

Government Intervention in Markets — Worksheet

Why governments intervene · indirect taxes and subsidies · maximum and minimum prices · permits, property rights and regulation · state provision and information · government failure

Name: _____

Class: _____

Date: _____

DEFINE an ad valorem tax · **CALCULATE** the cost of a subsidy and the revenue from a tax · **DRAW** a supply and demand diagram that shows a specific tax · **ANALYSE** the effects of a maximum price and a guaranteed price · **DISCUSS** whether an intervention results in government failure · **EVALUATE** an indirect tax against regulation as a way to reduce an external cost

Sitting 1 — Topic practice

30 marks

MULTIPLE CHOICE Task 1 — Six questions on government intervention

6 marks

Choose one answer for each question.

1. A law gives people a legal right over a resource, such as a river. This can correct an external cost because:
- A the people harmed can now make the polluter pay them or stop polluting
 - B the government can then charge a price for using the resource
 - C it turns the resource into a public good that nobody can be kept from
 - D it makes the harm disappear without any change in what firms do

Answer:

2. Which of the following is NOT one of the eight methods of government intervention?
- A extension of property rights
 - B a cut in the rate of income tax
 - C tradeable pollution permits
 - D provision of information

Answer:

3. A government wants a policy that fixes the quantity traded, while the price is set by the market. It should use:
- A tradeable pollution permits
 - B an indirect tax on each unit sold
 - C a minimum price fixed by law
 - D a subsidy paid per unit

Answer:

4. In agricultural and commodity markets, prices swing sharply mainly because:
- A governments intervene in these markets more often than in any others
 - B the goods are non-rival and non-excludable, which makes them public goods
 - C the external costs of producing them are unusually large and hard to measure
 - D supply cannot change quickly and demand is price inelastic

Answer:

5. Government failure occurs when:

- A a government fails to intervene in a market that is failing
- B an intervention turns out to be unpopular with voters
- C the cost of an intervention is larger than the government expected
- D intervention results in a net welfare loss

Answer:

6. A guaranteed floor price for a crop can cause moral hazard because it:

- A requires the government to store whatever it has bought at the floor
- B is expensive for the government to administer and to enforce each season
- C removes the risk of the price falling, so more is planted on poorer land
- D raises the price that consumers have to pay for food in the shops

Answer:

DEFINE Task 2 — The meaning of an ad valorem tax

2 marks

Define the term ad valorem tax.

ad valorem tax

EXPLAIN Task 3 — Flood compensation for home owners in Varo

4 marks

In Varo, land by the river floods often. It costs less than land on higher ground. The government pays compensation for the full cost of any flood damage to a home.

Explain one likely consequence of the flood compensation for the government of Varo.

CLASSIFY Task 4 — Eight policies of the government of Norvia

8 marks

The government of Norvia uses one policy in each of eight markets. Each row gives the policy and the reason the government gives for it.

Classify each policy by its purpose, using the key.

Key: Correcting a market failure · A fairness aim · A stability aim

#	The policy	Purpose
1	Health: it pays clinics for each child vaccinated against measles, because a vaccinated child also protects other children	
2	Housing: it sets a maximum rent for flats in the capital, because nurses and teachers cannot pay the market rent	

#	The policy	Purpose
3	Education: it runs schools that charge no fees, because an educated worker also makes the people who work with them more productive	
4	Transport: it charges drivers who enter the city centre at busy times, because each extra car slows every other driver	
5	Environment: it caps factory waste with tradeable permits, because the waste harms the fishing families who use the lake	
6	Energy: it pays a subsidy on cooking gas, because low-income families cannot afford it	
7	Agriculture: it guarantees wheat growers a minimum price, because the wheat price can double one year and halve the next	
8	Commodities: it guarantees tin miners a minimum price, because the price of tin rises and falls sharply from year to year	

CALCULATE
Task 5 — A subsidy for adult reading courses in Merro
4 marks

The government of Merro pays colleges a subsidy of \$15 for each place on an adult reading course. Before the subsidy, adults took 300 places a month. With the subsidy, they take 360 places a month. Nothing else in the market changes.

Calculate the monthly cost of the subsidy and the part of that cost paid on places that adults would take even with no subsidy.

Cost of the subsidy (\$ a month)

Workings

Answer: \$

Part paid on places that adults would take even with no subsidy (\$ a month)

Workings

Answer: \$

ANALYSE**Task 6 — A maximum rent for flats in Ambar****6 marks**

In 2024, the city of Ambar set a maximum rent of \$300 a month for a flat. The market rent was \$380 a month. Rents for short stays by visitors are not controlled.

Analyse why the number of flats offered to households at the maximum rent in Ambar may fall over time.

Knowledge — what a maximum price is, and what a shortage is (2)

Application — use two facts about Ambar (2)

Analysis — your chain of reasoning (2)

Sitting 2 — Mock section**74 marks****DRAW****Task 7 — A tax on coal in Hadra****4 marks**

In Hadra, each tonne of coal burnt harms people nearby by \$14. Buyers and sellers of coal do not pay for this harm. The government puts a specific tax of \$14 on each tonne of coal.

Draw a supply and demand diagram to show how the tax changes Hadra's market for coal.

CALCULATE**Task 8 — A tax on cement in Brena**

4 marks

In Brena, the government puts a specific tax of \$20 on each tonne of cement. The table shows the market before and after the tax.

Brena's market for cement

	Before the tax	After the tax
Price buyers pay (\$ a tonne)	100	112
Price sellers keep (\$ a tonne)	100	92
Tonnes sold a day	500	450

Calculate how much of the tax buyers pay on each tonne, and the tax revenue each day.

Part of the tax that buyers pay (\$ a tonne)

Workings

Answer: \$

Tax revenue (\$ a day)

Workings

Answer: \$

EXPLAIN**Task 9 — A campaign about dental check-ups in Doran**

4 marks

Parents in Doran do not know that a dental check-up for their child saves them \$30 of treatment later. The government runs a radio campaign that tells parents this. The supply of check-ups does not change.

Explain how the campaign may change the price and the quantity of dental check-ups in Doran.

EXPLAIN Task 10 — A council water department in Pelo

4 marks

In the city of Pelo, a council department supplies all the water. Households cannot buy water from any other supplier. Any money that the department saves goes back to the council's central budget.

Explain why the costs of Pelo's water department may rise over time.

EXPLAIN Task 11 — Trading smoke permits between two factories in Torin

4 marks

In Torin, two factories need a permit for each tonne of smoke they emit. Next year, each factory will hold permits for one tonne less than it emits now. Factory A can cut each tonne of smoke for \$20. Factory B would pay \$60 to cut each tonne.

Explain why letting the two factories trade permits may lower the cost of cutting smoke in Torin.

Source: A guaranteed price for rice in Taluna

- 1 Rice is the main food in Taluna, a small country, and most families eat it every day. Growers plant rice months before they can sell it. In 2021, the price of rice rose by 60%. In 2022, after a large harvest, it fell by 40%. Growers could not plan what to plant, and families faced sudden jumps in the price.
- 2 In 2023, the government set a guaranteed price for rice of \$400 a tonne. A state agency buys, at \$400 a tonne, any rice that is not sold to other buyers. Figure 1 shows the market for rice in 2025, and an estimate of the market without the scheme.
- 3 The agency stores the rice that it buys. In 2025, storing it cost \$1.5 million, and some of the stored rice spoiled. The agency also pays 200 staff to buy, check and store the rice. Since 2023, growers have planted rice on dry, poor land, where it was not profitable to grow rice before. Each year, the agency has bought more rice than it planned.

Figure 1: Taluna's market for rice, 2025

	Price (\$ a tonne)	Quantity demanded (tonnes)	Quantity supplied (tonnes)
Without the scheme (estimate)	320	33,000	33,000
With the guaranteed price	400	30,000	36,000

CALCULATE**Task 12 — Spending by the rice agency in 2025****2 marks**

Using Figure 1 and paragraph 2, calculate how much the agency spends on buying rice in 2025.

The agency's spending on rice in 2025 (\$)

Workings

Answer: \$

EXPLAIN**Task 13 — The purpose of the guaranteed price for rice****4 marks**

Explain why the government of Taluna set a guaranteed price for rice (paragraph 1).

ANALYSE**Task 14 — The surplus of rice in Taluna****6 marks**

With reference to Figure 1, analyse why the guaranteed price leads to a surplus of rice in Taluna.

Knowledge — what a guaranteed price is, and what a surplus is (2)

Application — use the prices and the quantities in Figure 1 (2)

Analysis — your chain of reasoning (2)

EXAMINE**Task 15 — The guaranteed price and buyers of rice****8 marks**

With reference to Figure 1, examine the likely effects of the guaranteed price on buyers of rice in Taluna.

Knowledge — what a guaranteed price is, and what it does to the price buyers pay (2)

Application — use the prices and the quantities in Figure 1 (2)

Analysis — your chain of reasoning about buyers (2)

Evaluation — say how much the effects matter, and what they depend on (2)

DISCUSS**Task 16 — The rice scheme and government failure****14 marks**

With reference to paragraph 3, discuss whether the guaranteed price for rice in Taluna results in government failure.

Knowledge — explain government failure (2)

Application — use two facts from paragraph 3 (2)

Analysis — two chains of reasoning, one for each fact you used (4)

Evaluation — weigh the arguments, say what they depend on, and judge (6)

EVALUATE Task 17 — A tax on petrol in Calda

20 marks

"Exhaust from cars harms the health of people who live in Calda's capital. The government plans a specific tax on each litre of petrol. Buses are few, so many workers drive to work."

Evaluate whether a specific tax on petrol is better than regulation for reducing the harm from car exhaust in Calda.

Knowledge — explain an external cost, a specific tax and regulation (3)

Application — apply these ideas to petrol in Calda (3)

Analysis — one chain on how the tax may reduce the harm, and one on how a rule may reduce it
(6)

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Write the one sentence that answers Task 17's question.



Answers and mark scheme: [revvylearn.com/w/e1-government-intervention/answers](https://www.revvylearn.com/w/e1-government-intervention/answers)

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