Price Theory Summer Camp - Lecture 1

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question: what are the effects of tax or cost increases for a monopolist?

- in a competitive industry, the loss to the sellers is less than the amount of the tax (at least for a small tax).
- in equilibrium, how does the loss to the monopolist compare to the tax revenue?
- could have more than proportional effects on prices (pass-through $>$ 100%)
- in fact, profits have to drop by more than tax revenues: consider removing the tax once it is in place, and suppose the monopolist does nothing.
- why is the monopoly case so different? monopolists have the ability to change prices, so any effects of changing the price are second-order.
- in the competitive case, there's no first-order loss to cutting *output*. thus, competitive industries have the ability to "shield themselves" by passing on price increases, while monopolists do not have this ability.
- you might think this makes competitive industries "easier" to tax, from a political economy point of view. (and you might think monopolists would invest in lobbyists, etc.)
- suppose the competitive industry has "veto power" over the tax. what could the government do in that case (assuming they want to tax the industry for other reasons - pollution, say). here it's not crucial that it be a literal tax; it could be a regulation that raises marginal costs, too.
- could provide a lump-sum subsidy: raise marginal costs, but lower average costs. this could take the form of "grandfathering" out old plants, or direct "adjustment assistance", etc. and, in fact, you don't have to fully compensate them, since firms can pass on some of the cost increases to consumers.
- another example: "master settlement" between tobacco companies and many state attorneys-general.
  - big point is that there was a tax imposed, which raised marginal costs and thus prices
  - by contrast, a settlement for *past* harms would not have affected marginal costs
  - from the government's point of view, as long as the total revenue raised was the same, it wouldn't matter. (and in fact, they could claim the tax would reduce future smoking, even though demand is inelastic in this case.)

  - objection: why didn't firms just agree to raise prices anyway and pay through a lump sum? (Murphy: well, antitrust laws make that illegal. and further, if you thought firms had the ability to raise prices, why weren't they doing it before? how is that suggestion consistent with equilibrium? that's the whole point of markets)
  - now, what if the tobacco had been monopolistic? the monopolist would have preferred the lump sum
  - the settlement with the government acts like an enforceable collusive agreement
  - consider the opposite point, in public finance: if we don't want to distort quantities, you don't want to change marginal prices
  - indeed, but remember, that's the theory of *optimal* taxation, where consumers' interests are considered. this discussion is about *equilibrium* taxation, where producers and the government are the only ones deciding on the policy.
- Becker: of course, if you think only about the individual firm or the individual consumer, then yes, higher costs are bad. but, when you start thinking about interactions in markets, things become more interesting.
- question: what is the relationship between market power and rents?
  - Murphy: rents are about reciving a return higher than your opportunity cost. market power can be one source of rents, yes. but even in competitive markets, inelastic supply (or dispersion in firms' marginal costs)
  - if price > average cost, then you have rents. with market power, price > marginal cost.
  - consider a highly talented actor; to the extent that they are imperfectly substitutable with a number of other less-talented actors, they might have some market power; but mostly these are "competitive rents"