**Chapter 12 “The Distribution Function of Government”**

# Relevant Readings from the Required Textbooks:

* Chapter 12, *Inequality and Redistribution*

# Definitions and Concepts:

* **distribution function** – government policies aimed at changing the final distribution of goods/services across consumers, usually with the intention of realizing a “fairer” apportionment of consumption/income/wealth.
* **redistribution** – government policies designed to alter the distribution of income/wealth/consumption across members of society.
* **income** – the flow of money earned by an individual during a period of time.
* **wealth** – the current stock of money (and other valuable assets) that an individual owns at a point in time.
* **income support** – monetary payments (such as unemployment benefits and social security payments) made to certain individuals, which directly alter the distribution of income within a society.
* **redistribution in-kind** – public provision of goods/services (such as healthcare, education, housing, food) for certain individuals, which alter the consumption of goods/services within society.
* **poverty** – the condition of having very limited access to goods and services.
* **poverty thresholds** – income levels (based upon the number of and ages of individuals in a household) below which a household is deemed to be living in poverty.
* **poverty rate** – the percentage of the population that is living in poverty.

# 7 Determinants of Productivity, Income, and Wealth:

* 1. **natural talent and ability** – ability is not distributed equally at birth; some people possess attributes (e.g., intelligence, strength) that make them more productive
  2. **Acquired Skills** – individual productivity depends in large part upon skills and experiences acquired during education, training, and work experience
  3. **Effort** – productivity is often largely dependent upon effort (“workers” are more productive than “shirkers”)
  4. **Compensating Differentials** – differences in wage rates that are due to differences in working conditions (e.g., risky jobs pay more; “glamour jobs” pay less)
  5. **Inherited Wealth** – wealth is distributed less evenly than income (due partly to differences in inheritances)
  6. **Accumulated Savings** – the stock of wealth that a person has at any point in time is partly determined by previous consumption/savings decisions
  7. **Seemingly Unrelated Market Conditions** – income depends in part upon economic conditions beyond our control; a worker’s value depends greatly upon

the price of the product he helps produce (e.g., wage of a coal miner would increase if we ran out of oil)

* **Lorenz Curve** – a graph (developed by economist Max Lorenz) which illustrates income inequality within a society by plotting the relation between cumulative fraction of the population (with people ordered from lowest income to highest) and corresponding cumulative fraction of total income earned.
* **Gini-Coefficient** – a quantitative measure of income inequality based upon the Lorenz Curve, defined as the ratio of “the area between 45-degree line and the Lorenz Curve” to “the entire area below 45-degree line.”

# 4 Arguments in Favor of Coercive Redistribution:

1. **Utilitarian Justice –** total social welfare can be increased by transferring

income/wealth from the rich to the poor, so long as people have a diminishing marginal utility for money

* + society should strive for the “greatest happiness for the greatest number of people” (i.e., attempt to maximize the summation of “utility” or “happiness” over all members of society)
  + arguments first put forth by Jeremy Bentham (1748-1835) and John Stuart

Mill (1806-1873)

1. **Rawlsian Justice (Social Contract Theory)** – the socially best income

distribution is the one which maximizes the well-being of the worst-off member of society

* + developed by the philosopher John Rawls in *A Theory of Justice* (1971)
  + consider the “ideal society” that would be designed by someone in the “beforelife” behind a “veil of ignorance” (i.e., not knowing what their realized lot in life would be, but just knowing that it would be a random draw in this “ideal society”) => Rawls argues that such a person would be particularly concerned about the situation of the poorest person (i.e., the worst possible outcome) => such an objectively ideal society should implement policies to apply the “maximin criterion”
  + **Maximin Criterion** – a claim that the government should aim to maximize the well-being of the worst off person in society

1. **Labor Theory of Value** – an assessment of the production process which

attributes all economic surplus generated from production to labor

* + Based upon the ideas of Karl Marx (1818-1883)
  + Marx’s notion attributes no value to the capital (and other “non-labor inputs”) necessary for the production process
  + since a capitalist system provides returns for all inputs (i.e., not only labor, but also capital and land), labor is vastly underpaid relative to what Marx believed was “fair” => thus, in the interest of fairness, income/wealth must be redistributed away from the owners of capital and toward workers

1. **Overcoming the Free Rider Problem** – if society prefers a more equal distribution of income/wealth, relying upon private charity to reduce inequality will result in too little redistribution (due to the “free rider problem” – recall the previous discussion of market provision of pure public goods)
   * that is, private charity results in “too little” redistribution => have government redistribute in order to get an amount closer to the socially best level

# An Argument Against Coercive Redistribution:

1. **Libertarian Justice** – the argument that the fairest distribution of income and consumption is the one realized when the government establishes and enforces a legal code which respects all voluntary economic interactions between individuals in society
   * ideas best articulated by Robert Nozick in *Anarchy, State, and Utopia* (1974)
   * “society” does not earn income; only individuals earn income => society has no rightful claim to the income earned by any person
   * government should sets rules of the “game” placing the utmost respect on individual property rights and choices, and then simply acts as the “referee”
   * whereas others try to judge “what distribution of income is best?,” Nozick and the proponents of Libertarian Justice deny the validity of the question
     + as long as the process for determining incomes is fair/just, the resulting distribution is fair/just (no matter how equal or unequal) => equality of opportunity is more important than equality of outcomes
     + government should enforce laws to guarantee that all people have the same opportunities to use their talents to earn income => but once the rules are established, the government has no reason (in fact, no legitimate authority) to alter the resulting distribution of income

**Average Tax Rate (ATR)** –the amount of total taxes paid divided by income.

* **Progressive Tax** – tax structure for which ATR increases as the level of income is increased.
* **Proportional Tax** – tax structure for which ATR remains constant as the level of income is increased.
* **Regressive Tax** – tax structure for which ATR decreases as the level of income is increased.
* **Marginal Tax Rate (MTR)** –the percentage of the next dollar earned that must be paid in taxes.
* real world examples of…
* **progressive tax**: U.S. Federal Income Tax
* **proportional tax**: “flat tax” with no deductions whatsoever (e.g., income taxes in Bulgaria (10%), Hungary (16%), Iraq (15%), Jamaica (25%), Romania (16%),

Russia (13%), Ukraine (15%))

* **regressive tax**: U.S. Social Security Payroll Tax – first $118,500 taxed at a marginal rate of 6.2%, while additional earnings are not taxed at all

Would everyone agree: regardless of how much tax revenue we want to raise, we should do so with a tax system that is “fair”?

What exactly do we mean by “fair”?

Two notions of “fairness”

1. Horizontal Equity – two individuals of equal economic capacity should have equal tax burdens
2. Vertical Equity – individuals of greater economic capacity should not have a smaller tax burden

However, if “tax burden” were instead equated to “total dollars paid in taxes,” then even regressive taxes can be “vertically equitable.”

i.e. – even for a regressive tax, “total dollars paid in taxes” can increase as level of

income increases.

Is “income” the only important determinant of “economic capacity”?

e.g. – consider the following two taxpayers:

1. 22 year old single college graduate earning $50,000 per year
2. 45 year old high school educated married couple with 4 kids earning a total of

$50,000 per year

Many of the “exemptions” and “deductions” built into our tax code are based upon recognitions that things other than income are important for determining economic capacity

But, “Inequities” (both “vertical” and “horizontal”) can easily result due to “deductions” and “exemptions”…

Consider the following five taxpayers in 2010:

|  |  |  |  |
| --- | --- | --- | --- |
| Taxpayer | AGI  (Line 37 of 1040) | Total Taxes Paid  (Line 60 from 1040) | ATR |
| Mitt R. | $21,646,507 | $3,009,766 | 13.90 |
| Newt G. | $3,142,066 | $994,708 | 31.66 |
| Barack  O. | $1,728,096 | $453,770 | 26.26 |
| Rick S. | $923,411 | $263,442 | 28.53 |
| Joe B. | $379,178 | $86,626 | 22.85 |

# Multiple Choice Questions:

1. Charles’ income is higher than Debbie’s income. Two of the notable differences between their jobs are that Charles must work outside year round (even when it is very hot in the summer and very cold in the winter) and Charles runs a greater risk of being injured on the job. This would seem to suggest that the difference in incomes between the two individuals is
   1. due to gender discrimination.
   2. an indication of the Labor Theory of Value.
   3. a compensating differential.
   4. a consequence of Debbie being paid a wage rate below the minimum wage.
2. wrote *A Theory of Justice* (1971), in he argued that a “social contract” designed behind a “veil of ignorance” would aim to “maximize the well- being of the worst-off member of society.”
   1. Karl Marx
   2. Jeremny Bentham
   3. John Rawls
   4. Robert Nozick
3. The Gini-Coefficient provides a quantitative measure of
   1. the rate at which a society is depleting its natural resources.
   2. income equality/inequality within a society.
   3. average levels of income in society.
   4. the rate at which prices are increasing in an economy over time.
4. One of the “7 Determinants of Productivity, Income, and Wealth” is “effort,” which refers to the recognition that differences in income or wealth across individuals could result from differences in
   1. the amount of money that individuals receive as inheritances during their lifetime.
   2. the natural talents that people are endowed with at birth.
   3. the skills and experiences that people acquire through education, training, and work experience.
   4. how hard individuals choose to work.
5. The Function of Government refers to government policies aimed at changing the final distribution of goods/services across consumers, usually with the intention of realizing a “fairer” apportionment of consumption, income, and wealth.
   1. Allocation
   2. Distribution
   3. Stabilization
   4. Free Rider
6. The U.S. Federal Income Tax
   1. was first established in 1913 (and authorized by the passage of the 16th Amendment to the U.S. Constitution).
   2. is a Progressive Tax.
   3. was abolished by President Barack Obama during his first year in office.
   4. More than one (perhaps all) of the above answers is correct.
7. In 2007: George earned $923,807 of income, of which he paid 24.0% in U.S. Federal Income Taxes; John earned $386,527 of income, of which he paid 30.7% in U.S. Federal Income Taxes; and Joe earned $319,853, of which he paid 20.7% in U.S. Federal Income Taxes. If “income” provides a measure of “economic capacity” and “average tax rate” provides a measure of “tax burden,” then these figures would suggest that the U.S. Federal Income Tax
   1. violates the notion of vertical equity.
   2. satisfies the notion of horizontal equity.
   3. generates enough revenue to cover all Federal Government expenditures.
   4. results in “the rich” paying “too little” in taxes.
8. Incomes may differ across different individuals in a free market society due to
   1. only factors which are beyond the control of the individual (such as their “endowment at birth of natural talent and ability”).
   2. only factors which are under the direct control of the individual (such as “how much education to acquire”).
   3. some factors which are under the control of the individual (such as “how much education to acquire”) and some factors which are beyond the control of the individual (such as their “endowment at birth of natural talent and ability”).
   4. None of the above answers are correct (since in general, income levels in a free market society are essentially “entirely random”).
9. Suppose that the Lorenz Curve for the U.S. in 2010 lies completely below the Lorenz Curve for France in 2010. This implies that

A.

B.

C.

D.

France.

Per Capita Incomes are higher in France than in the U.S. the Unemployment Rate is lower in the U.S. than in France.

incomes are distributed more equally in France than in the U.S. incomes are distributed more equally in the U.S. than in

1. Consider three taxpayers: Amy, Bill, and Cindy. Amy and Bill have exactly equal “economic capacities” when it comes to being able to bear the burden of taxation, while Cindy has a greater “economic capacity” than Amy and Bill. Considering the notions of “fairness” discussed in lecture,
   1. to satisfy the notion of Vertical Equity, Cindy should have a greater tax burden than both Amy and Bill.
   2. to satisfy the notion of Horizontal Equity, Cindy should have a greater tax burden than both Amy and Bill.
   3. to satisfy the notion of Horizontal Equity, Amy and Bill should have exactly equal tax burdens.
   4. More than one (perhaps all) of the above answers is correct.
2. Incomes may differ across different individuals in a free market society due to
   1. only factors which are beyond the control of the individual (such as their “endowment at birth of natural talent and ability”).
   2. only factors which are under the direct control of the individual (such as “how much education to acquire”).
   3. some factors which are under the control of the individual (such as “how much education to acquire”) and some factors which are beyond the control of the individual (such as their “endowment at birth of natural talent and ability”).
   4. None of the above answers are correct (since, in general, income levels in

a free market society are “entirely random”).

1. is defined as the flow of money earned by an individual during a period of time.
   1. Human Capital
   2. Income
   3. Wealth
   4. A Compensating Differential
2. Suppose that the Lorenz Curve for the U.S. in 2015 lies completely below the Lorenz Curve for France in 2015. This implies that
   1. Per Capita Incomes are higher in France than in the U.S.
   2. the Unemployment Rate is lower in the U.S. than in France.
   3. incomes are distributed more equally in France than in the U.S.
   4. incomes are distributed more equally in the U.S. than in France.
3. is a broad term which refers to monetary payments made by the government to certain individuals in society, with the impact of altering the distribution of income within a society.
   1. Monetary Policy
   2. Redistribution In-Kind
   3. Income Support
   4. Income Taxation

# Answers to Multiple Choice Questions:

1. C
2. C
3. B
4. D
5. B
6. D
7. A
8. C
9. C
10. D
11. C
12. B
13. C
14. C