

How do I teach abstract economic concepts?

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What is understanding of abstract concepts?

Understanding a concept from my personal experiences:

Feeling right



Use of the concepts in controlled, given, hypothetical cases (passive)



Application of the concepts in real life, complicated scenarios (active)

- 
- * A few examples (from both Micro- and Macro- topics) are used for your reference.

1. Output determination

- * Use of different equations:

$$MR = MC \quad \text{vs.} \quad \text{Max} (TR - TC)$$

Prior knowledge: MC, AC, TC, TR, AR, MR...

Put yourself into someone's shoes

Encourage students to think from producers' point of view (role-play, Q&A)

1. Output determination

* Use of different equations:

$$MR = MC \quad \text{vs.} \quad \text{Max} (TR - TC)$$

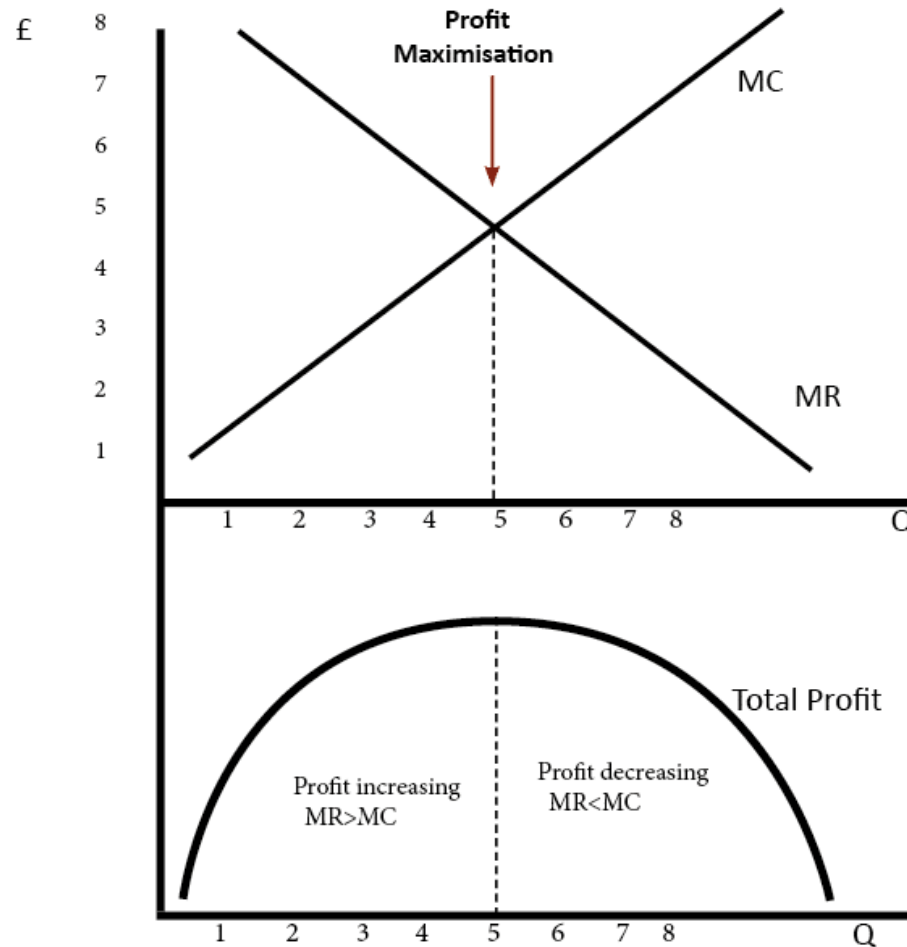
Meaningful differences?

Picking the better/more convenient tools for the tasks:

a) finding the value of profit

b) finding the profit-maximizing output

Diagrams for comparing related concepts



2. Efficiency: CS, PS, TSS

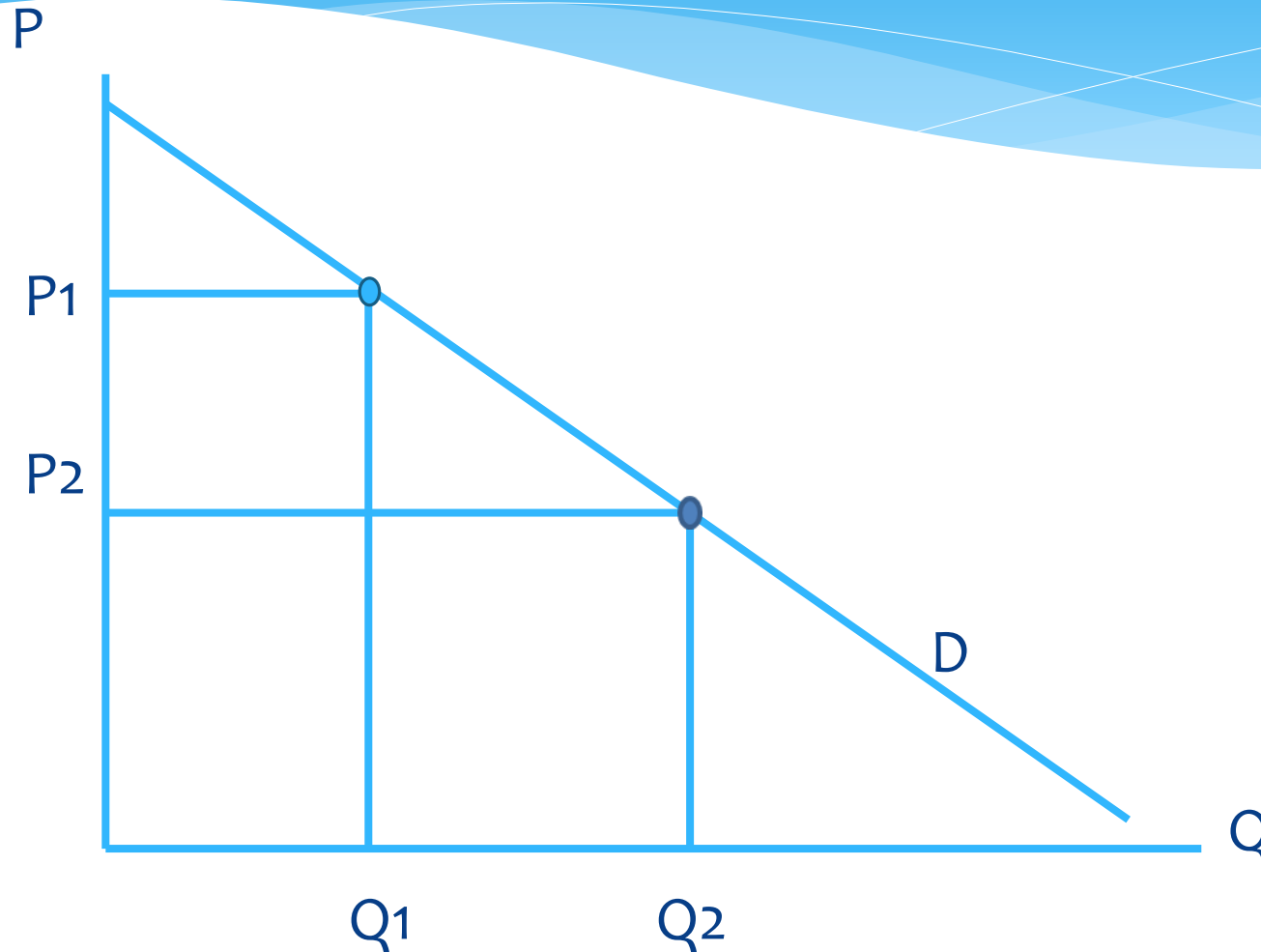
- * Prior knowledge: D , S , P_e , Q_e , TR/TE ...

Make use of their common sense/prior knowledge and give them a challenge!

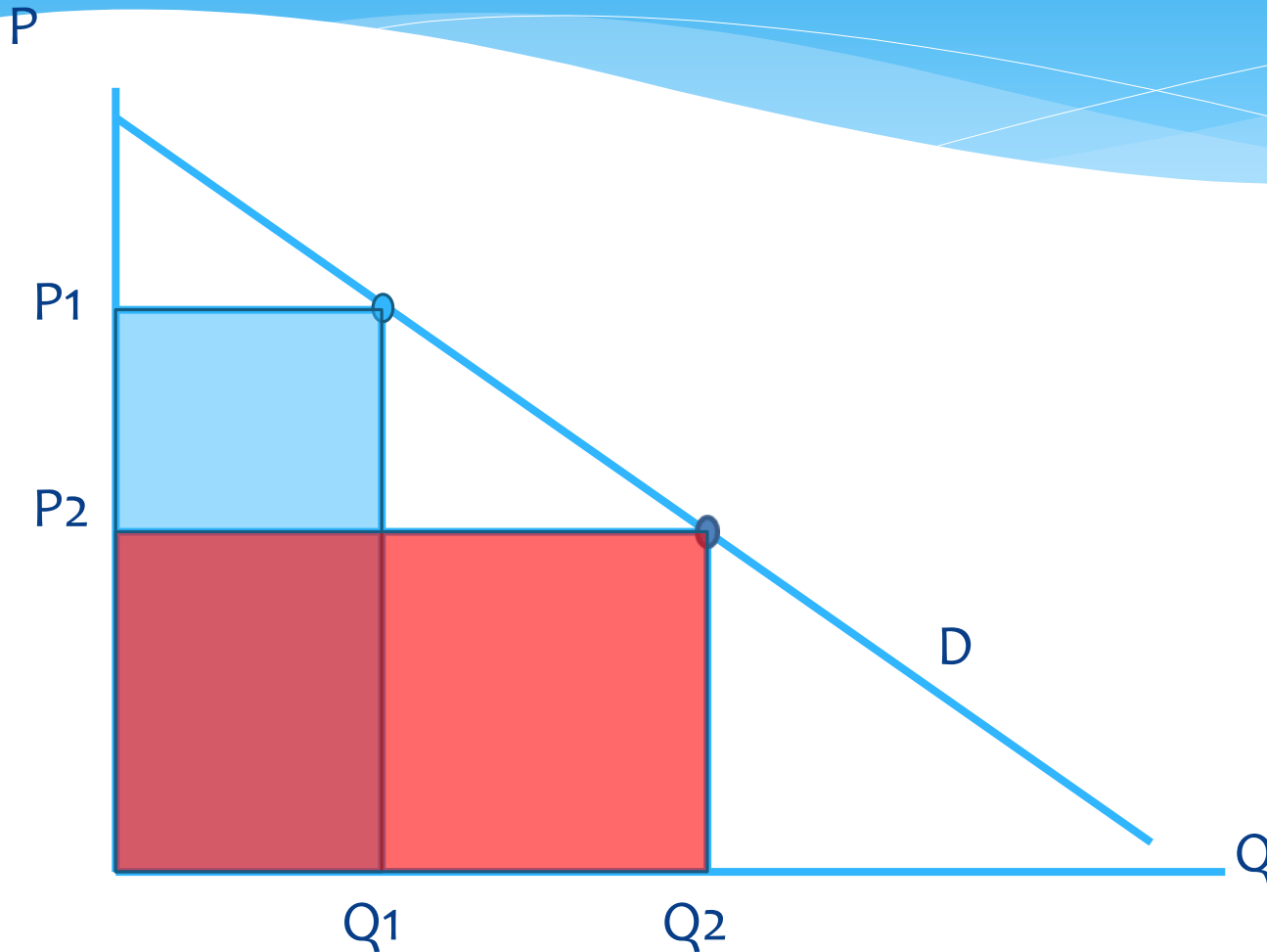
- * What happens when price of a good falls?
- * How will total expenditure change?
- * Are you happy for the bargains?

- * But... actually you may have spent more than before...
- * Still happy with it???
- * We want to understand more than what D&S can tell
→ introduce the concept of CS.

Law of Demand: “black box”



Law of Demand: change in Q_d and TE



With Consumer surplus

P

With the change in CS, predictions from LOD can be more convincing!

Learn more and understand more!

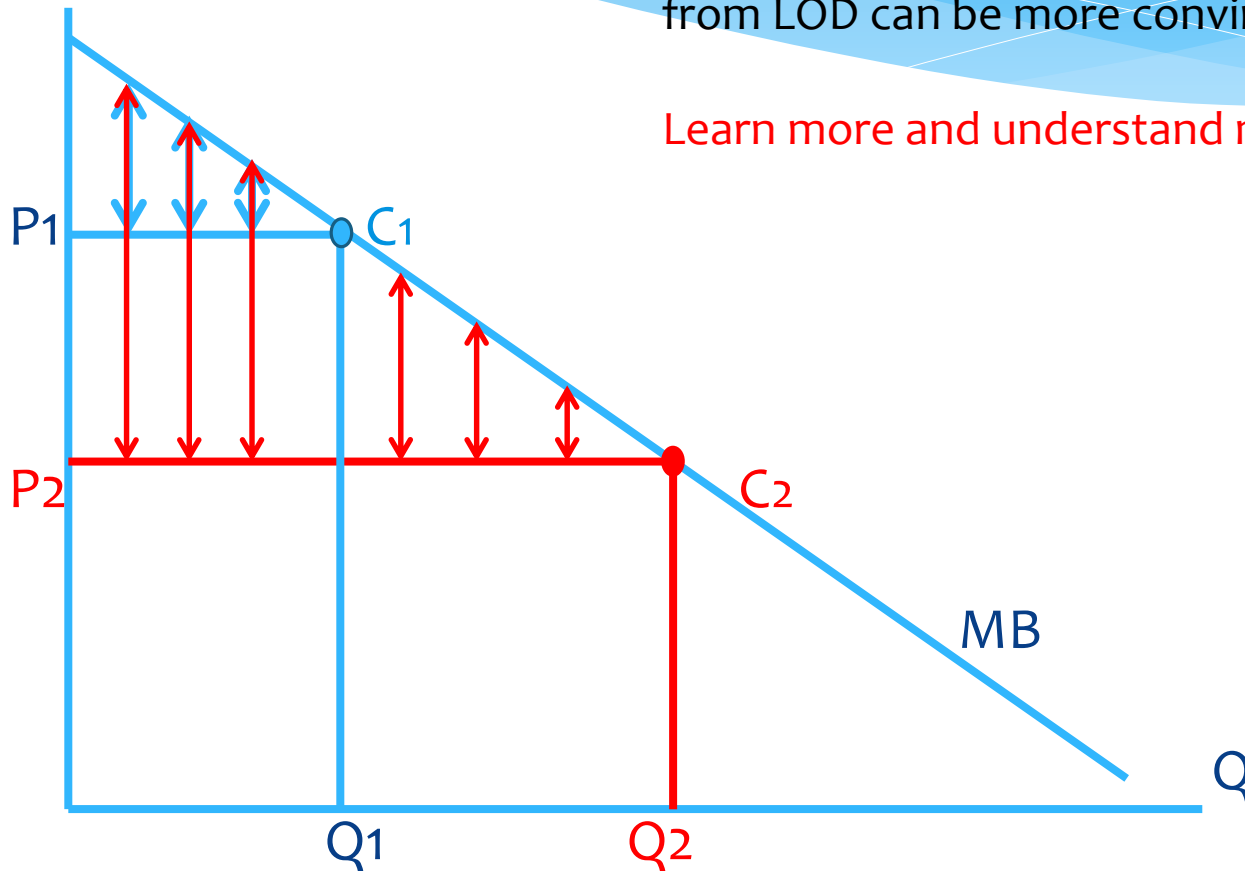


Diagram for market equilibrium

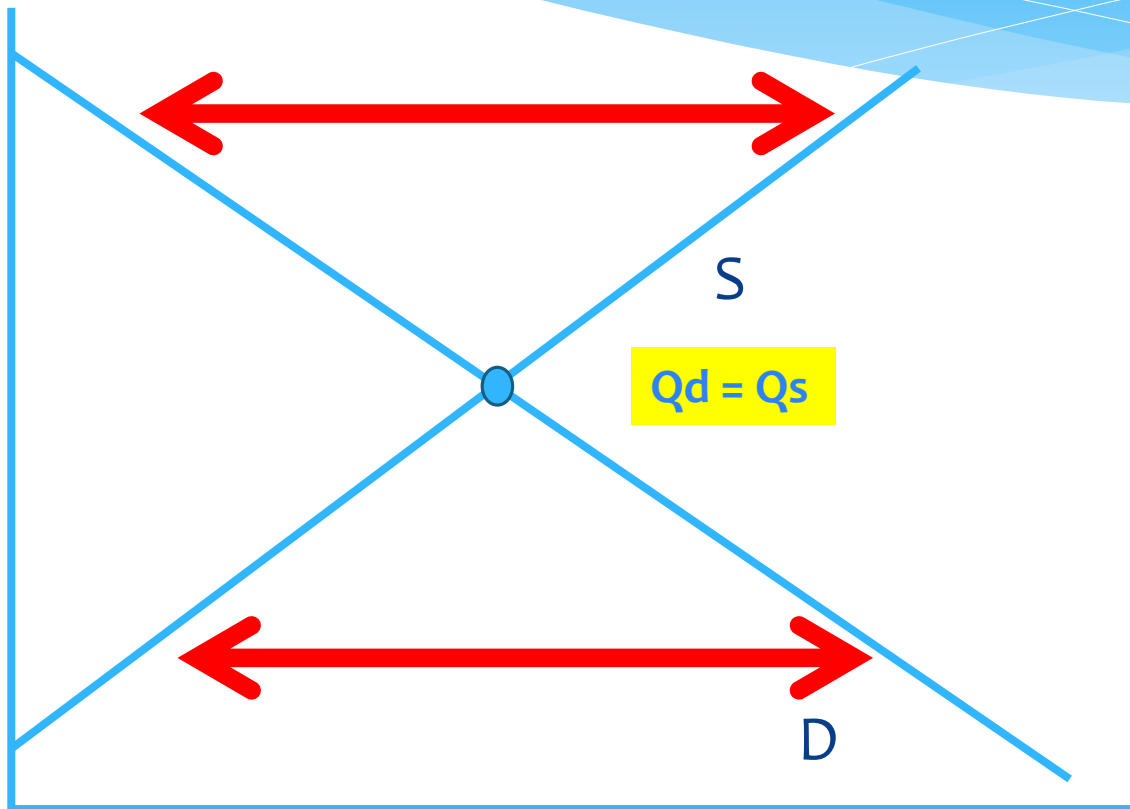
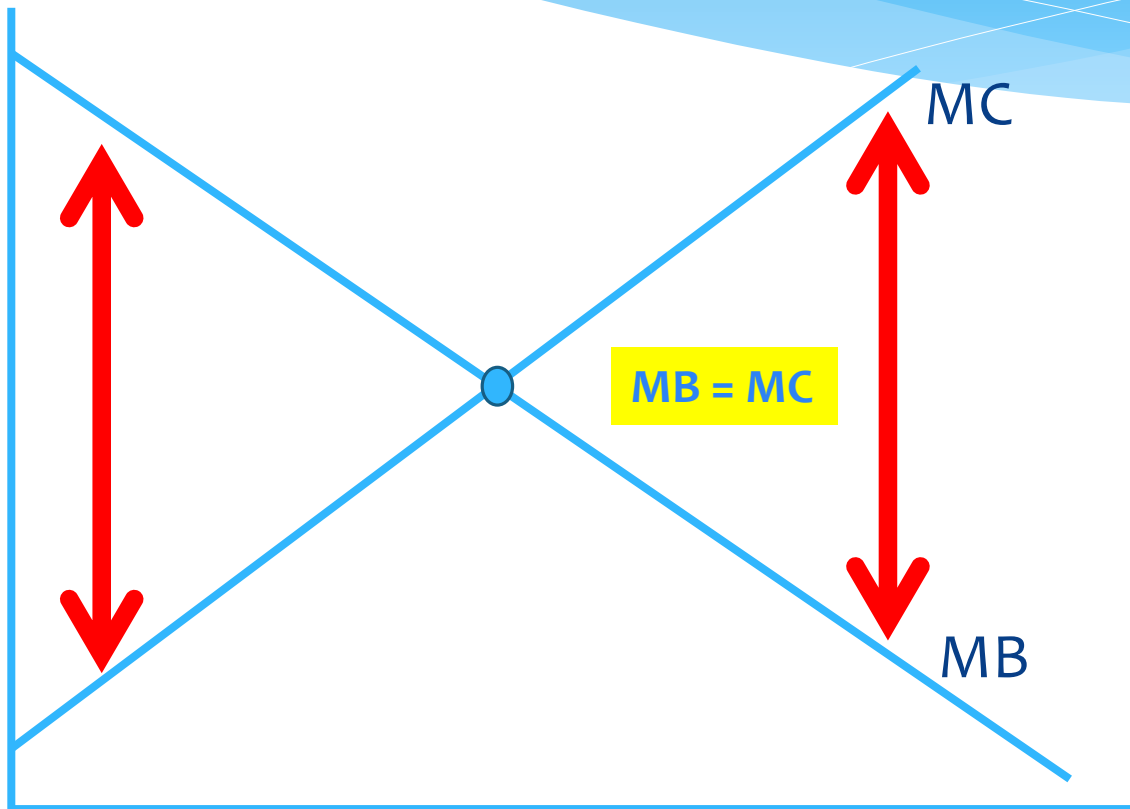


Diagram for efficiency



Compare and contrast

- * Use of “simplified” diagrams with only the most basic ideas
- * **Teach/Learn concepts in pair (different constraints, different choices → explanation!)**

3. Divergence between private and social costs

Relationship between

External cost/ benefit

and

Over-/under- consumption/production

No externality

$$MPB = MPC$$

||

||

MSB

MSC

External Cost

$$MPB = MPC$$

||

^

MSB

MSC

External Benefit

$$MPB = MPC$$

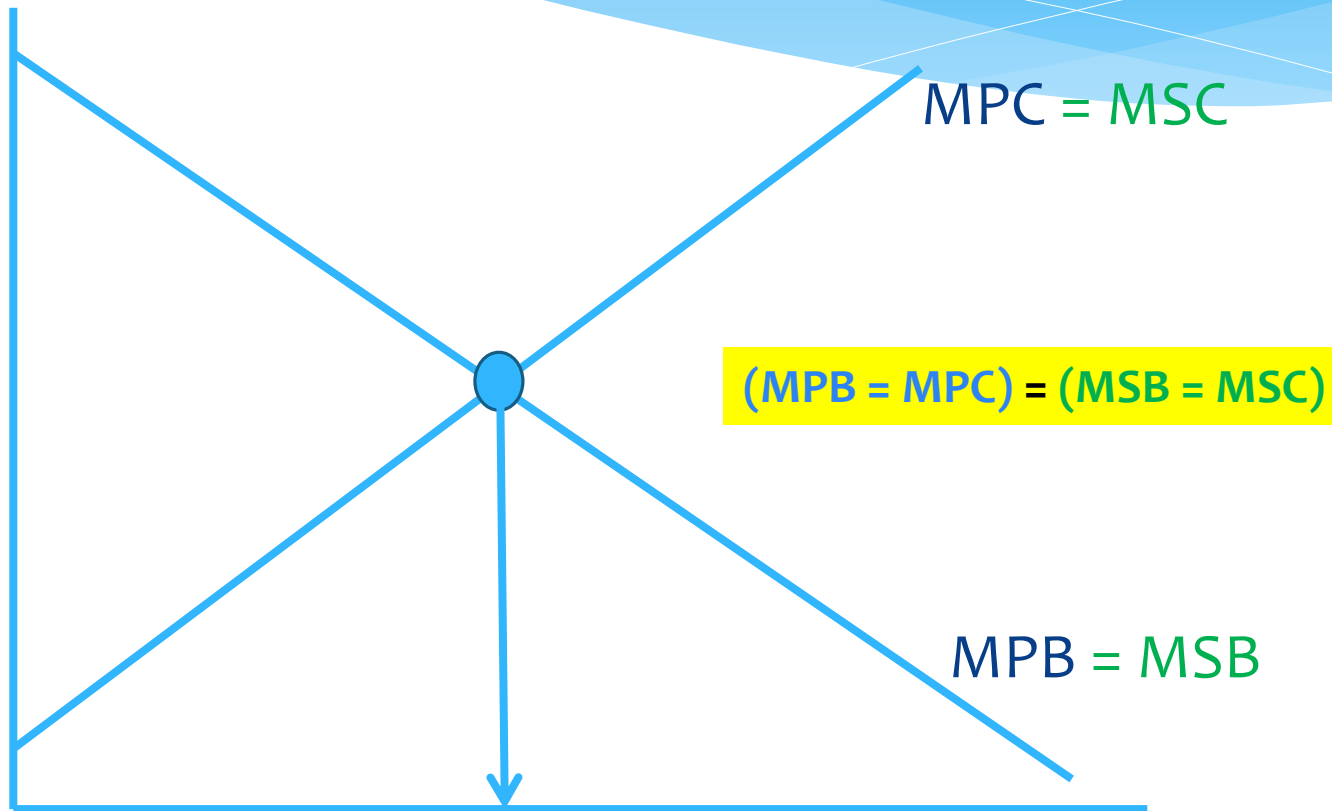
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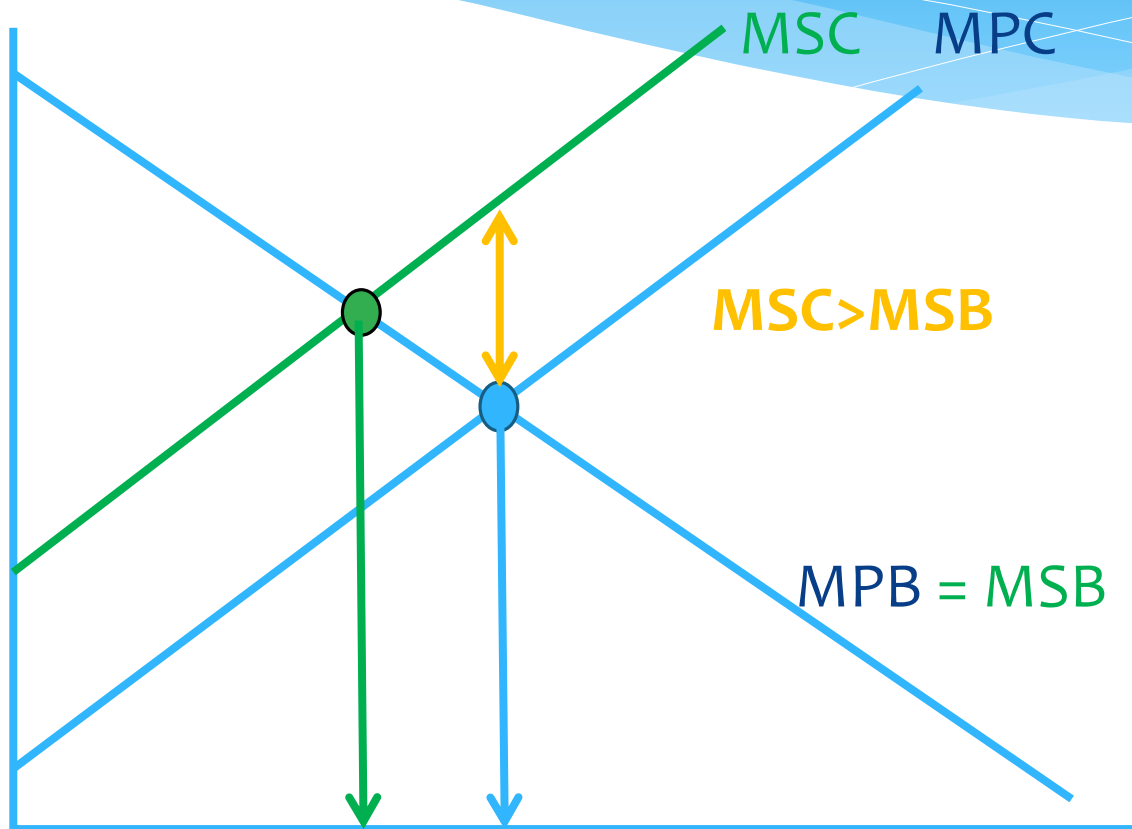
MSB

MSC

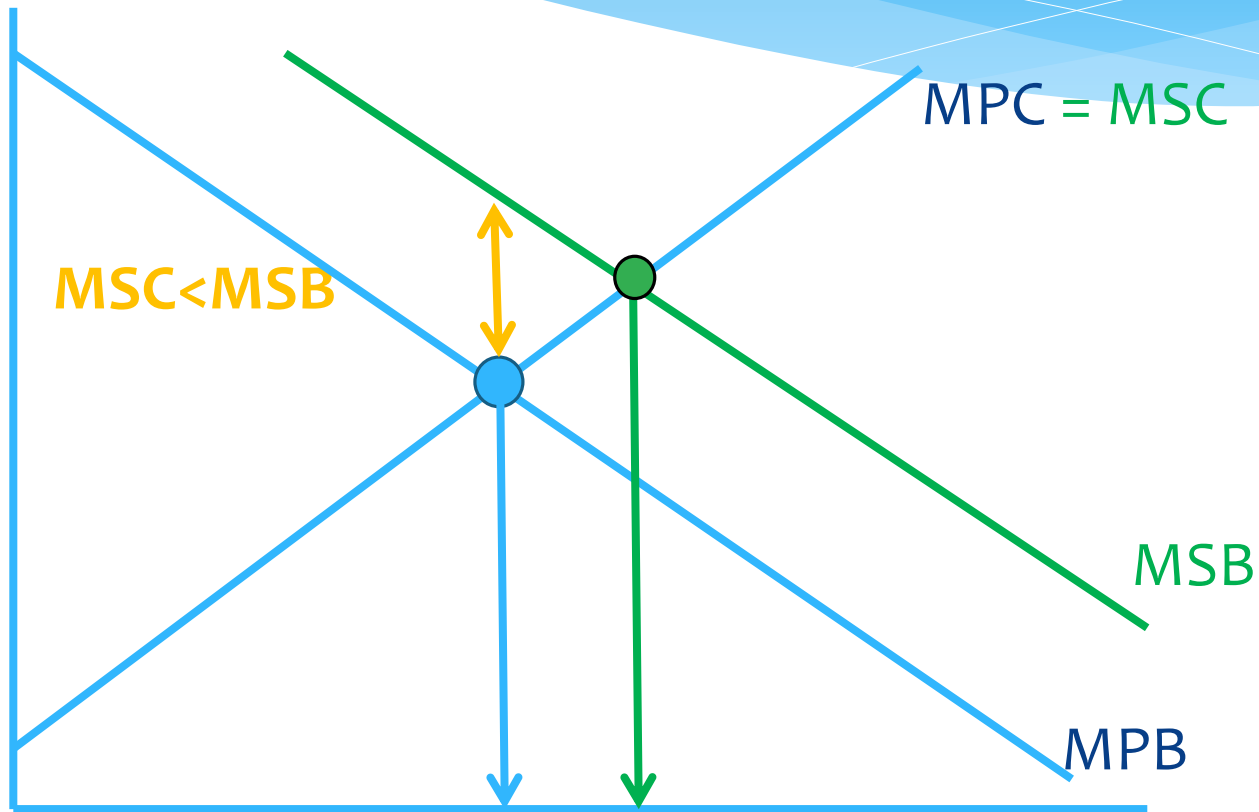
No Externality



External Cost : Overproduction



External benefit : Underproduction





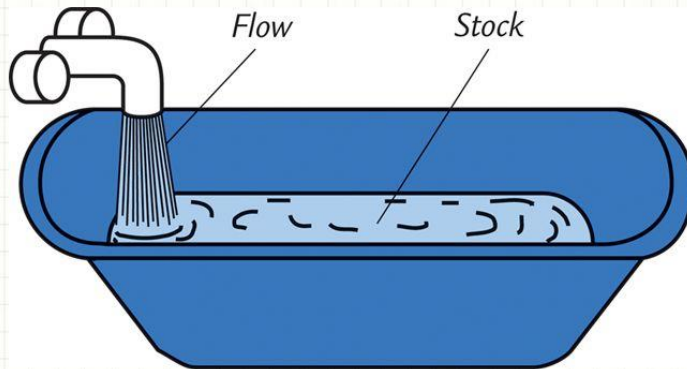
Which way is easier?

Let our students decide!

Exam's requirements vs. Teaching effectiveness

4. Stock vs. Flow

Lecture 2 The Data of Macroeconomics
Macroeconomic Accounts



Flow variables: GDP, income, expenditure, # of people losing their jobs, budget deficit

Stock variables: wealth, # of unemployed people, government debt, international reserves

5

Income: wage “rate”
Pocket money of a day vs
Pocket money of a month

Stock: savings today

Pick the most familiar examples.

Source: <https://slideplayer.com/slide/7368284/>

5. Exogenous vs Endogenous

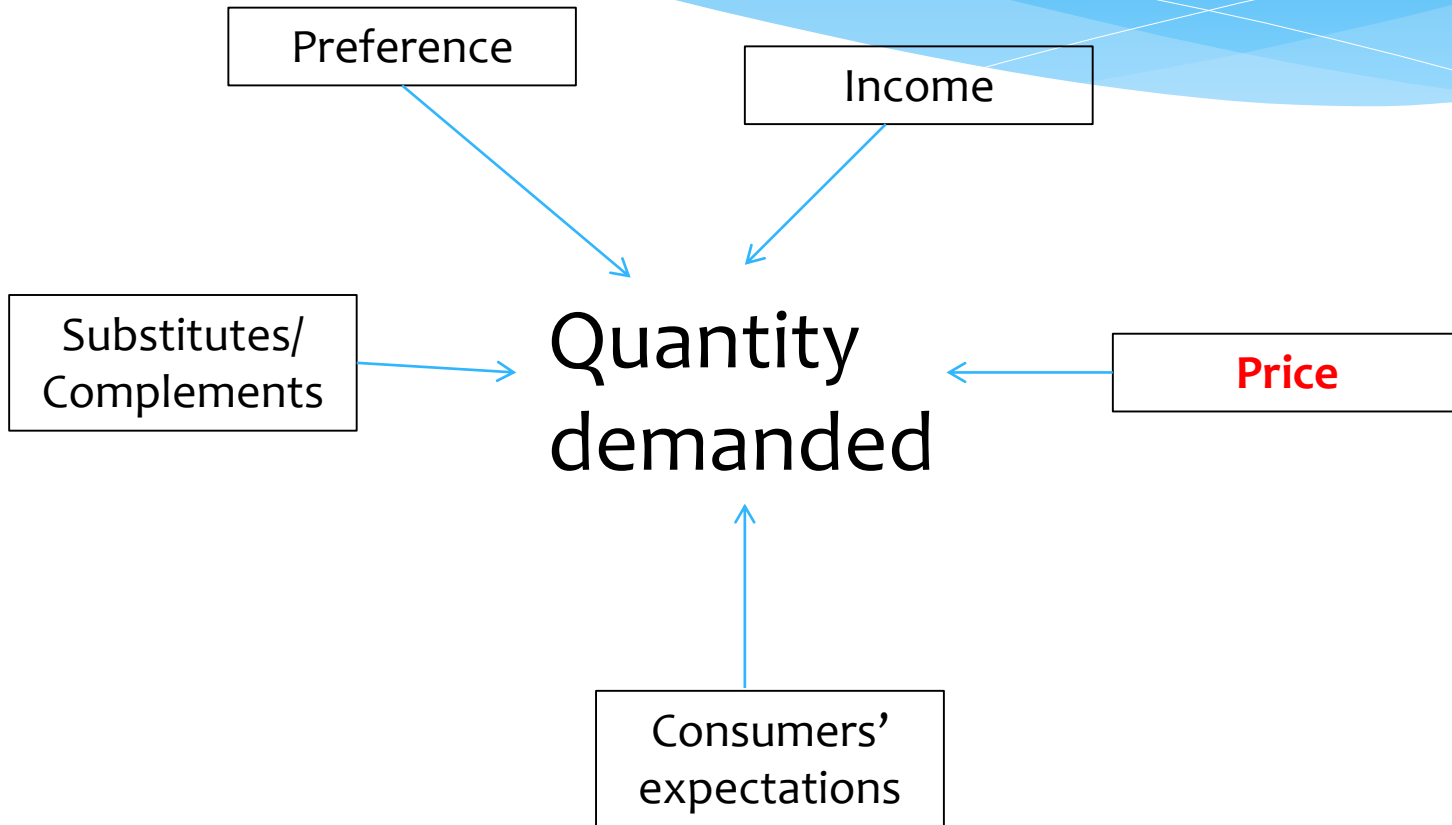
D-S

Movement along D/S vs. Shift of D/S

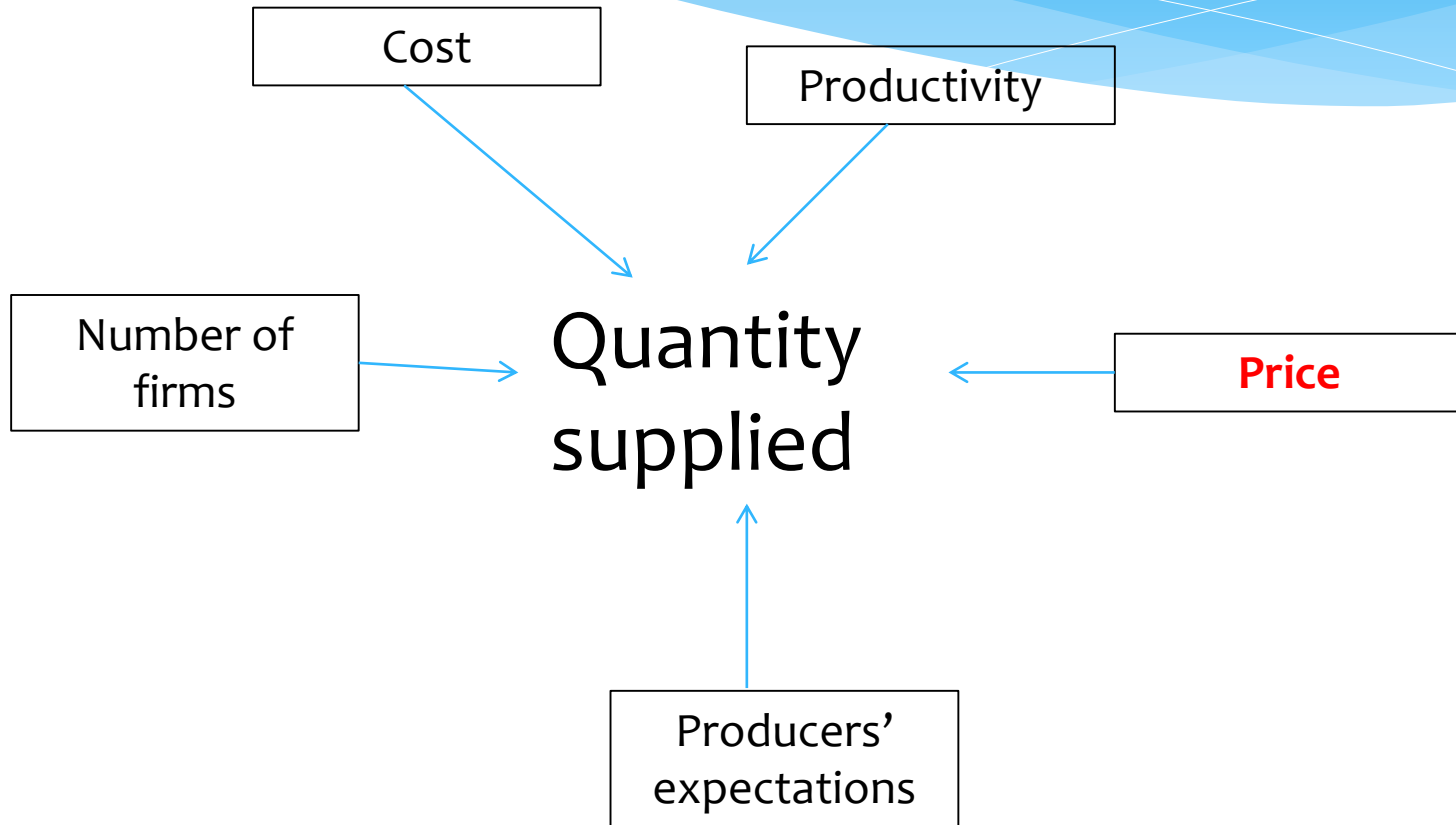
AD-AS

Movement along AD/SRAS/LRAS vs. Shift of AD/SRAS/LRAS

Demand



Supply



6. Expected vs Actual

Fisher's equation

Real interest rate = Nominal interest rate – **Expected** inflation rate



Unchanged
(once agreed upon)



Actual

Example:

Banking
Accounts & Services

Borrowing
Cards & Loans

Investing
Securities & FX

Insurance
Protection & Planning

Insights
Analysis & Market Data

All Bonds - 1 to 20 of 38

Compare Bonds
Select up to 5 bonds and add to comparison list for comparison. 0 of 5 bonds selected.

[Add to comparison list](#) [Compare](#) [Clear List](#)

1 2 Next ▶▶

	Issuer	Credit Rating	CCY	Coupon Rate	Coupon Payment Frequency	Maturity Date	Product Risk Level	Min. Purchase Amount	
<input type="checkbox"/>	ALPHABET INC US02079KAB35	Aa2 AA+	USD	3.375%	Semi-Annual	25 Feb 2024	2	2,000	Buy
<input type="checkbox"/>	APPLE INC US037833AK68	Aa1 AA+	USD	2.400%	Semi-Annual	03 May 2023	2	2,000	Buy
<input type="checkbox"/>	APPLE INC US037833CX61 🏆🌟🌟	Aa1 AA+	USD	3.000%	Semi-Annual	20 Jun 2027	3	2,000	Buy
<input type="checkbox"/>	AGRICULTURAL BANK OF CHINA (HONG KONG BRANCH) XS2319532995 🏆	--	USD	0.210%	At Maturity	20 Sep 2021	1	10,000	Buy
<input type="checkbox"/>	AGRICULTURAL BANK OF CHINA (HONG KONG BRANCH) XS2319532649 🏆	--	USD	0.360%	At Maturity	17 Mar 2022	1	10,000	Buy

<https://www.hkgb.gov.hk/en/greenbond/institutionaloutstanding.html>

Authentic examples are much more interesting and convincing!

7. Theoretical vs Actual

Demand –Supply analysis → Real world cases?

Observation: Change in D/S and no change in Price

Explanation:

Simplifications

Market structure

Motivate students to ask and explore why!

Texas Power Crisis 2021 (Theoretical is actual when...)

Statement Breakdown	
Wholesale Electricity	\$7,152.74
TDU Delivery Charges	\$82.15
Griddy Membership	\$6.07
Taxes & Fees	\$419.98
Total	\$7,660.93

Account Balance

-\$6,088.58

Add Funds

More details about this news:

HK01, “德州停電 | 電力批發價暴漲百倍 家用電費「爆錶」一個月數萬元”, 19 Feb. 2021

<https://www.hk01.com/%E5%8D%B3%E6%99%82%E5%9C%8B%E9%9A%9B/589231/%E5%BE%B7%E5%B7%9E%E5%81%9C%E9%9B%BB-%E9%9B%BB%E5%8A%9B%E6%89%B9%E7%99%BC%E5%83%B9%E6%9A%B4%E6%BC%B2%E7%99%BE%E5%80%8D-%E5%AE%B6%E7%94%A8%E9%9B%BB%E8%B2%BB-%E7%88%86%E9%8C%B6-%E4%B8%80%E5%80%8B%E6%9C%88%E6%95%B8%E8%90%AC%E5%85%83>

8. Inflationary/Deflationary gap

$$Y_e = Y_f$$

$$Y_e > Y_f$$

$$Y_e < Y_f$$

Misconceptions caused by the concepts of excess demand/supply.

Emphasis on the distinctions between similar models!

9. Deposit creation

31. The following table shows the balance sheet of a banking system.

Assets (\$)		Liabilities (\$)	
Reserves	300	Deposits	900
Loans	600		

Suppose the public does not hold cash and the required reserve ratio is reduced to 25%. After deposit creation, the amount of loans in the banking system is \$750. Which of the following statements about the banking system is correct?

- A. The money supply increases by \$300.
- B. The actual banking multiplier is 3.5.
- C. The deposits increase by \$600.
- D. Bank reserves are \$450.

(36% correct in 2017 DSE):

Skills required:

1. Presence of excess reserves → Change in reserves
2. Maximum multiplier: when and when not?
3. Use of $R + L = D$

Use of past paper questions in teaching: sequence matters (scaffolding)



How I teach depends on how I learnt.

How I teach depends on how I learns!