COLLABORATIVE WORK

MARKET EQUILIBRIUM (SUPPLY AND DEMAND)

Market equilibrium corresponds to the situation in which the quantity offered of a good or service, at a given price, is equal to the quantity demanded of that good or service at the same price. The **equilibrium price** is the price at which the quantity offered equals the quantity demanded. The number of units of a good or service that corresponds simultaneously to the quantity that the market is willing to consume and the quantity that the market is willing to offer, at a given price, is called the **equilibrium quantity**.

When the **supply and demand curves** of a good reflect all the significant costs and benefits associated with the production and consumption of that good, the **market equilibrium** will result in the highest possible economic surplus. A reverse situation would be one in which there is **excess demand (shortage)** or **excess supply (surplus)**.

The negative slope of the **demand curve** results from the evidence that the higher the price of a product, the fewer people are available to buy it. On a graph (**demand curve**), therefore, **demand** increases along the X (or horizontal) axis. Thus, a higher **demand** will correspond to a lower value on the Y (or vertical) axis.

The positive slope of the **supply curve** for a good is the result of the **marginal cost** of producing the good increasing as more of it is produced, despite possible increasing returns to scale (**economies of scale**).

It should be noted that any entrepreneurs will tend to “take a chance” on the market (aiming for profitability and contributing to consumer satisfaction and job creation) as long as the return on the investment is sufficient to cover the **opportunity cost** associated with the activity.

1. **After carefully reading the text: identify the main concepts referenced, research them and discuss them in groups, using information available online and/or various bibliographies (academic and scientific repositories and other sources/portals - critically analyze the source/origin of the information); carry out a Group Reflection; and present a valid resolution for each of the problems presented;**
2. The Group may use the Google Docs platform to write and organize their answers. For the “drawn” answers, they should use the collaborative work statement. The results should be presented by the members of the Working Group.
3. If the content presented is controversial, there will be time to present logical arguments and debate ideas.

1. **Consider figure 1 and describe the possible consequences (economic and social), from the Working Group's perspective, of a process of regulating the real estate market that consisted of publishing a law according to which landlords would be prohibited from charging more than €600 / month for 3-bedroom apartments.**

   And what would be the effect of a law preventing rents from rising above €1,800 / month?

   Note: you can mark on the figure the result of controlled rents (€600 max.).

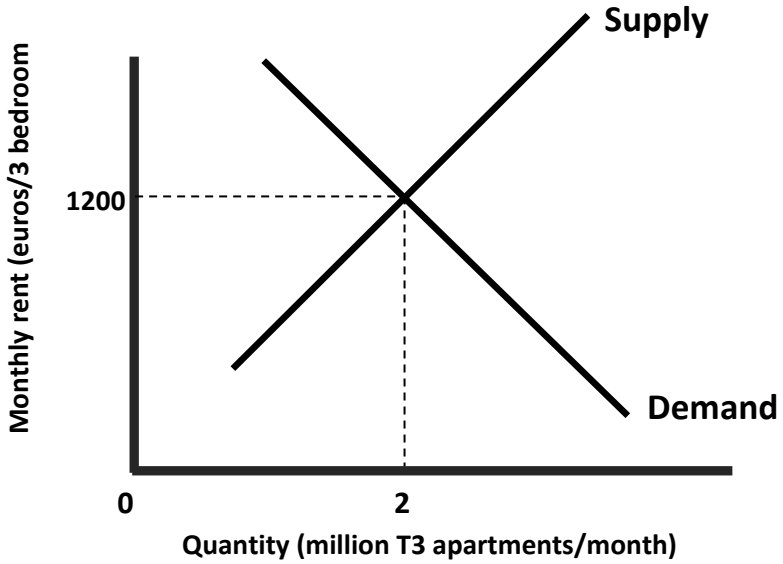

Figure 1 - Deregulated real estate market (3 bedroom apartments)

2. **What is the difference between "shifting the demand curve" and "moving along the demand curve"?**

   "Answer" this question: (1) by drawing your answer on the graphs in the figures below; and (2) by briefly defining each concept.

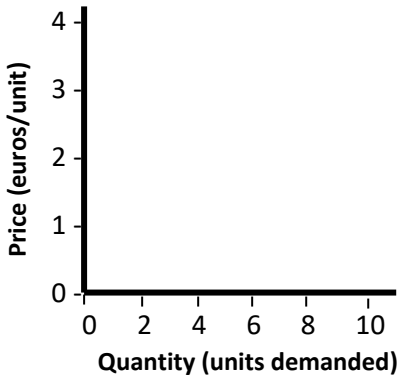

Figure 2 - Demand curve (apartments T1 | **2023**): **Shift of the demand curve** (figurative).

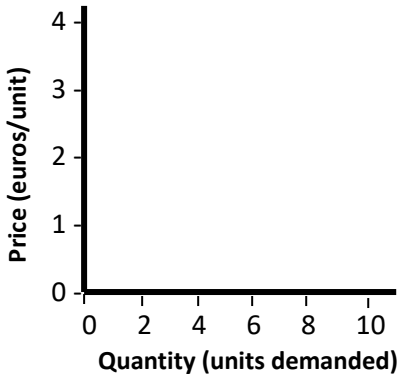

Figure 3 - Demand curve (apartments T1 | **2024**): **Movement along the demand curve** (figurative)

3. **What will tend to happen to the market price and the equilibrium quantity of Pizzas if one of the ingredients (input) used in their production increases in price?**

   Think about and justify your answer by considering the reasons behind an expected shift in the supply curve.

   You may start by drawing (in figure 4) a valid supply curve shift (S) for this case.

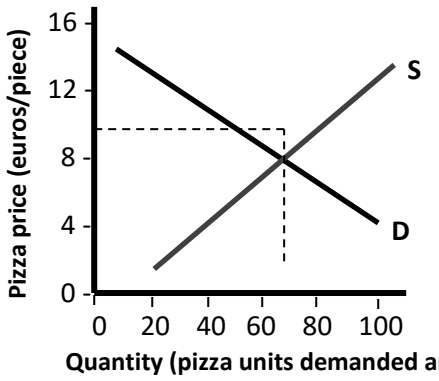

Figure 4 - **Shift of the Supply Curve**: Effect of changes in the prices of factors of production.

4. **For example, in the sports goods market, what would happen to the equilibrium price and equilibrium quantity of tennis balls if the rental value of tennis courts increased?**

   Note: in economics, tennis courts and tennis balls are complementary goods.

   Reflect on and justify your answer, taking into account the reasons behind the shift in the curve at _____ in figure 5.

   You could start by drawing (in figure 5) a valid shift in the curve of _____ for this case.

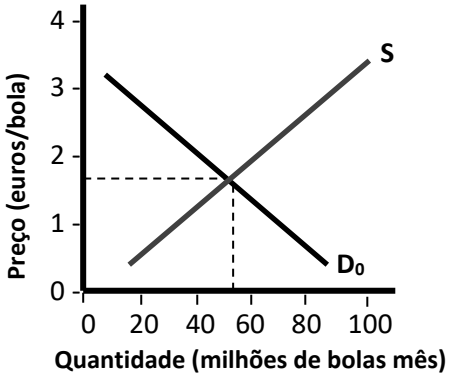

Figure 5 - **Curve shift** from _____: Effect of the increase in the rental price of tennis courts on the tennis ball market.

5. **How might a drop in the price of airline tickets from Lisbon to Porto (and vice versa) affect: (1) the sale of bus tickets between Lisbon and Porto (and vice versa); and (2) the prices of hotel rooms in these cities?**

   Please think about and justify your answer, taking into account the concepts of complementary goods and substitute goods. The answer should also include the words "displacement", "supply" and "demand".

6. **Consider a region where the majority of the resident population belongs to the civil service employee segment.**

   Why do the rents of apartments located near metro stations in that region tend to rise compared to the rents of apartments far from metro stations when, for example, the government decides to grant a generous salary increase to civil servants?

   Think about and justify your answer.

   You could start by drawing (in figure 6) the shift(s) of the curve(s) of _____ valid for this case.

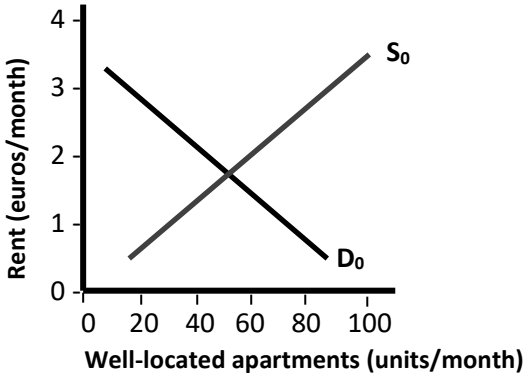

Figure 6 - **Shift(s) of the Curve(s) of _____ (and of) _____:** Predictable effect on the rental market of well-located apartments (in a certain region with a significant number of resident civil servants), resulting from a salary increase granted by the government.

7. **Under what circumstances can higher incomes correspond to a decrease in demand for certain products?**

   Answer this question by referring to the concepts of *income effect*, *normal good* and *inferior good*, and by referring to the effects of a fall in income on the demand curves for each of the categories of goods.

8. **How do *double shifts* in supply and demand affect equilibrium quantities and prices? Reflect and present a possible answer, complementing it with practical examples.**

9. **Hypothetically, what will happen to the equilibrium price and quantity in the fried sweet potato market if the following events occur simultaneously: (1) research shows that a vitamin found in sweet potatoes helps prevent heart disease; (2) an atypical hailstorm destroys part of the sweet potato harvest?**

   "Answer" the question by drawing two possible variations (depending on the relative magnitude of the displacements) on the graphs in the figures below.

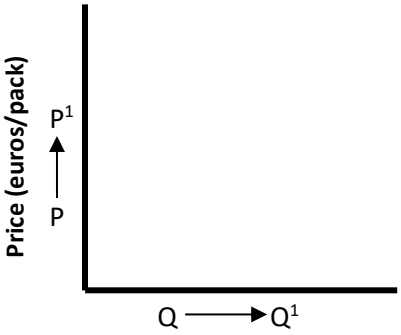

Figure 7 - Hypothesis 1: Shifts in the demand and supply curves for packages of sweet potato fries (possible variation in the equilibrium price and quantity)

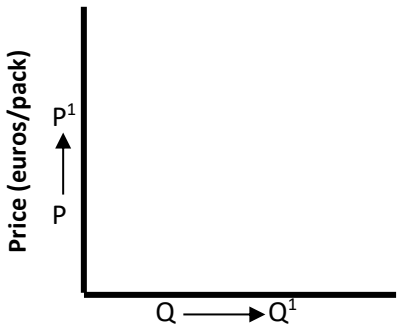

Figure 8 - Hypothesis 2: Shifts in the demand and supply curves for packages of sweet potato fries (possible variation in the equilibrium price and quantity)