

# Voting and redistribution

EC3060 Economics of Policy Issues

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Question:

**How can political processes  
affect redistribution of income  
or wealth?**

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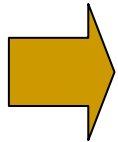
# Income redistribution through majority voting

- **Majority voting:**

- Any 51% of voters can (in principle) vote to redistribute income or wealth to themselves from the other 49% voters.

- **Voting is a means of redistributing income or wealth**

- Since the majority determines the redistribution of income or wealth to itself from the minority



Then the majority is like a **dictator!**

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# Private benefits from public spending

- Majority voting is a means of making **collective decisions** about public spending on public goods
- Majority voting regarding public spending for public goods could affect **income distribution**
- A majority could vote for public spending on public goods from which it benefited and for the public goods to be financed by taxes levied on the population at large
- Some people might then **pay taxes** and **not benefit at all** from the spending on public goods chosen by the majority

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- **Public spending** could also provide **private** benefits, rather than the collective benefits of a public good.
  - Example: road maintenance

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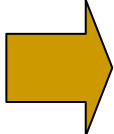
# Coalition size and coalition stability

- What is the optimal size of the majority coalition to maximize their gains from public spending for private benefit??

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# Coalition size and coalition stability

- The **optimal size** for members of the majority coalition to **maximize** their **gains** from public spending for **private** benefit is **51**.
- A member of the **minority** wants to have as many people as possible **sharing** the **costs** of financing the benefits for the majority
- A member of the minority wants there to be **as few as possible people in the majority**

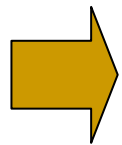
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- Everybody wants to be in the majority!
  - The minority could **bribe** members of the majority to leave the majority coalition and join them to make a new majority coalition
  - If people can be bribed to switch coalition
-  The original majority coalition is **unstable**
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But...

- Also the members of the new minority coalition have the incentive to bribe members of the new majority coalition



the **new** majority coalition is also **unstable**!

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Why might switching between coalitions  
not take place?

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## Why might switching between coalitions not take place?

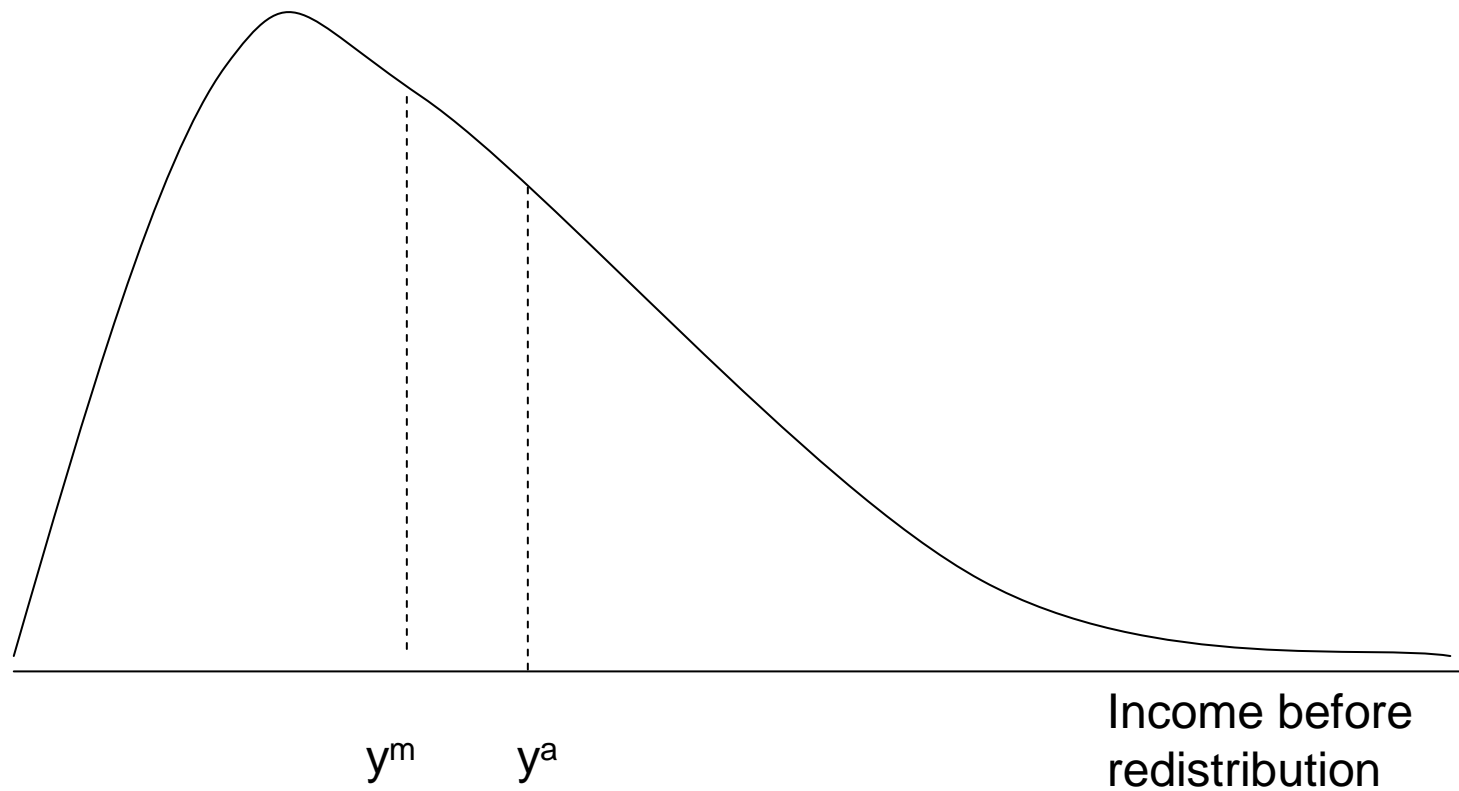
- People who can be bought too easily acquire a reputation of being opportunistic and unprincipled
- If **fixed costs** are incurred in forming coalitions, a **commitment** is required

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# Limits on redistribution through majority voting

- Abilities in a population are usually normally distributed
- However, income before redistribution is usually skewed
- **The median is less than the mean**

## Distribution of income (or wealth) in a society



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- When the mean exceeds the median, **more people have income below the average** than above the average.
  - A **majority coalition** can be made up of the **median voter,  $y^m$ , and all voters with incomes less than  $y^m$**
  - With majority voting, the majority of voters with below-average income can vote to redistribute income to themselves from the minority
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# 1. Voting to redistribute wealth

- If the majority voted to appropriate for their own benefit the wealth of a minority

➡ a precedent would be set that people can lose all their wealth though majority voting

- The precedent can be expected to **affect adversely incentives** to work and to save and to take risks

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- Because of the adverse effect on incentives to be productive and to take risks, societies do not tax personal wealth, or only in limited cases
  
  - Voting to appropriate personal wealth is a **violation of personal property rights**
    - After income taxes have been paid, people can choose to consume or to invest their post-tax income
    - If saved, post-taxed income is an addition to personal wealth



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- A tax on personal wealth is a **retroactive** tax on personal income that was already taxed in the past
  - Had people known in the past that they were going to be taxed on their wealth in the future, they may have behaved differently
    - For example consuming their post-tax income rather than saving

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## ■ Characteristics of taxation on wealth

- Surprise factor: no efficiency loss
- The minority cannot change their behaviour to avoid the appropriation of wealth
- There is no excess burden
- No “leaky bucket” of redistribution

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- But taxation of wealth affects **future** personal behaviour!
  - There are efficiency losses in the future.
  - Taxation of wealth affects future personal behaviour through unwillingness to exert effort to take risk

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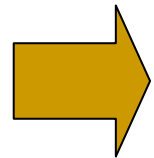
## 2. Voting to redistribute income

- How much **income redistribution** can we expect to take place through self-interested majority voting if **voters were able to choose taxation and redistribution** of income to **maximize their own utilities**?

... It depends

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- **Appropriative taxation** of the incomes of the minority for the exclusive benefit of the majority is **discriminatory**.
  
  - Consider an alternative scheme for taxation and redistribution which is non-discriminatory:
    - The **same rate** of income tax is to be applied to all people in the population
    - The **proceeds** of taxation are **distributed equally** among all the population
    - ...
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- In the case of a **single rate** of taxation
  - And with no discrimination in the distribution of tax revenue



The outcome of **majority** voting is **complete appropriative taxation** and post-redistribution income **equality**

- Income taxes and redistribution programs are in general more **complex** than the single proportional tax rate
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- The outcome of **majority voting** is the same as the outcome of social insurance through **maximizing a social welfare function** (under the same condition of no excess burden of taxation)
  - In both cases, incomes are equalized after taxation and redistribution

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# What is the difference?

- **Social welfare maximization**

- Social insurance is based on **people not knowing** who they are going to be

- **Majority voting**

- Equality of income under majority voting takes place when **people know** their pre-distribution income



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1. Incentives and the excess burden of taxation
  2. Principles of socially just taxation
  3. Anticipation of future improvements

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# 1. Incentives and the excess burden of taxation

- How about efficiency losses?
- How much effort would you exert if the rate of income taxation is 100%??

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- When choosing the rate of income taxation, the median voter has to consider how taxation and redistribution will affect **incentives** of people to work and exert effort.
  - The determination of income redistribution through majority voting is subject to **constraints** imposed by the beneficiaries.

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## 2. Principles of socially just taxation

- Principles of socially just taxation constrain a majority from discriminating against a minority
  - Two principles:
    - Horizontal equity
    - Vertical equity
  - These principles introduce considerations other than being the majority or minority
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- The principle of **horizontal equity** requires tax laws to treat equals equally

It prevents the application of extraneous criteria (as race, ethnicity, beliefs) to the determination of personal taxation.

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- The principle of **vertical equity** requires **just** tax treatment of **unequal** people (i.e., people with unequal incomes or wealth)

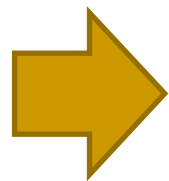
It imposes criteria of comparable loss for people

- with different incomes
  - with different sources of incomes
  - who differ according to the number of children they have
  - or whether they are married
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### 3. Anticipation of future improvements

- A low-income majority may not vote in favour of extensive income redistribution if **high future social mobility** is anticipated
- In presence of prospects of future gains through social mobility



people wait for their fortunes to improve rather than vote to redistribute income from others

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- The anticipation about the future include expectations about the shape of the future income distribution
  - The distribution of income may be expected to become less dispersed



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# The Right to Vote

- The right to vote determines the composition of the majority and minority voting coalitions
- Richer people are protected from the redistribution through majority voting if poorer people do not have the right to vote or do not register to vote

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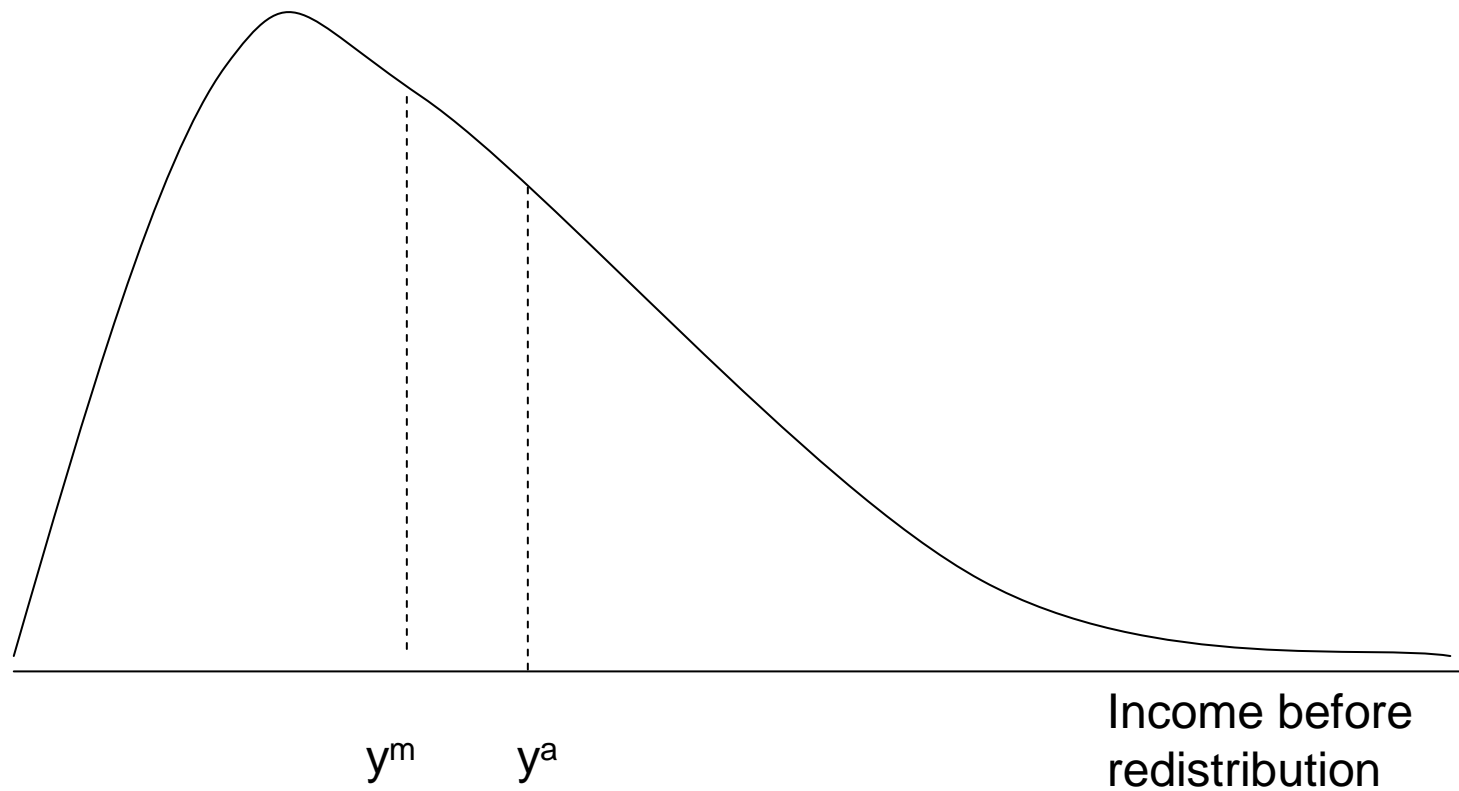
# Who votes?

- Empirical evidence shows that
  - People with lower incomes and less wealth appear to be less likely to vote than higher-income, wealthier people
  - Education matters: more educated people are more likely to vote

- Historically, the right to vote was based on ownership of property
- The owners of property were concerned that the more numerous poor would vote to appropriate their property
- Over time the franchise was extended to all men. And then to women as well.
- Empirical studies show that the extension of **franchise** led to as **increase** in **government spending** in Europe

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- A similar argument might be applied to voter participation in presence of universal franchise
  - A study in the US shows that the abolition of poll taxes and literacy tests led to an increase in welfare state

## Distribution of income in a society



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# Voter participation

- Voter participation affects the outcome of majority voting
- The person with the median income in a population is the median voter only if everybody votes
- Everybody, however, may not vote!

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**We have to distinguish between the  
median voter and the person with the  
median income**

**The median income of electors is higher  
than the median income of the voting  
age population**

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## Distribution of income in a society

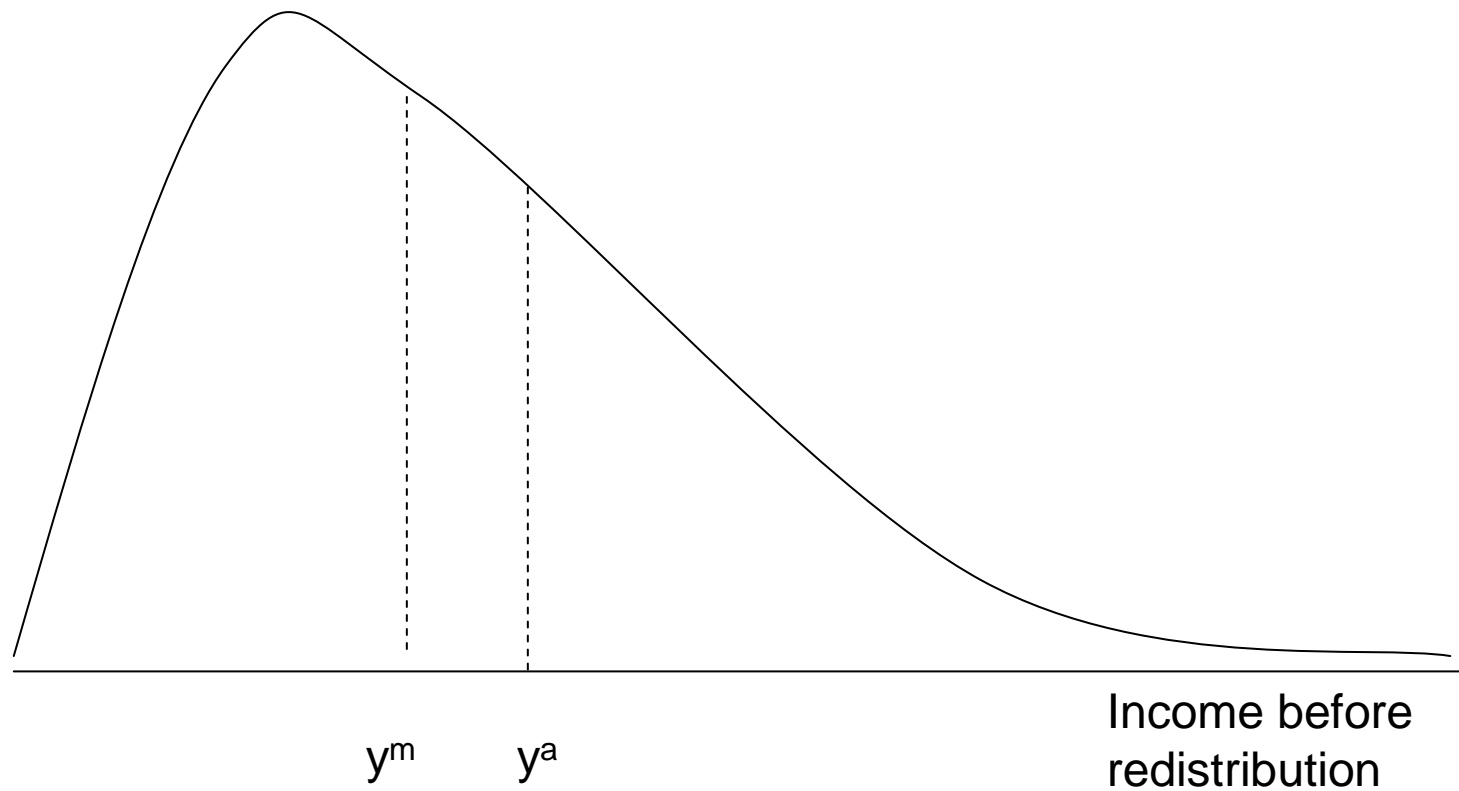




Table A1

## Voter Turnout by country.

Country	Voter Turnout	Country	Voter Turnout
Argentina	81.02	Malawi	68.16
Australia	82.45	Malaysia	63.33
Austria	75.88	Malta	96.43
Bahamas	68.19	Mauritius	79.77
Bangladesh	63.05	Nicaragua	75.8
Barbados	66.72	Norway	75.69
Belarus	60.28	Pakistan	37.48
Belgium	84.15	Papua N. Guinea	84.9
Belize	67.25	Mexico	59.03
Bolivia	57.28	Namibia	63
Botswana	44.63	Nepal	83.32
Brazil	79.07	Netherlands	72.66
Bulgaria	73.01	New Zealand	80.42
Canada	60.47	Paraguay	49.4
Chile	78.84	Peru	61.82
Colombia	33.83	Philippines	66.93
Costa Rica	81	Poland	53.84
Cyprus	79.72	Portugal	75.97
Czech republic	82.78	Romania	77.5
Denmark	81.76	Russia	62.72
Dominican Republic	48.9	Senegal	24.19
Ecuador	65.94	Singapore	54.18
El Salvador	54.95	Slovak Republic	82.9
Estonia	56.02	South Africa	85.53
Fiji	59.86	South Korea	79.22
Finland	74.82	Spain	79
France	64.47	Sri Lanka	71.32
Gambia	61.55	St. Vincent & G	75.16
Germany	73.6	Sweden	81.36
Ghana	60.15	Switzerland	37.67
Greece	84.75	Taiwan	70.9
Guatemala	31.34	Thailand	62.5
Honduras	65.8	Trinidad & Tobago	68.85
Hungary	68.13	Turkey	79.05
Iceland	87.82	USA	45.23
India	61.81	Uganda	56.67
Ireland	63.05	UK	72.38
Israel	83.7	Ukraine	69.89
Italy	90.18	Uruguay	96.11
Jamaica	46.72	Venezuela	47.04
Japan	61.46	Zambia	34.13
Latvia	60.31	Zimbabwe	39.43
Luxembourg	60.52		

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# Voting and Gender

- Women have tended to vote more than men in favour of higher government spending
- The extension of the voting franchise to women is associated to increases in publicly financed income transfers

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## ■ Why?

- Within the traditional family, the social insurance contract offered by the government was more important to women than to men.
- When the traditional model of the family no longer applies, single mothers might require income support from the government to support their children

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# Intergenerational income redistribution

- When public spending on public goods is financed through government bonding, the costs extends over generations
- A present generation might finance a public project by government through sale of government bonds.



This would impose the entire burden of financing the public project on future generations

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# Constitutional restraint

- A society may want to limit the redistribution that can be decided by voting
- The limitations can be specified in a constitution
- The constitution may designate that more support than 51 percent is required

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- Constitutional restraint on intergenerational redistribution can be applied through **limitations** on the size of the **deficit** of the government budget
  - A government has a budget deficit when the government borrowing is used to finance benefits for a present generation at the expenses of future generations
  - Another form of limitation on intergenerational distribution is a maximal permissible ratio between government **debt** and the size of national income.
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# Conclusions

- Voting on redistribution of income and wealth introduces two questions:
- **Normative question:** should the majority be allowed to exercise its will for personal benefit at the expenses of a minority?
- **Positive question:** explain the redistribution that takes place through majority voting