

## ECO 150 Worksheet on Market Failures.

Prior to class, I suggest that you briefly research a few of these topics.

1. It has been suggested that NASA's Apollo Program led to significant production spillovers, a type of positive externality. Here is an [article from \*Astronomy\*](#) on the issue.

a. Describe why this is arguably an example of a positive externality.

b. Why might firms choose to underinvest in research and development?

c. What other policies might correct these types of positive externalities?

d. What trade-offs are involved with awarding firms patents?

2. The [Aral Sea](#), once one of the world's largest inland bodies of water, is drying up, leading to economic and ecological disaster.

a. What policies lead to this disaster.

b. How is this an example of a negative externality? failure.

3. Rent Control is one example of a price floor. This [review article](#) describes the evidence surrounding rent control.

a. How does this policy create deadweight loss?

b. True or False? Renters' consumer surplus increases due to rent control.

c. If rent control increases consumer surplus, describe how it could be Pareto inefficient.

4. This [article](#) argues that students in college classrooms are an example of a market failure (I vehemently disagree but the article offers an interesting perspective).

a. What are the market failures that the authors see in colleges being in-person?

b. How might the nature of this externality have changed since 2020?

c. What other market failures might be connected to the covid-19 pandemic?

5. In the U.S. and many other countries, the government intervenes to encourage education. This [short article](#) discusses whether education is a public good or if it exhibits positive externalities. This [scholarly article](#) discusses the evidence of externalities surrounding education.

a. What is the difference between a public good and an externality?

b. How might the preferred policy intervention depend on the distinction from *a*?

c. Are public universities a typical response to a public goods problem or an externality?

d. True or False? Solid evidence on the existence of positive externalities would prove that the current U.S. education system is good policy?