valued goods and services, as noted above.

The objective of the tax is not to eliminate all social costs. To reiterate, the goal of the tax is to force the generator of the social costs to act to incorporate those costs into his production and pricing decisions. Whatever social costs were still being generated at the "efficient" level of output would be considered optimal.[5]

Assuming that a social cost problem has been accurately identified the excise tax remedy faces several problems...if the tax is not "set appropriately," "properly designed," or "carefully crafted," its efficiency properties disappear. Once the problems associated with identifying the correct tax are made clear, it can only be concluded that it is virtually impossible to specify the "efficient tax."

The point of the tax is to get the generator of the social costs to behave as if those costs were his own. In the case of the producer of a good, the idea is to induce the production level that would result if all of the social costs were private costs to the business. Assuming that there are no other price distortions anywhere in the economy (a crucial qualifier to be discussed below), this level of production is the level that is said to be efficient. The price that the market would generate under these circumstances is said to be the efficient price.

B. Limitations on the Use of Excise Taxes

Assuming that a social cost problem has been accurately identified the excise tax remedy faces several problems. The most significant problems center around identifying the "correct" tax. The amount and implementation of the tax have to be correctly specified if it is to have the appropriate efficiency properties. As even strong defenders of such taxes acknowledge, if only in passing, "if

[5] It should also be noted that it is not necessary that the revenues collected from the tax be used to compensate those who have suffered losses as a result of the offending activity. All that is necessary to insure the efficient result is that, in theory, the victims could be compensated for damage. This is known as the "Hicks-Kaldor compensation principle." See Hicks, J.R., "Foundations of Welfare Economics," *Economic Journal*, Vol. 49, 1939 and N. Kaldor, "Welfare Propositions in Economics," *Economic Journal*, No. 49, 1939.

set appropriately, a charge [tax] induces a net gain in economic welfare by incorporating environmental damages into financial decision-making...Properly designed charges do not distort economic decisions but rather eliminate distortions...carefully crafted charges will free resources and create market signals that encourage long-term growth and competitiveness"[6] (emphasis added). In fact, though, if the tax is not "set appropriately," "properly designed," or "carefully crafted," its efficiency properties disappear. Once the problems associated with identifying the correct tax are made clear, it can only be concluded that it is virtually impossible to specify the "efficient tax."

1. Opportunity Costs and the Problem of Quantification

There are several intractable problems with this scenario, any one of which renders the tax impossible to specify and therefore non-operational in the real world.[7] In reality the social costs themselves are unobservable. There are two reasons for this. First, social costs are not, despite their name, incurred by some collective called "society," but by particular individuals existing in particular circumstances. Indeed these costs are experienced privately. The costs that these individuals bear are appropriately viewed in terms of the opportunities that they must forgo as a result of the offending activity. These are what economists call "opportunity costs" and are the only relevant costs for economic analysis.

As Nobel Laureate James Buchanan has pointed out, these costs are experienced only subjectively and therefore defy quantification

In the cement dust case, one of the outward signs of the problem for those living in the region might be, for example, that they have to wash their cars more frequently. The cost to any individual who is put in this position is the value that he places on what he would have been doing had he not had to wash his car. This is the opportunity costs associated with car washing and would be part of the true social cost of cement production. The problem is that this cost is different for each individual car owner and varies for the same car owner each time he washes his car. It is a cost that is unobservable and hence cannot be calculated by any policy maker or economist. This is the nature of all opportunity costs. Furthermore, because these alternative uses of one's time and resources are

[6] "Using Pollution and Congestion Charges to Finance Tax Relief," testimony to the Committee on Ways and Means, U.S. House of Representatives by Roger C. Dower and Robert Repetto on behalf of the World Resource Institute, Washington, D.C., February 6, 1992. Throughout this testimony the authors use the term "charges" instead of taxes for the kind of social cost excise taxes discussed here. They use the term "taxes" for all other forms of taxation.

[7] For a more detailed discussion of these problems see Roy E. Cordato, *Welfare Economics and Externalities in an Open Ended Universe*, (Boston and London: Kluwer Academic Publishers), 1992, "Introduction," and Roy E. Cordato, "Subjective Value, Time Passage, and the Economics of Harmful Effects" *The Hamline Law Review*, Vol. 12, No. 2, 1989.

not actually experienced, no value is placed on them in a market setting and they have no price attached to them. As Nobel Laureate James Buchanan has pointed out, these costs are experienced only subjectively and therefore defy quantification:

> *Cost is that which the decision-maker sacrifices or gives up when he selects one alternative rather than another. Cost consists therefore in his own evaluation of the enjoyment or utility that he anticipated having to forego as a result of choice itself...Cost cannot be measured by someone other than the chooser since there is no way that subjective mental experience can be directly observed.*[8]

2. Passage of Time and Dealing With Changing Conditions

Even if the social costs could be empirically identified, which they cannot, there are additional stumbling blocks. For one thing, the magnitude of the social costs associated with any particular activity are not frozen through time. Because of continuous changes in population size and composition, people's tastes and preferences, scarcity conditions, and technology, social costs are also continually changing. The tax that is correct for time 1 will almost certainly be incorrect for time 2. To calculate the tax also requires accurate measurement of supply and demand conditions in the relevant market. The problem is that none of the variables are likely to remain constant. As soon as any one of them changes, the tax also needs to be changed. Therefore even if the appropriate tax could be calculated for a point in time, it would only be relevant with regard to the conditions that exist at that moment. Clearly, by the time all of the appropriate information is gathered and the tax is put in place, it would be completely out of date.

Even the economists who most ardently support social cost taxes would have to acknowledge that the most likely scenario, the transfer of resource control from economically-motivated forces in the private sector to politically-motivated forces in the public sector, would not necessarily enhance economic welfare and would probably reduce it.

In reality, all of the relevant data are historical. This means that any tax that is calculated, assuming away any problems associated with being able to observe and quantify social costs at all, could only be considered "correct" for the historical period in which those data existed.

[8] James Buchanan, *Cost and Choice*. (Chicago: Markham Press), 1969, pp. 14-15.

3. Improving Resource Allocation

Even if the above problems could be overcome and the social costs could be accurately assessed, the result is only efficient if the productive resources that are released when the tax is imposed flow into the production of goods and serves that market participants value more highly than the marginal outputs of the good that is being taxed. Empirically there is no way to demonstrate this and there is no reason to think that this would necessarily be the result. If the reallocation to higher valued uses does not occur then the tax would simply generate a transfer of resources from one use to other uses with no efficiency enhancement occurring. Indeed, social welfare would be reduced.

Whether the tax would result in more valuable uses of resources depends on what is done with the tax revenue. If the increased revenues from the tax go toward additional government spending, the most probable scenario, the tax will simply bring about a transfer of income and therefore control over resources, from the private to the public sector. But even the economic theory that supports using taxes to reduce social costs does not suggest that this income transfer should occur. The theory suggests that the resources would be released to other areas of the private sector where market forces would insure that they would be used more efficiently. Even the economists who most ardently support social cost taxes would have to acknowledge that the most likely scenario, the transfer of resource control from economically-motivated forces in the private sector to politically-motivated forces in the public sector, would not necessarily enhance economic welfare and would probably reduce it.

...any claim that economic efficiency and therefore economic growth can be enhanced by placing excise taxes on those activities that generate social costs is unverifiable.

But even if the revenues, and therefore the control over resource use, is left in the private sector, there is no way to know whether the reallocation would enhance efficiency. Ultimately, in order to calculate the correct tax in one market, information concerning conditions of supply and demand and all potential market distortions throughout the economic system must be accessible. Even if a tax actually generated a price and output that reflects all social costs in a given market, it would be "efficient" only if there were no other price/output distortions in the economy. For example, the resources that are released due to reduced production in the taxed area may go into the production of other goods that generate social costs. According to the theory, these goods would already be "overproduced" and the tax in one area would exacerbate the problem in the other area.

Another problem could arise if the taxed good were an input for the production of a product that is being "underproduced" due to a monopoly problem or restrictive regulations. The tax would drive up costs for the underproduced good, causing even further reductions in output. A policy maker attempting to implement an efficient tax would have to have information regarding all such

possibilities throughout the economy.[9] Furthermore, with the passage of time the policy maker would have to keep current with all changes in this information. Since it would be impossible to gather the relevant information for one market, it would clearly be impossible to access this information for the economy as a whole.[10]

In a dynamic market setting there is no way to trace any of these highly likely consequences of the tax, and therefore there is no way to verify the efficiency consequences of the changed allocation of resources that it would bring about. Because of all the problems discussed here, any claim that economic efficiency and therefore economic growth can be enhanced by placing excise taxes on those activities that generate social costs is unverifiable. Since the economic data that would be necessary for calculating such a tax are impossible to obtain, the amount of the tax would have to be determined by non-economic, most likely political, considerations.

A clear illustration of the problems discussed here and the political gamesmanship that they can generate is the current advocacy of carbon taxes.

The analytical problems which beset the design and implementation of an economically efficient tax insure that political concerns will ultimately determine not only the nature and amount of the tax, but the kinds of problems that are ultimately tagged with the social cost label. Since social costs are actually subjective opportunity costs imposed on particular individuals, what is and isn't a social cost is always highly speculative and very often, empirically unverifiable. This allows for a great deal of political manipulation of the entire issue.

Example: Carbon Taxes and Global Warming

A clear illustration of the problems discussed here and the political gamesmanship that they can generate is the current advocacy of carbon taxes.[11] These taxes would likely take the form of an excise tax on the production or use of fossil fuels, such as oil, gas, and coal. Many who participated in the U.N. sponsored "Earth Summit" on environmental issues advocate that such a tax be imposed by all nations. The rationale for such taxes stem from the alleged social costs that carbon dioxide (CO_2) emissions generate in the form of global warming.

---

[9] This argument is part of what is known as the theory of second best. See Lipsey and Lancaster, "The General Theory of Second Best," *Review of Economic Studies*, Vol. 24, No. 63.

[10] Because of this issue it has been argued that if one could calculate the efficient externality tax then one could efficiently centrally plan the entire economy, since theoretically the information requirements are identical. See Gerald O'Driscoll and Mario Rizzo, *The Economics of Time and Ignorance*, (London: Basil Blackwell), 1985.

[11] For example see "Understanding the Economic Costs of Reducing CO_2", Testimony before U.S. Senate Committee on Energy and Natural Resources, by Roger C. Dower, World Resources Institute, Washington, D.C.

The policy maker faces daunting problems in attempting to formulate an excise tax that would efficiently address the alleged global warming problems created by CO_2 emissions. From the perspective of economic efficiency, the point of the tax is to force the generators of the social costs to incorporate those costs into their production decisions. This means that the policy maker must be able to specify and quantify the social costs of global warming and then formulate and impose a tax that accurately reflects those costs. Given the problems identified in this paper the impossibility of doing so should be obvious.

There are, however, additional problems that are specific to this case. First, there is no evidence that anyone currently living is bearing any costs associated with global warming, so that all of the discussion is in terms of future generations who will have to bear whatever costs there may be. Assuming for the moment that there actually are costs that current productive activity by its use of fossil fuels imposes on future generations, it should be clear that these costs would be impossible for any present-day policy maker to calculate. Given the nature of opportunity costs, it is impossible to quantify social costs that are borne by people currently living. To calculate the efficient tax with regards to future social costs would require knowledge of the preferences of people who have not yet been born and the cost and production functions that relate to yet undiscovered technologies and unknowable future conditions of supply. This information would have to be known not just for fossil fuel markets but for all markets in the economic system.

Whether any carbon tax would actually address a real social cost problem at all is highly questionable. In the scientific community, there is controversy with respect to every aspect of this issue.

Justification of new taxes must also explain why existing taxes on fossil fuels and other supply restrictions are not enough. The point of any tax on social-cost generating activities is not to reduce the social costs to zero, but to achieve the price-output combination that would result if the offending parties were actually bearing the costs and there were no other distortions in the economy. To show merely that some social costs are still present is not proof that more taxes are needed. Throughout the world there is extensive taxation of the use of fossil fuels. Taxes on gasoline range from 28 percent of the retail sale price in the U.S. to as high as 75 and 77 percent in Italy and France respectively.[12] In addition, the U.S. government restricts exploration and drilling for oil in both Alaska and off-shore along both coasts. These taxes and restrictions cause supplies to be lower and prices to be higher than they would be in their absence. The question that must be addressed, but never is, is why are these very significant restrictions that already exist and the higher prices that they generate not enough to account for the social costs that the use of these fuels allegedly are, or

[12] James Tanner, "Carbon Tax to Limit Use of Fossil Fuels Becomes Embroiled in Global Politics", *The Wall Street Journal*, June 9, 1992. (Original source, International Energy Agency.)

will be generating? Indeed, none of these previous restrictions or taxes has been justified in accordance with the espoused economic theory, nor can they be.

We are assuming that a social cost problem actually exists, or will exist in the future. Whether any carbon tax would actually address a real social cost problem at all is highly questionable. In the scientific community, there is controversy with respect to every aspect of this issue. Whether global warming is actually occurring is in dispute.[13]

Second is the question of whether, assuming that global warming to some extent will occur, its consequences will actually be detrimental, that is, whether it will actually generate social costs. While some argue that global warming caused by increased levels of atmospheric CO_2 and other greenhouse gasses will bring on droughts, floods, and even thawing of the polar ice caps, others argue that the effects will be beneficial. For example, it is argued that most global warming would occur at night, leaving day time temperature unaffected. The implication of this is that growing seasons would be lengthened and allow for enhanced agricultural production in more northerly regions. In addition, increased CO_2 in the atmosphere would enhance crop production and agricultural yields. According to Patrick Michaels, Professor of Environmental Science at the University of Virginia:

> *[I]t's more likely that the way the enhanced greenhouse effect works is for night to warm up with little day warming...it's pretty hard to melt the polar ice fields with any conceivable warming during polar night, and the growing seasons will be longer as nights warm. Drought frequency can decline if world precipitation increases, as long as summer days don't warm much. Both have happened; in fact, summer days have cooled across our hemisphere over the period of reliable records.*[14]

The point here is not to argue the scientific validity of any of these perspectives, but simply to point out that an excise tax is advocated as a remedy for a social cost problem whose mere existence is controversial. In fact, if global warming would actually generate social benefits then the same theory that suggests that a tax is the correct policy tool for the social cost scenario would imply that a carbon subsidy should be put in place. The argument for such subsidies is symmetrical to the tax analysis and faces all of the same analytical problems. Of course, if both social costs and social benefits are generated, then both would have to be considered in any tax/subsidy solution. It is clear that none of these complications are part of the debate or are even being considered.

As noted above, whether or not a particular tax that is imposed is "efficient" is unverifiable. The entire framework of analysis then lends itself to simplistic assertions and ambiguous statistics. This

---

[13] See Patrick J. Michaels, "Apocalypse Not Now: Science, Politics, and Global Warming," *Policy Analysis*, (Washington, D.C.: The National Chamber Foundation) 1992. See also John Shanahan, "A Guide to the Global Warming Theory," *Backgrounder* No. 896, (Washington, D.C.: The Heritage Foundation), May 21, 1992.

[14] Patrick J. Michaels, "Smokescreen From the Greenhouse," *The Washington Times*, June 18, 1992.

not only opens the door for political manipulation of the economic "data," but, in cases such as global warming and the imposition of a carbon tax where the economic data depend on information from the physical sciences, it enhances the politicization of all of the relevant scientific discourse. If the political agenda calls for a tax on fuels that generate CO_2 as a bi-product, the economic theory will supposedly justify that tax if it can be shown that the CO_2 generates social costs. In order to demonstrate that these social costs exist, evidence from the physical sciences such as chemistry and climatology must be invoked. In such cases the empirically deficient economic theory provides the link that can lead to the politicization of the scientific evidence.

...whether or not a particular tax that is imposed is "efficient" is unverifiable...This not only opens the door for political manipulation of the economic "data," but, in cases such as global warming and the imposition of a carbon tax where the economic data depend on information from the physical sciences, it enhances the politicization of all of the relevant scientific discourse.

This politicization is demonstrated in a recent study conducted by the Congressional Budget Office on the economic effects of carbon taxes.[15] In an uncharacteristically candid statement for the publication, it pointed out that "there is great uncertainty about the extent to which...global warming is likely to occur, what its effects might be, and the costs of efforts to slow the progress of warming..." But it goes on to say that "its potential consequences have led to calls for immediate action."[16] The implication is that it is the politics not the science or economics that is driving the policy. But in spite of this acknowledgement, the underlying assumption of the study is not that the presence and effects of global warming are "uncertain," as is noted, but that global warming is occurring and generating social costs which, by implication, justify a tax. Throughout the document, global warming is referred to as a "problem" and as a "threat," with no hint that this underlying assumption is itself controversial. Except for the above acknowledgement, found only in passing, the view of "investigators...concerned that rising concentrations of these gases, largely resulting from human activities, may cause an increase in the earth's average temperatures that could have severe economic and ecological effects"[17] is implicitly accepted without question.

Politics have led to "calls for immediate action." The economics provide a pseudo justification for such action by suggesting that if a social cost is generated, a tax is justified on economic

---

[15] *Carbon Charges as a Response to Global Warming: The Effects of Taxing Fossil Fuels*, Congressional Budget Office, 1990.

[16] *Ibid.*, p. ix.

[17] *Ibid.*

efficiency grounds. This leads to contortions of the science such that only the scientific evidence and arguments that support the political "call for action" enters into the analysis.

If different scientific evidence were emphasized, the economic analysis would change. The CBO study emphasizes mostly beneficial consequences, in terms of enhanced "energy efficiency," from the imposition of fossil fuel taxes. But if it started with the opinion of scientists such as Michaels, who suggest that global warming may result in social benefits, not social costs, then the study would have to conclude that new fossil fuel taxes would impair economic efficiency and would have to go on to argue that existing taxes should be removed, or at least reduced.

As an aside, the CBO study makes no distinction between energy efficiency, the use of less energy per unit of output, and economic efficiency, minimizing the value of all inputs per unit of output. The strong implication in the CBO study is that any increase in energy efficiency is equivalent to an increase in economic efficiency. No justification is given for blurring this distinction, and none exists. While a tax on fossil fuels will increase the price of most energy inputs and therefore lead to a reduction in their use per unit of output, it will lead to an increase in the cost of production overall and therefore decrease economic efficiency. As the prices of fossil fuel-related energy sources rise, there would be a tendency to substitute other energy and non-energy related inputs for the taxed energy inputs. The increase in demand for the substitute inputs would cause their prices to rise. The end result would be an overall increase in the cost of production that would impact on all production processes. Increased energy efficiency brought about by such a tax, not by technological advance, would result in a decrease in economic efficiency and reductions in living standards overall. The distinction between energy efficiency and economic efficiency is an important one to make, but is typically ignored, not only in the CBO study but in debates over energy policy in general.

Conclusion

While excise taxes are touted as the economically efficient way of dealing with environmental and other social cost issues, objective economic analysis argues that the use of such taxes for this purpose are at least as likely to be counterproductive. Once this is realized, all claims that such taxes give us the best of all worlds, namely the possibility of raising taxes while doing good for the economy, are exposed as being false.

Social cost excises, like all other taxes, will indeed bring about a reduction in the amount of whatever is being taxed. But the economic analysis required to support such taxes must also address how one is to determine by how much output must be reduced to ensure that the resulting output accurately reflects the social costs generated, taking account of all other distortions in the economy. Also, like all other taxes, these excises bring about a reallocation of resources, most likely from private market-based uses to politically-motivated uses in the public sector. Were this the case, there

is likely to be a loss in economic efficiency, rather than a gain. If the new taxes are offset by reductions in other taxes or are used to reduce the deficit, then the reallocation would be from one area in the private sector to other areas of the private sector. There is no theoretically or empirically verifiable way to show that in a real world market setting, outside of the context of the highly stylized economic models that are typically used, resources would necessarily be reallocated to more efficient uses. Given this, imposing a tax to reduce the output of a good the production or consumption of which generates social costs does not guarantee enhancement of economic efficiency and should be analyzed no differently than any other tax.

None of the discussion here should be construed as an argument for doing nothing about environmental or other social costs problems. However, any solution that attempts to force markets to achieve allegedly efficient predetermined outcomes is certain to fail. A detailed discussion of an alternative approach is beyond the scope of this paper. Suffice it to note that constructive solutions should be based on recognition of the fact that most social cost problems are not attributable to market failure per se. Rather, they are the result of a failure in the legal and institutional arrangements that are necessary for the proper functioning of markets. In particular, social cost problems tend to arise when property rights are either unclearly defined or not enforced. Solutions that will promote the efficient operation of market processes while minimizing social cost should focus on adjustments to the property rights setting in which the market must operate.[18]

In the current political setting in which near hysteria over some environmental issues, obfuscating reasoned analysis of economic and scientific issues, is combining with budgetary concerns, social cost excises are being viewed by some as a panacea. They are not. Such taxes should be viewed with no less skepticism than any other tax. Ultimately they are simply another revenue raiser for the Treasury and another tool of social and economic engineering for would-be central planners, not a vehicle for enhanced economic efficiency.

Roy E. Cordato*
Senior Economist

* *The author acknowledges the research assistance provided for this paper by Daniel P. Noll.*

[18] For a very practical discussion of how such an approach might be implemented in a variety of cases see Terry L. Anderson and Donald R. Leal, *Free Market Environmentalism*, (San Francisco: Pacific Research Institute for Public Policy), 1991.