ECON 1000 – Contemporary Economic Issues
“Government Failure”

Relevant Readings from the Required Textbooks:
- Chapter 11, *Government Failure*

Definitions and Concepts:
- **government failure** – a situation in which Total Social Surplus is decreased by government intervention in a market
- Two broad causes of Government Failure: (1) government fails to perform a necessary task efficiently and (2) government fails to do only those tasks that it should do
- **public choice** – academic subfield which uses the tools and framework of economics to analyze issues that historically fall within the domain of political science
- **Condorcet Paradox** – a situation in which a series of pair-wise majority votes over more than two options leads to a cycling of winners
  - first formalized in the 18th century by Nicolas de Condorcet
  - when such a cycle occurs, it reveals that social preferences are irrational (i.e., not clearly defined) since they are non-transitive (i.e., internally non-consistent or internally contradictory)
- seven specific sources of government failure: (1) informational problems, (2) costs of complying with government bureaucracy, (3) corruption or kleptocracy, (4) regulatory capture, (5) rent-seeking, (6) logrolling and rational ignorance, and (7) deadweight-loss from taxes
- **economic calculation problem** – the argument that a system of planning will never be able to achieve efficient outcomes, precisely because under such a system the planners do not have the information generated by market activities available to them
  - first made by Ludwig von Mises and later refined by Friedrich von Hayek
- **costs of complying with government bureaucracy** – when governments impose rules/regulations, individual households and firms need to expend resources to comply with the policies
  - use of resources for compliance imposes a cost => the greater the bureaucracy, the higher are these costs => if the costs are sufficiently large, they will outweigh any benefits of the regulation
  - “Permit Raj” in India: “a complex, irrational, almost incomprehensible system of controls and licenses” under which “everything needed (government) approval and a stamp.”
  - Recall the “Ease of Doing Business” study. Costs of starting a new business in...
    - **Venezuela**: 17 procedures, 144+ days, costing 88.7% of annual per capita income
    - **New Zealand**: 1 procedure, as little as half a day, costing 0.3% of annual per capita income
- **corruption** – an environment in which regulations are not enforced and decisions are not made evenly and without bias => corruption leads to inefficient decisions
• kleptocracy – an environment of extreme corruption in which government officials unabashedly seek personal gain at the expense of the public interest
  ▪ present day Russia: “an ill-governed kleptocracy” in which “corruption is not a happy side effect of power, but the core of the system” and as a consequence “a small group of people wholly above the law has, in the past decade, become rich beyond the wildest dreams of the tsars.”
• regulatory capture – a situation in which firms in a regulated industry influence a regulatory agency to the point where the agency enacts policies that are in the best interest of the regulated firms (even if the decisions are not in the best interest of the public)
• rent seeking – attempts by people to manipulate government action or influence government decisions in order to make themselves better off at the expense of others
  ▪ e.g., U.S. trade restrictions on imported peanuts
    ▪ very beneficial to owners/workers of U.S. peanut farms (who therefore have a strong incentive to lobby hard to keep the restrictions in place) => peanut producers have an incentive to expend resources to secure these “rents”
    ▪ costly to consumers, foreign peanut producers, and U.S. producers of any goods which use peanuts as an input
• logrolling – the process by which a legislator votes to approve one bill in exchange for favorable votes from other members on other bills
  ▪ not necessarily a “bad thing” => logrolling can be potentially beneficial, since it allows for an expression of “intensity of preference”
  ▪ but, particularly when voters are “rationally ignorant,” the process can give rise to inefficient outcomes
• rational ignorance – since becoming informed on matters of public policy has high costs and low benefits for individual voters, it is rational for them to remain uninformed
• James Buchanan (1919–2013; Noble Prize in 1986) argued that politicians in a democracy often act so as to maximize their probability of re-election => it is in the best interest of the representative from GA to engage in logrolling (i.e., vote trading) with others to ensure passage of trade protection for peanuts (even if it means passing other programs as well)
• incidence of a tax – a measure of who bears the burden of a tax in terms of decreased welfare
• Equivalence between “per unit tax imposed on buyers” and “per unit tax imposed on sellers.” Consider either “a per unit tax of $T imposed on buyers” or “a per unit tax of $T imposed on sellers”…
  ▪ The outcomes of these two alternative policies are identical in terms of: level of trade; per unit price ultimately paid by buyers; per unit price ultimately received by sellers; decrease in Consumers’ Surplus; decrease in Producers’ Surplus; tax revenue generated by the government; magnitude of resulting Deadweight-Loss.
  ▪ That is, the two policies are equivalent to each other from the perspective of buyers, from the perspective of sellers, and from the perspective of society.
  ▪ Thus, if the government were to impose an additional $1 of taxes on gasoline, consumers should not care whether they are responsible for paying the tax or if gas station owners are responsible for paying the tax.
Economic Model of Voting:
- Donald, Hillary, and Ted (denoted D, H, and T) are seeking a public office
- Different voters have different preferences => 6 possible orderings
- Make choice by a democratic process => which candidate will be elected?
- Assume each person votes truthfully or sincerely (according to actual preferences)…

Preferences of voters over three candidates

<table>
<thead>
<tr>
<th>Voter Type</th>
<th>1st Choice</th>
<th>2nd Choice</th>
<th>3rd Choice</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>[i]</td>
<td>Ted</td>
<td>Hillary</td>
<td>Donald</td>
<td>20%</td>
</tr>
<tr>
<td>[ii]</td>
<td>Hillary</td>
<td>Ted</td>
<td>Donald</td>
<td>22%</td>
</tr>
<tr>
<td>[iii]</td>
<td>Ted</td>
<td>Donald</td>
<td>Hillary</td>
<td>6%</td>
</tr>
<tr>
<td>[iv]</td>
<td>Hillary</td>
<td>Donald</td>
<td>Ted</td>
<td>14%</td>
</tr>
<tr>
<td>[v]</td>
<td>Donald</td>
<td>Hillary</td>
<td>Ted</td>
<td>10%</td>
</tr>
<tr>
<td>[vi]</td>
<td>Donald</td>
<td>Ted</td>
<td>Hillary</td>
<td>28%</td>
</tr>
</tbody>
</table>

Voter behavior and outcomes in various elections

<table>
<thead>
<tr>
<th>Options</th>
<th>Types voting D</th>
<th>Types voting H</th>
<th>Types voting T</th>
<th>% D</th>
<th>% H</th>
<th>% T</th>
<th>Winner</th>
</tr>
</thead>
<tbody>
<tr>
<td>D, H, T</td>
<td>[v], [vi]</td>
<td>[ii], [iv]</td>
<td>[i], [iii]</td>
<td>38%</td>
<td>36%</td>
<td>26%</td>
<td>Donald</td>
</tr>
<tr>
<td>D, H</td>
<td>[iii], [v], [vi]</td>
<td>[i], [ii], [iv]</td>
<td>[i], [iii]</td>
<td>44%</td>
<td>56%</td>
<td>26%</td>
<td>Hillary</td>
</tr>
<tr>
<td>D, T</td>
<td>[iv], [v], [vi]</td>
<td>[i], [ii], [iv]</td>
<td>[i], [iii], [vi]</td>
<td>52%</td>
<td>48%</td>
<td>48%</td>
<td>Donald</td>
</tr>
<tr>
<td>H, T</td>
<td>[ii], [iv], [v]</td>
<td>[i], [iii], [vi]</td>
<td>[i], [iii], [vi]</td>
<td>46%</td>
<td>54%</td>
<td>54%</td>
<td>Ted</td>
</tr>
</tbody>
</table>

(1) Election with all three candidates on ballot…
- [v] and [vi] vote D => 10% + 28% = 38%
- [ii] and [iv] vote H => 22% + 14% = 36%
- [i] and [iii] vote T => 20% + 6% = 26%
  - If the person getting the most votes in this election is declared the winner, then Donald fills the position. Note, Donald is the person who is most preferred by the largest number of people, but he is also the person who is least preferred by the largest number of people (this seems like a shortcoming of the process)

(2) Since nobody got 50%+ of vote, perhaps we have a runoff between the “Top 2”…
- second round of voting with only D and H on ballot…
  - [i], [ii], [iv] vote H => 20% + 22% + 14% = 56%
  - [iii], [v], [vi] vote D => 6% + 10% + 28% = 44%
  - If the winner of this runoff is declared the winner, then Hillary fills the position

(3) Series of pairwise elections (e.g., primary round followed by general election)
- 3.1: Primary between D & T => D wins
  - General between D & H => H wins => H elected
- 3.2: Primary between D & H => H wins
  - General between H & T => T wins => T elected
- 3.3: Primary between H & T => T wins
  - General between D & T => D wins => D elected
  - Eventual outcome apparently determined simply by the voting rules!

(4) Recognize that if we continued to have a series of pairwise elections and then pit the winner against the third option in a subsequent round of voting, we would have a never ending cycle…
- Pairwise votes suggest group preferences are such that: H>D, T>H, and D>T
Per unit tax of $T$ imposed on Buyers:

**Effect on Demand** => at the “point of sale” any buyer is now willing to pay exactly $T=$1 less than before => Demand curve shifts down by $T=$1

Outcome with tax in place:
- Outcome at “point of sale” determined by focusing on “green curve” and “red curve”
- 4,200 units are traded (less than the efficient level of 5,000) <= unique quantity at which “buyer’s reservation price” (height of blue curve) is exactly $T=$1 greater than “seller’s reservation price” (height of red curve)
- Price at the “point of sale” is $3.20
- Sellers receive $3.20 on each of the 4,200 units sold
- Buyers must pay $T=$1 on top of the $3.20 purchase price, for a total of $4.20 on each of the 4,200 units purchased
- CS decreases by (a)+(b)+(c) <= Incidence of Tax for buyers
- PS decreases by (d)+(e)+(f) <= Incidence of Tax for sellers
- Government generates tax revenue of (a)+(b)+(d)+(e) (equal to $(1)(4,200)=$4,200). Note that the government collects less than $5,000 in tax revenue, since they only collect the $1 of tax on the units which are traded when the tax is in place.
- DWL of (c)+(f)
Per unit tax of $T$ imposed on Sellers:

**Effect on Supply** => at the “point of sale” any seller must now be paid exactly $T = $1 more than before => Supply curve shifts up by $T = $1

Outcome with tax in place:
- Outcome at “point of sale” determined by focusing on “orange curve” and “blue curve”
- 4,200 units are traded (less than the efficient level of 5,000) <= unique quantity at which “buyer’s reservation price” (height of blue curve) is exactly $T = $1 greater than “seller’s reservation price” (height of red curve)
- Since the same quantity is traded with the tax imposed on sellers as when the tax was imposed on buyers, it follows that all other aspects of the two outcomes are identical as well! That is:
  - Sellers receive $3.20 while buyers pay $4.20 on each of the 4,200 units traded
  - The decrease in CS, decrease in PS, amount of government tax revenue, and magnitude of DWL are all the same as when the tax was imposed on buyers instead of sellers
  - It makes **NO DIFFERENCE** in terms of welfare (to buyers, sellers, or society) if this per unit tax is imposed on buyers or imposed on sellers!
Multiple Choice Questions:
- Questions 1-21 on pages 278-282 in textbook (answers on page 351)

Additional Multiple Choice Questions:

1. Within our discussion of Logrolling, we noted that ____________ argued that politicians in a democracy often act to maximize the probability of their own re-election.
   A. Ronald Coase
   B. Gordon Tullock
   C. James Buchanan
   D. Jeremy Bentham

2. The ________________ refers to a situation in which a series of pair-wise majority votes over more than two options leads to a cycling of winners.
   A. Condorcet Paradox
   B. Buchanan Puzzle
   C. Coase Conjecture
   D. Shapley Value

3. Regulatory Capture refers to a situation in which
   A. a government regulatory is thrown in jail for unethical behavior.
   B. legislators trade votes in order to have multiple policies enacted (each of which would otherwise not garner a majority of support).
   C. firms in a regulated industry influence a regulatory agency to the point where the agency makes decisions which are in the best interest of the firms (even if the decisions are not in the best interest of the public).
   D. government regulators collect bribes from the firms being regulated.
Answers to Multiple Choice Questions:

1. C
2. A
3. C