Government Policy and Income Distribution

December 2006

Reading: Chapter 20

In this topic we briefly discuss tax and expenditure policies of the government, drawing on many ideas discussed earlier. Also examine two issues concerning fairness and equity, that is, poverty and income distribution, discuss government policies which deal with them.

Government Policies and Income Distribution

a. Taxes and tax policy

b. Government spending

c. Poverty

d. Income distribution

e. Government policy on poverty and income distribution

Taxes and Tax Policy

The government imposes taxes on people and economic activities in order to:

1. **Collect revenue** to finance government activity
2. To **correct distortions** in the economy to reduce or remove market failures
3. **Redistribute income and wealth**

The government's tax policy has two overall **goals**:

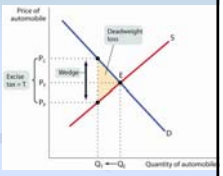
1. To achieve **tax efficiency**: to minimize direct and indirect costs to the economy of tax collections.
2. To seek **tax fairness** or tax equity: that the tax burden is borne in a fair manner.

Taxes and Tax Policy

Tax efficiency

- Taxes can adversely affect efficiency by **distorting incentives** and creating **deadweight losses**.

Examples:
Deadweight loss from an excise tax.
Income tax which reduces incentives for work or saving.



To minimize deadweight losses, imposed taxes on those with most **inelastic** response.

- Taxes affect efficiency through **administrative costs**, by using up resources to collect and pay taxes.
- Taxes can also remove or reduce market failures and help to **improve efficiency**. Example, tax on pollution and other kinds of externalities.

Taxes and Tax Policy

Tax fairness

Tax system should be fair. What does fairness mean? Most debates about taxes rely on one of two principles of tax fairness:

1. benefits principle: those who benefit from public spending should bear the burden of the tax that pays for that spending. Matches one major justification of government activity: public goods. But cumbersome to do, and can be inequitable.

2. ability-to-pay principle: those with greater ability to pay a tax should pay more tax. Usually taken to imply that rich pay more than poor. Sometimes not just proportionate to income, but as a higher percentage of income.

Taxes and Tax Policy

Taxes

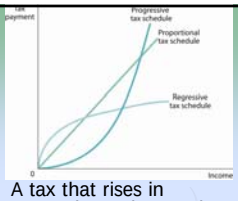
Every tax has two attributes:

Tax base: the measure or value (such as income or property value) that determines how much tax an individual pays.

Tax structure: what specifies how the tax depends on the tax base.

There any many **kinds of taxes**, including: Income tax; Payroll tax; Sales tax; Excise tax; Profits tax; Property tax; Wealth tax; Value added tax.

Taxes can be imposed by different levels of government: federal, state, local



A tax that rises in proportion to income is called proportional. A tax that rises more than in proportional to income is progressive, and a tax that rises less than in proportion to income is regressive. The average tax rate is tax as a proportion of income, and the marginal tax rate is the additional tax a person pays when income rises by $1.

Taxes and Tax Policy
Efficiency and Equity

A lump-sum tax (same for everyone, regardless of any actions people take) is efficient because it does not distort incentives, but it is unfair. Has resulted in tax revolts.

A progressive income tax can be fair, being based on the ability to pay principle, but is likely to distort incentives. Marginal tax rates have been reduced in many countries.

The United States has **a mixture of progressive and regressive taxes**, both because there are different levels of government and because different principles of fairness are applied to different taxes. The overall structure of taxes is progressive.

Revenue from Major Taxes in the United States, Fiscal Year 2002 (billions of dollars)

Federal		State and local	
Income tax:	$858.3	Sales tax:	$333.5
Payroll tax:	700.8	Income tax:	200.7
Profits tax:	148.0	Property tax:	267.8
		Profits tax:	33.5

Source: Statistical Abstract of the United States, 2004.

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Government Spending

Governments spend money mainly to

1. provide **public goods**: goods that are non-exludable and non-rival.
2. provide **social insurance**: spending intended to protect people again financial risk, due to medical costs or temporary loss of income.
3. engage in **redistribution**: taxing the relatively well off and providing income to the poor of benefits like housing and medical care.

Last two are **transfer payments**: what the government gives away, not spent ongoods or services. Line between two is fuzzy, the latter are usually **means tested** to ensure that only the poor qualify.

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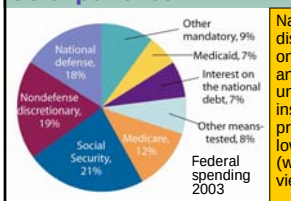
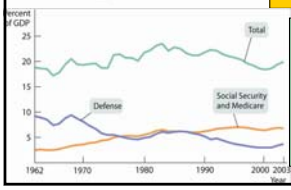
Government Spending
US experience

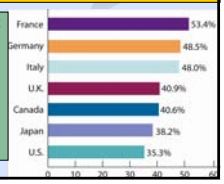


Federal spending 2003

National defense and "nondefense discretionary" can be considered spending on public goods. Social Security, Medicare, and "other mandatory" (which includes unemployment insurance) are social insurance programs. Medicaid, which provides medical insurance for people with low incomes, and "other means-tested" (which includes food stamps) are best viewed as income redistribution.



Government spending as percentage of GDP, 2002. US spending is one of lowest of all rich countries.



Poverty
Definition and Measurement

The **poverty line** is a minimum income that the government defines as adequate.

Usually calculated by estimating cost of buying a nutritionally adequate amount of food, and making an allowance of other basic necessities like shelter, etc.

Poverty line recalculated to take into account changes in prices. But not to take into account the fact that the amount of goods required to satisfy basic needs may increase with average income of people. Eg: transportation, health care, education, safe housing, dignity.

People or families whose income falls below the poverty line are considered **poor**.

The **poverty rate** is the percentage of the population living below the poverty line.

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Poverty
US experience

Declined sharply from 1960s to early 1970s, but then rough constancy, with ups and downs. Failure to make progress in reducing poverty.

Who are poor? Poverty disproportionately high among African-Americans and Hispanics (although the majority of the poor are white), families with single mothers, people without full-time employment. Poverty rate among young increased; fell among old due government programs; but health costs have increased too.

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Poverty
Origins and Consequences

Important **factors contributing** to poverty:

1. **Lack of education**: low level of human capital, difficulties in finding full-time jobs with decent pay.
2. **Discrimination**: Ethnic minorities and women receive lower wages than others with same education and experience.
3. **Adverse events**: Health problems, loss of jobs.

Important **consequence** of poverty is that it leads to low level of education, discrimination and increased probability of adverse events. Vicious cycle of poverty. Especially for children: health, education.

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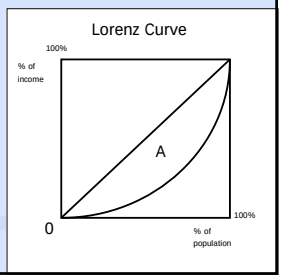
Income Distribution
Concept and Measurement

Poverty: absolute standard of living of the poor. Income distribution: how income and wealth or other measures of well-being are distributed among people.

Since poverty has a relative dimension, income distribution is closely related to the poverty issue. Also, question of fairness and equity.

Fairness and equity can also be thought of in terms of equality of opportunity. But if outcomes are inequitable, maybe there isn't equality of opportunity. Inequality of outcomes creates inequality of opportunity for a number of reasons like education, health, access to credit, etc.

How to **measure** inequality. How much of income bottom quintile, etc., makes. Lorenz curves show the entire picture. Compare with perfect equality and perfect inequality. Gini coefficient is area *A*/area of triangle. Can also look at the distribution of wealth.



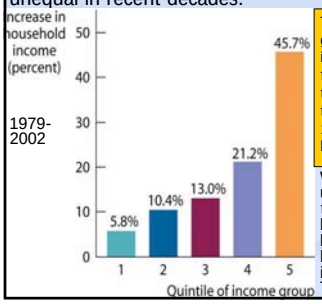
Income Distribution
Determinants

What determines the distribution of income and changes in it?

- **Distribution of assets**: capital, land. Unequal distribution of income because of unequal distribution of assets – historical reasons.
- **Education and human capital**: distribution of human capital. Intergenerational effects. Richer people more likely to get more education.
- **Bargaining position of workers versus firms** – union strength. If unions weakened, wage share falls. Role of government in it.
- **Degree of monopoly**. More concentrated industries, higher profit share, more inequality.
- **International trade issues**. Increasing trade leads to increase in demand for abundant factor along Heckscher-Ohlin lines.
- Nature of **technology** and technological change. How demand for factors changes with technological change. Labor saving technological change. Skill-intensive technological change.
- **Winner-take-all issues.** Those who sell more are able to obtain larger markets because of changes in technology reducing transport and communication costs.

Income Distribution
US experience

Income distribution in the United States is unequal among families (compared to other developed countries), and has become more unequal in recent decades.



The incomes of higher-income families grew faster during this period than the incomes of lower income families. The first quintile is the 20% of families with the lowest income, the second quintile the next poorest 20%, and so on. From 1979 to 2002, average income in the lowest quintile rose, but by only 5.8%.

Why? Increase in skilled wage – unskilled labor wage differential due to technological change and to a lesser extent international trade has been stressed. But also wage share has fallen, executive salaries have increased, profit share increased. Tax cuts for the rich.

Government Policy
Antipoverty Programs

Families below the poverty line receive three main types of government aid:

- **Welfare** is monetary aid to poor families.
- **In-kind transfers** provide poor families with specific goods and services.
- A **negative income tax** is a program that supplements the earnings of low income families.

Inequality

Government tax policy is on the whole progressive, but there have been recent tax cuts for the rich.

Less funding for many government programs which benefit the poor.

Government Policy
Redistribution Debate

Case for redistribution

Various arguments for redistribution:

1. based on fairness and equity. For instance, Rawls's argument.
2. based on improvements in efficiency. Low level of income at bottom of income distribution leads to bad health for the poor, poor education, absence of borrowing capabilities. Also, possibility of crime. These create.

Case against redistribution

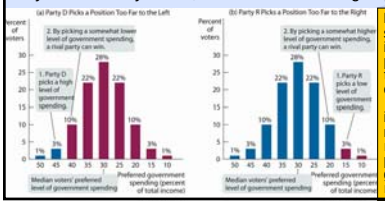
There are two different kinds of argument against redistribution:

1. philosophical concerns about the **proper role of government**: Government's role should be limited to maintaining the rule of law, providing public goods, and controlling externalities.
2. more conventional argument against taxing the rich and making transfers to the poor involves the **trade-off between efficiency and equity**. Reduction of incentives. Deadweight losses due to taxation.

Government Policy
Median voter theory

Which policies will be adopted depend not on philosophical discussions, but on what voters want. There are clear differences in the interests of different voters. Whose interests prevail?

In election by majority rule where voters decide how much of a given policy action should be taken, the **median voter theorem** says that actual policies will mostly reflect the preferences of the median voter. Implication: parties that compete for votes on how much to redistribute will choose positions close to the preferences of median voter. In practice, parties' positions have not always obeyed this: many issues, influence of interest groups.



Party D picks a position of spending equal to 45% of income. Rival party can win by picking a policy that is closer to the center, leaving D with only represented by blue bars. If party R picks a position that is well to the right of the median voter's preferences, a rival party can win by picking a position closer to the center, R getting votes from those represented by red bars.