14.121, Fall 2019
Pathak / Ridley
Due: Wednesday, October 9, 2019

- 1) MWG 11.B.2
- 2) MWG 11.B.5
- 3) MWG 11.D.5
- 4) MWG 11.E.1 and MWG 11.E.2
- 5*) This question is optional. We will share the best answer with the class.

One aspect of the Pigouvian taxation that we ignored in class is that taxes or quantity restrictions are not free or automatic to enforce. For instance, some describe low levels of tax compliance in much of the developing world as an example of under-enforcement, while the existence of politically motivated prosecutors or regulators is an example of over-enforcement.

I want you to investigate how enforcement problems may affect the analysis of the appropriate regulatory instrument. Consider "blue laws" like those in Massachusetts which prohibited the purchase of alcoholic beverages for consumption (off-site) until 2004. Suppose instead the government imposes a tax on liquor sales on Sunday. Such a tax, as compared to an outright prohibition, has the benefit of enabling people who value the ability to purchase liquor on Sundays to pay more. However, the tax is also subject to possible evasion, as vendors might record Sunday liquor sales as occurring on Saturdays or by bribing tax collectors. As a result, an inspector enforcing the tax rule has to spend considerable resources to find out whether taxes have been paid. If, in contrast, there is a restriction against all liquor sales on Sundays, the detection and verification of violations is much cheaper: the inspector needs only to drive by the store. Moreover, private citizens could help with enforcement by reporting liquor stores open on Sunday to the police.

Try to write down a model formalizing this informal story. What does your model say about private vs. public enforcement of laws?