



Is Market Failure an Option? | Worksheet

Matching

Match the definition in Column A with the term in Column B.

Column A

- _____ Market can't gauge consumers' true demand.
- _____ Taxes discouraging harmful or costly activities.
- _____ When markets misallocate resources inefficiently.
- _____ Place where buyers and sellers trade goods.
- _____ Unintended effects of transactions on bystanders.
- _____ Production costs exceed what producers actually pay.

Column B

- a. Market
- b. Market Failure
- c. Demand-Side Failure
- d. Supply-Side Failure
- e. Externalities
- f. Pigouvian Taxes

Multiple Choice

1. **Which of the following is an example of a positive externality?**
 - a. A factory pollutes a river, harming nearby residents.
 - b. A park increases nearby property values, even for those who never visit it.
 - c. A cafeteria dumps grease down the drain, causing plumbing problems.
 - d. A concert ticket price rises when demand is high.
2. **What is an example of the government using direct controls to fix a market failure?**
 - a. Placing a limit on how much pollution a factory can produce.
 - b. Charging a fee for every ton of pollution produced.
 - c. Giving money to companies that plant trees.
 - d. Building a public park in a neighborhood.
3. **Why would a government place a Pigouvian tax on a business?**
 - a. To reward companies that produce positive benefits for others.
 - b. To encourage companies to lower prices for consumers.
 - c. To discourage companies from creating negative side effects.
 - d. To provide public goods such as clean water or sewage systems.
4. **Which situation shows the government using a subsidy to encourage positive externalities?**
 - a. Requiring cafeterias to safely dispose of grease.
 - b. Funding a park that improves the community.
 - c. Charging a fee when businesses overproduce waste.
 - d. Limiting how many tickets a concert can sell.

Application

A city wants to reduce car use, so it makes both public bike rentals and public transit free. At first, this seems like a good idea, but problems soon appear. Many bikes are damaged or abandoned in hard-to-reach places, making it difficult for people who actually need a bike to find one. Free public transit also leads to new issues, including an uptick in crime as more people begin using buses and trains as a place to loiter or sleep. Meanwhile, most car owners keep driving, preferring the convenience of long-distance travel, carrying passengers, and transporting heavy loads.



In a short paragraph, explain:

1. What type(s) of market failure are happening here?
2. What kinds of externalities are factoring into the situation?
3. What might fix the situation?

Use terms from today's lesson in your response.

Is Market Failure an Option? | Answer Key

Matching

Match the definition in Column A with the term in Column B.

Column A

- c. Market can't gauge consumers' true demand.
- f. Taxes discouraging harmful or costly activities.
- b. When markets misallocate resources inefficiently.
- a. Place where buyers and sellers trade goods.
- e. Unintended effects of transactions on bystanders.
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Sample Answer:

*This situation shows a **demand-side failure** with the free bikes, because people misuse them and the city can't measure the true demand. Free public transit creates **negative externalities** like crime and overcrowding that affect regular riders. These problems actually started because the government made bikes and transit free, so it's possible that more intervention would just make it worse. Instead, the market could adjust on its own—like charging a fee to use the bikes so people value them more, or letting private companies compete to provide better public transit services. This shows that sometimes government policies create the failures they're trying to fix.*

Guidance for Grading

- ☐ **Identifies at least one kind of market failure:** The student should explicitly identify at least one failure:
 - ☐ Demand-side failure: Free bikes are overused, abandoned, or misused → true demand cannot be measured. Free fares for public transit encourage some people to use them for non-transport purposes (loitering, sleeping, etc.). The city cannot measure true demand if the services are used for other reasons.
 - ☐ Supply-side failure: Maintenance for the repair and collection of damaged and lost bikes isn't paid for by the users, meaning the city must cover it. With the free rides, the city must cover increased wear and tear, cleaning, or security costs.
- ☐ **Correctly names at least one externality:** The student correctly names at least one of the following externalities:
 - ☐ Positive: Cleaner air, less traffic if cars are actually used less (debatable if public transit needs to increase to accommodate more passengers)
 - ☐ Negative: Abandoned/damaged bikes, crime on free transit, pollution from cars that continue driving.
- ☐ **Use of two or more vocabulary terms:** The student correctly uses at least two vocabulary terms to explain their reasoning.
 - ☐ Market failure, demand-side failure, supply-side failure, externalities, Pigouvian tax, subsidy, direct controls.
- ☐ **Demonstrates clear reasoning:** Award full points if all criteria are met in a clear, logical paragraph.