The analysis of government intervention – (Stiglitz ch.10; Gruber ch.2)

- How does the government intervene: some comparative data
- Effects of government interventions
  - the importance of design features
  - evaluating efficiency and distributional effects
- The policy process

What have we learned up to now

A. When should the government intervene?
- Lesson of basic micro: the private market equilibrium is optimal for a market that meets the criteria of perfect competition.
- Need to ask: where is the market failure that causes a deviation from perfect competition?
- Even if there is a market failure, we only want the government to intervene if the government can make things better. Some types of intervention may be worse than the market outcome.

B. How should the government intervene?
- Often multiple options; to choose, need answer to know effects of policies.

C. What is the effect of government intervention on economic outcomes?
- Sometimes, one policy is more efficient. Example: externality with heterogeneous firms.
- Important to think about direct and indirect effects of a policy. Individuals and firms change their behavior in response to the policy. Example: free care for people without insurance.
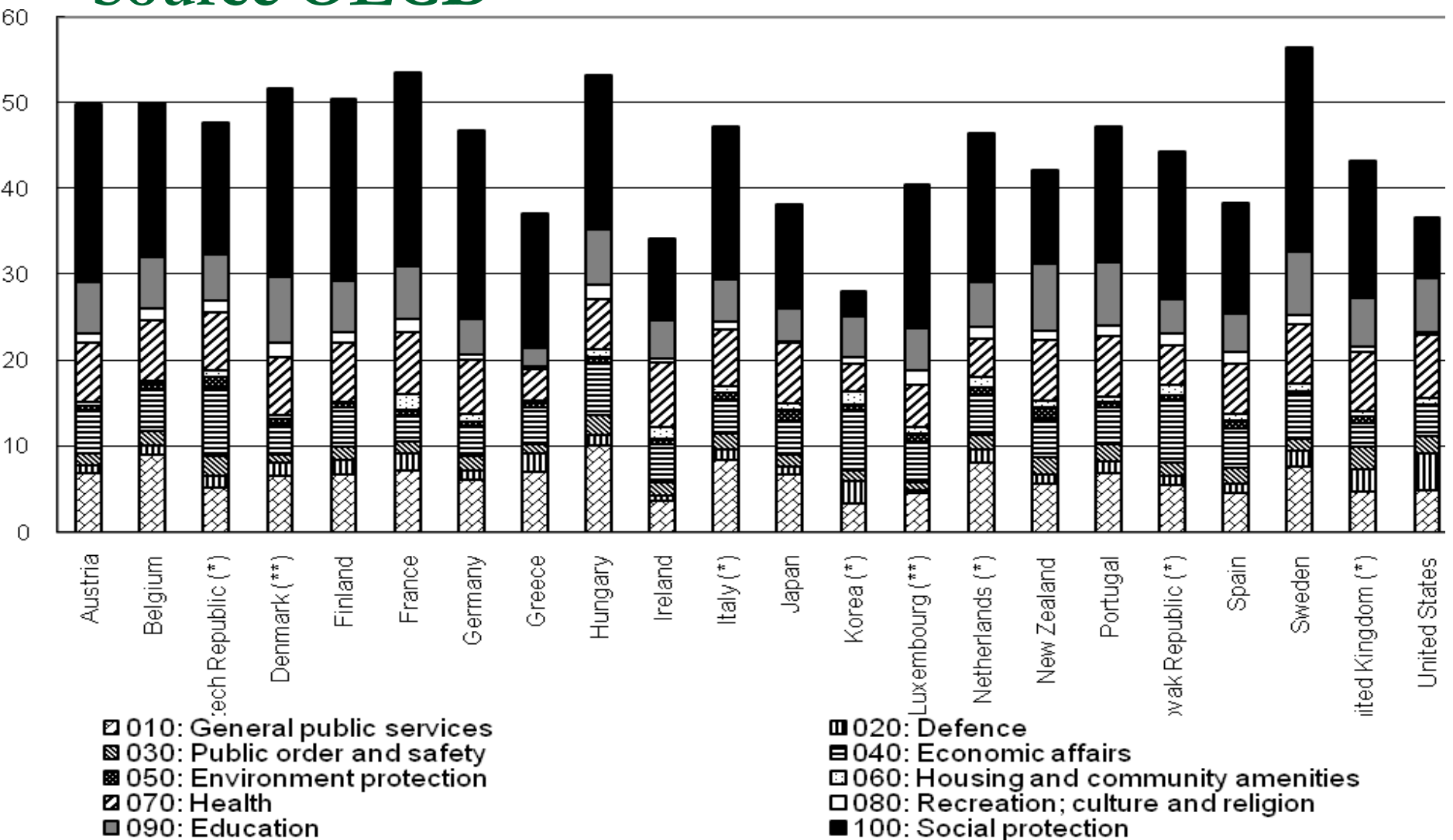
D. Why do governments do what they do?
- This is political economy, the study of how governments behave.

Public expenditures in OECD countries (2005 data)

- In Oecd countries general **government expenditures go from 28% of GDP in Korea to 56,5% in Sweden**. European countries present generally higher public expenditures on GDP than non European countries, due to their more generous welfare system.

- Most OECD countries show a **decrease in general expenditure as a share of GDP from 1995 to 2005.** Decline larger in some European countries (France, Sweden, Finland, Denmark, Austria)

- **Social protection is the most significant part of government expenditure (**except for the USA and Korea): between 30% and more than 40% of GDP. Nordic countries, France, Germany and Austria spend the most in social protection. The **share of social protection expenditures increased slightly since 1995** in all countries, except for the USA, UK and Ireland, which present small decreases.

- **Defence, law and order** do not represent significant shares of general government expenditures.

Government expenditure by function as a share of GDP in 2005 or closest year available- Source OECD

Legend:
- 010: General public services
- 020: Defence
- 030: Public order and safety
- 040: Economic affairs
- 050: Environment protection
- 060: Housing and community amenities
- 070: Health
- 080: Recreation; culture and religion
- 090: Education
- 100: Social protection

Countries (x-axis): Austria, Belgium, Czech Republic (*), Denmark (**), Finland, France, Germany, Greece, Hungary, Ireland, Italy (*), Japan, Korea (*), Luxembourg (**), Netherlands (*), New Zealand, Portugal, Slovak Republic (*), Spain, Sweden, United Kingdom (*), United States

Structure of general government expenditure by function in OECD countries in 2005 or closest year available- Source Oecd
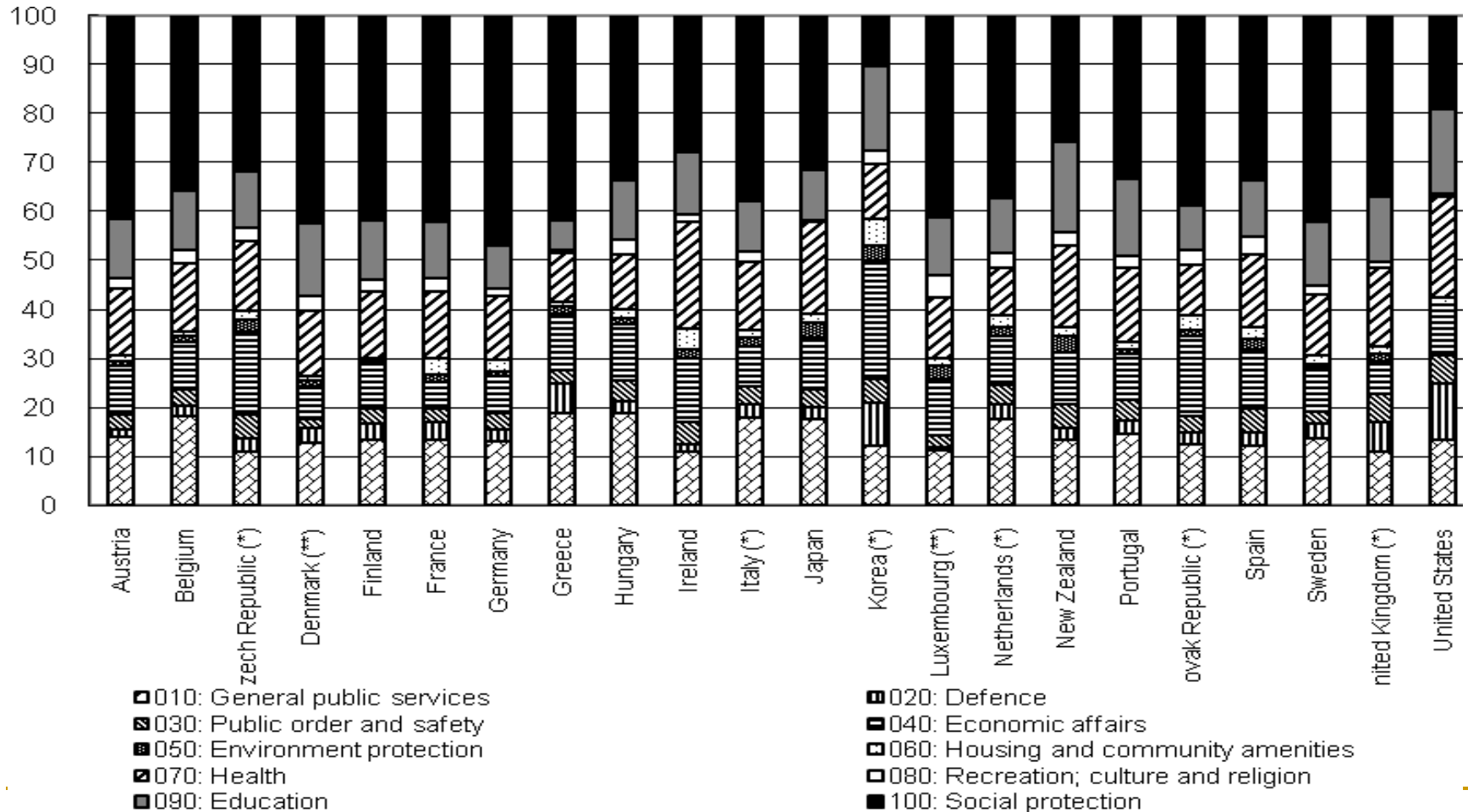
How to analyse and evaluate public expenditure programmes

1. Identify the need for a programme
2. Identify the market failure (if it exists) and if it is a relevant issue in relation to income distribution or a merit good
3. Identify alternative programmes which might address the perceived problem
4. Evaluate the impact of alternative programmes, considering:
   - design features
   - private sector responses
   - efficiency and distributional consequences of alternative programmes and their trade offs
5. Evaluate the political process at the basis of decision making, policy design and implementation

The importance of design features/1
Alternative forms of government intervention

1. **Government regulation** of: quality, quantity and prices

2. **Public provision**: free distribution (ex. compulsory education), distribution at below the cost of production (health or higher education), distribution at cost (electricity)

3. **Public financing of private provision:** as for example reimboursement of private insurers for special groups of population

4. **Government transfers or subsidies /taxes**: on producers and/or consumers.

The importance of design features/2 Defining eligibility standards for transfer or subsidies

- **How broad should eligibility standards be**?

Trade off:

   a) Too narrow: risk of excluding somebody in need;

   b) Too broad: risk of supporting those not in need

- in addition, **risk of altering individuals'/firms behaviour in order to gain eligibility or receive larger benefits**.

Ex. a) Food stamps aimed only at lone mothers may discourage marriages among low income groups;

   b) unemployment benefits may discourage low wage individuals to accept jobs until the end of the benefits;

   c) employment subsidies related to certain categories of workers may induce firms to assume only eligible workers and lay off non eligible ones

The importance of design features/3 Defining forms of erogation

- **Monetary transfers:** produce income effects
- **Specific transfers** (in kind or targeted to the purchase of specific goods/services) : produce substitution effects

According to economic theory monetary transfers should be preferred to in kind or targeted transfers because they leave more freedom of choice to individuals and do not alter marginal incentives.

BUT in **some cases (education, health services)** in kind transfers are preferred because they guarantee reaching a certain level of consumption, since:

a) these services are considered merit goods (paternalistic government)

b) There are positive externalities

c)   Specific egualitarism (all citizens have the right to access to basic goods/services: health, education, etc.)

# The importance of design features/4 Defining financing forms

- **Social contributions on labour costs**, usually to finance programmes related to the labour market and insurance type (unemployment benefits, sickness, pensions, ..)

- **General Taxation**, usually to finance programmes aimed at all citizens to cover citizenship rights (defence, health, education, minimum income and anti-poverty programmes, large infrastructures, etc.)

- **Participation to costs** (user fees), usually to finance programmes aimed at specific targets which may pay for them and to reduce the risks of moral hazard (infrastructures, health, kindergarten,…)

Government revenues in OECD countries

- Scandinavian countries (Sweden, Norway, Denmark and Finland) and France present the highest absorption of GDP by government (between 50 and 60% of GDP) to pay for the generous welfare expenditures. On the other side, the US, Greece, Japan and Mexico present the lowest absorption.

- Taxes represent more than half of general government revenue in all OECD countries. Eastern and continental European countries tend to use social contribution to a larger extent than other countries. Most OECD countries show a decline in the tax share and an increase in the weight of social contributions between 2000 and 2005

General government revenue as a share of GDP (%) in 2005 or closest year available

Legend: ■ Taxes ▦ Social contributions ☐ Grants + Other revenue
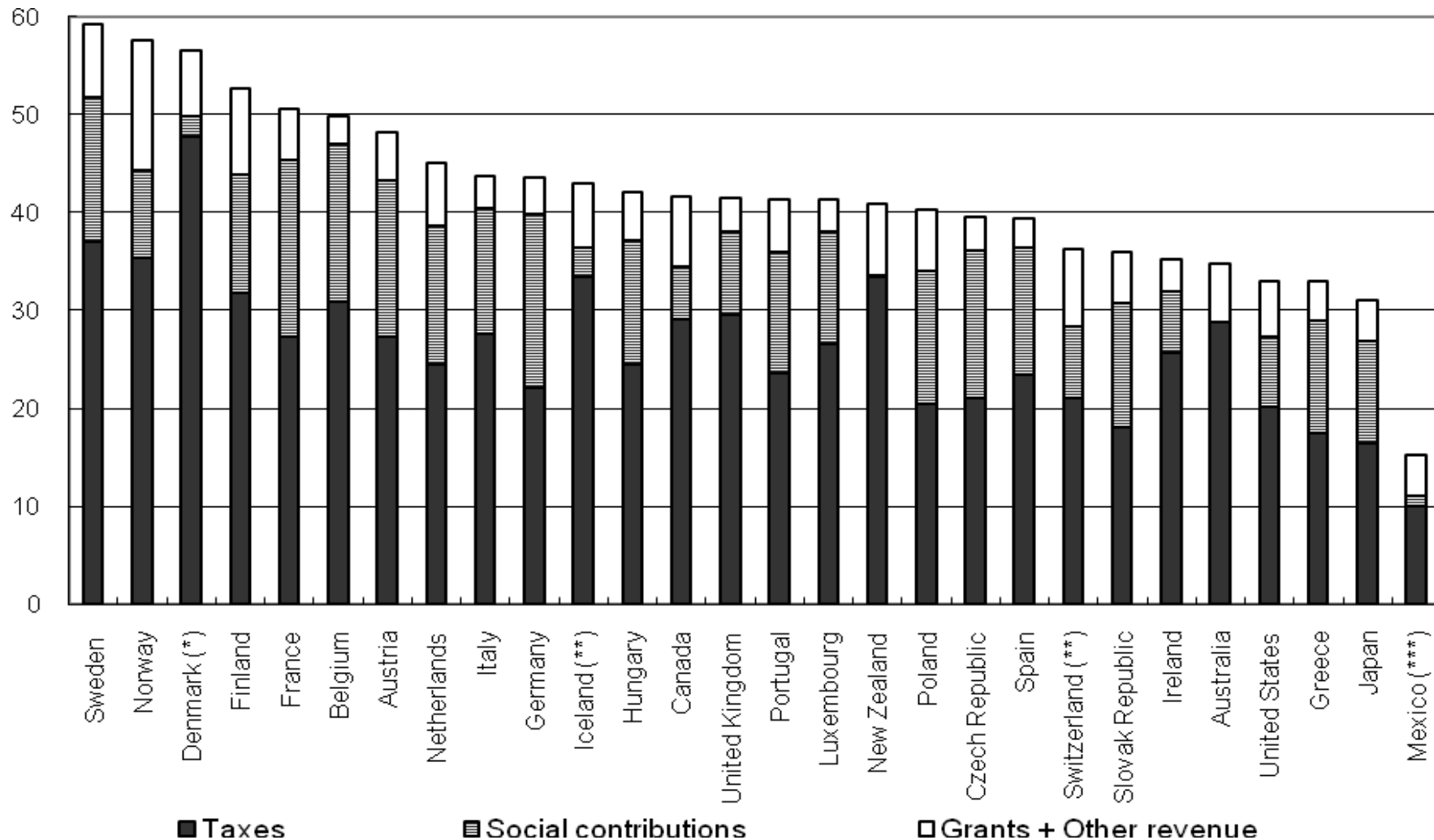
Evaluating the efficiency effects of public programmes

- Need to consider:
- ➢ **Crowding out effects**
- ➢ **Substitution and income effects**
- ➢ **Deadweight losses**
- ➢ **Marginal incentive effects,** which may be very different even in programs with the same average subsidy.
- ➢ **Short run and long run effects**
- ➢ **Direct and indirect effects** in order to assess the real incidence of public policies

Effects of public programmes: crowding out

- Public intervention may **crowd out** private intervention and reduce the impact of programmes.

- Examples:
- Public pensions may discourage individuals to save for retirement
- Rent controls may reduce in the long run the supply of new housing

Substitution and income effects

- **Substitution effects**: when public programmes reduce the relative price of a commodity/service (specific transfers) consumers substitute that cheaper commodity/service for other goods. Examples: tuition subsidies for higher education or food stamps.

- **Income effects**: public grants which do not affect the relative prices of different commodities result in income effects.

- Inefficiency (**deadweight loss)** is associated with substitution effects, because policies acting on relative prices directly affect the market performance. Deadweight loss: the loss of consumer and/or producer surplus due to departures of prices from marginal costs.

- In some cases (merit goods) the government may **want to affect relative prices and marginal incentives**.

Income effects of monetary transfers on Sam consumption choices


Qa
Qb
D
E
U1
U0
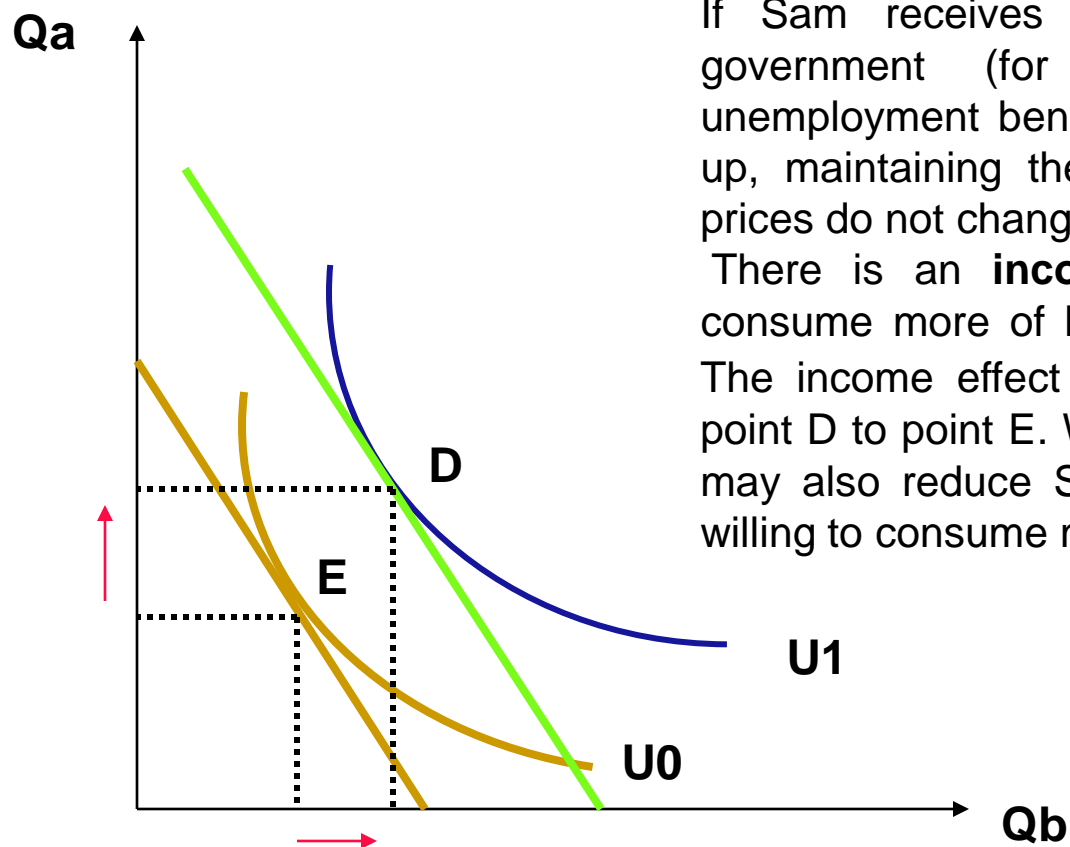
If Sam receives a monetary transfer from the government (for example in the form of unemployment benefits), his budget constraint shifts up, maintaining the same slope beacuse relative prices do not change.

There is an **income effect** as Sam is able to consume more of both goods because he is richer.

The income effect is represented as a move from point D to point E. We will see that this income effect may also reduce Sam labour supply, as he will be willing to consume more leisure.

Income and substitution effects of price changes on Sam consumption choices
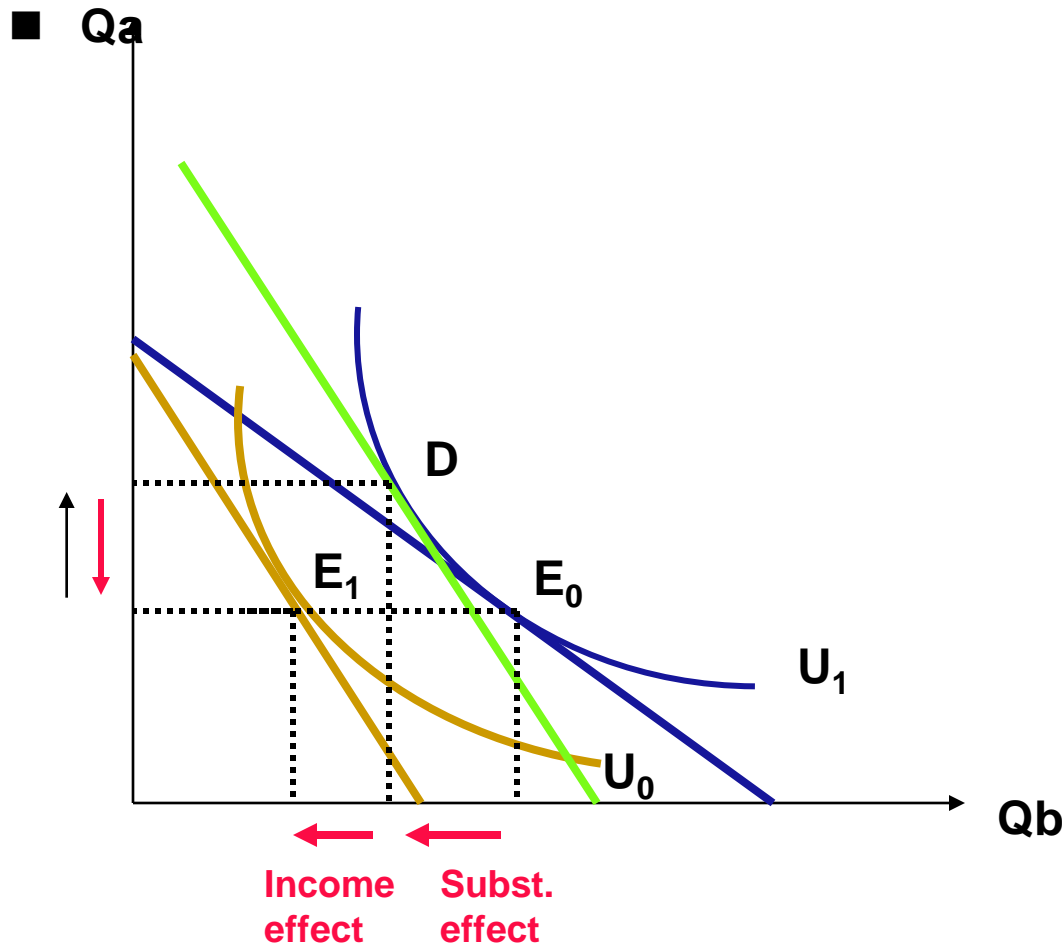
The increase in the price of good B has two effects.

First, holding utility constant, there is a **substitution effect**, which causes Sam to reduce the consumption of good B, because it is now more expensive than good A. The substitution effect is represented as a move from point E_0 to point D on the initial indifference curve U_0.

Second, holding relative prices constant, there is a **income effect**, which causes Sam to demand less of both goods because he is poorer. The income effect is represented as a move from point D to point E_1.

The two effects result in a reduction in Sam demand for good B, while the final demand for good A depends on their relative weight:
• if SE>IE the demand for good A increases,
• if SE<IE the demand for A decreases,
• if SE=IE (as in the graph) the demand for A does not change.

Distributional consequences of public policies: Incidence of public policies/1

- The Incidence of a government expenditure or tax measures considers **who really benefits from, or is hurt by, or bears the costs of the programme or tax**. The actual incidence may be different from the intended one.

- The incidence may be different in the short and in the long run, since in the short run price effects prevail on quantity effects, which take a longer time to take place.

- When evaluating the distributional consequences of a public programme or tax it is important to evaluate its impact on different groups of population and to assess if its distribution effect is **progressive** (i.e. the poor receive more than their contribution to the costs of the programme) or **regressive**.

Distributional consequences of public policies: Incidence of public policies/2

- Examples:

a) **housing subsidies**: in the short run the main effect is to increase in the price of housing since housing supply is rather unelastic in the short run. In the long run, however the supply of new housing will increase and limit price increases. Hence in the short run the subsidy mainly benefits current owners of houses, in the long it also benefits renters.

b) **Subsidies to support a new subway**: the effect is to increase the value of areas and houses near the subway, so the beneficiaries are property owners near the subway lines. Commuters are better off because of improved transportation services, but worse off because of higher housing rents in areas close to the subway.

c) **Health care support for the elderly**: the programme beneficiaries are not only the elderly, but also their children (especially women) which do not have to support their elderly privately (public expenditures crowds out private ones)

Equity-efficiency trade-offs and importance of the decision making process

- Very often public programmes entail trade offs between equity and efficiency: for example high welfare benefits may improve the living conditions of those in need (distributional goals), but may also reduce the incentives to find a job for those who would get low wages in the labour market

- There may be disagreement on the desirability of public programmes due to:

  a) different views on the relative importance of the efficiency versus equity considerations

  b) different views on the nature of the trade-offs, i.e. the amount of efficiency to be given up to improve distributional equity