**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***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Voter Type* | *1st Choice* | *2nd Choice* | *3rd Choice* | *% of Population* |
| [i] | Ted | Hillary | Donald | 20% |
| [ii] | Hillary | Ted | Donald | 22% |
| [iii] | Ted | Donald | Hillary | 6% |
| [iv] | Hillary | Donald | Ted | 14% |
| [v] | Donald | Hillary | Ted | 10% |
| [vi] | Donald | Ted | Hillary | 28% |

***Voter behavior and outcomes in various elections***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Options* | *Types voting D* | *Types voting H* | *Types voting T* | *% D* | *% H* | *% T* | *Winner* |
| D, H, T | [v], [vi] | [ii], [iv] | [i], [iii] | 38% | 36% | 26% | Donald |
| D, H | [iii], [v], [vi] | [i], [ii], [iv] |  | 44% | 56% |  | Hillary |
| D, T | [iv], [v], [vi] |  | [i], [ii], [iii] | 52% |  | 48% | Donald |
| H, T |  | [ii], [iv], [v] | [i], [iii], [vi] |  | 46% | 54% | Ted |

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)

1. 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

1. 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!

1. 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

0

0

quantity

Supply = (Seller’s Res. Price)

(Buyer’s Res. Price)-(T)

$

*b*

*a*

*e*

*c*

*d*

*f*

Demand = (Buyer’s Res. Price)











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

0

0

quantity

Supply = (Seller’s Res. Price)

$

*a*

*f*

Demand = (Buyer’s Res. Price)











*d*

*e*

(Seller’s Res. Price)+(T)

*c*

*b*

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:**

1. If a per unit tax is placed on sellers of a product, the “price ultimately paid by buyers” \_\_\_\_\_\_\_\_\_\_\_\_, while the “price ultimately received by sellers” \_\_\_\_\_\_\_\_\_\_\_\_.

A. increases; remains unchanged.

B. remains unchanged; decreases.

C. increases; increases.

D. increases; decreases.

2. Which of the following is NOT one of the seven sources of government failure discussed in lecture?

A. Corruption.

B. Regulatory Capture.

C. Logrolling.

D. Externalities.

3. In the textbook, \_\_\_\_\_\_\_\_\_\_\_\_\_\_ was described as “an ill-governed kleptocracy in which corruption is not a happy side-effect of power, but the core of the system.”

A. present day India

B. present day Russia

C. the United States during the 1930s

D. Great Britain during the 1980s

4. The “Economic Calculation Problem” posits that

A. a system of planning will never be able to achieve efficient outcomes, precisely because under such a system the planners do not have access to the information generated by market transactions.

B. in order for economic outcomes to be fair, it is necessary to redistribute wealth through a highly progressive tax structure.

C. it is impossible to come up with any estimate of the costs of complying with government bureaucracy.

D. calculating the true economic value of a worker can only be done under a socialist system.

5. 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

6. 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

7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the process by which a legislator votes to approve one bill in exchange for favorable votes from other members on other bills.

A. Rent Seeking

B. Logrolling

C. Rational Ignorance

D. Regulatory Capture

8. The “Incidence of a Tax” refers to

A. which level of government is imposing the tax.

B. the frequency with which an individual has to pay the tax.

C. which individual is legally responsible for writing a check to pay the tax.

D. who bears the burden of the tax in terms of decreased welfare.

9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ refers to a situation in which total social surplus is decreased as a result of government intervention in a market.

A. Market Failure

B. Government Failure

C. The Free Rider Problem

D. An Externality

10. In advance of the election for County Sheriff, Edward and Mike are discussing the different candidates. Edward states: “I haven’t really researched the positions and backgrounds of the two people running. In order to do so properly I would have to invest a great deal of time, and, after all, the chance of my vote deciding the election is very small and I don’t think things will be very different for me regardless of who wins.” His statement is closely related to the issue of

A. the incidence of a tax.

B. regulatory capture.

C. rational ignorance.

D. the Economic Calculation Problem.

11. 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.

***For questions 12 through 15, consider a market with Supply and Demand as illustrated below.***

quantity



*e*

*a*



*b*

*d*

Supply

*g*

Demand

*c*

$









0

*f*

0

12. Imposing a per unit tax of $2.60 on buyers in this market would generate tax revenue of

A. less than $26,000.

B. exactly $26,000.

C. more than $26,000 but less than $39,000.

D. exactly $39,000.

13. In comparison to the “free market outcome,” imposing a per unit tax of $4.00 on sellers in this market would

A. decrease Producers’ Surplus by “areas (e)+(f).”

B. decrease Producers’ Surplus by “areas (c)+(f).”

C. increase Producers’ Surplus by “area (g).”

D. not have any impact on the value of Producers’ Surplus.

14. In comparison to the “free market outcome,” imposing a per unit tax of $1.40 on sellers in this market would generate a Deadweight-Loss

A. larger than “areas (e)+(f).”

B. exactly equal to “areas (e)+(f).”

C. smaller than “areas (e)+(f).”

D. exactly equal to “area (g).”

15. Consider the following two proposed taxes: “Tax A” is a $3 per unit tax imposed on buyers; “Tax B” is a $2 per unit tax imposed on sellers. We can infer that

A. Deadweight-Loss would be exactly the same under “Tax A” and “Tax B.”

B. consumers would prefer “Tax B” over “Tax A.”

C. producers would prefer “Tax A” over “Tax B.”

D. More than one (perhaps all) of the above answers is correct.

***For questions 16 through 19, consider a situation in which three different candidates (Donald, Hillary, and Gary – denoted D, H, and G) are seeking an office. The person to fill the position will be decided by a vote. Voter preferences are summarized by the table below. Assume throughout that all people vote sincerely/truthfully (i.e., in-line with their actual preferences).***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Voter Type* | *1st Choice* | *2nd Choice* | *3rd Choice* | *% of Population* |
| [i] | Gary | Hillary | Donald | 22% |
| [ii] | Hillary | Gary | Donald | 18% |
| [iii] | Gary | Donald | Hillary | 9% |
| [iv] | Hillary | Donald | Gary | 12% |
| [v] | Donald | Hillary | Gary | 12% |
| [vi] | Donald | Gary | Hillary | 27% |

16. In an election between all three candidates, \_\_\_\_\_\_\_\_\_\_ would receive the most votes.

A. Donald

B. Gary

C. Hillary

D. None of the above are correct (since the table does not provide enough information to answer this question).

17. In a two candidate head-to-head election between just Donald and Hillary, Donald would receive

A. 40% of the vote.

B. 48% of the vote.

C. 52% of the vote.

D. 70% of the vote.

18. If the position were filled by first having a vote over all three candidates, followed by a head-to-head runoff between the two highest vote getters, the person chosen as the eventual winner would be

A. Donald

B. Gary

C. Hillary

D. None of the above are correct (since the table does not provide enough information to answer this question).

19. Consider the outcomes which would occur in two candidate head-to-head elections, it would appear as if voters

A. prefer Donald over Gary.

B. prefer Gary over Hillary.

C. prefer Hillary over Donald.

D. More than one (perhaps all) of the above answers is correct.

***For questions 20 through 23, consider a situation in which representatives from five legislative districts need to consider two proposals. The surplus that would be realized by constituents in each legislative district for each project is given by the table below. Unless otherwise stated, suppose that each proposal is voted on separately (and approved/rejected based upon simple majority rule).***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | District 1 | District 2 | District 3 | District 4 | District 5 |
| Proposal I | 200 | 900 | –300 | –200 | –400 |
| Proposal II | 100 | –500 | 800 | –600 | –300 |

20. The socially best (i.e., efficient outcome) is for

A. both Proposal I and Proposal II to be rejected.

B. both Proposal I and Proposal II to be approved.

C. Proposal I to be approved but Proposal II to be rejected.

D. Proposal II to be approved but Proposal I to be rejected.

21. Suppose no vote trading occurs. In this case,

A. Proposal I would be approved but Proposal II would be rejected.

B. Proposal II would be approved but Proposal I would be rejected.

C. both Proposal I and Proposal II would be rejected.

D. both Proposal I and Proposal II would be approved.

22. Suppose that the representative from District 2 proposes the following vote trading scheme to the representative from District 3: “I will vote in favor of Proposal II so long as you vote in favor of Proposal I.” Which of the following statements regarding this proposed vote trading is accurate?

A. “The representative from District 3 would not want to agree to this vote trade.”

B. “If the representative from District 3 agrees to this vote trade, then both proposals would be approved.”

C. “If the representative from District 3 agrees to this vote trade, then both proposals would be rejected.”

D. None of the above answers are correct.

23. Suppose that both proposals are voted on as a package (i.e., one single vote, to determine if either both are approved or both are rejected). In comparison to the outcome which would result from two separate votes on the two proposals, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ when the two proposals are voted on as a package.

A. Total Social Surplus is larger

B. constituents in District 1 are better off

C. constituents in District 3 are worse off

D. More than one (perhaps all) of the above answers is correct.

**Answers to Multiple Choice Questions:**

1. D
2. D
3. B
4. A
5. C
6. A
7. B
8. D
9. B
10. C
11. C
12. C
13. B
14. C
15. B
16. A
17. B
18. A
19. D
20. C
21. C
22. B
23. B