Market failure and the arts

1. Before about 1980, if a public administrator found a compelling argument that a good had public goods characteristics, the automatic solution usually was to suggest regulating the industry. These days, public managers tend to establish more facts about the situation before regulating. In general, what do regulators need to know before moving into an industry? Why? Explain in one paragraph.

The National Endowment for the Arts (NEA) is the federal agency responsible for American government arts funding at the national level. The agency justifies its existence on the argument that art enriches everybody’s life—even those not directly producing and consuming it. That is, the NEA believes that it adjusts the private market, to internalize the positive externality.

2. Say that the private demand for (thousands of) arts events is characterized by the equation P=50-3Q. The private marginal cost of producing arts events is MC=5, and the purported marginal external benefit per unit is 3. Without the NEA, how much art will be produced and consumed in the private market? What will the price be?

3. What is the optimal quantity and price for art? (Remember that a positive externality reduces MSC).

4. To get to the optimal level of art, how much should the NEA subsidize art, per unit? Remember, subsidies are simply the opposite of taxes.

The Coalition for Family Values (CFV) is an advocacy organization that has been protesting the fact that the NEA often subsidizes arts that is vulgar and obscene. That is, the CFV believes that the NEA creates a market failure in the form of negative externalities.

As an impartial policy analyst, you find that both sides of the arts funding debate have merit. Specifically, you find that (as before), art yields a marginal external benefit of 3. However, you also find that it produces a marginal external cost of 1.8Q.

5. Given this full information about externalities, calculate the optimal Q and P.

6. To get these optimal levels, should you impose a tax or a subsidy on the production of art? Calculate this tax or subsidy.

II. Mediation solutions and the Coase Theorem

A workers’ advocacy group called Workers for a Safe Workplace (WSW) is calling to ban all smoking in restaurants and bars in New York State because of the harms of second-hand smoke to the employees of these establishments. They are negotiating with the New York Restaurant Association, a trade group representing owners. There is currently no law barring smoking, but the NYRA knows that voters are unforgiving on this issue and are reluctant to let this problem get to a referendum, which they would probably lose and would cost them about $5 million in campaign costs. Hence, they would like to investigate private settlements. The WSW would like to avoid a referendum as well, which would probably cost them about $10 million in campaign costs.

They call you in to discuss alternative private solutions to the problem. Through your research, you estimate the following:

- The owners earn $100 million per year from smoking patrons that would stay home if smoking were banned from restaurants.
- Employees have second-hand smoking related health costs of $110 million per year. Some of these costs are borne by the state, insurance companies, and workers themselves.
- Owners would ban smoking voluntarily if appropriately compensated for doing so.
- Restaurant and bar workers could solve the problem by wearing particulate masks, at a cost of $80 million per year. This includes $20 million in the price of masks plus $60 million in lost business because the employees look so weird.
- Owners could solve the problem by physically separating smokers and imposing self-service on them, at a cost (including net loss of business) of $90 million.

1. What are the settlement options?
2. What is the net value of each one?
3. Which is best for the owners?
4. Which is best for the workers?
5. Which is best from a societal standpoint?
6. Should the workers seek a referendum legally banning smoking?

III. The market for lemons

Internet auctions for art items looked to market analysts to have huge potential early on, but have produced disappointing results. Buyers have largely stayed away, after an initial burst of activity. Today, many people complain that it’s almost impossible to find nice or valuable work on e-Bay.

To understand this, imagine that the original market (period 1) for artworks on e-Bay was made up of 75 percent valuable works, with an average true value of $200, and 25 percent junk, with an average true value of $50. It’s not possible to tell the difference over the internet.

When the average auction price for the artworks on e-Bay fails to meet the true value of valuable work, its percentage of the total tends to drop proportional to the ratio of the market price to the true price. Therefore, if in a given period, 50 percent of the market is made up of valuable work, but the average auction price is $100, then in the next period, the percentage of valuable work in the market will fall to 50%/(100/200)=25%. The remainder of the market is always made up of junk.

1. Using the lemons model, Calculate how long it takes for the valuable work to fall below 50%, 25%, 10% and 1% of the market.
2. Find a nice way to graph these dynamics.
3. Explain what happened to an executive at e-Bay.