

The government can for any of a variety of reasons decide the allocation is wrong:

We should make more or less

(The logic will almost always be expressed as an externality)

To address overallocation, the government can:

Tax the good

Burden the producer

Prohibit/limit production

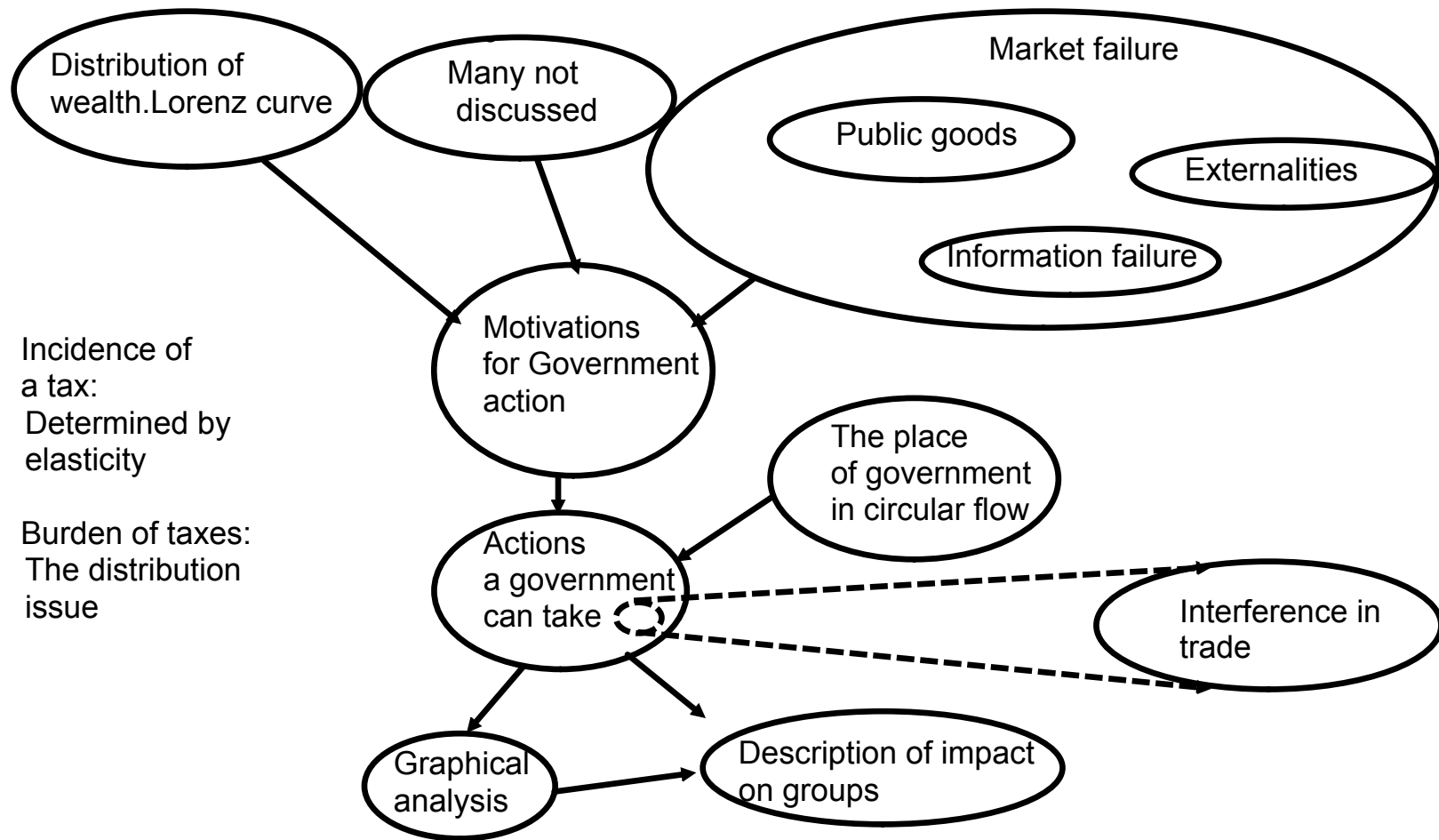
To address underallocation, the government can:

Subsidize

Provide

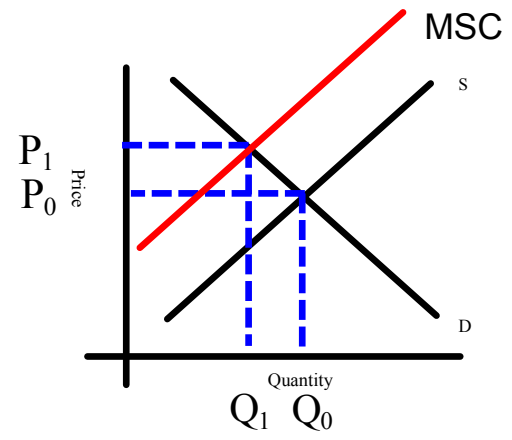
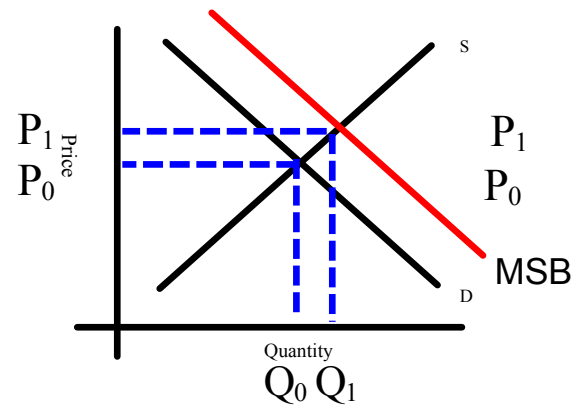
You should be able to:

- Graph these actions
- Discuss allocation effects
- Discuss total expenditure and revenue
- Discuss which get closest to finding true MSB/MSC equilibrium.
- Analyze the areas of the graph



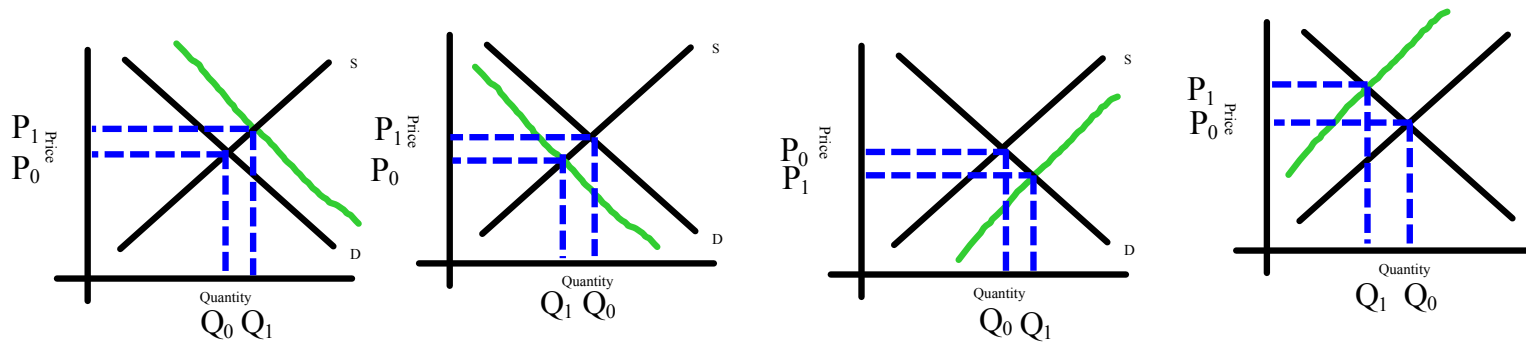
Incidence of a tax:
Determined by elasticity

Burden of taxes:
The distribution issue



We can tax or subsidize consumers or producers.

Which type of externality are we remedying in each picture and how?



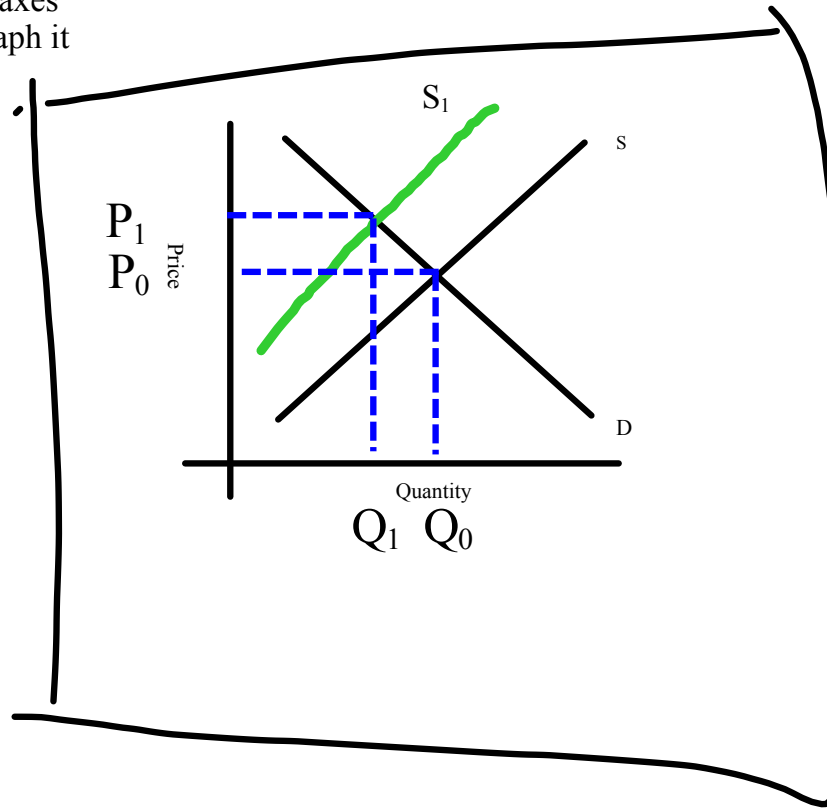
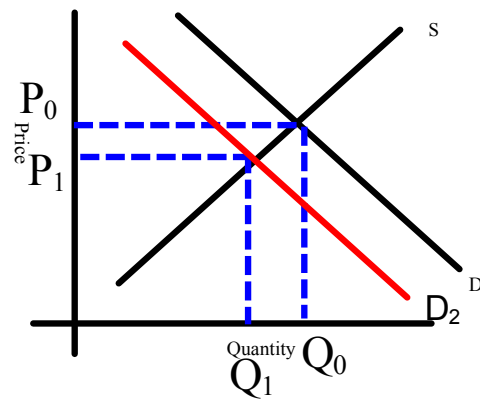
The most direct approach for action and for analysis is this:

- Address each type of externality with the more appropriate curve
 - Understated costs => Alter supply
 - Understated benefits => Alter demand
- Format your analysis in that way

Part 1, lowering allocation
(Correcting for negative ext.)

Option 1

Specific taxes
Graph it



Less good

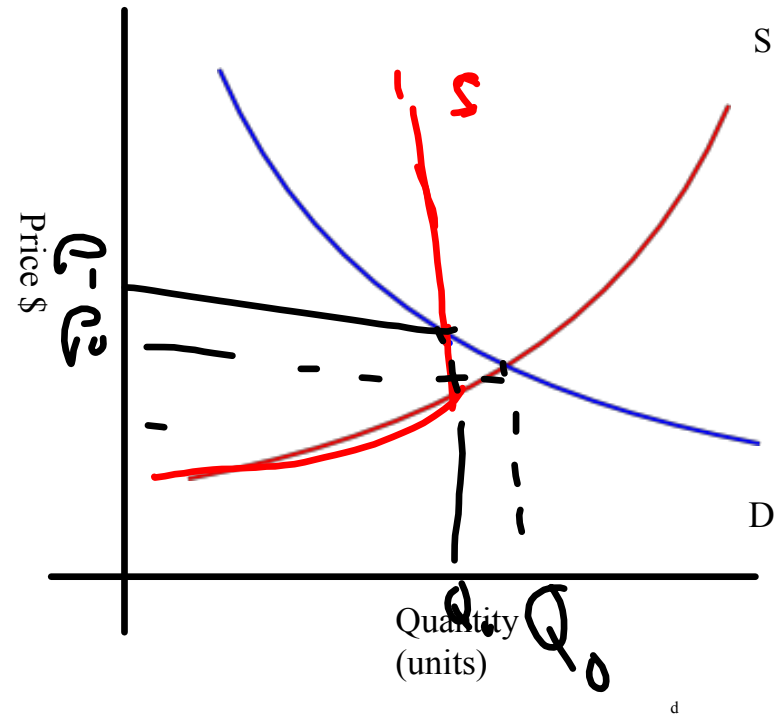
Part 1, lowering allocation
(Correcting for negative ext.)

Option 2&3

Legislation

- Burdensome remedies (extra equipment, steps, inspectors, etc.)
- Prohibitions or quantity limitations

GRAPH EACH



Part 2, raising allocation
(Correcting for positive ext.)

Fuller understanding of government's goals and choice

Correcting for benefits:

"Subsidize consumers"

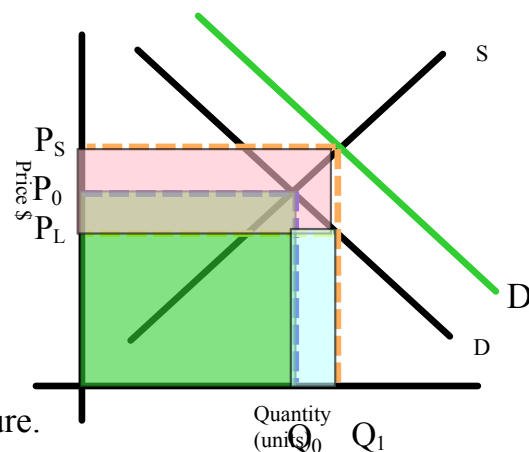
A coupon, or voucher

Consumers will pay more for each quantity.

$P + \text{Coupon}$ for each Q .

Producers total revenue is whole shaded area

- Pink from government
- Green and blue below pink is consumer expenditure.



Can also be done by subsidizing producer

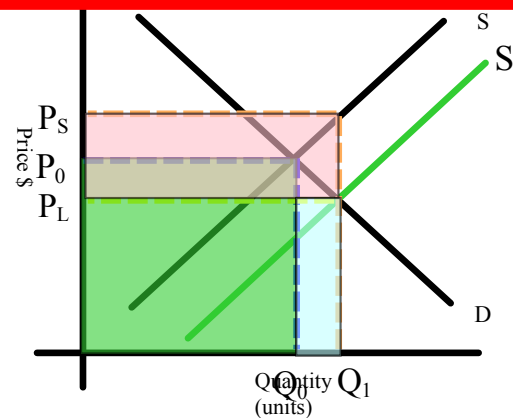
The Demand curve does not change.

The coupon makes it so each price is lower, effectively the supply faced has shifted.

Consumers expend green and blue below pink.

Government pays pink.

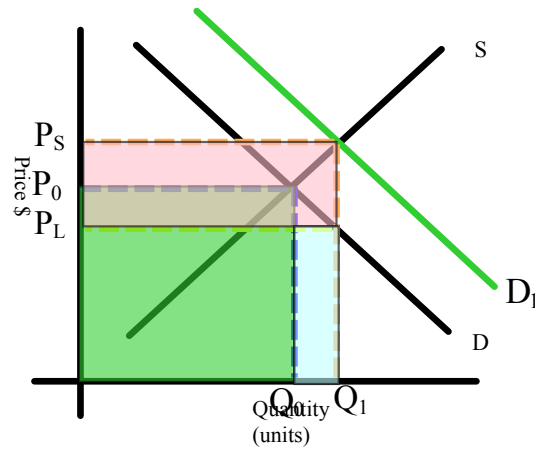
- Total producer revenue is shaded area.



Part 2, raising allocation
(Correcting for positive ext.)

Fuller understanding of government's goals and choice

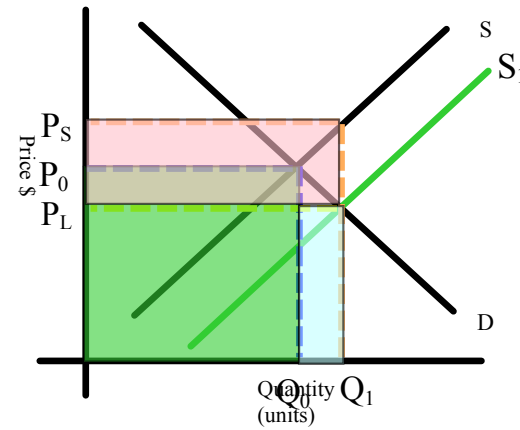
Subsidize consumers



Producers total revenue is whole shaded area

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Subsidize producers



Consumers expend green and blue below pink.
Government pays pink.

- Total producer revenue is shaded area.

Last option government provision:

Negative logic - they should not be these things:

Rivalry: I buy it, I use it up and you can not. My use kills yours, I consume it.

Public goods should be non-rivalrous (movie, amusement park, concert hall).

Excludability: The producer or the purchaser can restrict enjoyment to the buyer.

Goods where you can not get this control are candidates to be public goods.
(highways, statues, pretty stuff)

Free rider problem:

If you can't keep others from enjoying your investment.

Market price without rivalry and excludability.

Non-rivalrous - a requirement: Governments have issues with providing rivalrous goods.

Non-excludable - a motivation: Non-excludable goods don't happen without government provision.

Pure public good: National security

Partial public good: Libraires ed.

Rivalrous:

Excludable:

Exclusively
controlled /
consumed
by purchaser?

Can producer
control for
free riders?

Libraries

Convention center

Museums

Police

Army

Medical research

Health insurance

Energy research



Health insurance:

Pro-government provision argument

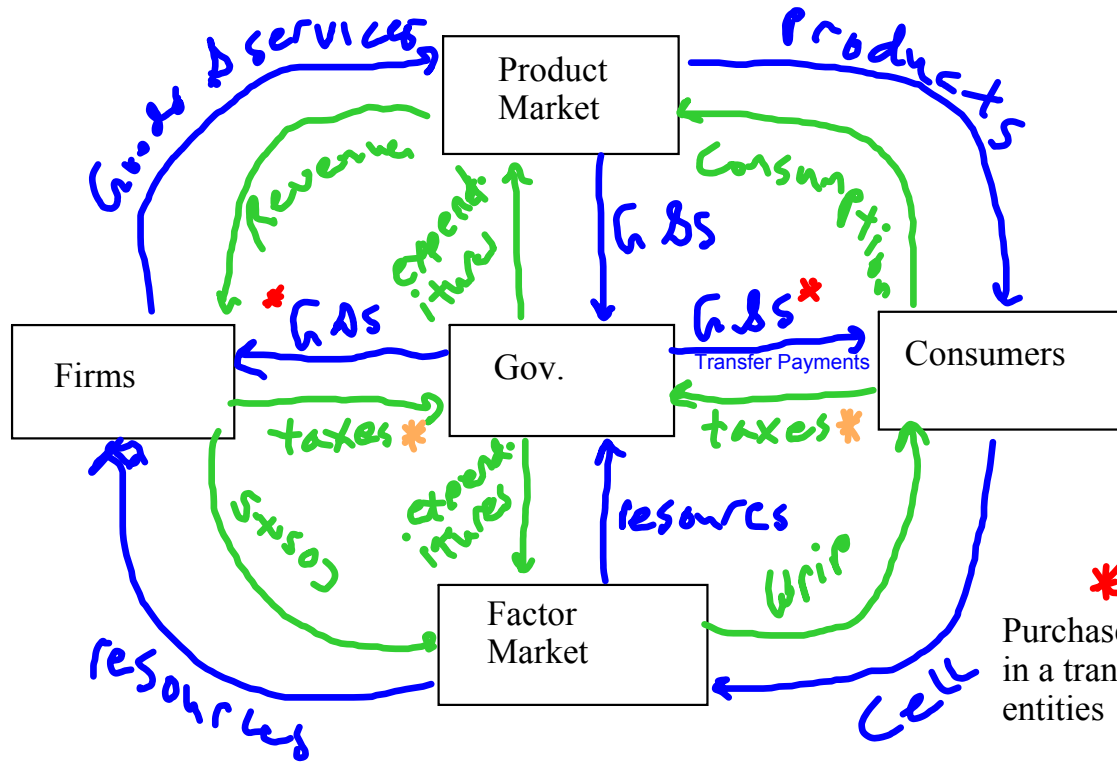
- To function as a private good, it needs to be able to exclude bad risks. (Yes, they want to be non-exclusionary by having a big pool, but they want to be exclusionary in keeping bad risks out)/ This leaves people excluded.
- We end up paying for the health care of many of these excluded people in a disorganized way.
- So, the "Pro" recommendation is: Eliminate any exclusion (which private markets can't do on their own) and make sure all have insurance up front.

Anti-government provision:

- The private market functions for the vast majority of the population.
- Government provision to address and issue for some will goof it up for all in the following ways:
 - Extra government money in the system will only increase demand and costs.
 - Free market competition drives efficiency in costs and methods, government provision will remove that efficiency.
 - Government provision may reduce freedom of choice in services.
- Whose gonna pay for it? You are taking the ones who the private market wants to exclude because they are too expensive and paying for them. Who foots that bill?

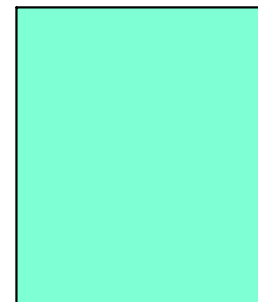
Circular flow 2

What makes the government unique as an entity in this flow?



* : These can, theoretically, flow backwards - they are net.
 Transfer payments - may not imply exchange.

* Purchases - consumes resource in a transaction. Like other entities



Foreign Exchange:

- To get my stuff, you must give me my money
- Every exchange has four parts.

US

US consumers:

We want Champagne! Here's our money!

Europe

European Producers:

We can't use your stinking dollars!

Keep your stinking lips of our bubbles!

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Hey, helpful banker, can you get me some Euros
so I can buy some bubbles?

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US Bankers:

Hey, european bankers. Do you have any customers who want \$ to buy our stuff?

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European Producers:

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European Bankers:

Funny you should ask, let's make a deal.

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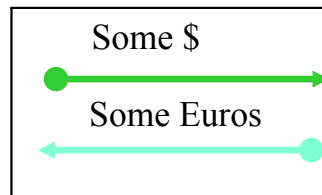
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US Customer:



Europe

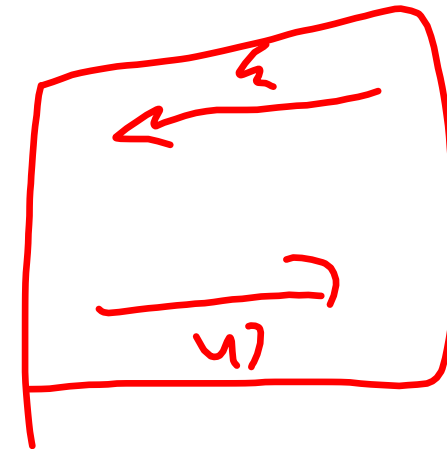
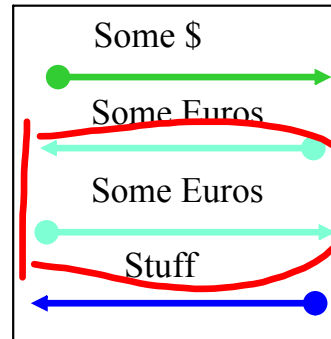
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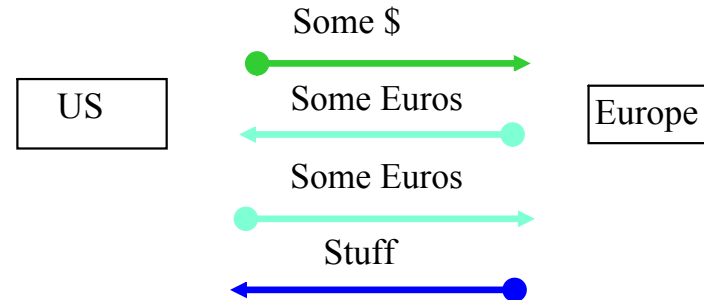
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Net effects: - Customer gives up \$ gets stuff

- Producer gives up stuff gets \$

- Some other guys switch \$ for Euros.

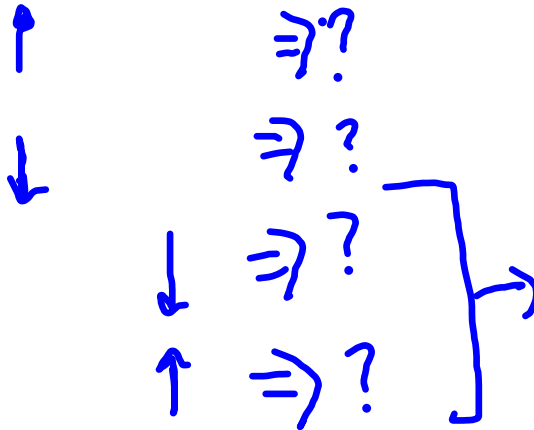
If US is always asking for Euros, what happens?

KEY IDEA: THE PRICE YOU ACTUALLY PAY IS THE PRODUCT OF THE ORIGINAL PRICE AND EXCHANGE RATE. BOTH CAN MOVE

$$\text{Your cost} = \text{Euro Price} * (\$/\text{Euro}) = \text{Euro Price} * (\$/\text{Euro}) = \$ \text{ Price}$$

$$\text{Euro Price} * (\$/\text{Euro}) = \$ \text{ Price}$$

$$20 \text{ Euro} * 1.40 \$/\text{Euro} = \$28$$



OK, easy, but how does the FX price
change AND
why would it change?
what does it mean for \$/Euro to go up?

So, a more expensive euro is good for whom? Bad for whom?
So, a cheaper euro is good for whom? Bad for whom?

1) To buy goods you need to buy currency =>

if buying goes only one way the price for currency moves=>

then the dollar price for foreign goods moves.

2) Dollar price of a european import:

$$\text{Euro Price of good} * (\$/\text{Euro}) = \$ \text{ Price}$$

3) So, the price, and therefore, quantity of the things we buy from overseas (as substitutes for US Goods), is affected by two things:

Prices in the other economy

The prices of currency

4) Domestic markets are affected by this market for substitutes, which depends on FX rate and foreign pricing.

A government policy issues?

Dollar price of a european import:

$$\text{Euro Price of good} * (\$/\text{Euro}) = \$ \text{ Price}$$

Who does a stronger currency help or hurt?

If the Euro is stronger:

- What happens to the price of European goods in the US?
- What happens to the price of US goods in Europe?

Producers in the USA

Producers in Europe

Households in the USA as consumers

Household in Europe as consumers

Households in the USA as employees

Households in the USA as employees



1) The market for Euros

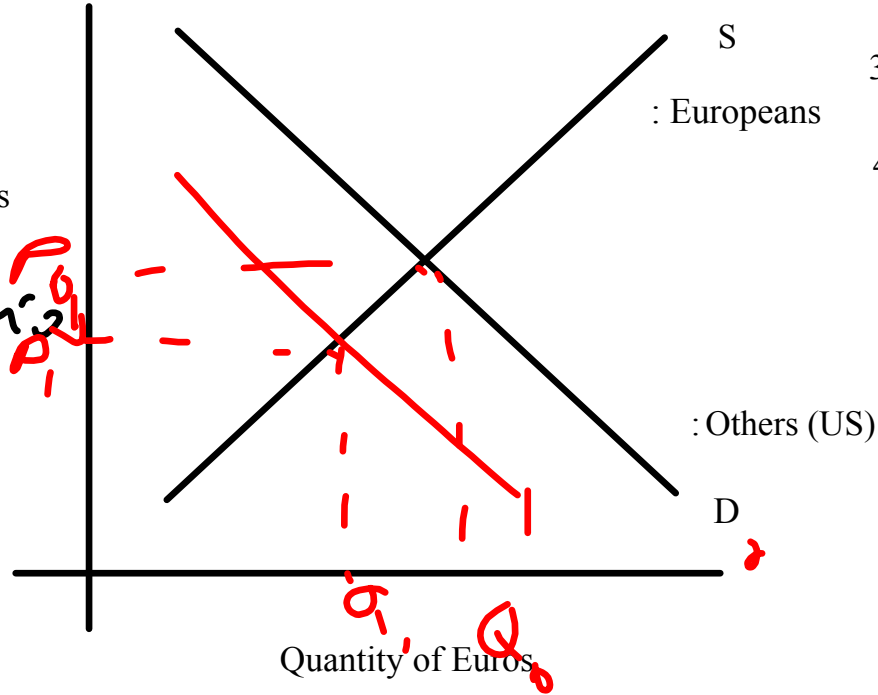
The price demanders will pay for what is supplied:

The dollar price of euros

The ratio?

Think cost of chicken.

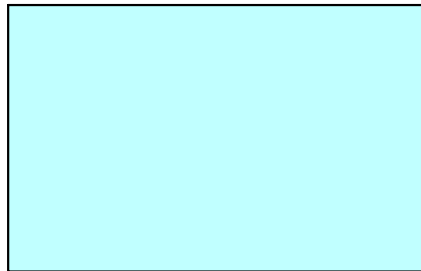
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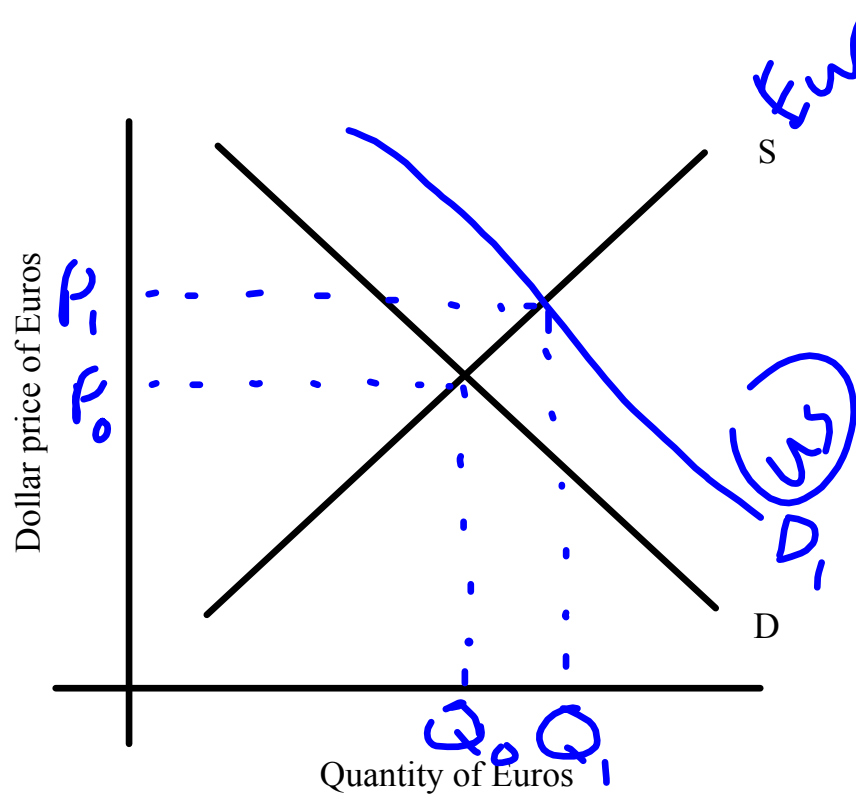
2) Who is the supplier?

3) Who is the demander?

4) What is P?



The market for Euros



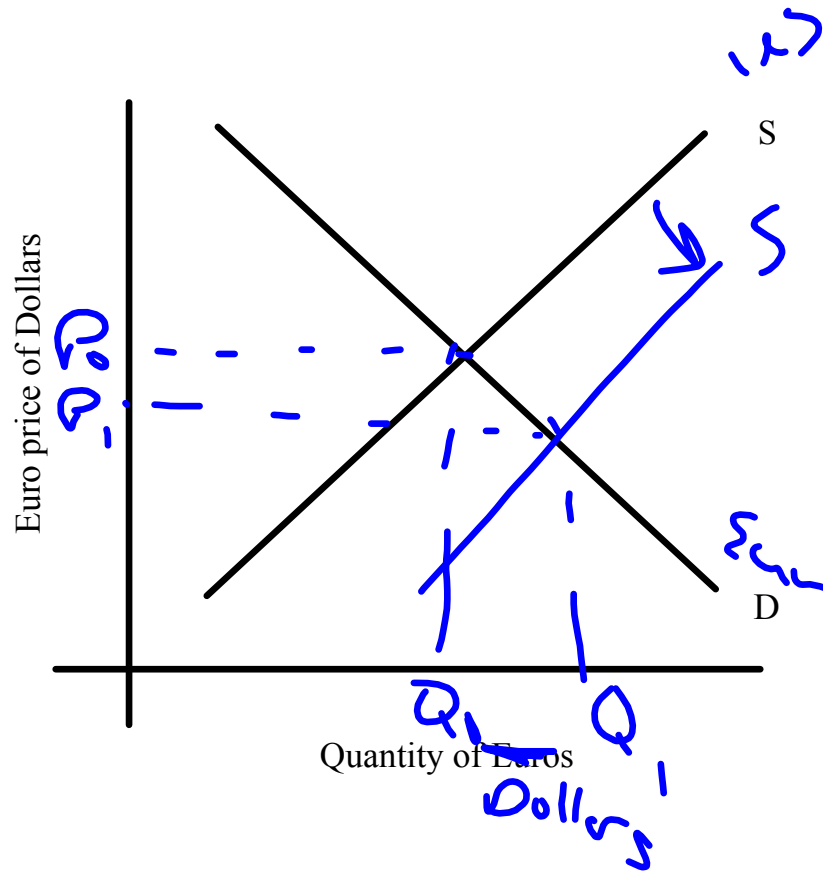
What happens if the US is demanding more goods from the Europeans?

Who is happy? Who is sad?

What happens if the Europeans are demanding more goods from the US?

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The market for Dollars

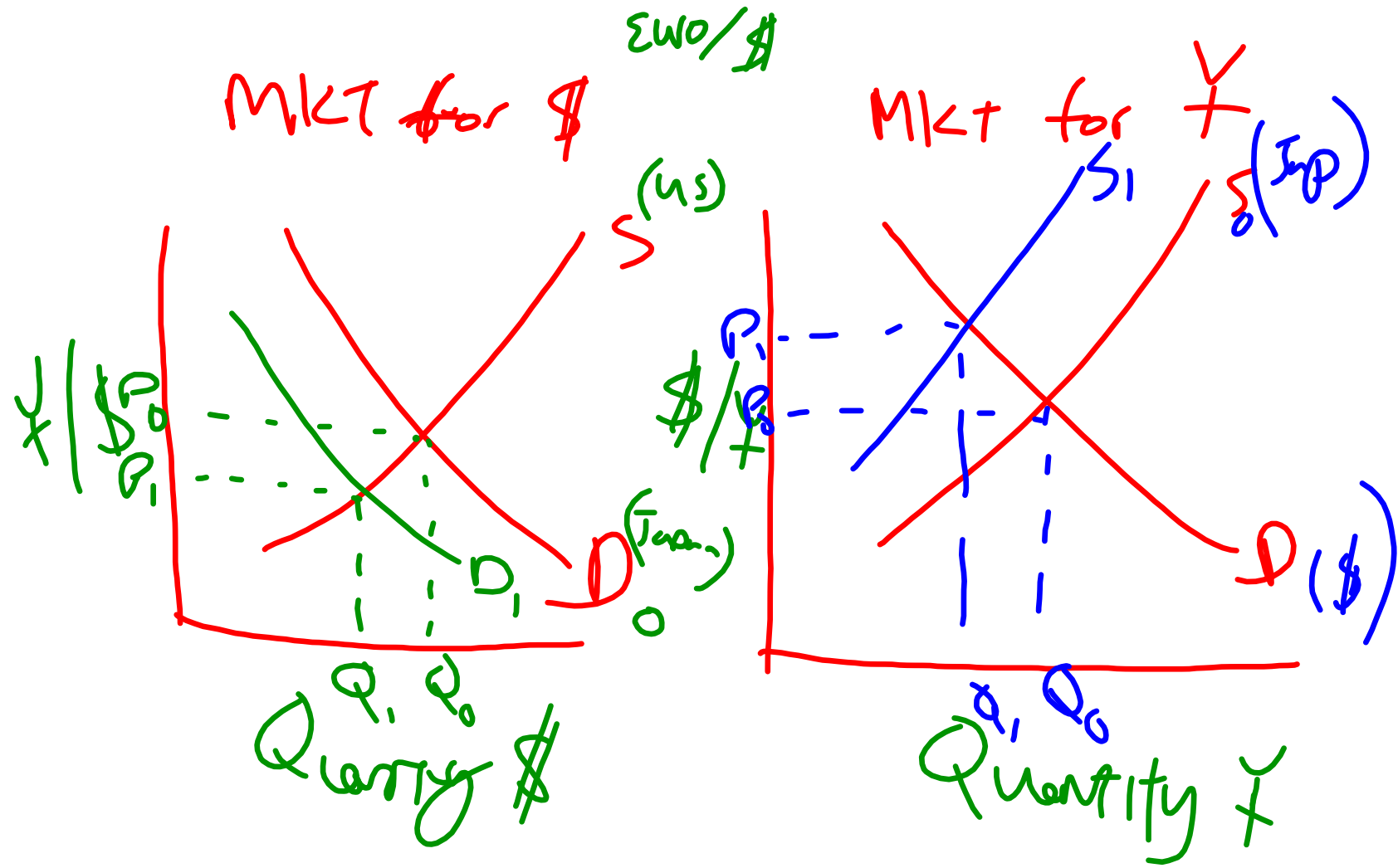


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Back to gov. policy:

Strong dollar, good for whom? Bad for whom?

Who does the government help by making dollars cheap?

Dollar is crashing, stock market going up, make sense?

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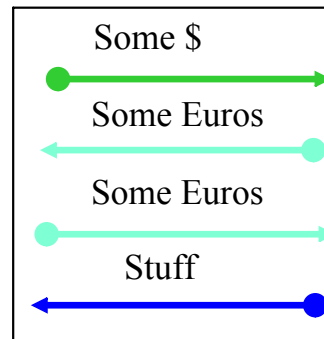


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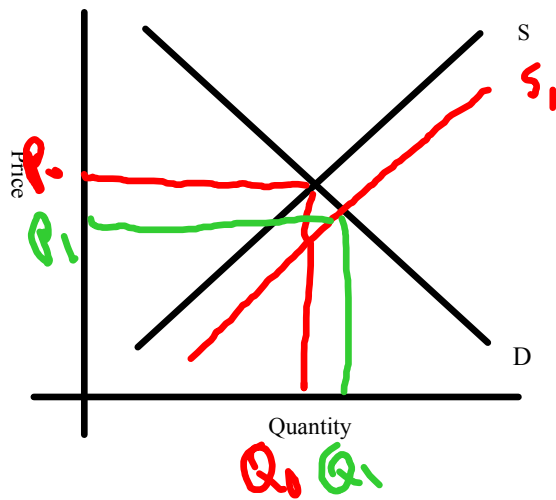
Foreign shoes vs. Domestic shoes

What is the name for the relationship between these two markets?

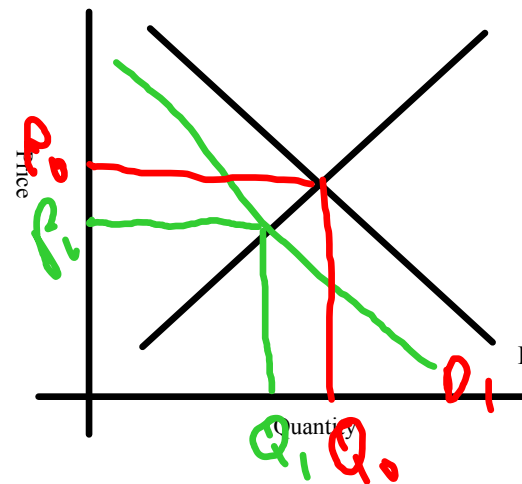
What happens to each market if the dollar gets stronger?

Draw the two markets, before and after a stronger dollar

US market for Foreign shoes



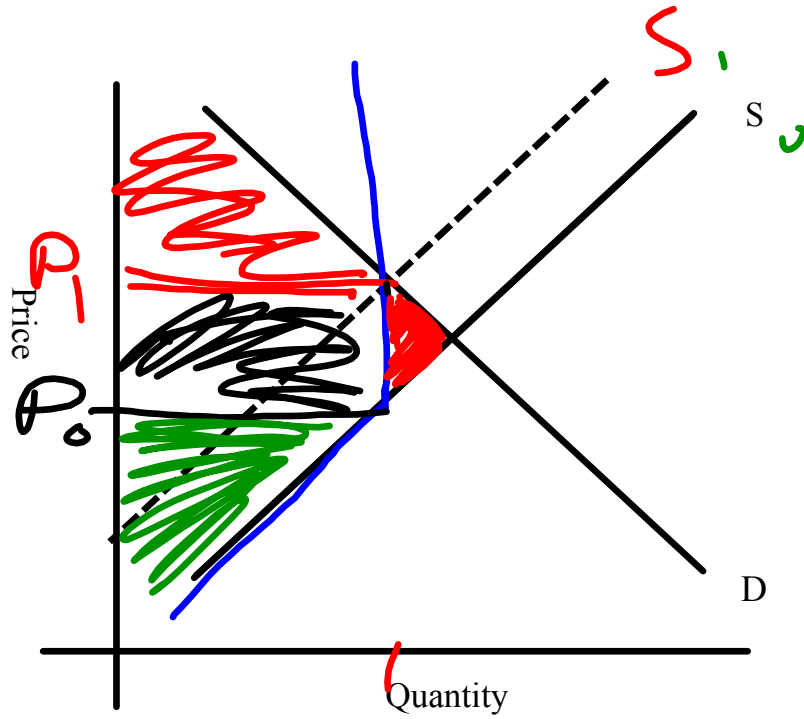
US Market for domestic shoes



Effects of Tariffs and Quotas

US mkt for for.

A tariff is a charge add to the price of goods coming into the country.



Is there an efficiency effect?

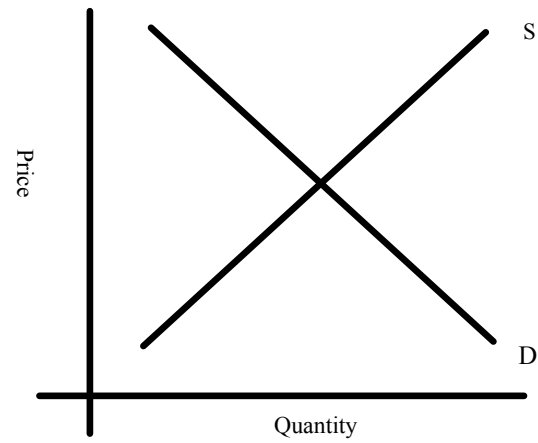
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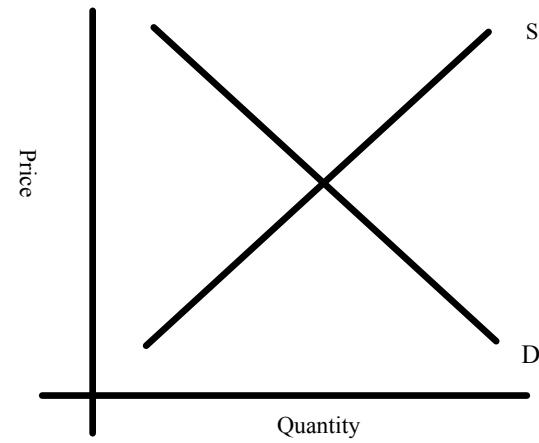
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US Market for domestic shoes



Do comparative advantage again

Manipulating trade

Protective tariff:

What is it?

Graph the effect on the markets for domestic and foreign good (shoes)

Import quotas:

What is it?

Graph the effect on the market for foreign goods.

What happens at imposition

Nontariff (and nonquota) barriers:

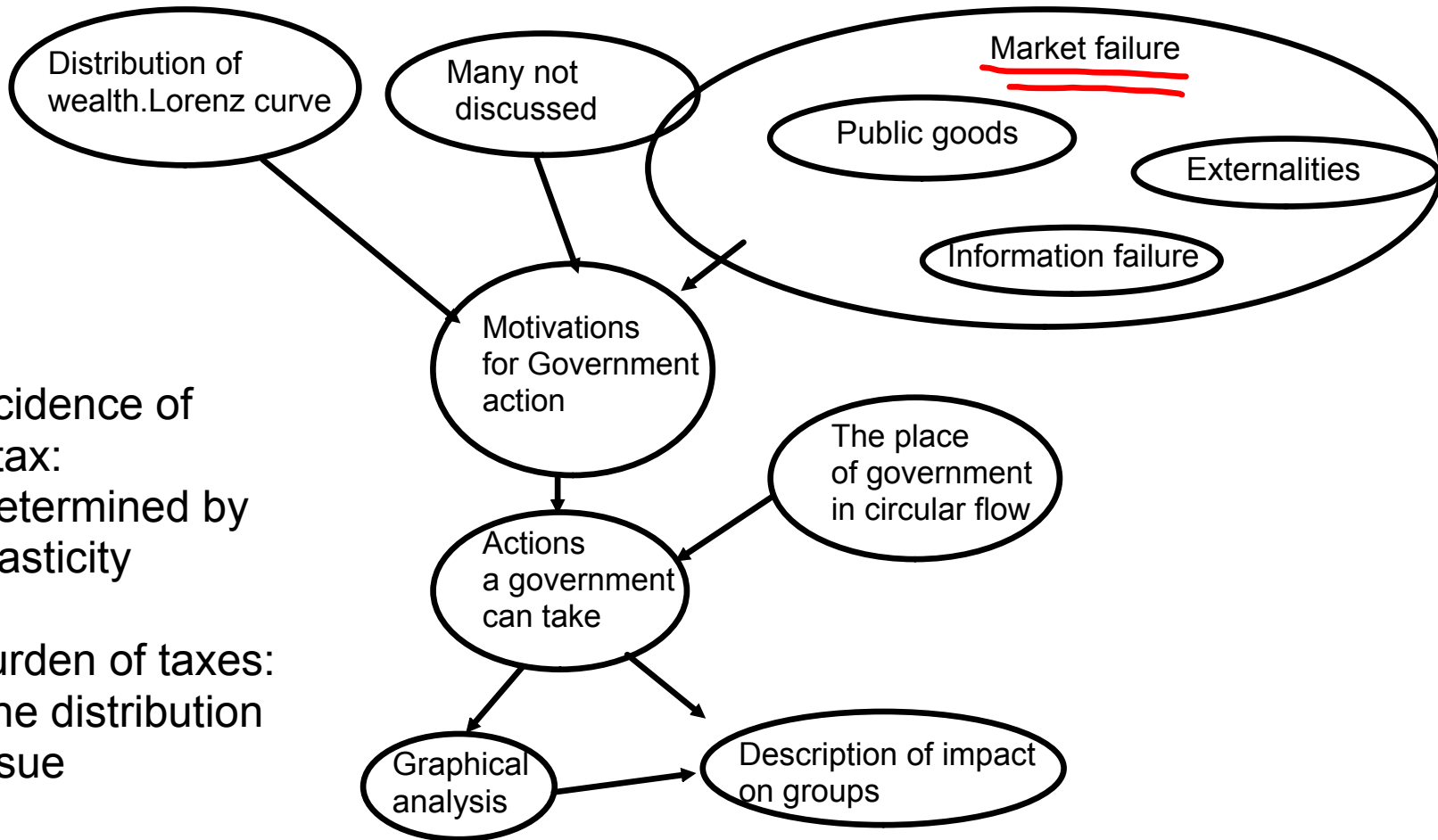
What is it? Impediments

Graph the effect on the market for foreign goods

Export subsidies

What are they?

Graph the effect on the market for foreign goods.



Three categories of market failure:

- Public goods
- Externalities

MSB = MSC is the ideal allocation

Spillover costs = negative externalities

Spillover benefits = positive externalities

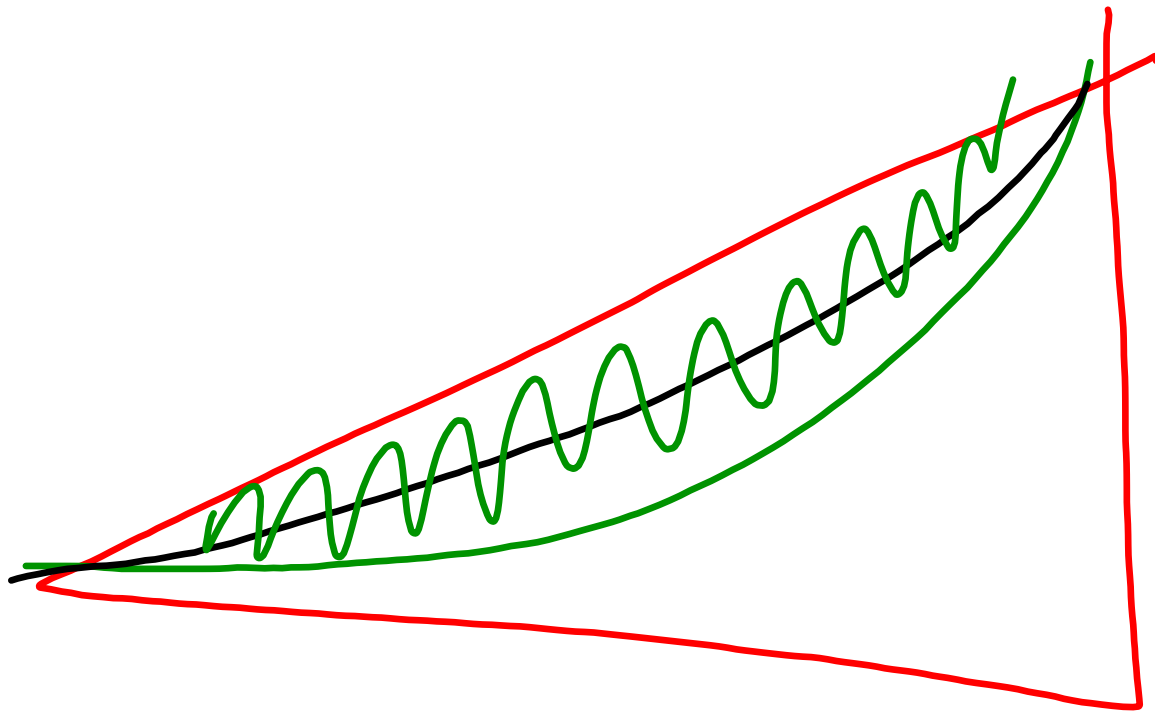
Actions:

- Burden the producer
- Specific taxes
- Subsidies to buyer
- Subsidies to producer
- Government provision

**Tragedy of the commons: If it is free people will base their assumptions on this free good - and abuse it.
Example solution: Make them pay for right to abuse it.

More examples

**Information failures:



Information failures

Do the buyer and seller have equal information? No, market is broke

Why? T 



Sellers have more information:

- 
- 

Buyer have more information:



Tax incidence and allocative efficiency

Not about regressive, progressive, and neutral

Types of tax -

Personal income tax

Sales tax

Corporate income tax

Payroll tax

Property tax

Excise tax
(versus sales tax)

Public good
Externality MSC/MSB
Tragedy of commons
information
distribution of income/taxation
Trade/tariffs/quotas

