ERUVIO MENTORING · EXTERNAL-STYLE EXAMINATION

Economics

Unit 2 · Modified markets

Stimulus book

SOURCES 1 TO 8

DO NOT WRITE ON THIS PAGE

Instructions

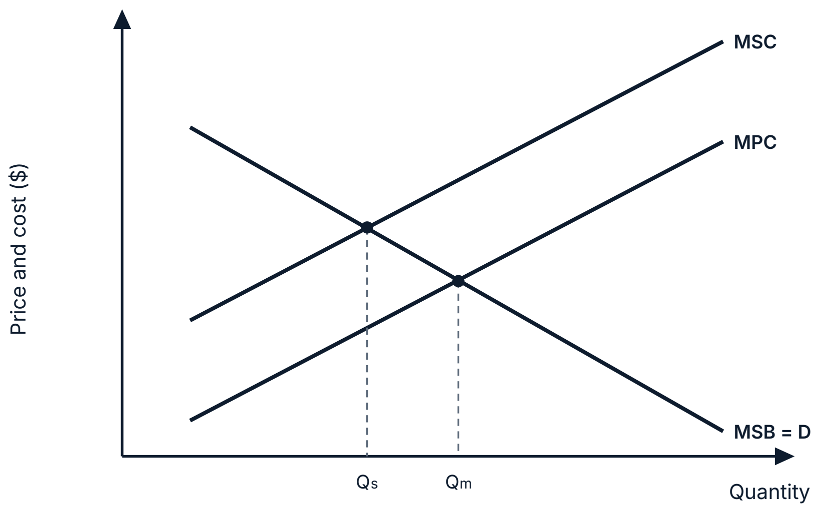
- **This book contains eight sources.** Questions in Section 2 and Section 3 direct you to particular sources, but you may refer to any source that supports your response.
- The data in this book describe a hypothetical economy unless a source states otherwise. Figures are illustrative and are provided so that you can practise interpreting economic data, not as a record of any actual economy.
- You may annotate this book during perusal time.

This book is for reference only. Do not write your responses in this book. All sources may be used in Section 2 and Section 3.

Source 1 Characteristics of three markets

	Market X	Market Y	Market Z
Number of sellers	One	Many small sellers	Four large sellers
Nature of the product	No close substitute	Identical	Differentiated by brand
Barriers to entry	Very high	None	High
Control over price	Considerable	None	Some, but firms watch rivals
Long-run economic profit	Positive	Zero	Often positive

Source 2 The market for sugar-sweetened beverages



MPC is the marginal private cost borne by producers. MSC is the marginal social cost, which includes the health costs borne by the wider community. MSB is the marginal social benefit, which in this market equals the demand curve. Q_m is the quantity traded by the market and Q_s is the socially optimal quantity.

Source 3 Commentary on the levy

> The government has introduced a levy of 40 cents per litre on drinks containing added sugar above a set threshold. The Treasurer described the levy as a way of making producers face the full cost of what they sell, rather than leaving those costs with hospitals and families.
>
> Industry bodies argue that the levy is regressive, because lower income households spend a larger share of their income on these drinks, and that it will cost jobs in bottling and distribution.
>
> Public health groups counter that the levy is the only measure that changes the price signal at the moment of purchase, and note that manufacturers elsewhere reformulated their products to fall below the threshold rather than pay the levy.

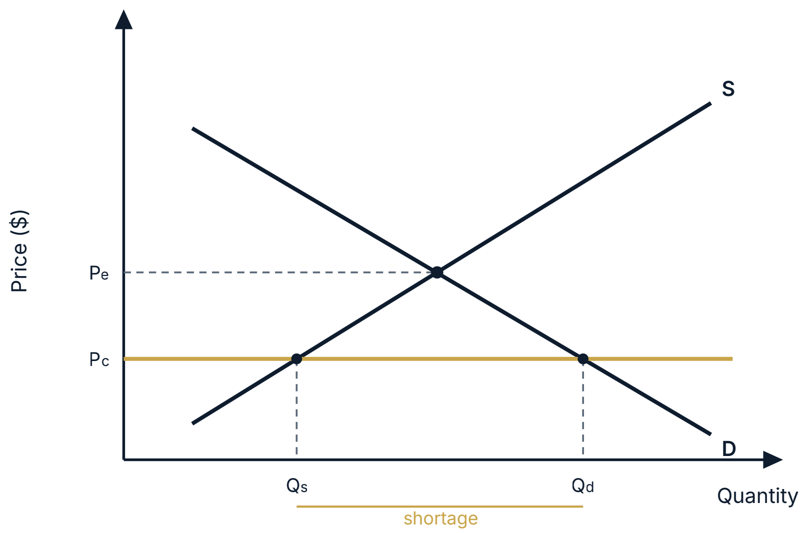
Adapted commentary written for this examination. It does not quote any real official or organisation.

Source 4 Outcomes two years after the levy

	Year before the levy	Two years after the levy
Sales of drinks above the sugar threshold	100 (index)	68 (index)
Sales of drinks below the threshold	100 (index)	129 (index)
Share of products reformulated to fall below the threshold	4%	51%
Average retail price of an affected drink	$3.20	$3.55
Levy revenue collected	nil	$412 million
Employment in beverage manufacturing	100 (index)	98 (index)

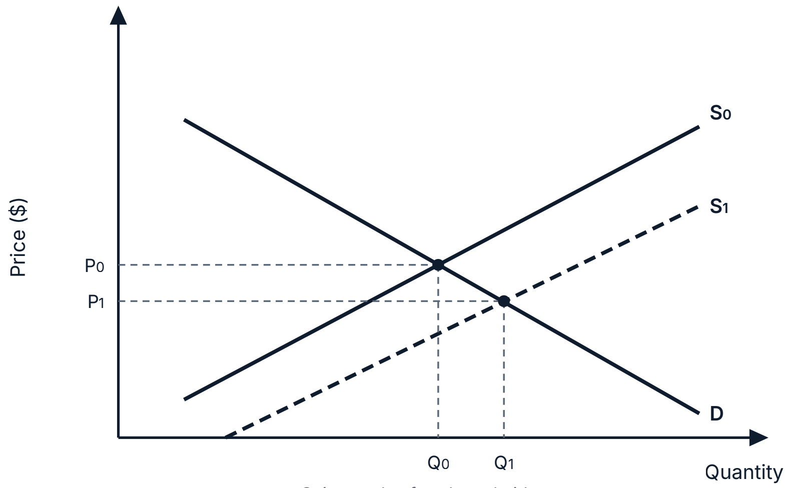
Illustrative figures for a hypothetical economy, constructed for this examination.

Source 5 A maximum price in the rental housing market



The government has set a maximum price P_c below the equilibrium price P_e. At the maximum price the quantity supplied is Q_s and the quantity demanded is Q_d.

Source 6 A subsidy paid to producers of a merit good



S_1 is supply after the subsidy

The government pays producers a subsidy of a fixed amount per unit. S_0 is supply before the subsidy and S_1 is supply after it. The equilibrium moves from P_0, Q_0 to P_1, Q_1.

Source 7 A tradeable emissions permit scheme

	Firm A	Firm B	Firm C
Permits issued (tonnes)	400	400	400
Cost of cutting one tonne of emissions	$18	$45	$92
Emissions before the scheme (tonnes)	500	450	450
Emissions after trading (tonnes)	280	420	450
Permits bought (+) or sold (–)	−120	+20	+50

Illustrative figures for a hypothetical scheme. The regulator issued 1200 permits in total against combined emissions of 1400 tonnes.

Source 8 Regulation or a market-based instrument

A government facing a negative externality has two broad families of response. It can regulate directly, by setting a legal limit on the harmful characteristic, or it can use a market-based instrument such as a tax, a subsidy or a system of tradeable permits, which changes the price signal and leaves the decision with the firm.

Direct regulation offers certainty about the outcome. If the limit is set at the right level and enforced, the harm is reduced by exactly the intended amount. Its weakness is that it treats every firm alike, so the burden of compliance is heaviest on the firms least able to bear it, and it gives no reward for cutting harm below the limit.

A market-based instrument concentrates abatement where it is cheapest and rewards continued innovation, because a firm that reduces harm further keeps the saving. Its weakness is uncertainty: the regulator sets a price, not a quantity, and if the response is smaller than expected the harm persists.

Adapted commentary written for this examination.

END OF STIMULUS BOOK