Econ 201 Lecture 2

The Economic Naturalist

Example 2.1. “Why do the keypad buttons on drive-up automatic teller machines have Braille dots?” (Bill Tjoa)

Example 2.2. Why are child safety seats required in cars but not in airplanes?” (Greg Balet)

A mother cannot legally drive her 6-month-old son to a nearby grocery store without first strapping him into a government-approved safety seat. Yet she can fly with him from Miami to Seattle with no restraining device at all. Why this difference?

In case of an accident—whether in a car or an airplane—an infant who is strapped into a safety seat is more likely to escape injury or death than one who is unrestrained. But the probability of being involved in a serious accident is hundreds of times higher when traveling by car than when traveling by air, so the benefit of having safety seats is greater for trips made by car. Using safety seats is also far more costly on plane trips than on car trips. Whereas most cars have plenty of extra room for a safety seat, parents might need to purchase an extra ticket to use one on an airplane. Most parents appear unwilling to pay $600 more per trip for a small increment in safety, either for themselves or their children.

Example 2.3. Why are Australian films so good?

Breaker Morant
Picnic at Hanging Rock
The Last Wave
Strictly Ballroom
Priscilla, Queen of the Desert
My Brilliant Career
Mad Max
Crocodile Dundee
Gallipoli
Moulin Rouge
Walkabout
Lantana
Rabbit Proof Fence
The Year of Living Dangerously
Muriel’s Wedding
Shine

Criteria for choosing a film to see:

Is it by a well-known director?
Does it feature a favorite actor or actress?
Has it gotten rave reviews in the media?
Word of mouth?

Only Australian films with a chance to make it in the US market are really good ones—those able to generate strong reviews and word of mouth.

Example 2.4. Why do brides spend so much money on wedding dresses, while grooms often rent cheap tuxedos, even though grooms could potentially wear their tuxedos on many other occasions and brides will never wear their dresses again? (Jennifer Dulski)

This is my all-time favorite economic naturalist question. In attempting to answer it, Ms. Dulski began with the assumption that distinctive attire matters more for women than for men on important social occasions. This might strike many as a heroic assumption, but evolutionary biologists tell us that in largely monogamous species such as humans, distinctive appearance is indeed more important for females than for males. (Precisely the opposite pattern is observed in species in which dominant males take many mates. In those species, bright coloration and other distinctive features are more likely to be found on males than on females.) Ms. Dulski reasoned that if men need not wear distinctive clothing on special
occasions, a rental company could serve their fashion needs at relatively modest prices. Thus, by focusing on only a few variants of the standard men’s tuxedo, a company could maintain a sufficiently large inventory to accommodate clients of a wide variety of sizes at rental prices that average roughly one-quarter of the garment’s purchase price. If the goal were to appear in distinctive attire, however, it would be necessary to hold an inventory in which numerous different styles were available in all different sizes. Since this would require an inventory possibly dozens of times larger than the corresponding tuxedo inventory to serve a given volume of rentals, a rental price that covered costs would have to be perhaps three or four times a garment’s purchase price. And this, she concluded, is why women buy and men rent.

Again, I stress that whether this is the correct explanation for the observed pattern is less important than the fact that Ms. Dulski’s question itself is interesting and that her proposed answer is economically plausible.

Example 2.5. Why are round-trip fares from Hawaii to the mainland higher than the corresponding fares from the mainland to Hawaii? (Karen Hittle)

Most people whose trips originate on the mainland are on vacation when they fly to Hawaii, Ms. Hittle reasoned, while those whose trips originate in Hawaii are far more likely to be business or other non-leisure travelers. The distinction is important because while trips taken on business typically entail destinations that are dictated by external circumstances, vacation trips present travelers with an almost inexhaustible choice of destinations. As a result, the price elasticity of demand tends to be higher for leisure than for business travelers. And this, according, to Ms. Hittle, is what accounts for the higher prices on flights that originate in Hawaii.

Example 2.6. Why do airlines charge much more for tickets purchased at the last minute, while Broadway theaters follow exactly the opposite practice? (Gerasimos Efthimiatis)

In both cases, firms face downward-sloping demand curves and thus stand to gain if they can segregate buyers with high reservation prices from those with low reservation prices. But why would last-minute purchases be associated with lower reservation prices in the case of theater tickets, but with high reservation prices in the case of airline tickets? The answer, according to Mr. Efthimiatis, stems in part from how a buyer’s reservation price case is linked to her opportunity cost of time. By waiting until the last minute to buy a theater ticket, someone whose opportunity cost of time is high would risk wasting a valuable evening if a seat turned out to be unavailable, and hence her willingness to pay a premium for an advance ticket. Although she might also be willing to pay a premium to avoid missing a flight, an offsetting factor seems even more important, which is that those travelers whose opportunity costs of time are highest—business travelers, for the most part—tend also to be those who most often need to rearrange their travel schedules to accommodate last-minute contingencies. By making discounts available only to those who are willing to commit to a specific travel schedule well in advance, airlines are thus able to charge higher fares to those business travelers. Most remaining business travelers are made ineligible for discounts by what for them proves an extremely effective hurdle—namely, the Saturday night stay-over requirement. Since most vacation trips involve at least a weekend, this hurdle is easily cleared by vacation travelers. But having been away from their families during the week, few business travelers are willing to extend their stay for the weekend just to receive a discount.

Example 2.7. Why do many people buy larger houses when they retire and their own children leave home? (Tobin Schilke)

Historically, the pattern was for couples to move to smaller houses in warmer climates when they retired. These days, however, couples are far more likely to sell the family home and then build or purchase a significantly larger one close by. Why this change? Mr. Schilke speculated that it has been driven in part by changes in family structure. It was once the norm for children to have at most four living grandparents. With divorce and remarriage occurring at higher rates than in the past, however, it has become common for any given child to have six, eight, or even more living grandparents and step-grandparents. With a larger number of grandparents and essentially no change in the number of grandchildren, we see excess demand on the part of grandparents for visits with their grand children. By building conveniently located houses with plenty of guest space, game rooms, swimming pools, and other kid-friendly amenities, grandparents are in effect paying higher prices to satisfy their demand for visits with their grandchildren.

Example 2.8. Why did paper towels replace hot-air hand dryers in public restrooms in the 1970s?
In the 1950s and 1960s, paper towel dispensers were replaced by electric hot-air hand dryers in many public restrooms. More recently, however, it is the hot-air dryers themselves that are being replaced by paper towel dispensers.

The explanation for these movements naturally has to do with the costs and benefits of the different methods of drying hands. The hot-air dryers made their original appearance on the heels of a steady decline in the price of electricity. When power became cheap, as it did in the 50s and 60s, electric dryers became less expensive to operate and maintain than the traditional paper towel dispensers. With the Arab oil embargoes of the 1970s, however, the price of energy rose dramatically, making paper towels once again the hand-drying method of choice.

Some economic naturalists may also find it amusing to speculate about why the paper towel dispensers of today are so different from the earlier ones. Most current designs feature a continuous hand crank. The paper is inside on a roll, and the longer you turn the crank the longer sheet of paper towel you get. Older designs also had a roll of paper inside, but you had to pull the paper out by hand. Most of the older models would also release only a limited amount of paper with each pull. To get more, you had to reset the release mechanism by pushing a button on the front of the dispenser.

The advantage of the older design, from the establishment's point of view, was that it induced people to use less paper. Indeed, if your hands were wet enough it was difficult to get any paper at all because, when you pulled, the wet paper would simply tear away in your hands.

But if establishments saved on paper with the old design, why have they switched to the new? The answer is that saving on paper is not their only objective. They also want satisfied customers. Incomes are higher now than they were 30 years ago, and customers are willing to pay more for a more convenient way of drying their hands. The current design may use a little more paper, but it is so much less frustrating that customers seem happy to pay more for their meals or their gasoline in order to cover the extra costs.

Some people may respond that the old design, infuriating though it was, was better because of its paper-saving property. These people feel that it is wrong to waste paper, and that we ought to be willing to tolerate plenty of inconvenience to avoid doing so. The same people also often lament the thousands of trees that must be cut down in order to print each Sunday's *New York Times*. But trees are a renewable resource, which means there is no reason to treat them differently from any other scarce but renewable resource. When the demand for paper is high, we cut down more trees, to be sure. But the market also provides a strong incentive to plant new ones. The irony here is that the more paper we use, the more trees we have. If every metropolitan newspaper were to cease publication tomorrow, we would ultimately have fewer acres of forest, not more.

**Example 2.9.** Why is airline food so bad?

Everyone complains about airline food. Indeed, if any serious restaurant dared to serve such food, it would go bankrupt in an instant. Our complaints seem to take for granted that airline meals should be just as good as the ones we eat in restaurants.

But why should they? The cost-benefit perspective makes clear that airlines should increase the quality of their
meals if and only if the benefits would outweigh the costs of doing so. The benefits of better food are probably well measured by what passengers would be willing to pay for it, in the form of higher ticket prices. If a restaurant-quality meal could be had for a mere $5 increase in costs, most people would probably be delighted to pay it. The difficulty, however, is that it would be much more costly than that to prepare significantly better meals at 39,000 feet in a tiny galley with virtually no time. It could be done, of course. An airline could remove 20 seats from the plane, install a modern, well-equipped kitchen, hire extra staff, spend more on ingredients, and so on. But these extra costs would be more like $50 per passenger than $5.

For all our complaints about the low quality of airline food, few of us would be willing to bear this extra burden. The sad result is that airline food is destined to remain unpalatable because the costs of making it better outweigh the benefits.

Many of us respond warmly to the maxim, "Anything worth doing is worth doing well." After all, it encourages a certain pride of workmanship that is often sadly lacking. As the airline food example makes clear, however, when the maxim is interpreted literally, it makes no sense. It is completely unmindful of the need to weigh costs against benefits. To do something well means to devote time, effort, and expense to it. But time, effort, and expense are scarce. To devote them to one activity makes them unavailable for another. Increasing the quality of one of the things we do thus necessarily means to reduce the quality of others—yet another application of the concept of opportunity cost. Every intelligent decision must be mindful of this tradeoff.

Everything we see in life is the result of some such compromise. For Serena Williams to play tennis as well as she does means that she cannot become a concert pianist. And yet this obviously does not mean that she shouldn't spend any time playing the piano. It just means that she should hold herself to a lower standard there than in the tennis arena.

### Example 2.10

Why do most manual transmissions have five forward speeds, most automatics only four?

The more forward speeds a car's transmission has, the better its fuel economy. The additional gears act like the "overdrive" of cars of the 1940s, conserving fuel by allowing cars to cruise at highway speeds at lower engine speeds. Most cars in current production offer five forward speeds on their manual transmissions, but only three or four speeds on their automatics. Since fuel economy is obviously a good thing, why limit the number of speeds on automatics?

The reason is that fuel economy is not our only objective. We also want to keep the price of the car within limits. Automatic transmissions are much more complex than manual ones, and the cost of adding an extra speed is accordingly much greater in the former. The benefits of adding an extra speed, by contrast, are the same in both cases. If car makers
follow the rule, "Add an extra speed if its benefits outweigh its costs," then automatics will have fewer speeds than manuals.

The reasoning in this example also helps make clear why many manual transmissions now have five forward speeds when 20 years ago most had only three (and many automatic transmissions only two). The benefit of adding an extra speed, again, is that it increases fuel economy. The value of this benefit, in dollar terms, thus depends directly on the price of fuel. The price of gasoline relative to other goods doubled during the 1970s, and this helps explain why transmissions have more speeds than they used to.

Example 2.11. Why does a telecommunications equipment manufacturer offer “free” BMW sedans to employees with more than one year of service?

Arcnet, Inc., a New Jersey company that designs and builds wireless telecommunication systems, provides a "free" BMW sedan to every employee with at least one year of service. The cars are not really free, of course. Each one costs the company about $9,000 a year in leasing and insurance fees, and employees who get one must declare that amount as additional income each year to the Internal Revenue Service. So we're left with a puzzle: If the company had given not the car but an additional $9,000 a year in salary instead, no one should have been worse off and at least some should have been better off. After all, any worker who really wanted a BMW could have spent the extra cash to lease one. Others who happen not to want a BMW would have come out ahead by having $9,000 a year extra to spend on other things. So why give cars instead of cash?

Essentially the same question is raised by ordinary gift exchanges among family and friends. Why give someone a necktie he might never wear when you know you could trust him to spend the same money on something he really wants? Some would answer that giving cash is just too easy, and is hence a less effective way of demonstrating affection than taking the time and trouble to shop for a gift. That explanation might work for small gifts, but is surely a stretch for luxury cars.

A more promising tack was suggested by Richard Thaler (1985), who observed that the best gifts are often things we don't dare buy for ourselves. Why, for example, is a man happy when his wife gives him a $1,000 set of titanium golf clubs paid for out of their joint checking account? Perhaps he really wanted those clubs, but couldn't quite justify spending so much on himself.

The plausibility of this way of thinking about gift giving is affirmed by the advice it suggests for gift givers. For example, consider this thought experiment: Among each of the following pairs of items costing the same amounts, which item would be the more suitable gift for a close friend?

- $20 worth of Macadamia nuts (1 pound) or $20 worth of peanuts (10 pounds)?
- A $75 gift certificate for one of the nicest restaurants in town (one lunch) or a $75 gift certificate for McDonalds (15 lunches)?
- $30 worth of wild rice (3 pounds) vs. $30 worth of Uncle Ben's converted rice (50 pounds)?

For most people, the first item in each pair is almost surely the safer choice.

Arcnet and other employers may be giving away BMWs for essentially similar reasons. An employee might find it awkward to explain to his depression-era parents why he had bought a car costing almost twice as much as a Honda Accord. Or he may worry that buying a new BMW might make his neighbors think he was putting on airs. Or perhaps he really wants to buy the new BMW, but his wife insists on remodeling the kitchen instead. A gift car from his employer erases all these concerns and more.

Further examples:
- Why, despite the proliferation of electrical appliances in the last century, do electrical outlets in newly built houses still have only two receptacles? (Beth Wollberg)
- Why do top female models earn so much more than top male models? (Fran Adams)
- Why aren’t NFL kickers paid the same as leading scorers in other sports? (Ed Kline)
- Why didn’t anyone sign up for Thanksgiving dinner? (Anita Lee)
- Why won’t the Chicago Cubs ever win a World Series?“ (Paul Snyder)

Seven Important Ideas

The Scarcity Principle:
Having more of one good thing usually means having less of another.

The Cost-Benefit Principle:
Take no action unless its marginal benefit is at least as great as its marginal cost.

The Not-All-Costs-Matter-Equally Principle:
Some costs (e.g., opportunity and marginal costs) matter in making decisions; other costs (e.g., sunk and average costs) don’t.

The Principle of Comparative Advantage:
Everyone does best when each concentrates on the activity for which he or she is relatively most productive.

The Principle of Increasing Opportunity Cost:
Use the resources with the lowest opportunity cost before turning to those with higher opportunity costs.

The Equilibrium Principle:
A market in equilibrium leaves no unexploited opportunities for individuals, but may not exploit all gains achievable through collective action.

**The Efficiency Principle:**
Efficiency is an important social goal, because when the economic pie grows larger, everyone can have a larger slice.