

# Microeconomics: an introduction

introduction, curiosities and insights on Economic and Social Sciences

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# Outline

- 1 What is (micro)economics?
- 2 Case study
- 3 Welfare effect of policies
- 4 Market structures
- 5 Externalities

## Q&A

For (anonymous) questions, doubts and comments, please speak, use the chat or if you want:

`https://sli.do`

and enter the code:

`#93031`

We will use this website also to improve interaction!!!

# Outline

- 1 What is (micro)economics?
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# What is (micro)economics?



- We live in a world of scarcity: resources are not sufficient to satisfy all our needs and desires
- So people, as individuals and groups, allocate their limited resources (human, physical and intangible) in order to make themselves as well off as possible.

## 3 main trade offs

- Which goods and services to produce (remember that some choices are mutually exclusive);
- How to produce;
- Who gets those goods and services;
- Who decides?

# Positive vs Normative Analysis

- Positive analysis: what is (objective and fact-based)
- Normative analysis: what ought to be (value judgement)

# Positive vs Normative Analysis

but if we consider economic model from a strictly logical point of view. In case of mistake in the prediction:

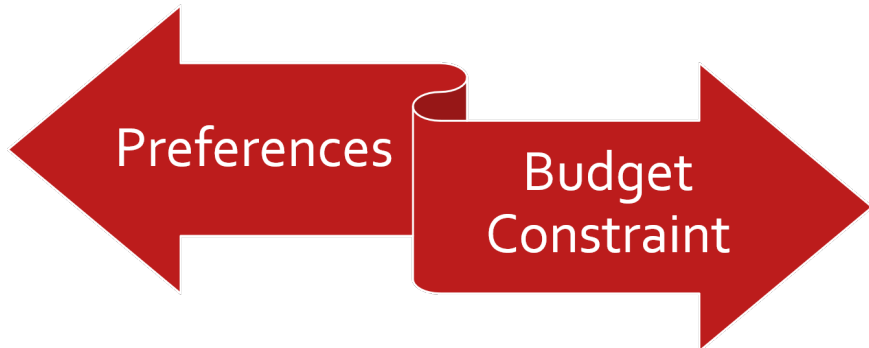
- Positive analysis: reject the model (natural sciences)
- Normative analysis: the model is valid (per se)
- A model is intrinsically not realistic!



# Making choices

- What did you choose for breakfast this morning? Why?
- Do you have breakfast at home (or at a bar)? Why?
- Why have you chosen Liceo Frisi?
- Have you already decided what to do next?
- You receive 1000€. You can decide to spend or save your money in a bank with 2% interest rate. What do you do?
- You receive 1000€ more each month. You can decide to spend or save your money in a bank with 2% interest rate. What do you do?
- The government cuts taxes on wages and salaries and introduces a 15% flat tax. Will you work more hour, less hour or the same number as before?

# Making choices



# University enrollment - Making choices

- Would you decide to enroll in university given Covid-19 vis a vis a normal situation? Why?

# University enrollment - Opportunity cost

- You are in a restaurant, would you decide to order a pizza? Why
- the value of the next-best alternative when a decision is made

## 3 trade offs

- 1 value today;
- 2 what I give up today;
- 3 what I give up in the future

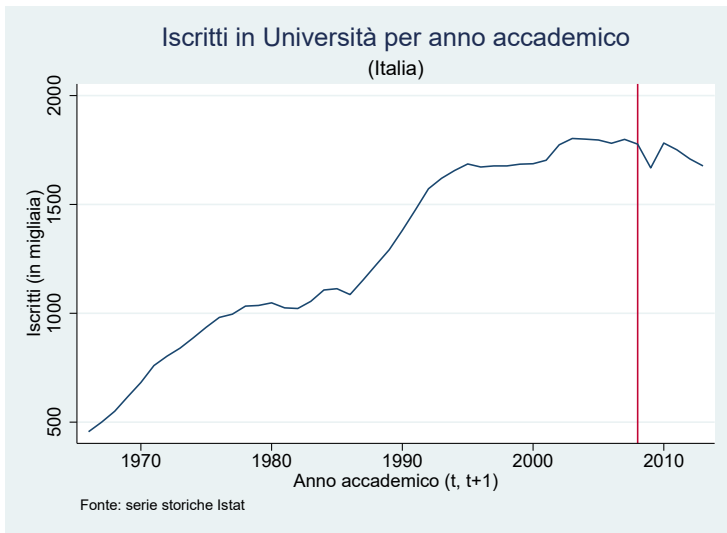
# University enrollment

College-going has increased in every recession since the 1960s

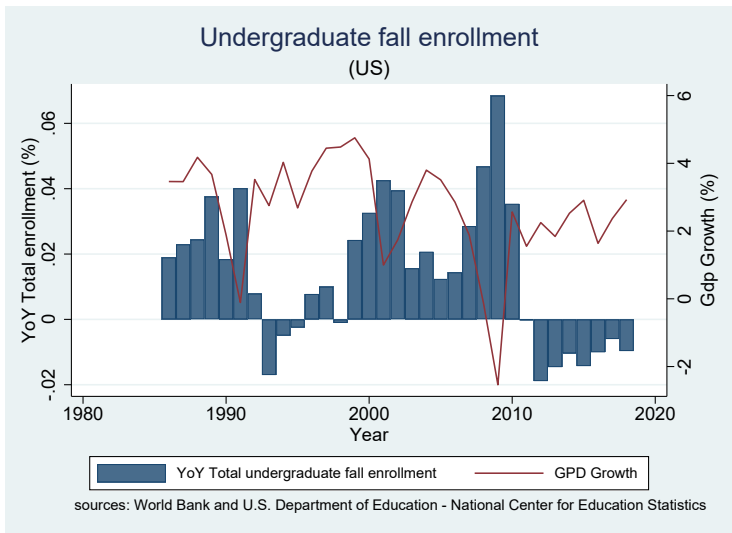
## 3 effects

- 1 Income effect ( $\downarrow$ );
- 2 Substitution effect ( $\uparrow$ );
- 3 gvt intervention

# University enrollment



# University enrollment



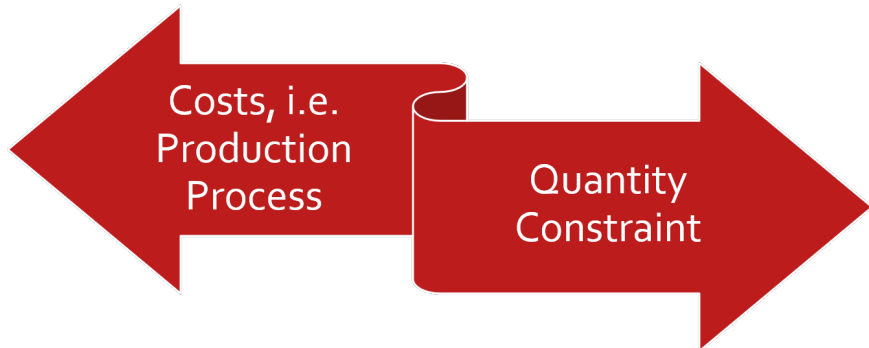
# Making choices

You are the owner of a new bar near Liceo Frisi

- Will you decide to make a special price for students? And for teachers?
- You can decide to buy a new hi-tech coffee machine that require two employee or two coffee machine that require only an employee. What will you choose?



# Making choices



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# Sugar tax

## 3 different conclusions

- Improve health and welfare;
- Improve health but not welfare;
- Doesn't improve health nor welfare

## U.S. Situation: some data

- Cost of diet-related diseases: \$71 billion (only coronary heart disease, cancer, stroke and diabetes);
- $\epsilon = -0,4$  (cigarettes)

### Price elasticity of demand

$$\epsilon = \frac{\Delta\%Q^D}{\Delta\%P}$$

for the one attending the last year of high school:

$$\epsilon = \frac{dQ_D}{dp} \frac{P}{Q_D}$$

- A campaign reaching about 200,000 people costs 1 coronary bypass operation

## Possible solution

- ban

### Black Market

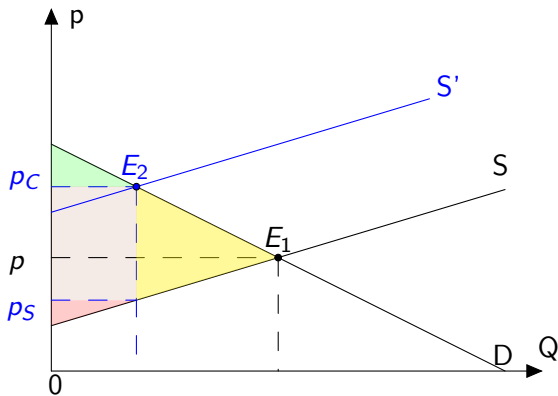
is the state able to enforce it?

- high sugar tax and subsidize health food (is it politically feasible?)
- small tax (but high revenue) to support health measure
- nudging

# Transmission mechanism

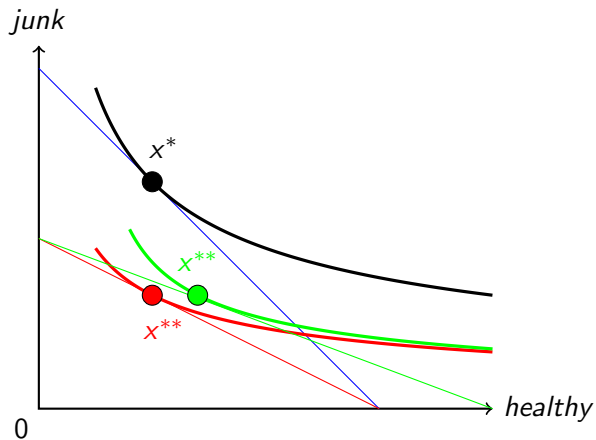
- direct effect: increase in the price for each quantity
  - at the eq. it depends on both  $\eta$  and  $\varepsilon$
- indirect effect: decrease in the price of healthy food
- change in the preferences
- compensation of the health damage

# Tax revenue



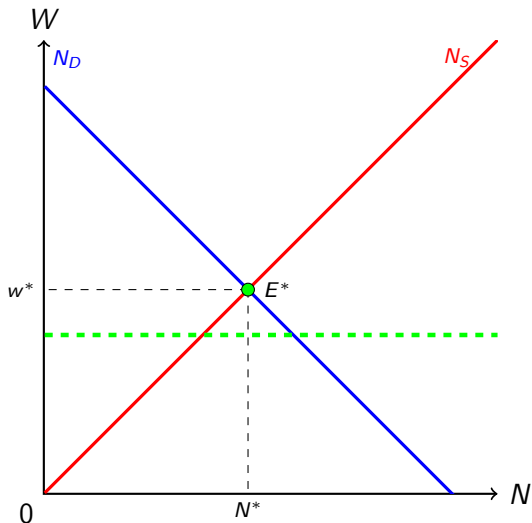


# Direct and indirect effect

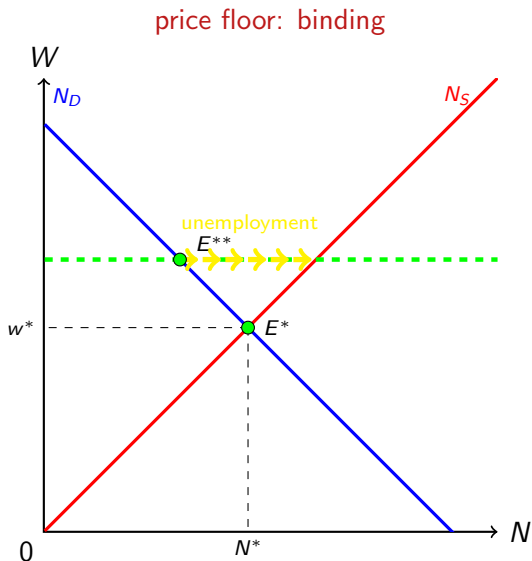


# Minimum wage

price floor: non binding



# Minimum wage



# Minimum wage: from a macro perspective

- austrian view: to reduce unemployment, remove rigidities to downward wage adjustment (process of liquidation)
- keynesian view:
  - employment is determined conterminously to aggregate demand
  - to reduce involuntary unemployment, stimulate aggregate demand
  - wage rigidity is a good thing

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## Policies to support a specific group

Suppose the Government wants to support farmers

- Fluctuations in farm output
- Low price elasticity of demand
- Incentives to innovation (green technologies)
- Protection of rural areas...

Compare policies

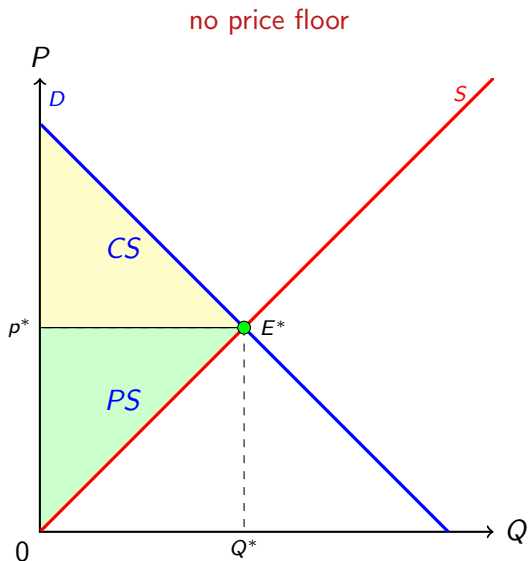
- Price support (price floor)
- Deficiency Payments
- Direct income subsidies

# Welfare Effect of a Price Floor

Suppose the Government imposes a price floor:

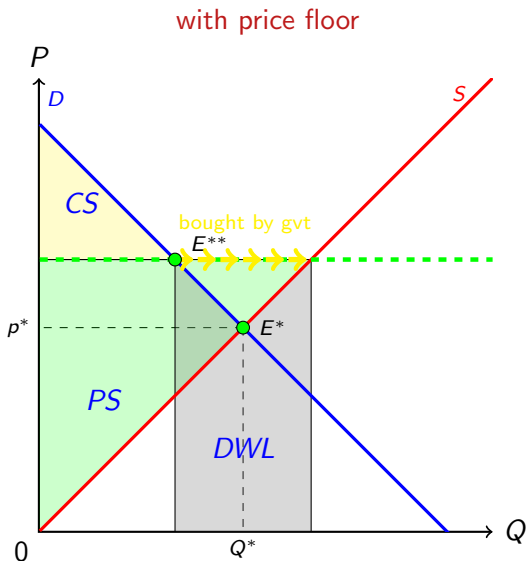
- A price floor, if binding, generates an excess supply
- To enforce the price floor, the Government has to buy excess supply

# Welfare Effect of a Price Floor





# Welfare Effect of a Price Floor



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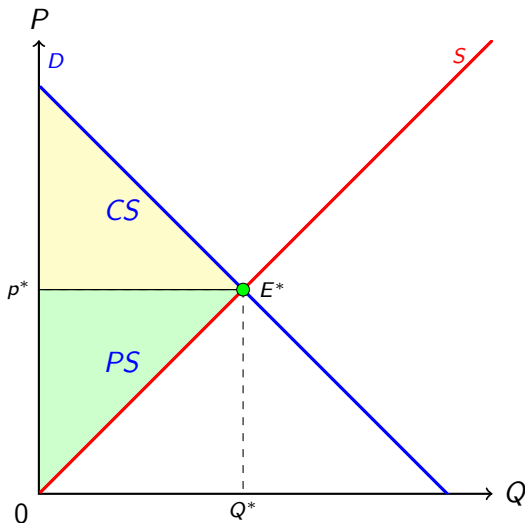
# Welfare Effect of a Deficiency Payment

Suppose the Gvt introduces a deficiency payment:

- Farmers sell at the market price, but the Gvt pays the difference between the target price  $\bar{p}$  and the market price for each unit sold.
- This policy works as a unit subsidy:
  - Producers supply more
  - Market price declines
  - No excess supply, but impact on the market!!!

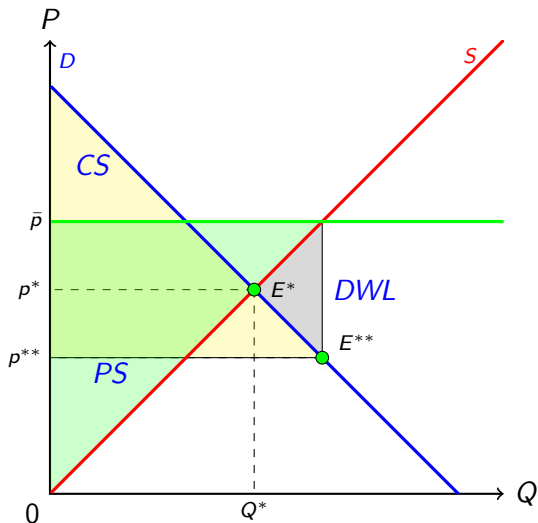
# Welfare Effect of a Deficiency Payment

without gvt intervention



# Welfare Effect of a Deficiency Payment

with gvt intervention

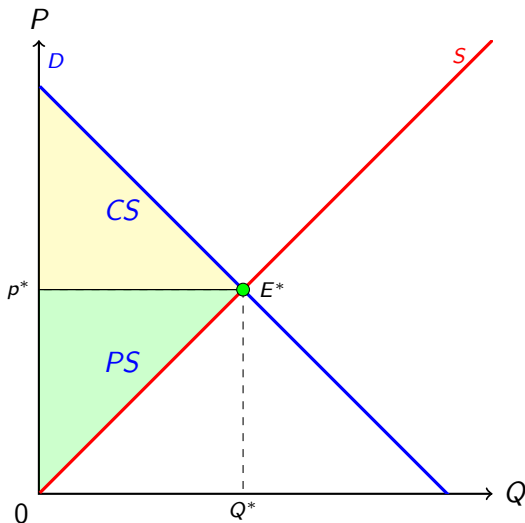


# Price ceiling

Imagine the gvt wants to help students to rent an apartment and impose a price ceiling.

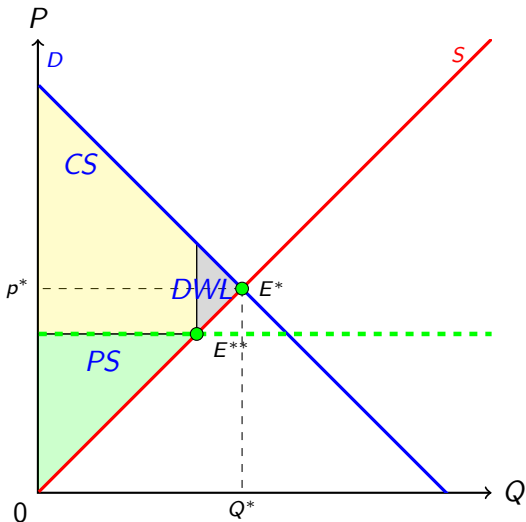
# Welfare Effect of a Price ceiling

without gvt intervention



# Welfare Effect of a Price Ceiling

with price ceiling  $\rightarrow$  excess of demand (shortage)





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# Monopoly: nutmeg and cloves

At the beginning of the 16th century this two plants grew only in the Moluccas islands.



- In 1512, Portugal established a monopoly on them
- Under Dutch domination, indigenous people used to sell nutmeg and cloves to other European countries
- Dutch reaction was tough

### The Little Divergence

The *Economic Capital* shifts from Venice to Antwerp, Genoa, Amsterdam and finally to London. The Dutch were the first to found Privileged Companies (VOC).

- The monopoly ended during the 18th century when some seeds were stolen
- The market structure changed
- Preferences and technology changed

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# Externalities

An **externality** occurs when a person's well-being or a firm's production capability is **directly affected** by the actions of other consumers or firms rather than indirectly through changes in prices.

In presence of externality the market allocation doesn't take into proper account the damage or benefit.

There are positive and negative externalities. But the problem is of reciprocal nature if we consider **opportunity costs**.

*should A be allowed to harm B or should B be allowed to harm A?*



# Negative externality

A negative externality arises when two conditions hold:

- 1 an action by an individual or a firm produces a negative effect on other individuals or firms
- 2 absence of compensation of individuals or firms harmed

# Positive externality

A positive externality arises when two conditions hold:

- 1 an action by an individual or a firm produces a positive effect on other individuals or firms
- 2 the individual or the firm causing the positive effect is not compensated by the individuals or firms that receive the benefit

# Coase Theorem

If property rights are clearly defined and agents can freely bargain, then the social optimal allocation can be reached.

The optimal levels of pollution and output can result from bargaining between polluters and their victims if property rights are clearly defined

## Limits and Assumptions

Transaction Costs (arise also from imperfect information) must be low enough!

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