

Market and price formation

Worksheet 2

Key questions for game evaluation

1. When a buyer and seller engage in a trade, a trading profit is achieved. How is this calculated?

2. From the point of view of all the market participants, did the 'right people' do the trading, or would it have been possible for the class as a whole to achieve a higher profit?

Comparison with real life

3. Compare markets for everyday goods (e.g. bread or sunglasses) with the market simulated in Pitgame.
 - a. How are these markets different? In reflecting on these differences, pay attention to efficiency, competition and transparency.

- b. What mechanisms are the same or similar in both markets?

Additional questions

4. The various buyers and sellers have different maximum purchase prices (reservation prices) for the same good. Conversely, they offer the same good at different minimum sale prices (reservation prices). Explore the reasons for these differences using the following examples.

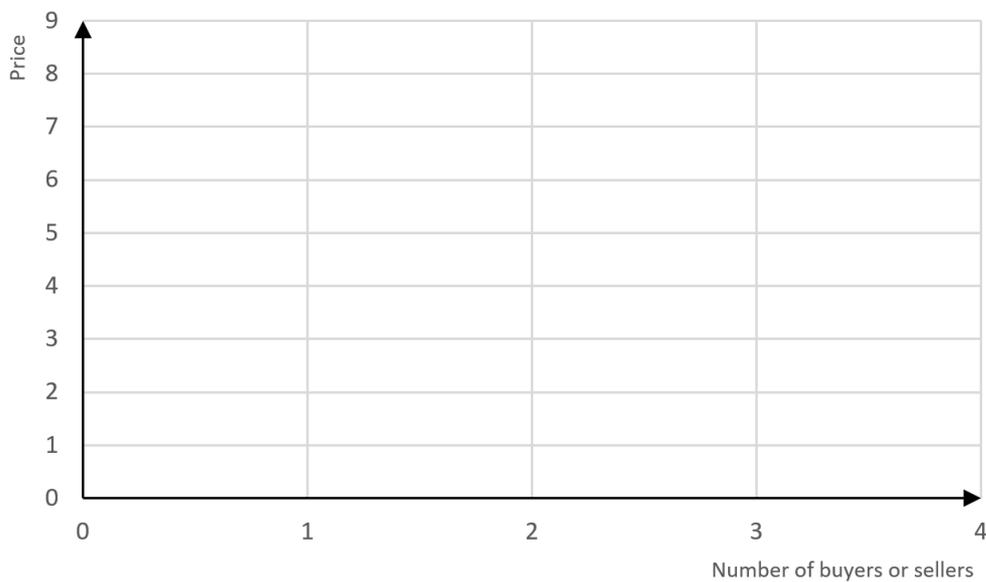
a. Let's assume that you own a petrol-powered vehicle (car, moped or motorbike). Which factors influence your reservation price for petrol?

b. Imagine you are an oil producer. What factors influence the minimum amount you charge for a barrel of oil?

5. Consider the following starting scenario for a mini-pitgame/market:

Buyers	Maximum purchase prices	Sellers	Minimum sale prices
A	8	D	1
B	6	E	4
C	3	F	6

a. Construct the supply/demand curves. The number on the x-axis denotes the number of people who are willing to buy or sell the good. Bear in mind: the lower the price, the larger the number of people who want to buy and the smaller the number of people who want to sell.



b. How high is the equilibrium price?

c. Who can trade at equilibrium?

d. How high is the trading profit for all market participants?

e. What happens in the market when the price is 2?

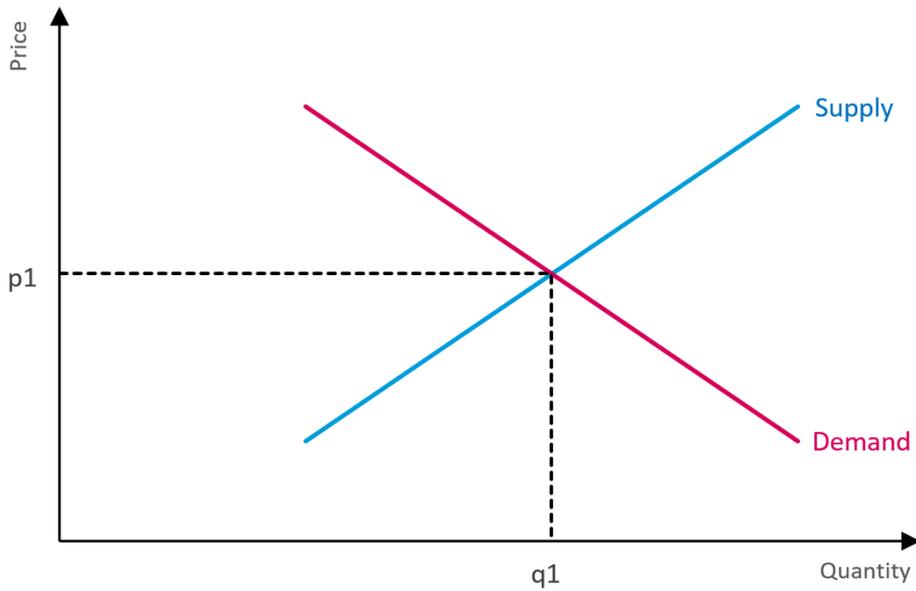
6. Change in market equilibrium

New hygiene regulations have recently been introduced for the manufacturing of a particular good that is traded on a commodities exchange. These new regulations slow down production.

a. How will this fact influence the starting scenario in Pitgame?

b. How does this new situation affect the equilibrium price for the good and the quantity sold?

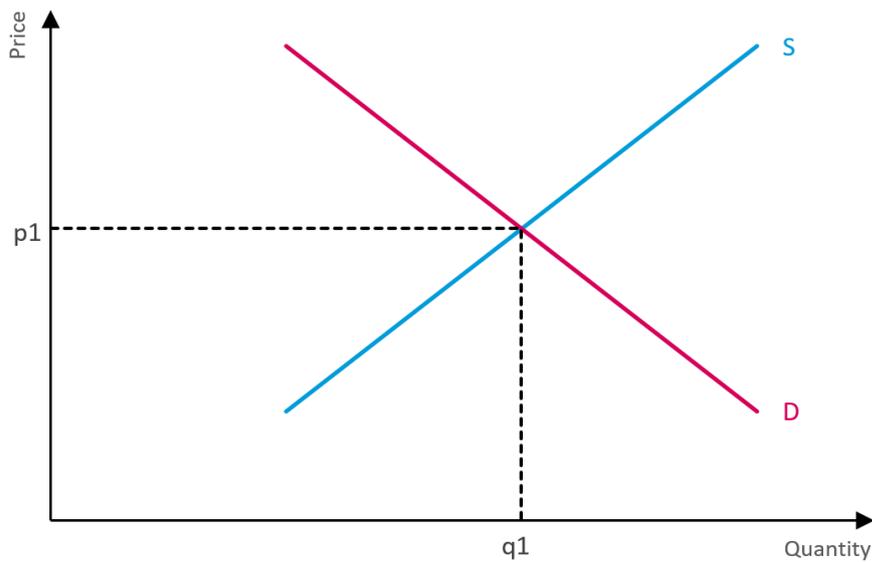
- c. Depict the new scenario graphically. Indicate how the curves shift and where the new market equilibrium lies. p stands for price and q for quantity. Thus, p_1 is the initial price and q_1 the initial quantity.



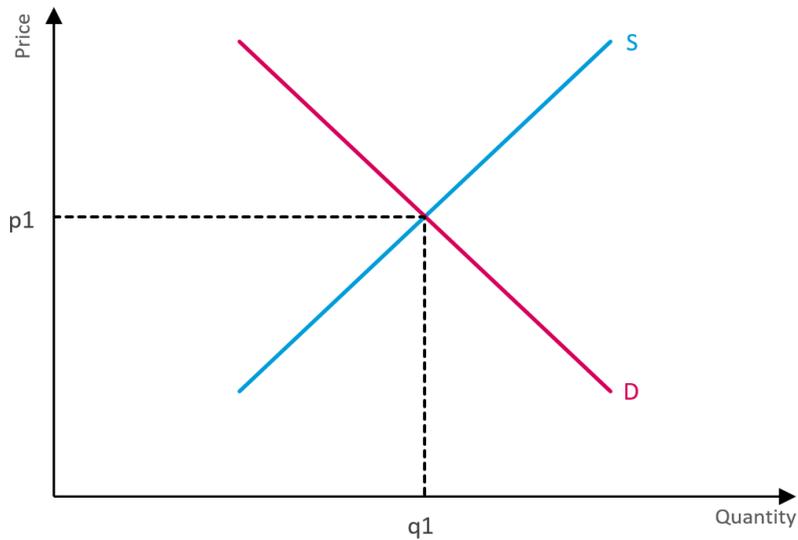
7. Change in market equilibrium

How do the following market changes affect the market equilibrium? Briefly explain your answers in each case and indicate how the curves would shift.

- a. The commodity is less popular with customers as they can replace it with a cheaper one.



b. Technological progress enables a more efficient manufacturing process.



8. Government intervention: setting a price cap

Let's assume that the government deems the equilibrium price in Pitgame to be too high. It therefore sets a binding price cap, which is \$3 below the equilibrium price.

a. How does this price cap affect the trades transacted in Pitgame? Study the following table listing the trades from the last round. The equilibrium market price is \$38.

Seller	Price [min.]	Profit	Buyer	Price [max.]	Profit	Trading price [\$]	Trading profit
August	32 \$	2 \$	Franca	41 \$	7 \$	34 \$	9 \$
Daniel	35 \$	4 \$	Dominica	40 \$	1 \$	39 \$	5 \$
Beata	37 \$	3 \$	Mia	40 \$	0 \$	40 \$	3 \$
Wolf	38 \$	0 \$	Gerry	39 \$	1 \$	38 \$	1 \$
Roxanne	39 \$	-- \$	Gudrun	37 \$	-- \$	-- \$	-- \$
Jens	42 \$	-- \$	Detlef	36 \$	-- \$	-- \$	-- \$

	Trade price so far (\$)	New price (\$)	Trading profit so far (\$)	New trading profit (\$)
August/Franca				
Daniel/Dominica				
Beata/Mia				
Wolf/Gerry				
Roxanne/Gudrun				
Jens/Detlef				
Total				

b. How does the overall trading profit change?

c. Draw a conclusion: will the market participants profit from this government intervention? Explain your answer.

9. In a well-organised, transparent and competitive market, the price will settle at a certain level. Who determines this price? Check the appropriate box and briefly explain your answers.

	True	False
a. Those on the demand side (i.e. the buyers) who are prepared to pay the least for the product.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>		
b. Those on the supply side (i.e. the sellers) who set the highest price for their product.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>		
c. The interactions of all buyers and sellers.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>		
d. The traders with the loudest voice.	<input type="checkbox"/>	<input type="checkbox"/>
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10. Which statements are correct? Check the appropriate box and briefly explain your answers.

	True	False
a. In a well-organised and transparent market, the price usually settles at the equilibrium price. <hr/>	<input type="checkbox"/>	<input type="checkbox"/>
b. If a buyer and a seller in the market can agree on a trade, one party makes a loss. <hr/>	<input type="checkbox"/>	<input type="checkbox"/>
c. The highest possible trading profit for the sum of all market participants is achieved if all of them engage in a trade. <hr/>	<input type="checkbox"/>	<input type="checkbox"/>
d. The number of market participants prepared to buy or sell a product is dependent on the possible trading price. <hr/>	<input type="checkbox"/>	<input type="checkbox"/>