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They Clapped: Can Price-Gouging Laws Prohibit Scarcity?

Michael Munger*

Here's the thing: They clapped. I can't for the life of me understand why the people would clap. But I'm starting in the middle. Here is what happened:

> "There were no generators, ice, or chain saws to be had, none. But that means that anyone who brought these commodities into the crippled city, and charged less than infinity, would be doing us a service."

Hurricane "Fran" smashed into the North Carolina coastline at Cape Fear at about 8:30 pm, 5 September 1996. It was a category 3, with 120 mph winds, and enormous rain bands. It ran nearly due north, hitting the state capital of Raleigh about 3 am, and moving north and east out of the state by morning. The storm also dropped as much as ten inches of rain. In some counties, nearly every building was damaged; total reconstruction cost and damages were later calculated at $5 billion (2006 $).

In the Triangle (Raleigh, Durham, and Chapel Hill), more than a million people were without power the next morning. Humidity made everything sticky. Hundreds of homes had roofs damaged by falling pines and powerful winds. Few residences had any kind of back-up power. Many roads were blocked by large fallen trees. Within hours, food in refrigerators and freezers started to go bad. Insulin, baby formula, and other necessities immediately became susceptible to spoilage in the 92+ degree heat.

The damage was so widespread, and communication so sketchy, that no one had any firm idea of when power would be restored. More than a million people needed ice. And they needed it now.

Resources on the Move... Not

One might think that thousands of entrepreneurs in the surrounding areas, little touched by the storm, would load trucks and head to the disaster area. After all, they owned, or could obtain, all the things that the residents of central North Carolina needed so desperately. Ice, chain saws, generators, lumber, tarps for covering gaping holes in roofs... we needed it all. I say "we" because my family lived in North Raleigh. No power, and 36 large pine trees smashed down like God's own pick-up-stix. We couldn't get out of our immediate Mungerhood, and my underpowered chain saw burned out on the first tree I tried to cut.

But no such mass movement of resources to their highest valued use took place. North Carolina had an "anti-gouging

North Carolina's Anti-Gouging Law in 1996

law," which made it illegal to sell anything useful at a price that was "unreasonably excessive under the circumstances." This had been widely interpreted to limit price increases to around 5% or less. Each instance of violation of this law could result in a fine of up to $5,000. So, ice that happened in Charlotte, *stayed* in Charlotte. Why drive three hours to Raleigh when you can only charge the Charlotte price, plus just enough for gas money to break even?

The problem for Raleigh residents was all about price, at that point. The prices of all the necessities that I wanted to use to "preserve, protect, or sustain" my own life shot up to infinity. Within a day after the storm, there were no generators, ice, or chain saws to be had, none. *But that means that anyone who brought these commodities into the crippled city, and charged***less than infinity***, would be doing us a service.*

(General Statutes 75-36)

(a) It shall be a violation of G.S. 75-1.1 for any person to sell or rent or offer to sell or rent at retail during a state of disaster, in the area for which the state of disaster has been declared, any merchandise or services which are consumed or used as a direct result of an emergency or which are consumed or used to preserve, protect, or sustain life, health, safety, or comfort of persons or their property with the knowledge and intent to charge a price that is unreasonably excessive under the circumstances.

(Later amended to be even more restrictive, outlawing price changes reflecting cost increases up the supply chain, August 2006, SL2006-245, GS 75-38).

Some service was, in fact, on the way. Four young men in the town of Goldsboro, an hour east of Raleigh and largely untouched by the storm, noticed that the freezers at the Circle P's, the Stop Marts, and the Handee Sluggos were brimming with ice. Convenience stores had stocked up, expecting a more easterly course for the storm. Now, there was an ice surplus in Goldsboro, and a shortage in Raleigh. These young men rented two small freezer trucks, paid $1.70 each for 500 bags of ice for each truck and set off, filled with a sense of charity and the public good.

Okay, I made that last part up. They were filled with a sense of greed. They may have been bad human beings, real jerks. But who cares? If there had been a benevolent, omniscient social planner, she would have been yelling: *(1) Raleigh is desperate for ice. (2) If you have ice, take it to Raleigh.* Of course, there could never be a social planner with that level of information and authority, as **Hayek** (1945) argued so persuasively. But these yahoos acted *as if* they heard one anyway, speaking through the price system: cheap ice in Goldsboro was expensive ice in Raleigh, so they could make money.

Our icemen came to the outskirts of Raleigh, and headed for the interior, where the citizens waited, icelessly. The path was blocked by fallen trees, but these were yahoos, not idiots. Yahoos have chain saws, big ones. They rolled the cut logs off the road so their trucks (and, by the way, other cars and emergency vehicles) could pass.

One truck apparently parked in Five Points, near downtown, and another parked a bit west, near wealthy St. Mary's Street, and opened for business. I have not been able to find a definitive claim about price, but it was more than $8. (All three of my personal "sources" knew someone who saw events, but... I'd love to be able to ask the sellers if they knew of the anti-gouging law, but we'll never know, I guess.)

On reaching the front of the line, some customers were angry that the price was so high, but almost no one refused to pay for the ice. I have also been told that the sellers limited purchases to 4, or 6, bags per customer, but I'm not sure. If it is true, it reflects the altruism of the native North Carolinian, even ones who are just trying to make a buck.

But the police are charged with upholding the law, even the dumb ones (laws, not police). Someone must have made a call, because two Raleigh police cars and an unmarked car pulled up to the Five Points truck after about an hour. The officers talked to the sellers, talked to some buyers, still holding their ice, and confirmed that the price was much higher than the "correct" price of $1.75 (the cost of a bag of ice before the storm). The officers did their duty, and arrested the yahoos.

Apparently the truck was then driven to the police impoundment lot in downtown Raleigh, as evidence. The ice may or may not have melted (accounts vary), but it certainly was not given out to citizens.

And now we are back to where I started: the citizens, the prospective buyers being denied a chance to buy ice... *they clapped.* Clapped, cheered, and hooted, as the vicious ice sellers were handcuffed and arrested. Some of those buyers had been standing in line for five minutes or more, and had been ready to pay 4 times as much as the maximum price the state would allow. And they clapped as the police, at gunpoint, took that opportunity away from them.

From John Hood, **"Gouge Away: Hurricanes and the politics of prices,"** December 1996 (written after, and about, Hurricane Fran), *Reason Magazine*:

> I am a victim of price gouging.
>
> Less than a day after Hurricane Fran's visit September 6, I ventured out of my neighborhood just south of Raleigh, North Carolina, to look for gasoline. I, along with seemingly half of the population of Wake County, found it at a nearby service station, the owners of which had rented someone's generator to get the pumps going. The line stretched far down U.S. Highway 70. I didn't mind waiting. Nor did I mind paying about 15 cents a gallon more than I had the previous week. Driving away with $10 of gas, I didn't feel gouged. Excited would be more like it....

What Were They Thinking?

I am completely stumped by the clapping. But then I'm stumped on why people support anti-gouging laws. I strongly suspect the two things are related.

Consider some quotes from the Raleigh paper, the News and Observer, in the days following the hurricane. First, on September 10, 1996, less than a week after the storm, in two different page 1 stories, we were told:

> "Ice shortages are becoming severe in some places—so much so that local counties are asking the federal government to send as much ice as it can." (Eisley, 1996)

And:

From Roy Cordato, **North Carolina's Price Control Laws**:

> From the perspective of economic science, and particularly the subdiscipline known as "price theory," the concept of "price gouging" or "extreme pricing" or "unreasonable pricing" has no meaning. In fact, none of these terms appear in the index of any of the five most widely adopted principles of economics textbooks used in college classes in the United States.[8] The extent to which

> "At the cabinet meeting, Richard Moore, Hunt's secretary for crime control and public safety, said... he was... deploying the state's Alcohol Law Enforcement officers to investigate reports of price-gouging of products in short supply.
>
> Hunt said both Florida Gov. Lawton Chiles and South Carolina Gov. David Beasley had agreed to send truckloads of ice and other supplies to North Carolina." (Wagner and Whitlock, 1996).

this price control law ignores economic analysis cannot be overstated. It has no grounding in the role of prices discussed above. As noted, while the law specifies several factors that should be used to determine whether prices are illegally high, including facts that are completely irrelevant (such as the average price over the previous 60 days), there is no mention of whether the prices are consistent with actual conditions of supply and demand—which, from an economic perspective, is all that matters.

When I read these two articles, I started sputtering like a crazy person to my poor wife. And I am still sputtering about it. These articles told me two things: #1—Police and other government officials were being sent out to arrest anyone selling ice at a profit. #2—There was a terrible ice shortage. We were so desperate for ice that the only option is to beg the federal government, or other state governments, for supplies from their ice hoards, because there was no other way to get it.

Listen to **"Munger on Price Gouging,"** a podcast with Russ Roberts and Mike Munger on EconTalk.

I'm pretty sure I have a solution: stop doing #1, and #2 will go away like... well, like ice on a steamy September day in Raleigh. Ice is easy to make; just freeze some water. It's hard to make ice without electricity, but most of east, and all of west, North Carolina had plenty of electricity. And, in fact, they had plenty of ice. The problem is that the only real omniscient social planner we have is the market, and she speaks to people through prices. Do this, stop doing that, build something here, move to this city. When the state made it a crime to sell ice at a profit, the price mechanism was struck dumb. Only a few people could hear it. And we threw *them* in jail, ensuring that even fewer would heed the desperate call in the next crisis of deprivation.

Tale of Two Prices

Consider two prices. First, the price of ice before the storm, which most people know, or have a feel for. Second, the price of ice after the storm, which is unknown and highly variable. People who favor price-gouging laws think that the first price, the price *before* the storm, is the fair price, and that is the price they want to pay. The market price *after* the storm reflects both the difficulty of getting ice from stores, because the store has no electricity, and the huge bump in demand for ice as thousands try to buy it.

Clearly, the relative scarcity of ice after the storm is much higher. The market price rises rapidly to reflect this increased scarcity. This makes people who would have used ice at the old price economize, and use something else. They can drink their bottled water, or their Carolina Ale, warm if they don't want to pay $12 for a bag of ice. So ice only goes to people who really value it. And the higher price also signals yahoos, wahoos, and all sorts of regular

folks that one can make boxloads of money by taking truckloads of ice to Raleigh. The price system is automatically doing its job, signaling to buyers that they should cut back, and signaling sellers (even potential sellers, those who have to enter the market from Goldboro) that they should sell more.

If enough people bring ice to Raleigh, of course, the price won't be $12, or $8, for very long. Ice is easy to make and transport, so without market restrictions price *after* the storm will quickly be driven down near the price *before* the storm, because there is so much more ice available. That's what the clapping people *must have wanted.* Even the supporters of price-gouging laws want low prices and large supplies. But they can't get those things from a price-gouging law. Precisely the opposite happens, as the supply of ice disappears and the effective price, what people would be *willing* to pay, goes higher and higher. I admit that it's not intuitive, until you think about it. The only way to ensure *low* prices, and large supply, to buyers is to allow sellers to charge *high* prices, the highest they can get.

Well, but what if you seek a political solution, rather than trusting markets? What if you pass an anti-gouging law, to symbolize your opposition to scarcity? Scarcity hurts; it means that I can't have everything I want. Let's abolish scarcity; what then? As I have tried to argue, all a state accomplishes by passing an anti-gouging law is to ensure that there is no ice. I can't get it for $100, or $1,000. And too many citizens say, "Help: the market has failed! Let's call on government to rescue us!"

But they are wrong. Markets didn't fail. All that happened was that the price mechanism was bound and gagged, held hostage in the attic of the legislature.

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http://www.econlib.org/library/Columns/y2007/Mungerrecycling.html

Think Globally, Act Irrationally: Recycling

Michael Munger*

Two empty bottles, still cool from their malty contents. I glance at my lovely wife. And as always after a couple of beers, she looks strikingly attractive... as an audience for an economics lecture.

Her reaction, also as always, is to pretend to focus intently on her book, and probably to wonder how we ever managed to have children.

I press on, though. "These two bottles. Suppose you value earth stewardship, and want to use the fewest resources. What if you want to minimize the negative impact on the environment? With that as your goal... should these bottles be made of recycled glass? Should anything be recycled? How would we know?"

> "The claims for recycling rest on an assumed, if not always articulated, moral imperative rather than on trade-offs or costs. But underlying this claim, for many people at least, is some murky idea that recycling 'uses up' fewer resources than making things from scratch."

Turning them, I can't tell just from looking if they are made from "cullet," the industry name for ground recycled glass. But I keep talking. "Of course, we don't need to know after the fact; we can predict! Markets price resources by opportunity cost; if recycling is more expensive than using new materials, it can't possibly be efficient. And no producer would choose to use packaging that costs more for the same result. Economics rescues us again!"

I look up from my reverie. Donna seems to have gotten up and gone to bed, a while ago. The easy chair isn't even rocking anymore. Oh, well. Now that certain other options are foreclosed, I can focus on analyzing recycling. Let's think it out together.

Moral Imperatives Rule Out Trade-Offs

Near my own hometown in North Carolina, two recent news items caught my eye. The first was a statement by Greensboro councilman Tom Phillips:

> "The net cost for recycling is more than double the cost for regular garbage collection that will go to the transfer station. (This is after selling the recyclables we can.) A lot of what we recycle winds up at the landfill anyway because of contamination or lack of markets for the recycled material.... While it "feels good" it is too expensive and we must look for better alternatives." (public comment, March 17, 2006)

This made me wonder: how could we *know* if recycling makes sense? What are the standards? Is Mr. Phillips right: should we look at costs?

The second was more remarkable, a parable of the costs of ignoring costs. It happened in Durham, home of Duke University. Here are the facts:

- Durham residents pay $60 per year for separate pick-up of "yard waste" (grass clippings, stumps, tree limbs, etc.) Residents must separate the waste streams, putting yard waste in separate containers. Yard waste is "too valuable," as compost-in-training, to dump in the landfill.
- The city operated a facility that had become clogged with huge amounts of stumps and rotting vegetable matter. The $60 per year fee didn't come close to covering the extra costs of collection. No one offered to buy the "valuable" yard waste, for some reason.
- The stumps at the yard waste facility caught fire, deep in the huge pile. The fire could not be completely extinguished for weeks, and neighbors for miles downwind complained of the pollution. So the waste that homeowners paid extra for reusing was dumped instead in the main garbage staging facility.
- But the law prohibits disposal of yard waste in landfills in North Carolina.
- So, Durham shipped all its trash, including grass clippings, to a landfill more than 85 miles away, in Lawrenceville, VA.
- The clean-up and the extra hauling charges have already cost Durham an extra $1 million, compared to landfill disposal.

The reaction of the citizens of Durham? We can catch a glimpse in this newspaper story:

> People such as Frank Hyman, a garden designer and former City Council member, *pay for yard waste collection with the understanding that the city is reusing it.*
>
> "That's my expectation, and I think that's the expectation of most people," he said.
>
> "A lot of people may be angry when they hear the city is shipping the yard waste to the landfill." (Dees, 2007; emphasis added)

Reuse it? *For what?* The city is desperate to save money, and would surely use the stuff if they could. A question for Mr. Hyman: If yard waste is so useful, why do you have to pay the city to take it away?

There is a simple test for determining whether something is a resource (something valuable) or just garbage (something you want to dispose of at the lowest possible cost, including costs to the environment). If someone will pay you for the item, it's a resource. Or, if you can use the item to make something else people want, and do it at lower price or higher quality than you could without that item, then the item is also a resource. But if you have to pay someone to take the item away, or if other things made with that item cost more or have lower quality,

then the item is garbage.

If yard waste were a resource, then trucks would drive up and down streets in your neighborhood, bidding up the price of your bagged grass clippings. That doesn't happen. *Ipso facto,* yard waste is garbage. No amount of wishful thinking, or worship of nature as a goddess, can change this basic calculus. Let's go back to the problem of recycling glass bottles.

Clear as Glass: If Recycling is Expensive, It's Not A Resource

One of most interesting treatments of the problem of markets and waste disposal is by an old friend of mine, Peter VanDoren. He writes:

> Some policy analysts justify government intervention in refuse collection by invoking market-failure arguments in the collection of recyclables. Why don't free markets for recycling work? Well, in some circumstances they do. Scrap yards, for example, recycle iron and steel. The growth segment in the U.S. steel industry is the so-called "minimill" whose raw material is recycled. Recycling markets work fine in this sector of the economy because making steel from virgin iron and coal is more expensive than making it from recycled raw materials. In other areas of the economy involving glass, paper, and plastic, for example, the discrepancy between recycled and virgin prices often does not justify the development of markets for recycling.... [S]upport for recycling is more religious than economic in nature.

Markets can handle lots of things that look like "recycling." We reuse copper, even stripping it from old homes before they are torn down. I rent a car at Hervis, and take it back two days later so someone else can use it. And when I finish with the turkey at Thanksgiving, or the ham at Easter, I always boil the bones to make soup. That soup is much cheaper, and better, as a result of recycling the bones. None of these things is mandatory; we do them automatically, because they make economic sense.

What VanDoren means by "religious" is that the claims for recycling rest on an assumed, if not always articulated, moral imperative rather than on trade-offs or costs. But underlying this claim, for many people at least, is some murky idea that recycling "uses up" fewer resources than making things from scratch. Or, in the case of glass, making bottles from sand. As one earnest young staffer at a public works department in the northeast told me, "Recycling is cheaper, no matter how much it costs!" You can believe, if you want, that there is some mystical quality of products that make them valuable, and that price is the wrong measure of value. But if prices matter, lots of recycling we now do is irrational.

The difference between cullet (glass ground up by machines, using electricity) and sand (rocks ground up by nature) is clear: most cullet is full of additives, contaminants, and impurities. These contaminants are trapped in the cullet, inert and harmless. But if someone melts the cullet, an important step for making new glass, the contaminants can become toxic releases into the atmosphere, water, or soil. The impurities introduced by even small amounts of merged colors or types of glass in waste streams make mixed cullet nearly useless.

Sand, by contrast, is cheap and can be made into glass without extra steps, extra expense, or extra danger to the environment.

So why do we recycle glass? Why is it against the law, in many cities and counties, to dispose of glass as garbage? *The fact that glass made from cullet is much more expensive than glass made from sand should be a hint that recycling uses more resources and more energy.*

Interestingly, in many cities, the answer to the "why recycle glass?" question is, "We don't!" Green glass, in particular, is so plentiful, and the cullet market so overwhelmed by excess supply, that disposal of green glass through recycling is prohibitively expensive. A number of cities have tried to delete green glass from the list of recyclable materials, but they face a political veto from recycling enthusiasts. And, interestingly, the political opposition comes precisely from those people who will end up paying more for the inefficiency of the recycling they insist they want. Taxpayers, citizens, the folks who take their garbage out to the street, want to ask the city to put green glass back on the recyclable list, regardless of the cost.

Incredibly, the pressures have been strong enough that some municipal systems have caved in, and either continued, or have restarted, accepting green glass. In a number of areas, private companies under contract with the city collect the green glass as recyclable, and then under direction from the city simply put the green glass back into the garbage waste stream. Given the resource costs of recycling, treating green glass as garbage is the environmentally responsible thing to do.

Save Resources, Recycle at All Costs

Let me close this essay by focusing on "contaminants," another example of good intentions gone badly wrong. Two of the sources of contaminants in cullet that make it less valuable, or even useless, are (a) mixed types and colors of glass, and (b) food residues that remain on glass surfaces.

The first problem was discussed in a news story in 2006 in the *Arizona Republic.* Here's the interesting part:

> Nearly one-quarter of everything tossed into Phoenix's blue [recycling] barrels shouldn't be there. Removing all that non-recyclable trash costs the city nearly $1 million each year....
>
> For residents who treat their recycling barrel like a garbage bin, the fact is sometimes lost that other people will eventually have to rummage through their cast-offs. "The question that I always ask children and adults alike is, *'Would you want to sort this stuff*?' " said Sheree Sepulveda, Chandler's environmental programs education coordinator. "It really puts a different perspective on it." (Purtill, 2006; emphasis added)

My mouth gaped when I read this. "Would you want to sort this stuff?" That's *exactly* what recycling zealots want us to do. Sort by color, sort by type, store separately, carry to facility and deal out your garbage in half a dozen little cubbyholes. It's as if time, our most precious

resource, the one thing we can't make more of, has no value whatsoever.

Here's my perspective, which is rather different: does it make more sense for (a) a few workers, and specialized equipment, to separate waste streams, or for (b) all the rest of us, with far more valuable uses of our time, to spend time, gas, and effort separating "recyclable" materials and feeling good about ourselves by putting them in little separate slots in some expensive facility dedicated to this purpose?

Trick question! The answer is: *Neither.* It makes no sense for either the waste worker, or the homeowner, to separate waste streams, because the price system is telling us this is an inefficient and wasteful activity. If recycling were efficient, someone would pay you to do it. Disguising the costs by forcing citizens to do the labor, instead of paid government employees, changes nothing. It just reduces the explicit budget of the recycling program, and raises implicit taxes on the people.

And that brings us the second type of contamination, food residues. Now, I have long heard of people running their mayonnaise or spaghetti sauce jars through the dishwasher before recycling them. But I had assumed this was an urban legend, since no rational person could justify the time and hot water need to run garbage through the dishwasher.

To my surprise, it is actually easy to find examples of cities encouraging this lunacy. I found two examples very quickly, one from Beverly, MA, and one from Mason City, IL. But it is surprisingly common all over the U.S., in towns large and small.

> "Do I need to rinse out my bottles and cans? Yes! Rinsing cans, bottles and jars helps to reduce odor and discourage pests from invading your bin. An easy way to do this is to place cans and bottles and plastics in your dishwasher...." (**Frequently Asked Questions, Beverly, MA,** accessed May 28, 2006)
>
> "Helpful Hints—Keep a container for recyclables near your dishwashing sink (A medium-to-large wastebasket work well). Wash or rinse out cans, bottles, milk jugs, etc., while you are cleaning up after meals, or run tin cans and glass jars through the dishwasher." (**How to Collect and Sort Your Recyclables.** Mason City, IL, accessed May 28, 2006)

Why would a city do this? Two reasons, and both of them are bad. The first we have already discussed: any costs imposed on citizens is avoided by city budgets strained by the irrational insistence on "recycle at all costs." Cleaner glass is worth more as cullet, and citizens' time and effort cost the city nothing.

The second reason is more disturbing. A generation of Americans has been indoctrinated into a "save resources, recycle at all costs" mindset. "Recycle!" is used as a moral bludgeon. This is different from "Don't Litter!" Littering is a collective action problem, a genuine social dilemma: cheaper for me to throw that cup out the window. But I myself would prefer a world where no one throws cups out of windows over a world where everyone does. "Don't litter" is an attempt to solve a real problem.

"Recycle, regardless of cost!" doesn't solve a problem; it

creates one. Laws requiring recycling harm me, the environment, and everyone else. We have to take prices into account, because prices are telling us that we can't save resources by wasting resources.

Well, it's late, and it's time I head upstairs. I put the glass bottles in the recycle container. They are brown glass, and though their "value" is negative, at least they can be recycled at nominal cost. Besides, it makes me feel good. I'm saving the Earth, one piece of expensive garbage at a time.

For more on this topic, see **Recycling** by Jane Shaw in the *Concise Encyclopedia of Economics*.

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FEATURED ARTICLE | SEPTEMBER 1, 2008

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http://www.econlib.org/library/Columns/y2008/Mungerbus.html

Planning Order, Causing Chaos: Transantiago

Michael Munger*

I sat in the office of the Decano, or Dean, of the School of Government. Out the window, the sun sank into the Andes in a Dr. Seuss palette of pastels. I must have been distracted. Because I thought I heard el Decano say that, according to his survey results, the biggest problem facing the citizens of Santiago was... the bus system.

> "Transantiago was predictably a choice of planned chaos, rather than orderly market, from the outset."

The bus system? Really? How could the capital of privatization-friendly Chile have botched buses?

The answer, though entertaining to an outsider, is a parable about the combustible combination of optimism and ignorance. Add a spark of "two hours late to work," and you have riots hot enough to match the sunset. Let's go over a bit of history.

Santiago's Private Buses

With more than five million residents, and real economic growth averaging six percent over the last decade, Santiago is a boom town, the economic engine of Chile. Nestled in a broad basin of the Andes, Santiago has the density (21,800 people per square mile) and the wealth (banking center and headquarters to more than one hundred international corporations) to make a mass transit system work.

For a related EconTalk podcast on Santiago's bus system, see **Munger on the Political Economy of Public Transportation**.

And work it did. The underground, or Metro, was built in the early 1970s and had high ridership, more than 2.5 million per day. Like many municipal subway systems, it received government subsidies to operate, but, compared to Washington D.C.'s fiscal black hole, "Metrorail," Santiago's was a model of efficiency. (If you are keeping score at home, the D.C. Metro gets annual direct subsidies of more than $175 million and average construction subsidies of nearly $1 billion per year; Santiago's Metro gets about one third that much operating funds, and less in construction, in a metro area twice as large as metro D.C.)

But the real jewel in Santiago's transit crown, or so I would have thought, was the bus system. Hundreds of different bus lines, most of them entirely privately owned, operated freely

throughout the city. Some of the lines ran on surface streets parallel to the Metro, adding transport redundancy in case the Metro was having mechanical problems or was simply overcrowded. Competition among bus lines kept fares low, and drivers were paid according to the number of passengers they transported. Other bus routes delivered riders to Metro stops, not because anyone had ordered them to do so, but because that is where passengers wanted to go. And there were several classes of service, ranging from posh express buses that charged high prices down to claptrap jalopies that charged pennies and stopped every few blocks.

There were two problems with the Santiagueño bus system, however—as a survey of newspaper articles in *El Mercurio* and *La Segunda* in this period illustrate. Both had to do with greed, or the public perception of it.

Problem one: dangerous incentives. Drivers were paid based on the number of passengers, rather than on time or distance driven. But a moment's thought reveals the problem: Take one bus stop with a crowd of passengers, and then add two buses with a lot of empty seats. The result is a 40-mile-per-hour bus race on streets full of cars and pedestrians. The drivers were taking tickets, making change, watching traffic, and reenacting the chariot race scene from the movie *Ben Hur* all at the same time. Not surprisingly, there were accidents, and more than a few deaths. The number of motor vehicle accidents had risen from about ten per 100,000 population in 1990 to nearly fifteen by 2005. Further, 700 pedestrians per year, nearly half of all traffic fatalities in Santiago, were killed by cars or buses, a number much higher than in many other cities in Latin America over the same period. Worse, both trends (motor vehicle accidents and accidents resulting in deaths) rose over the period 1990-2005, compared with falling rates in nearly all of Chile's neighbors.

Problem number two was a little hard for me to believe when first I heard it. But even a few moments of research proves that it was true: The private bus system was operated without any public subsidies, or losses. That's right: a major municipal mass transit system was operating in the black! And that's a problem... why?

Well, of course, that's not the way that detractors described things. For a privately owned asset to be operating "without losses" means that the owners were either breaking even (some years) or making actual profits (most years).

For more than a few members of La Concertacion, Chile's center-left ruling government coalition, having companies profit by providing a public service smacked of theft. And so a consensus started to build. Citizens were upset about the rude, aggressive bus drivers. And the "planners" who run city agencies objected (first) to having only routes people seemed to want, and (second) to the injustice of different levels of service. They preferred a comprehensive, "rational" transportation plan, one that treated everyone equally badly, like the DMV in the United States.

The result was the new "Transantiago" public bus system, rolled out on February 10, 2007,

during the summer vacation period, when Santiago seems asleep. Nonetheless, almost overnight, the new "planned" system cut mass transit ridership, increased congestion everywhere in the city, and tripled average commute times from forty minutes to two hours. As President Michelle Bachelet later said in a speech, "It is not common for a president to stand before the nation and say 'Things haven't gone well.... But that is exactly what I want to say in the case of Transantiago.... The inhabitants of Santiago, especially the poorest, deserve an apology."

The roll-out was not a total disaster, however. The new planned system did solve one of the major problems it had targeted: profits were eliminated overnight. Where the old system had made $60 million a year, the new planned system immediately began to lose, and has continued to lose, more than $600 million per year. Mission accomplished.

Transantiago: Publicly Planned Private Chaos

It's always easy to criticize, with hindsight. But optimism about planning and ignorance about the information provided by markets nearly always imply bad outcomes, and people should be able to see that in advance. Check this list of "reforms," and I think you'll conclude that Transantiago was predictably a choice of planned chaos, rather than orderly market, from the outset.

1. Bus routes that paralleled Metro rail routes were eliminated. Planners ignored the information embedded in those route choices: commuters wanted to travel those routes, and not some other route preferred by the planner.

2. Nearly all the new routes were feeders into, or from, Metro stops. Commuters who had ridden straight from home to work, and back, now had to wait, take one bus to the Metro, wait, board the Metro, wait a third time, and then board another bus to their workplace. Commute times tripled, causing thousands of commuters to drive cars instead. Worst of all, the Metro, which had been near capacity before the reform, was operating at ten to twenty percent above its designed capacity. No money had been allocated for handling this additional load—and the maintenance it required. The system barely operated at all at peak rush hour, again leading commuters to use private single-passenger surface transport to avoid being fired from their jobs.

3. The ten companies licensed by the city to operate bought hundreds of huge accordion-hinged "bendy buses" and put them into service on the streets. Each company operated monopoly routes prescribed by the authorities and had no latitude in level of service, frequency of service, or fares. The old competitive system, with many small and nimble buses, was entirely replaced. But the narrow lanes on many roads in the old city and mountain foothills simply could not handle the new behemoths.

4. Drivers were paid hourly, and could be fired if they didn't keep on schedule. The old system, in which drivers were paid by number of passengers, was proudly scrapped. The new system, rather than 'rewarding greed,' was planned to improve public service. And it should surprise

exactly no one that this system was even worse than its predecessor. For one thing, the long hinged buses had four doors. Of course, passengers were *supposed* to enter at the front door, and to exit through any of the rear three.

But the drivers had no reason to care about the number of paying riders, and it was very time-consuming to go back and throw non-payers off the back of a crowded 30-meter-long bus. So, many drivers would simply drive their routes, operating on something close to the honor system: If you wanted to pay, you got on through the front door, and otherwise you used the rear doors. A dishonor system.

Then, things got even worse. The streets became clogged by increased private traffic, confusing new routes, and huge buses on tight corners that looked big only on planners' maps. The on-time performance of drivers deteriorated. And the drivers recognized that they didn't need to stop at all. Some drivers, by no means all but a disturbingly large number, would simply pass large groups of passengers, some of whom had been waiting for an hour or more.

Any Idiot Can Criticize; What Would Work?

As I noted above, with hindsight anyone can criticize. The question is what *should* have been done, instead? There were problems, real problems, with the old system. I will take up the "problem" of profits in the next section. But it is true that under the old private system, the buses were poorly maintained and spewed pollution. Drivers raced each other for passengers, sometimes injuring pedestrians or occupants of cars as they "overfished" what was, in effect, a commons of possible passengers and stops. Although Chile had fewer traffic accidents than most Latin American nations, it had a rate of pedestrian injuries and deaths as high as Brazil's or Mexico's, well-known pedestrian death traps. And it's true that the streets were congested.

A remarkable book, *Curb Rights,* by George Mason University Economics Professor Dan Klein and two coauthors (Adrian Moore at *Reason* and Binyam Reja at the World Bank; hereafter KMR), analyzes the problem of urban transit more deeply than any other source I have seen. KMR point out that there are two key problems with many private bus services, especially in areas where property rights may not be defined or defensible. The first is the problem of congregation, or coordinating on a stop location where a sufficient number of passengers are conveniently massed. The second problem is timing since no one makes money from a passenger waiting for a bus.

Now, monopoly public bus service "solves" the first problem by having well-defined bus stops, with (in some cases) attractive well-lit shelters. The road can be modified to make a pull-off lane for the bus, in some locations. Public bus systems solve the second problem by having schedules.

KMR point out that there is nothing particularly "public" about either of these solutions. In fact, most public bus systems rely on government enforcement of their monopoly property right, so that no private buses can pick up or drop off passengers at public bus stops. But this would work just as well for private buses, provided government simply enforces *private* rights to

exclusive local pick-up areas. All that is needed for competition is enforceable "curb rights:" If a bus company builds a bus stop and pays for a pull-off lane, then no other bus company can steal the passengers congregating there. Different bus companies, different bus stops, and a "no poaching" enforced by government.

There are other, obvious institutional features of well-functioning private markets in the urban transit setting, and they would flourish if government regulation allowed them to. Bus companies might have two-tiered pricing systems to ensure a reliable supply of customers throughout the city. An ad hoc rider, one who simply catches a ride from one point to another without a consistent pattern (someone going across town to shop for an electronic part, perhaps) might pay a high fare. But "monthly pass" cards give riders a sharply discounted average fare if they pay up front for a whole month. Once a rider purchases a monthly pass, he can ride as many times as he wants for no extra charge on *that bus line,* whereas he would have to pay on any other line. Monthly pass holders thus form a reliable, constant base of customers that cannot easily be "overfished" by another company. Routes could be run, with high ridership, from the same neighborhoods to the same workplaces on a predictable schedule.

Finally, one cannot emphasize enough the advantages of allowing competition over routes and level of service. The argument that bad service is "fair" because literally everyone suffers places the value of equality over every other public goal, no matter how desirable. In a large, diverse urban area, some people want higher-speed express service, with amenities and perhaps an attendant. Others want rock-bottom prices and are willing to accept more inconvenience and less service. Charging everyone the same price and providing only one state-mandated level of service ensures that nearly everyone actually wants something else, but can't get it.

The Hydra-Headed Beast

Here is the real problem with the "greed is always bad, public provision is always good" perspective. As James Buchanan pointed out in "Politics Without Romance," it makes no sense to assume that, under some circumstances (private buses), people are greedy, and under others (government buses), people are benevolent. The fact is that in both cases people behave purposively, pursuing their own goals filtered through the incentives and costs the system presents to them. Yet, the idea persists that removing profits and using government planning results in a kind of moral transubstantiation. Many planners think that profits are evil and would prefer a system that eliminates profits, even it means accepting substantial losses and no improvement in service.

See **James M. Buchanan**, in the *Concise Encyclopedia of Economics* for more information about Buchanan and public choice.

No matter how many times this notion is killed off by experience and evidence, the hydra of planning grows another head, and political leaders trumpet the new reform in public service. Then, when the reform fails, commissions are formed, implementation is blamed, and budgets are raised.

The Transantiago bus reforms took an imperfect private system, operating without public subsidy and serving well over a million people a day, and "publicized" it. The expectation, almost pathetically naïve in retrospective, was that outlawing profits and demotivating drivers would change human nature. Worse, planners believed that they could dictate choices to commuters, who turned back to private automobiles instead. Why don't they ever learn?

Further Reading

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