It has been 40 years now since South Royalton conference on Austrian Economics. Already by the 25\textsuperscript{th} anniversary, one participant had declared that conference to be the moment of rebirth for the school. (Vaughn, 2000) The number and youth of the participants at this 40\textsuperscript{th} anniversary gathering confirms that Austrian economics is alive and well. But is alive and well enough?

In the introduction to the proceedings of the South Royalton conference, I suggested that Austrian economics had the potential not just to survive but also to achieve what Thomas Kuhn (1962) calls a scientific revolution. Such a revolution would fundamentally
change the way practitioners of a field saw the world as a new paradigm came to replace the dominant one. What can we say of the success of Austrian economics in that regard?

As I noted then, the Austrian school does possess one key component of a scientific revolution, a distinctive paradigm, but that is a necessary, not a sufficient, condition. To assess the progress toward a real scientific revolution, we have to ask three additional questions.

• Have Austrian economists addressed problems that people think are important?
• Have they been able to offer proposals of practical value to economic policy, or is their work limited to pure theory?
• Do they offer unique solutions to economic problems, or just different ways of reaching the same results as the dominant paradigm?

Papers presented at this conference range from marketing and entrepreneurship, to history and method, to money and macroeconomics. Such a broad scope shows that it would be impossible to survey all of Austrian economics as it has developed over the past four decades. Instead, in this presentation, I will take a case study approach. The case I have chosen to focus on is Austrian environmental economics, a field I have followed more closely than others over the years.

PREMISES OF AUSTRIAN ENVIRONMENTAL ECONOMICS

The Austrian paradigm, as applied to environmental economics, has three components.

The first is a characterization of environmental issues as problems coordination. As Roy Cordato (2004, p. 7) puts it, they are “not about harming the environment, but about human conflict over the use of physical resources.”

The second component is a comparative institutional method. Rather than trying to maximize efficiency or social welfare, as in the neoclassical approach, Austrians ask what set of institutions can best facilitate (or, perhaps better, least impede) coordination among the conflicting plans of various potential users of environmental resources.
The third component of the paradigm specifies that property rights are the key to resolving environmental problems. To quote Cordato again, “it is logical that both the origin and the solution of the problem is to be found in a lack of clearly defined or enforced property rights.” (2004, p. 9)

These three components of the Austrian paradigm lead naturally to policy prescriptions that envision a minimal role for government. Graham Dawson (2011, p. 18), addressing climate change, expresses a view that Austrian writers extend to environmental problems of every kind:

The policy implication is that government has no cause to intervene in market exchange where property rights have been allocated and legislative procedures exist that make it possible for the victim to take legal action against the polluter....

The Austrian or libertarian policy must therefore be to privatise “climate change policy,” repealing all existing climate change legislation.... There simply should not be a public policy towards “climate change.” Instead, the courts should build up a body of common law and establish precedents to guide the actions of the users of fossil fuels.... (Dawson, 2011, p. 19)

It all sounds easy, but between the statement of theoretical principles and their practical implementation lie several significant challenges.

**CHALLENGE NO. 1: THE INSTITUTION GAP**

The first question to ask is, how successful have Austrian writers been in specifying the property rights and enforcement mechanisms they see as necessary to achieve environmental coordination? The answer requires turning from easily stated generalities to some of the more difficult details. In doing so, we will pay particular attention to the distinction between *normative* legal principles—the way the law should look if it is to serve the purposes of economic coordination and libertarian justice—and principles of *positive* law as actually practiced today.

**What Property Rights?**

Many Austrian writers have strong ideas about how property rights should be defined. In one of the most widely cited treatments,
Murray Rothbard (1982) begins from the bedrock principle of homesteading, or first use. Polluters should be allowed to homestead the right to dispose of wastes in unused waterways or air space. People who later “come to the nuisance” by buying land near a smelly feedlot or a polluted waterway have no valid claim to relief. Elsewhere (1998, p. 63), he extends the principle of homesteading to land that is legally owned but unused.

Rothbard makes it clear that these are normative principles that today’s courts do not consistently follow. The resulting gap between normative and positive law is of more than theoretical importance. For example, if courts were to recognize homesteading of owned but unused property, they would frustrate the efforts of conservationists like Ted Turner or environmental organizations like Ducks Unlimited who buy up millions of acres of critical habitat for the specific purpose of leaving it unused.

What Courts?

Austrian writers loosely refer to “the courts” as the instruments for enforcement of property rights, but just what courts? Unfortunately, the courts we have now are not always diligent in upholding property rights.

For example, consider how U.S. courts have treated regulatory takings. The Fifth and Fourteenth Amendments to the Constitution provide that “private property shall not be taken for public use without just compensation.” Libertarians have long held that this language should apply not just to cases in which the government takes title to property, but also to those in which regulation reduces its value or the ways the owner can use it.

Suppose, for example, I own a property that I intend to use for farming. A new regulation then defines part of it as a protected wetland, no farming allowed. Let’s stipulate that wetland protection is something that many people value. No matter—the Fifth Amendment would, on the face of it, seem to require that I be compensated for the loss to my farming operation. Yet in practice, U.S. courts have consistently held that if a regulation serves a public purpose, no compensation need be paid as long as the government does not actually take title to the property in question.
For another example, consider the Fourth Amendment’s restrictions on unreasonable searches and seizures. Unreasonable searches and seizures, whether they are stop-and-frisk searches for drugs by local police or searches of cell phone records by the NSA, are violations of property rights. The idea of a constitutional prohibition on overly broad searches came out of the experience of colonial-era merchants like John Adams and Elbridge Gerry who objected to raids on their homes and businesses by British officials, acting under “general writs,” in search of seditious documents or contraband tea or whatever. Sadly, today’s courts are even less willing to stand up against the NSA than against the EPA.

Why don’t our courts protect property as diligently as Austrian writers think they should? Part of the reason, I am sure, lies in the selection of judges by political appointment or popular election. It is not just Democratic judges who are shaky in their support of property rights. Republican judges, rather than being pro-market, often reach the bench because they are “pro-business”—a code word for subservience to corporate rent seekers. If Austrian environmental economics is to rest on a solid institutional foundation, the issue of how to get better courts and judges deserves more attention.

**What Standards of Proof?**

Even with clear definitions of property rights and courts truly dedicated to enforcing them, plaintiffs would have to prove violations of their rights in each specific case. Rothbard and other Austrian writers have clear ideas about the standards of proof that courts should apply, but again, these often differ from current practice.

For example, in many, if not most, civil cases, the prevailing standard of proof is *preponderance of evidence*, also known as *balance of probabilities*. Austrian writers instead tend to favor *beyond a reasonable doubt*. The distinction is hardly trivial. Imagine a case in which plaintiffs claim that their property is being harmed by climate change. Would a court be convinced by existing scientific evidence that climate change is harmful and that human activity contributes to it? Quite possibly yes, if the standard of proof were *preponderance of evidence*, but no, if the standard were *beyond a reasonable doubt*. 
The choice between negligence and strict liability is another example. A negligence standard, which today’s courts commonly apply in tort cases, is not entirely toothless. Properly implemented, it at least encourages people to take cost-effective measures to safeguard other people’s property. However, most Austrians prefer the less frequently applied standard of strict liability, which requires people to take responsibility for harm they cause even when it is unintentional.

Taking these three issues together—what property rights, what courts, what standards of proof—we see that there is a major gap between existing institutions for defining and enforcing property rights and the ideal versions of Austrian theory. The gap matters, especially when we move from theory to policy. Unless Austrians can at least outline the crucial institutional bridge between the ideal and the possible, they risk falling into what Harold Demsetz (1969, p. 1) calls the nirvana approach:

The view that now pervades much public policy economics implicitly presents the relevant choice as between an ideal norm and an existing “imperfect” institutional arrangement. This nirvana approach differs considerably from a comparative institution approach in which the relevant choice is between alternative real institutional arrangements. In practice, those who adopt the nirvana viewpoint seek to discover discrepancies between the ideal and the real and if discrepancies are found, they deduce that the real is inefficient. Users of the comparative institution approach attempt to assess which alternative real institutional arrangement seems best able to cope with the economic problem; practitioners of this approach may use an ideal norm to provide standards from which divergences are assessed for all practical alternatives of interest and select as efficient that alternative which seems most likely to minimize the divergence.

If we replace the neoclassical term efficiency with the Austrian term coordination, Demsetz’s point is highly relevant. To argue that an ideal set of courts could do a better job of resolving environmental problems than can existing government regulations is to follow the nirvana approach, yet writers like Rothbard, Cordato, Dawson, and others tread perilously close to doing just that.

That is all the more striking, since Austrians are quick to condemn neoclassical economists when they slip into nirvana mode. Consider the economics of antitrust.
approach has been to compare existing market processes with the ideal construct of perfect competition. Finding that the messy realities of the former fall short of the perfect efficiency of the latter, they declare a “market failure” and recommend a set of remedial laws and regulations. The Austrian approach instead, is to compare the messy details of real-world markets with the even messier institutions of real-world antitrust law and policy. Dominick Armentano, an alumnus of the South Royalton conference, has used this comparative institutional method to build a strong case for antitrust repeal. (Armentano, 1999)

The bottom line here is that if Austrian environmental economics is to be fully persuasive, its policy proposals need to be better rooted in a comparison of the existing policy regime with alternatives that have real institutional meat on their normative bones. As we will see in the next section, the property rights approach to environmental issues has made more progress in this regard when dealing with some kinds of environmental issues than with others.

CHALLENGE NO. 2: THE PROBLEM OF ENVIRONMENTAL MASS TORTS

In areas like grazing, conservation, forestry, fisheries, and urban development, the property rights approach has made real progress, not just in theory, but also in practice. Examples abound. National organizations like the Nature Conservancy and local ones like the San Juan Preservation Trust, in the small community where I live, protect millions of acres of critical habitat. In doing so, they use a full range of property rights tools, including not just purchases, but also conservation easements, mitigation banks, and more. (Dolan, 2011). Terry Anderson and Donald Leal (2001) of the Property and Environment Research Center show how the property rights approach has led to better coordination of the varying interests of ranchers, farmers, hunters, and conservationists in the American West. In an urban context, property developers use covenants, easements, and other devices to coordinate the conflicting interests of individual owners in condominiums and planned developments. David Zetland (2014) has detailed how markets and property rights can help coordinate the overlapping plans of farmers, homeowners, and industry for use of scarce water resources.
However, there are limits. The property rights approach works best when the number of parties involved in environmental dispute are few and proximate. When they are many and remote, neither face-to-face bargaining nor common law litigation works well. Many of the most important environmental issues of our times fit this pattern, including urban smog, acid rain, ozone depletion, ocean acidification, and anthropogenic climate change. I will refer to this class of problems as environmental mass torts.

As Anderson and Leal put it, air pollution and related mass torts “challenge the paradigm.” (2001, p. 8) Poorly defined property rights are part of the problem, but even if rights were clearly established, the larger issue would be the procedural barriers and burdens of proof that pollution victims would face in any attempt to prevail in court. These do not arise solely from the shortcomings of laws and courts as they now exist. On the contrary, it would be even harder for pollution victims to prevail before an ideal court that followed the rigorous standards proposed by Rothbard and those who follow his lead.

Here is Rothbard’s (1982, p. 87) succinct statement of those standards, as applied to air pollution:

Aggression may take the form of pollution of someone else’s air, including his owned effective airspace, injury against his person, or a nuisance interfering with his possession or use of his land. This is the case, provided that: (a) the polluter has not previously established a homestead easement; (b) while visible pollutants or noxious odors are per se aggression, in the case of invisible and insensible pollutants the plaintiff must prove actual harm; (c) the burden of proof of such aggression rests upon the plaintiff; (d) the plaintiff must prove strict causality from the actions of the defendant to the victimization of the plaintiff; (e) the plaintiff must prove such causality and aggression beyond a reasonable doubt; and (f) there is no vicarious liability, but only liability for those who actually commit the deed.

Later in the same article, Rothbard (1982, pp. 93–97) specifies additional standards for joint torts and joint plaintiffs. He limits compulsory joinder of defendants to cases where polluters have acted in concert, and joinder of plaintiffs to cases where each plaintiff actively and voluntarily participates and common interests predominate.
Consider how these standards would work out in the case of a hypothetical Vermont farmer, call her Nancy Norman, who claims that acid rain is harming her maple trees.

- Defendants, such as Midwestern power plants, could argue that their emissions began before Norman purchased her property, so that she was “coming to the nuisance.” Unless she had inherited her farm from a line of ancestors dating back before the industrial age, older pollution sources would be off the hook and she could only go after more recent ones.

- Because Rothbard treats harm from invisible and insensible gases like $SO_2$ and $NO_x$ as a nuisance, not a trespass, Norman would have to prove actual damage. In any legal action, she would have to bear the cost of expert testimony regarding the science of acid rain, and would have to rebut defendants’ testimony that some other agent, say a fungus, might be harming her maple trees. The testimony would have to establish her contentions beyond a reasonable doubt.

- Norman would have to sue each polluter individually, unless she could prove they acted in concert, which presumably they do not. She would have to prove strict causality, not just regarding the point that acid rain in general damaged her trees, but that each individual defendant contributed causally to the damage. (Rothbard approvingly quotes an authority who says, “Currently, a party who has been damaged by air pollution must prove in court that emitter A damaged him. He must establish that he was damaged and emitter A did it, and not emitter B. This is almost always an impossible task.”)

- Finally, it would be difficult to undertake a class action. Although Norman might be able to join with other maple farmers, if she could secure their active participation, she could not, under Rothbard’s standards, join with defendants claiming that acid rain caused other forms of damage, say, to fisheries, buildings, or personal health.

Taking all of these considerations together, Rothbard acknowledges that an individual pollution victim would have no chance at all of prevailing in a tort action against multiple, remote polluters:

The prevalence of multiple sources of pollution emissions is a problem. How are we to blame emitter A if there are other emitters or if there are
natural sources of emission? Whatever the answer, it must not come at the expense of throwing out proper standards of proof, and conferring unjust special privileges on plaintiffs and special burdens on defendants. (Rothbard, 1982, p. 88)

Instead, he says, if the burden of proof is insurmountable, then pollution victims “must assent uncomplainingly.”

Not all advocates of a property rights approach agree with Rothbard on these points. For example, Martin Anderson (1989), as quoted approvingly by Block (1990), puts it this way:

If you took a bag of garbage and dropped it on your neighbor’s lawn, we all know what would happen. Your neighbor would call the police and you would soon find out that the disposal of your garbage is your responsibility, and that it must be done in a way that does not violate anyone else’s property rights.

But if you took that same bag of garbage and burned it in a backyard incinerator, letting the sooty ash drift over the neighborhood, the problem gets more complicated. The violation of property rights is clear, but protecting them is more difficult. And when the garbage is invisible to the naked eye, as much air and water pollution is, the problem often seems insurmountable.

...The only effective way to eliminate serious pollution is to treat it exactly for what it is—garbage. Just as one does not have the right to drop a bag of garbage on his neighbor’s lawn, so does one not have the right to place any garbage in the air or the water or the earth, if it in any way violates the property rights of others.

What we need are tougher clearer environmental laws that are enforced—not with economic incentives but with jail terms.

Although this passage does not use Rothbard’s careful legal language as Rothbard, it clearly takes a different approach. Its key features include:

• A tilt toward the rights of victims rather than polluters when procedural considerations make it hard to protect both perfectly.

• The implication that a public prosecutor could act to prevent known harm even when specific victims have not filed suit or even been identified.

• The possibility of injunctive remedies or criminal sanctions in addition to, or instead of, payment of damages under tort law.
Despite their differences, Rothbard’s approach and the move toward a victim-friendly alternative have one thing in common: Neither does much to solve the coordination problem in cases of environmental mass torts. Under Rothbard’s approach, polluters would have little incentive to accommodate themselves to the conflicting plans of remote pollution victims. Under the alternative version, it might be the polluters who, because of the difficulty of negotiating pollution easements with downwind property owners, would have to “assent uncomplainingly” to costly abatement measures.

The bottom line: There can be no coordination unless the property rights of both polluters and their victims are clearly defined and diligently enforced. In the case of environmental mass torts, that appears to be a practical impossibility, as proponents of the property rights approach themselves acknowledge.

CHALLENGE NO. 3: BRINGING THE PRICE SYSTEM TO BEAR

In the hands of Rothbard, Cordato, and other Austrian writers, the property rights paradigm leads to a dead end when applied to urban smog, acid rain, ozone depletion, climate change, and other large-scale forms of pollution. It turns out to be incapable either of ensuring equal justice for polluters and victims, or of resolving the coordination problem. Much of the reason, I think, is that these writers take an excessively legalistic approach. Yes, property rights are important, but it is wrong to focus on direct negotiations backed by tort law as the principal mechanism through which they achieve coordination. Something is missing.

Fortunately, we do not have to look outside Austrian framework to find the missing piece. As famously articulated in Friedrich Hayek’s (1945) essay on the use of knowledge in society, the price system, not property rights per se, is the key mechanism that facilitates economic coordination among large numbers of widely scattered actors. That being the case, we can restate the problem as one of how to bring the price system to bear on the problem of environmental mass torts.
Where property rights are adequately defined and enforceable, prices arise naturally from the interplay of supply and demand. Hayek uses the market for tin as an example. Sellers expand supply when the price is higher than their estimated cost of production. Consumers buy more when the price is below the maximum they are willing to pay for an additional unit. Coordination occurs without the need for face-to-face negotiation or even the knowledge of who your customers are or why they want your product. The law is there as a backstop, but only as a last resort in cases of fraud or breach of contract. Most of the time, mutual self-interest and the desire to protect commercial reputations are sufficient to ensure that the parties carry out their agreements.

Things are not so simple, though, when the legal backstop is missing, as it is when property rights are murky and enforcement is impracticable. Since prices and markets do not emerge naturally in such a setting, the only choices are to get along without them altogether or to take artificial measures to bring them into play. In Hayekian terms, we might think of it as artificial insemination of knowledge—not nature’s way, but better than nothing when nature fails.

The two leading approaches for doing this are emissions trading and pollution fees. I think Austrian economists succumb to the nirvana fallacy when they dismiss these policy alternatives too quickly. The comparative institutional method demands that these proposals receive unbiased evaluation. It turns out that there is much to like about them, even from an Austrian point of view. Let’s look first at the positive features of these policies and then at some common objections to them.

**Emissions Trading**

An Austrian case for emissions trading follows naturally from Rothbardian homesteading of pollution easements. Rothbard (1982, p. 77) uses the example of noise pollution from an airport. At time T, he imagines, an entrepreneur sets up an airport in an open area with no one nearby to be bothered by the noise. The facility emits X decibels of noise into the surrounding unused airspace, thereby homesteading the right to X decibels. If someone builds a house nearby at time T+1, says Rothbard, they have no cause
for action against airport, since they have “come to the nuisance.” However, if the homeowner bought the property for a price that reflected ambient noise of X decibels, and at time T+2 the airport increases its noise emissions to 2X decibels, the homeowner would have a cause of action for 1 decibel of excess noise.

Rothbard specifies that the titles to pollution easements created by homesteading are transferable by sale, gift, or bequest. Furthermore, they are separable, in the sense that it is permissible to sell them without selling the airport itself.

If purchases and sales of noise easements became frequent, some entrepreneur would no doubt set up an exchange to trade them in standardized units. Soon a fully developed, fully private emissions trading scheme would spontaneously emerge, with the supply of easements for each type of pollution capped by the number that had been legitimately homesteaded. Once population density increased to the point that no part of the relevant airspace or watershed remained unused, there could be no further homesteading and the caps would become permanent.

Such a spontaneously emergent emissions trading scheme would facilitate coordination of the plans of the various affected parties in a way completely consistent with Austrian principles. The mechanism of coordination would be the price of easement units as traded on the exchange. For example:

• The airport would use the price of easement units in deciding how much to invest in abatement technologies like noise deflecting walls and berms.

• It would communicate the value of easements to airlines through the price it charged for landing fees. Airlines, in turn, would use that price in scheduling flights and perhaps in negotiating lower landing fees in return for investments in quieter engines.

• As the local community grew in size and wealth, property developers or voluntary community associations could buy up some easement units to hold them off the market, with a payback through lower noise levels and higher property values.

In short, if we accept the homesteading principle, then nothing about emissions trading per se is offensive to Austrian principles.
Pollution Fees

Pollution fees are another way to inject prices artificially into a world where muddled property rights and imperfect courts prevent them from emerging spontaneously. I find that neoclassical economists tend to like pollution fees better than emissions trading, but for Austrians, they are probably an even harder sell. They object that pollution fees are a form of tax, and that all taxes are bad. Even so, that does not mean they are equally bad.

Yes, taxes can pose barriers to coordination. Payroll and income taxes make employment less attractive to workers and hiring less attractive to employers. Corporate taxes distort incentives for choosing one form of business organization rather than another. But, within a comparative institutional framework, the critique of such taxes presumes that the alternative would be coordination through functioning, tax-free markets for labor, capital, and their products.

Pollution fees have a different status. As we have seen, though, where property rights are not clearly defined and or adequately enforced, markets for pollution cannot emerge and coordinating conflicting uses of environmental resources becomes problematic. That changes matters in two key ways.

First, it means that the effects of pollution fees must be compared not with the operation of a nonexistent tax-free market, but with a situation in which pollution goes altogether unpriced. Whatever one’s distaste for taxes, the latter situation is, arguably, even less congenial to economic coordination.

Second, it means that the effects of pollution fees must be compared to those of other taxes. No one that I know of proposes just adding pollution fees on top of all other sources of government revenue. The proper approach is that of a revenue-neutral tax reform in which pollution fees would replace payroll taxes, corporate taxes, or whatever other existing taxes are most harmful to coordination. In that context, it is appropriate to reject pollution fees only if they are worse than any other tax.

Again, we have to choose between the nirvana approach and that of comparative institutions. For many Austrians, nirvana means a society with no taxes at all. As libertarian philosophy or science fiction, I find such an anarcho-capitalist utopia quite charming.
However, there is also a less radical, more practically minded thread within the Austrian tradition, that of Hayekian classical liberalism, which envisions a limited government supported by limited, minimally intrusive forms of taxation. From a classical liberal point of view, pollution fees deserve a fair hearing.

The Calculation Objection

Let’s turn now to three objections that Austrian writers have raised against both emissions trading and pollution fees. The first is the calculation objection. Cordato states it this way:

Both of these approaches are fundamentally forms of market socialism and suffer from all of the problems that Austrians have typically made against central planning. Most specifically, a central authority must know in advance what the efficient outcome is. In the case of the tax, a central authority must know in advance the exact amount of the externality costs being imposed by the polluter, and the correct price and output, not only for the good in question but, since efficiency only makes sense in a general equilibrium context, for all other affected goods and services. In the case of tradable permits, the knowledge requirements are essentially the same. This is because the central authority must first determine the “efficient” level of emissions for the particular pollutant, which also must be determined within the context of a general equilibrium solution. (Cordato, 2004, p. 11)

Art Carden (2013, p. 30) echoes this, saying:

 Tradable permits and Pigovian taxes are market-like, but they still rest on a planner’s conceit that the optimal amount of a particular activity can be known independent of what is revealed by trade (or more generally, by consent).

For several reasons, I think this objection misses the mark. First, the context is wrong. As Cordato himself notes, the origins of the objection lies in the socialist calculation debate. There, Austrian economists sought to establish that real markets could better solve the coordination problem than could central planning or “market socialism.” That debate centered on ordinary goods like coal, cement, or clothing, for which markets, backed by clearly defined and enforced property rights, actually existed. In the socialist calculation debate, the socialists were the ones who succumbed
to the nirvana fallacy by invoking optimal central planning or pseudo-market mechanisms to balance supply and demand in imitation of perfect competition. Austrians, meanwhile, grounded their arguments firmly in a comparison of real world markets with real world socialism.

In the case of air pollution, the shoe is on the other foot. The starting point is a reality in which there are no markets for pollution and no prices. Cordato and others point out that this reality falls short of their nirvana of clearly defined and consistently enforced property rights, but they offer no institutionally practicable alternative.

Second, it is wrong to say that environmental administrators would have to know every detail of the optimal outcome in order to improve coordination. The correct comparison is neither the utopian concept of perfect efficiency nor the nonexistent ideal of perfect enforcement of property rights, but rather, the set of environmental policies that we now have. Arguably, the current mish-mash of command-and-control policy, CAFE standards, ethanol blend ratios and the rest is a mess. Emissions caps or pollution fees could miss the neoclassical optimum by a considerable margin and still be an improvement over the status quo.

Third, those Austrians who employ the calculation objection seem to forget their own concepts of how markets actually work. In real life, relatively few decisions are guided by exact calculations. To take an example from business, engineers at an auto company might, with a fair degree of precision, be able to calculate the optimal mix of fuel and air for the engine of a new model. However, marketing managers tasked with setting the level of advertising for the new model would have to rely on implicit knowledge and rules of thumb. They would be well aware that the difficulty of measuring some quantity does not constitute proof that its optimal value is zero. Better to guess at the proper advertising budget than not to advertise at all.

Matters would be much the same for a common law court. If a farmer successfully sues a railroad for emitting sparks that burn a field of wheat, the court might be able to use data on wheat prices, acreage, and crop yields to calculate damages with reasonable accuracy. But instead, suppose a spill from a plastics plant contaminates an adjacent well and the well owner comes down with
cancer. Assuming that the plaintiff can prove causation, what are the appropriate damages? Medical costs only? Medical costs plus time lost from work? The above plus pain and suffering? The above plus punitive damages to discourage similar abuses in the future? There is no exact answer; the court must give a reasoned judgment based on rules of thumb established by precedent. Yet the inability of judges to perform exact calculations in cases like this does not seem to keep Austrians from placing great faith in tort law.

The Compensation Objection

A second Austrian objection is that emissions trading and pollution fees solve only part of the coordination problem. Yes, if properly implemented, such policies could deter pollution, but they don’t compensate victims. Failure to compensate is not only unjust; it distorts choices about the use of environmental resources and inhibits coordination.

By analogy, consider shoplifting from grocery stores. As intermediaries in the market for apples, grocers facilitate coordination between farmers and consumers. Shoplifting interferes with that function. To offset losses, grocers have to lower the prices they pay to farmers. Given misleading information about the value of apples, farmers might mistakenly convert their land to housing developments. Shoplifting losses also causes grocers to raise prices to consumers, who might turn to snack alternatives they would otherwise find less satisfying, say cookies. The result would be more houses and cookies, and fewer apples, than we would find under full coordination.

In an ideal world of clearly defined and strictly enforced property rights, grocers could hire private guards to nab the shoplifters, take them to court, and demand restitution to cover the value of the stolen goods plus the costs of the guards and court proceedings. With their losses made whole, grocers could then pay more to farmers and charge less to consumers. Coordination would improve.

Suppose, though, that instead of private guards, government police nab the shoplifters and throw them in jail without compensating anyone. Like pollution fees or emissions trading, jailing
shoplifters deters the unwanted behavior but does so without making the victim whole. Still, criminal sanctions offer a partial solution to the coordination problem, in that less shoplifting allows grocers to somewhat raise prices paid to farmers and somewhat reduce those charged to consumers.

The same goes for policies like emissions trading or pollution fees. When it is not possible both to deter aggression and to compensate victims, it is better at least to do the one than to do neither.

The Stolen Property Objection

Walter Block (2004) raises yet another objection against emissions trading. Markets in emissions quotas are illegitimate, he says, not because trading itself is objectionable, but because they are trading in stolen property, like selling stolen televisions from the back of a truck.

Block is not entirely clear from whom the relevant emissions rights have been stolen. If he has in mind a framework of Rothbardian homesteading, then the rights would be stolen from polluters. If he has in mind that downwind property owners have a right to protect themselves against trespass and nuisance, then the tradable permits are stolen from the victims. In either case, they are stolen.

This is a legitimate objection to some versions of emissions trading, but it seems to me that proper design of the trading scheme could overcome it, at least in part. Without going into great detail, I see several possibilities.

First, if one believes that existing pollution levels have been legitimately homesteaded under a “first user” theory, then the solution would be to grandfather in that level of pollution when the trading scheme is instituted. That would fully protect polluters’ rights since they would not have to sell their emissions quota unless they chose to do so.

Alternatively, if polluters are not seen as having legitimately homesteaded the rights, then the trading scheme could include some mechanism to compensate victims. Perhaps the original allocation of permits could be sold at auction. The proceeds could then be distributed through a victim compensation fund or simply through a general tax rebate if all taxpayers were seen as
equally victimized by the pollution. True, it might not be feasible to negotiate release of the relevant property rights with each individual victim. If so, the state might have to invoke eminent domain, as it would when taking property for a highway. Even in that case, the “stolen property” objection would be mitigated if the government observed Fifth and Fourteenth Amendment principles to compensate pollution victims for the regulatory taking.

CONCLUSIONS

What does all this mean for progress toward an Austrian scientific revolution in environmental economics? Let’s take a last look at the questions posed at the beginning of this paper.

First, in taking on the coordination of conflicting plans for the use of scarce environmental resources, Austrian economists have definitely addressed a problem that other economists agree are important. My only disappointment here is that when they encounter difficult cases like climate change, some Austrian writers try to duck the economic issues by retreating into amateur criticisms of the relevant science. That is a problem I dealt with at length in an earlier paper (Dolan, 2006), so I won’t repeat myself here. In my view, Austrian economists qua economists have to deal with climate change and the like in the spirit of “What if Chicken Little is right this time?” That is, they need to propose solutions that would work if at some point real scientists persuade them that climate change is a real threat.

Second, Austrians have offered proposals of practical value to economic policy, as judged by a comparative institutional standard, for problems such as land management, water rights, forestry, urban land use, and others where the parties are few in number and proximate to one another. Unfortunately, Austrians have contributed little if anything to the solution of the problems of mass torts that remain the headline environmental problems of our day.

Third, even where Austrian writers have successfully addressed environmental problems, it is hard to say that their successes spring from their unique Austrian paradigm. There is not always a great practical difference between the conclusions reached by Austrians and those reached by others who ground their approach
to property rights in the neoclassical tradition. The one case where I see the possibility of a uniquely Austrian approach—a version of emissions trading based on Rothbardian homesteading—has been completely neglected.

Taken together, these shortcomings leave Austrian environmental economics with a split personality. On a theoretical level, Austrian writers delight in claiming the moral high ground, condemning polluters as aggressors against property rights. On a practical level, however, they leave pollution victims in the lurch. They invite them to sue, but propose a set of legal standards that would guarantee that polluters would always win. They oppose all government measures to reduce pollution, whether through regulation or through measures to make polluters pay. As a result, at least in cases of environmental mass torts, the Austrian paradigm is a polluter’s dream and a victim’s nightmare. It offers far too little of any practical value toward securing property rights, too little toward facilitating environmental coordination, and too little toward promoting libertarian justice. Much work remains to be done.

REFERENCES


