



The Market Mechanism

Stand: März 2024

Jahrgangsstufe	10, Lernbereich 10.1: Ökonomisches Handeln auf dem Markt
Fach	Wirtschaft und Recht
Übergreifende Bildungs- und Erziehungsziele	Ökonomische Verbraucherbildung, Alltagskompetenz und Lebensökonomie, Werteerziehung, Bildung für nachhaltige Entwicklung
Zeitrahmen	4 – 5 Unterrichtsstunden

Kompetenzerwartungen

Die Schülerinnen und Schüler ...

- wenden das Marktmodell auf konkrete Beispiele an, um die Koordinationsfunktion von Märkten darzustellen. Dabei kontrastieren sie Prämissen des Marktmodells mit der Realität.
- treffen reflektierte Verbraucherentscheidungen in ökonomischen Knappheitssituationen mit Blick auf persönliche Anreizsysteme und das Prinzip der Nachhaltigkeit. [...]

Inhalte zu den Kompetenzen:

Prinzip der Nachhaltigkeit: ökonomische, ökologische und soziale Aspekte

Lead-in

This is a developing sequence on the topic "The market model". It starts with the most basic concept of the market model and ends with a case study in which the students can apply the theory. Alternatively, at the end of the sequence the students could do online research on whichever market may seem fitting at the time and apply their skills to producing an assessment or forecast.

The steps of this sequence are:

1. Basic concepts of the market model (Tasks 1 and 2)
2. Shifts in the market (Tasks 3 and 4)
3. Short run vs. long run (Task 5)
4. The perfect market vs. reality (Task 6)

What this sequence does not include is a closer look at surplus supply and demand situations as well as issues around elasticity.



Tasks

Task 1

Work in small groups. One task per group.

Group 1: You are looking for a holiday job. Discuss the image (M 1) in your half of the class. Then write down how many of you would ask the price for washing someone else's car. Write down price/pricing solutions ranging from \$1 to \$20.

Group 2: You are a car owner and have a good job that pays well but leaves you little time to wash your car yourself. Discuss the image (M 1) in your half of the class. Then write down how many of you would be willing to pay what price for a car wash. Write down the prices ranging from \$1 to \$20.

Task 2

Work in the class.

Devise a market model that contains the relevant terms from M 2. Also add the price and number of cars washed (quantity) that could be reached in your class. Discuss your findings. Also discuss whether the price reached would be a fair one.

Task 3

Let's say you as a class have established quite a successful car wash business and are relieving your teachers of their money on a regular basis. Your parallel class has learnt about this and has decided to move into the market as well. In your group or class discuss which curve would move where in the market model and what that would do to price and quantity. Present your findings as a market model. Also discuss which other reasons could cause a similar shift to this.



Task 4

Group 1: There are four basic shifts that can happen in a market. In task 3 there was an increase in supply. Develop a market model for an increase in demand. Note down at least three different reasons for such a shift. Always pay attention to what happens to price and quantity. Present your findings to the class.

Group 2: There are four basic shifts that can happen in a market. In task 3 there was an increase in supply. Develop a market model for a decreasing supply. Note down at least three different reasons for such a shift. Always pay attention to what happens to price and quantity. Present your findings to the class.

Group 3: There are four basic shifts that can happen in a market. In task 3 there was an increase in supply. Develop a market model for a decreasing demand. Note down at least three different reasons for such a shift. Always pay attention to what happens to price and quantity. Present your findings to the class.

Class: Make notes on each other's solutions as they are being presented.

Task 5

Let's assume the fictitious town in M 3 decides to turn the yellow area into a limited traffic zone to which only public transport would have access. Let's also assume that as a consequence many people in this area decide to sell their cars and buy annual public transport tickets instead. Let's also say that you own a car wash close to this specific area.

Sit down with your group and devise two market models that show what the turning of the inner city into a limited traffic zone would do to the car washes in the area

a) in the short run and

b) how the market would change in the long run.

List at least three aspects that can affect a market in the long run. Present your findings to the class.

Task 6

Create a table with the conditions of the perfect market as explained in M 4 contrasting these conditions with the reality of a car wash business. Present your findings.



Word bank

supply – Angebot

demand – Nachfrage

market mechanism – Marktmechanismus

equilibrium price – Gleichgewichtspreis

market clearing – Markträumung

curve – Kurve

downward-sloping – fallende (Kurve)

upward-sloping – steigende (Kurve)

surplus supply / supply surplus – Angebotsüberhang

surplus demand / demand surplus – Nachfrageüberhang

turnover – Umsatz

commodity – Ware

competition – Wettbewerb

revenue – Einkommen, Einnahmen, Ertrag

coordinating function – Koordinationsfunktion



Material

M 1

Offer: Car Wash \$____



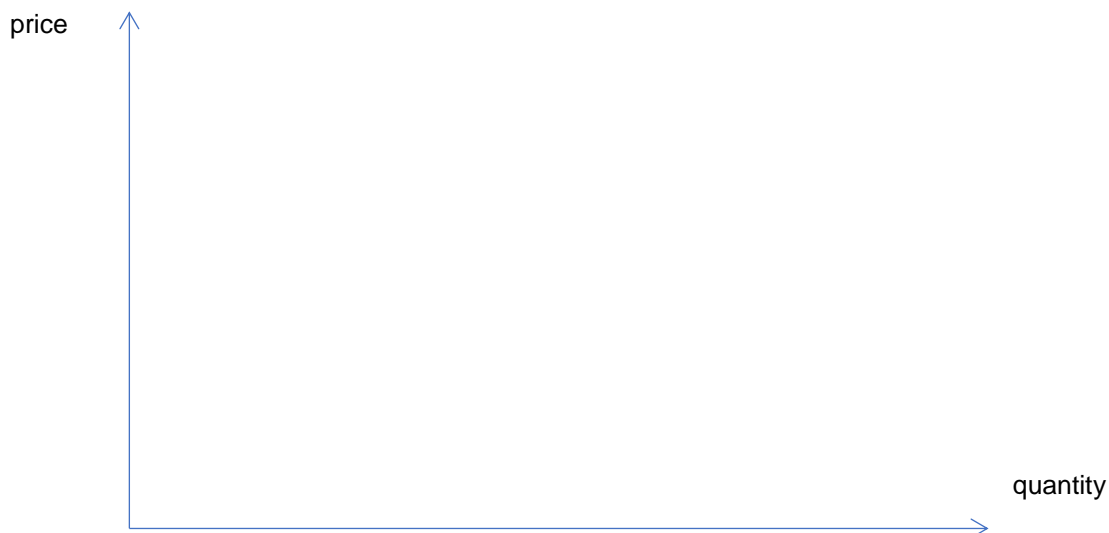
© clipdealer



M 2 The market

Think of a **market** as an arena in which **buyers** and **sellers** for a particular **good** or **service** are brought together to exchange. They are in **competition** with each other. Markets are not limited to a particular place like the exchange at your local supermarket. The exchange of goods and services can be agreed on over the internet or the telephone. All that needs to follow is the shipment of goods or a business trip to provide the agreed-on service in a particular place on our planet. The total quantity of a good or service requested by the buyers is called "**demand**", while the total quantity of a good or service offered by the sellers is called "**supply**".

As we see from our initial example, after a while pretty much everyone who is engaged in this market has an idea what this service should cost. Buyers are willing to pay a particular price while sellers are willing to accept that price in terms of their production costs and the profit they need to make all the work worth their while. Supply and demand come together and the market reaches its **equilibrium**. At this particular price, all goods that are offered are absorbed by the buyers (**market clearing**). In this way the market has coordinated **demand** and **supply** and fulfilled its **coordinating function**. People are provided with goods and services at a reasonable price, sellers make a profit and a living.



M 3 Cars out of cities

Many German towns are discussing environmental issues and how to make their inner cities cleaner. Scandals around car emissions, a strong international environmental movement, and court rulings have fuelled such discussions recently.

Below there is a map of a fictitious town which we assume has banned cars from its inner city (yellow area).





M 4 The perfect market

A perfect market is a theoretical concept in economics that implies perfect competition. There is a set of conditions that comes with this concept. It includes that no single market participant is able to affect the price of any commodity that is bought or sold. It is the powers of supply and demand that lead to equilibrium for every commodity and which determine the exact price for every commodity at any given point in time. Although this concept is purely theoretical and does not apply directly to real market situations, it is widely used as a model to make theoretical assumptions and as a point of comparison for real market situations.

The market model is not at all about justice or whether a certain development or price is fair or not. It is solely descriptive, which means that it only states what happens in this simplified model. In the same way, other scientific fields use models to describe something and through this process reach some sort of approximation to reality and better understand what happens in reality.

Other conditions for a perfect market are that the number of buyers and sellers is infinitely large so that no one market participant can affect market prices. There are no restrictions to accessing a perfect market either. Anyone could start buying and selling commodities and services without paying attention to any regulations that would otherwise prevent them from doing so. The goods in a perfect market are completely homogenous, which means that they do not differ at all from one supplier to the next for the same commodity or service. Everyone in this market is in possession of perfect information, which means that everyone knows everything about everything that is relevant to an economic decision, e.g. how much one commodity costs in another shop across town. Everyone in this market acts rationally solely to maximise their own utility ignoring all other preferences. This means e.g. that you would buy a commodity at €1 cheaper from someone you don't like instead of paying €1 more to your best friend who sells exactly the same commodity. Additionally, any exchange of labour force, capital, and resources is perfectly mobile and can be moved to adjust new market requirements for free. Any changes in a perfect market happen without delay and have an instantaneous effect on price and quantity.

Sounds unrealistic? Of course, it is. Still, the behaviour of many markets is close enough to this theoretical concept to make it a valuable tool, e.g., to explain economic concepts or to investigate how real market situations deviate from the model.



Notes on the lesson plan

Task 1 – 4: You can let your students work on their own, occasionally checking how they are doing. You'll see how they cope and where and when it is necessary to act. For more influence on results, you can add the following passage to task 1:

“Your teacher will transfer your answers into a coordinated system on the board. Make notes.”

If you prefer, you can also develop task 2 together with your students.

After task 4 you should definitely look over the solutions for tasks 1 and 2 and have the students present their findings for tasks 3 and 4 to make sure that they have grasped the most basic concepts of the market model.

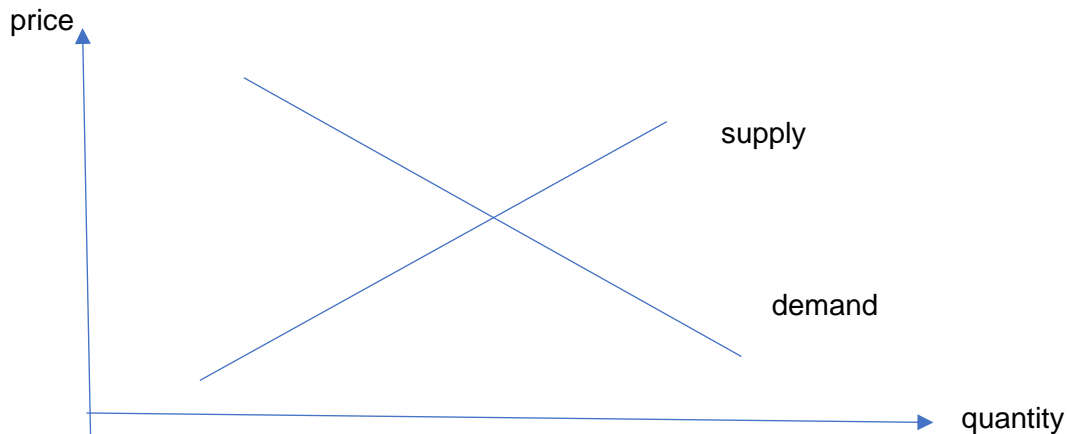
We are aware that there are different currencies in these tasks. This is intentional as we did not want to limit ourselves to one particular currency area. After all markets do not depend on one particular currency.

Possible findings

Task 1

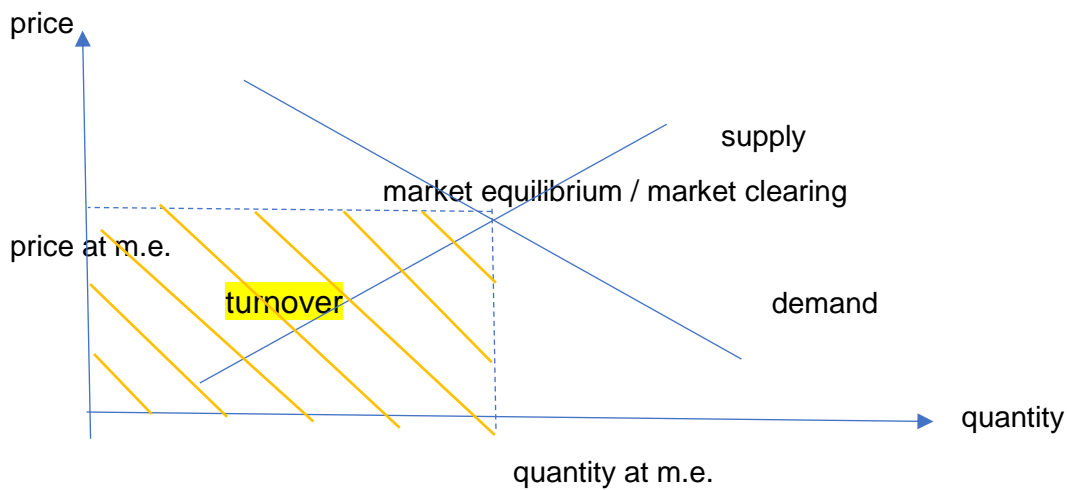
There should be a rough standard supply and demand curve that follows the numbers the students have come up with.

e.g.



Task 2

e.g.



The possible findings for this task depend on how many of these concepts are known to the students and to what extent the teacher would like to explore this model with the students.



Task 3

Standard increase in supply situation with the supply curve moving down.

Students should be made aware of the effects on price and quantity and note them down in the market model.

Other causes with a similar outcome could be:

e.g.

- Instead of new businesses moving in, the existing ones could employ more workers and expand their businesses
- Prices for business costs could fall; because of competition this will result in lower prices for the customers
- Prices for workers could fall, e.g., inflow of workers from other countries who are willing to work for lower prices; again, this would lead to lower prices for the customers.

It could make sense to have the students copy down a correct solution to this task.

Task 4

Standard shifts with respective effects on price and quantity.

Causes for increasing demand:

e.g.

- Rising wages > more people can afford cars and car washes
- Marketing campaigns advertising the imaginary importance of clean cars

Causes for decreasing supply

e.g.

- rising prices for workers
- rising business costs
- businesses closing down or downsizing

Causes for decreasing demand

e.g.

- falling wages with fewer cars and fewer people washing cars
- rising environmental consciousness maybe leading to fewer cars
- rising prices for cars leading to fewer cars on the streets
- changing attitude towards the importance of clean cars
- new material in car manufacturing that makes surfaces dirt-resistant



Task 5

e.g.

Fewer cars in the area > decrease in demand for clean cars

Short run > decrease in quantity and decrease in price as competitors try to keep or win customers by lowering their price

Long run > some suppliers will be pushed out of the market due to the more aggressive competition in a decreasing market

This results in a decreasing supply with the supply curve moving up.

It is possible that the old market equilibrium price is reached at some point, however, with a lower total quantity of cars washed in this area.

It is also possible that suppliers move their businesses to locations that can be reached by more car drivers if these locations are not yet provided with the required services or if other businesses can be pushed out of the market due to some suppliers' superior business models.

This task is also an opportunity to discuss a variety of possible outcomes.

Three aspects that could affect a market in the long run: e.g

- political decisions such as in this task
- a change in people's attitude such as more environmental awareness
- climate change
- the availability or unavailability of a particular resource
- ...



Task 6

Table:

Perfect Market

1. infinite number of buyers and sellers > no market participant can influence the price
2. homogeneous goods
3. no market entry barriers
4. perfect information
5. market participants maximise utility and do not have any other preferences
6. perfect mobility of factors of production > infinitely fast reactions of prices and quantities to any changes in supply or demand; no transaction costs

Imperfect Market

1. limited suppliers and customers in a limited area
2. different products at different car washes
3. market entry requires capital and know-how
4. information is limited to information at the specific car wash or maybe to some internet resources that customers would have to research beforehand; not many do this
5. there are personal preferences e.g. on your own way home it is more convenient for you than travelling to the next car wash
6. expensive transaction costs for the suppliers to move their car wash to a new maybe better suited location