

***“Who would be a leader must be a bridge”***

Colega Consulting Ltd  
Bridgend  
Wales

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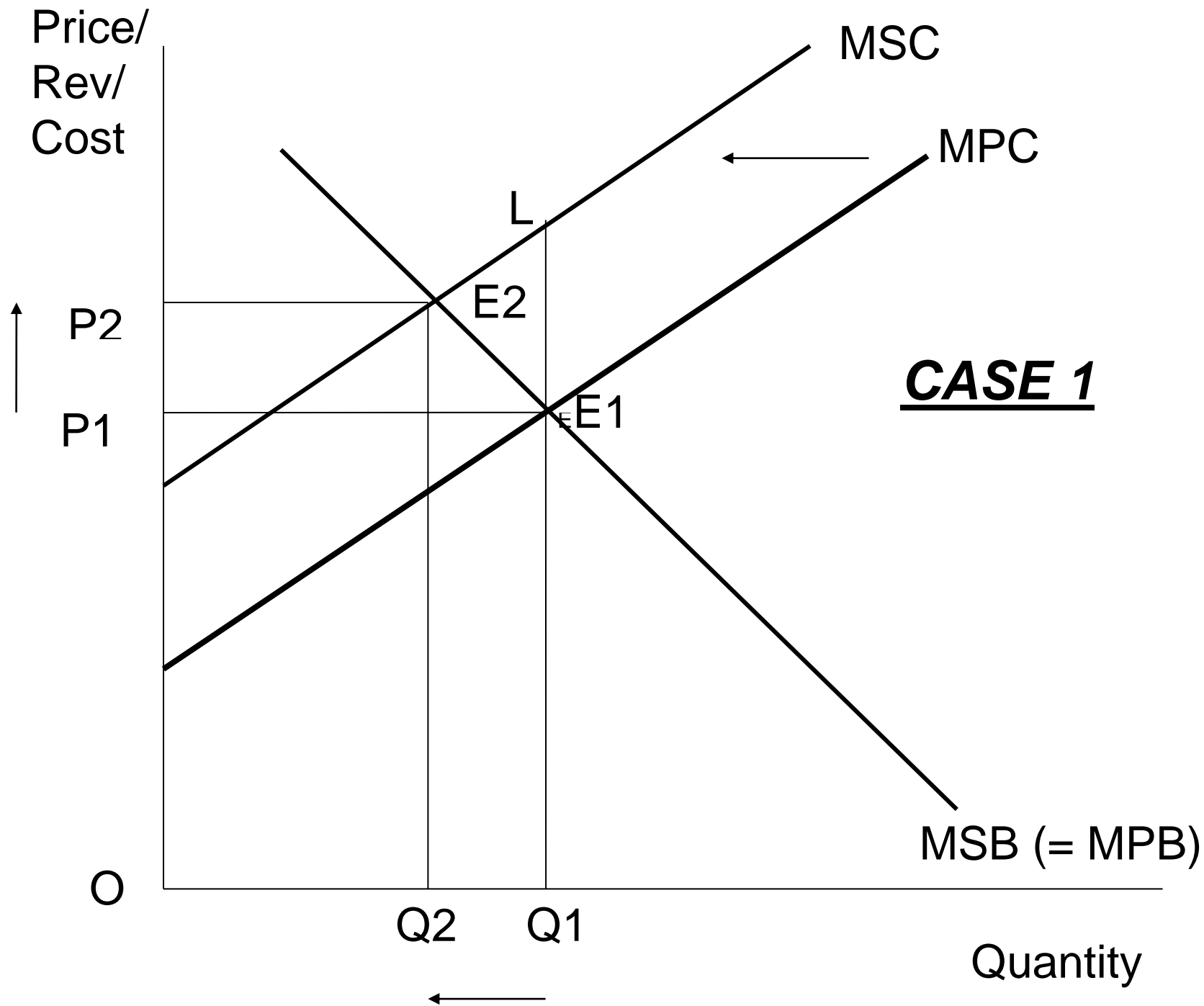
# **“ILLUSTRATING EXTERNALITIES”**

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**and**

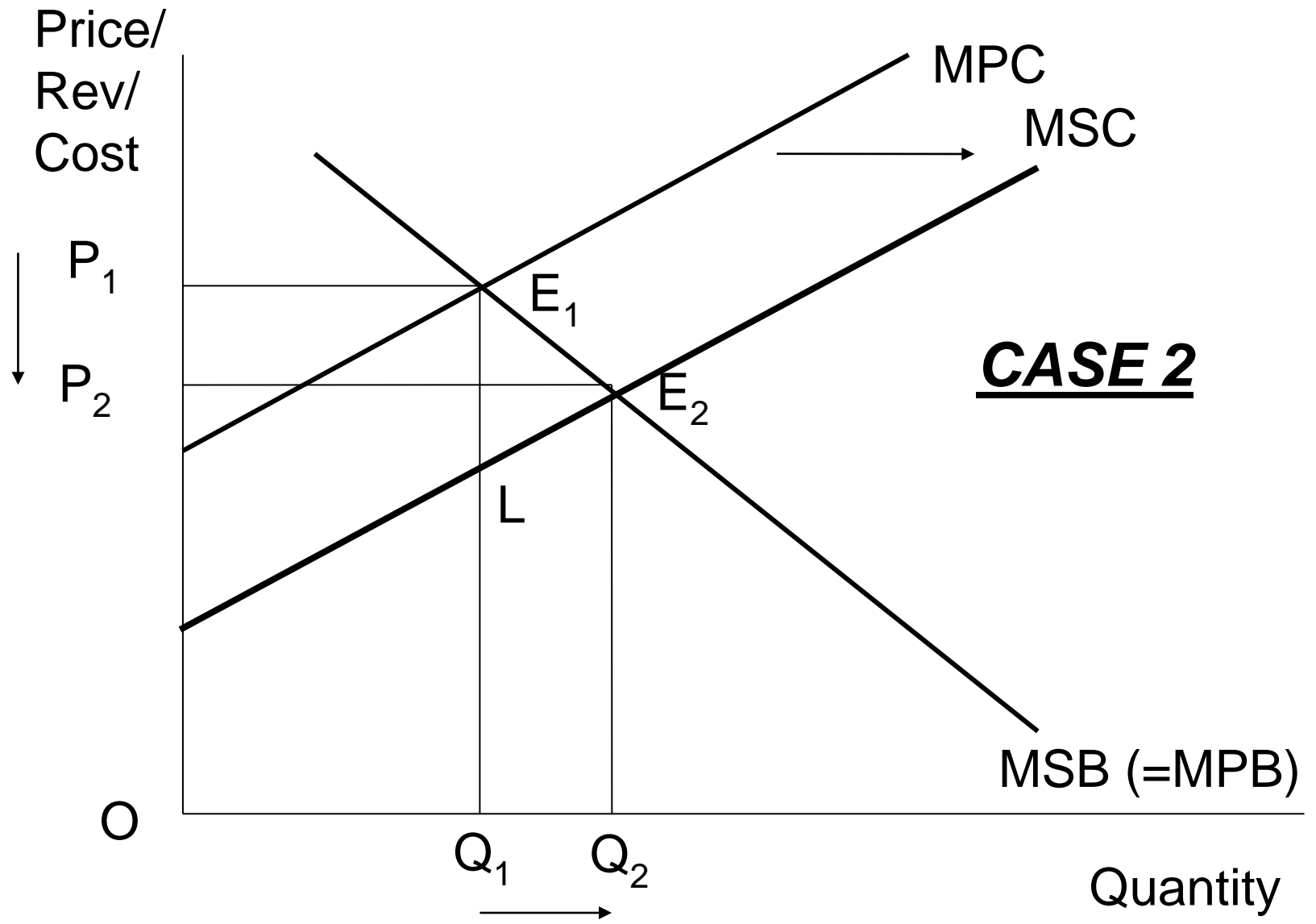
**University of Wales**



# CASE 1

NEGATIVE EXTERNALITIES IN  
PRODUCTION, e.g. PRODUCTION  
OF A DE-MERIT GOOD.

Triangle E1-E2-L = Deadweight Loss  
(Eliminated by shifting MPC to the left,  
giving a Welfare Gain)

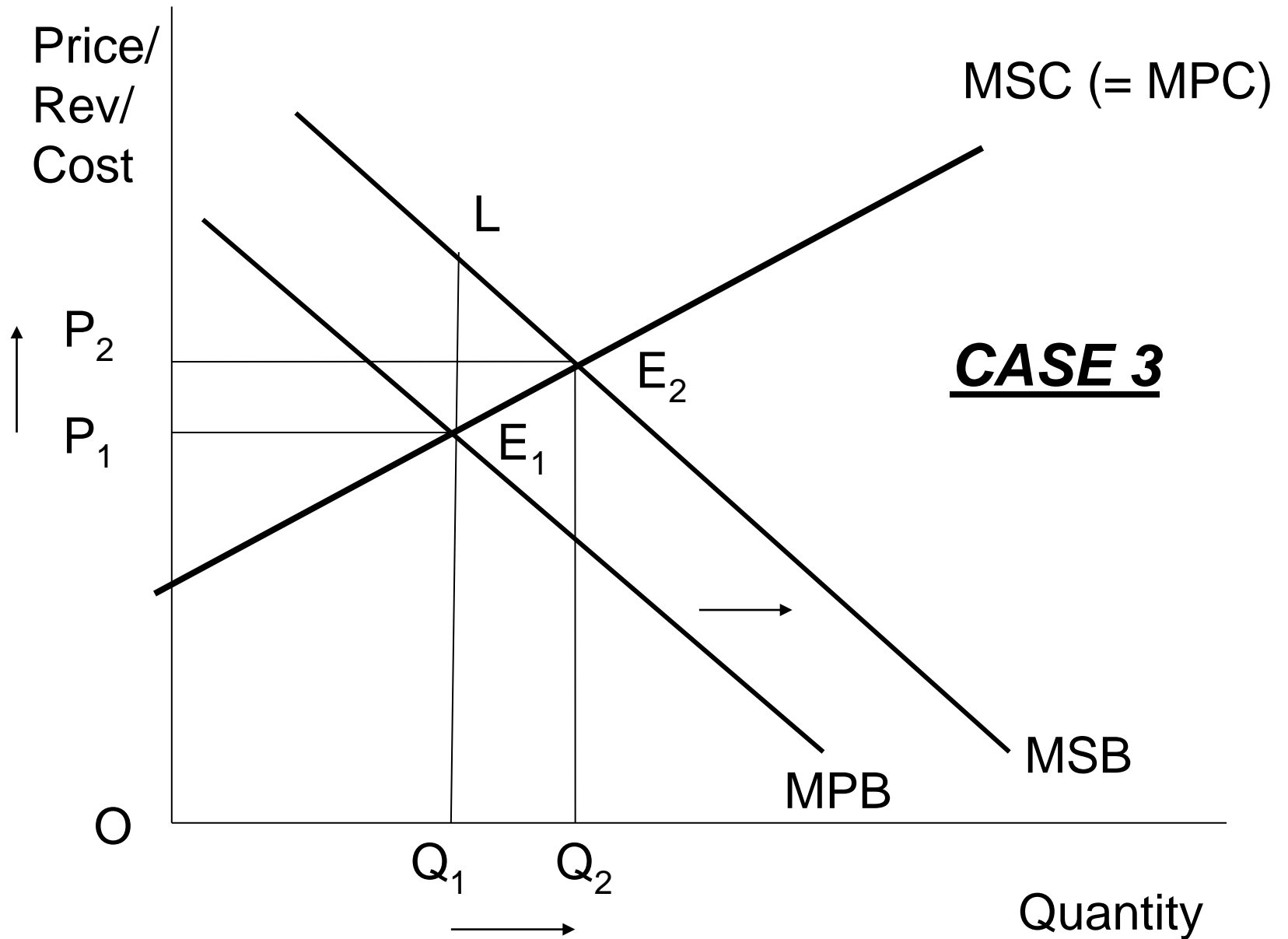


## CASE 2

POSITIVE EXTERNALITIES IN PRODUCTION, e.g. PRODUCTION OF A MERIT GOOD.

Triangle E1-E2-L = Deadweight Loss  
(Eliminated by shifting MPC to the right giving a Welfare Gain)

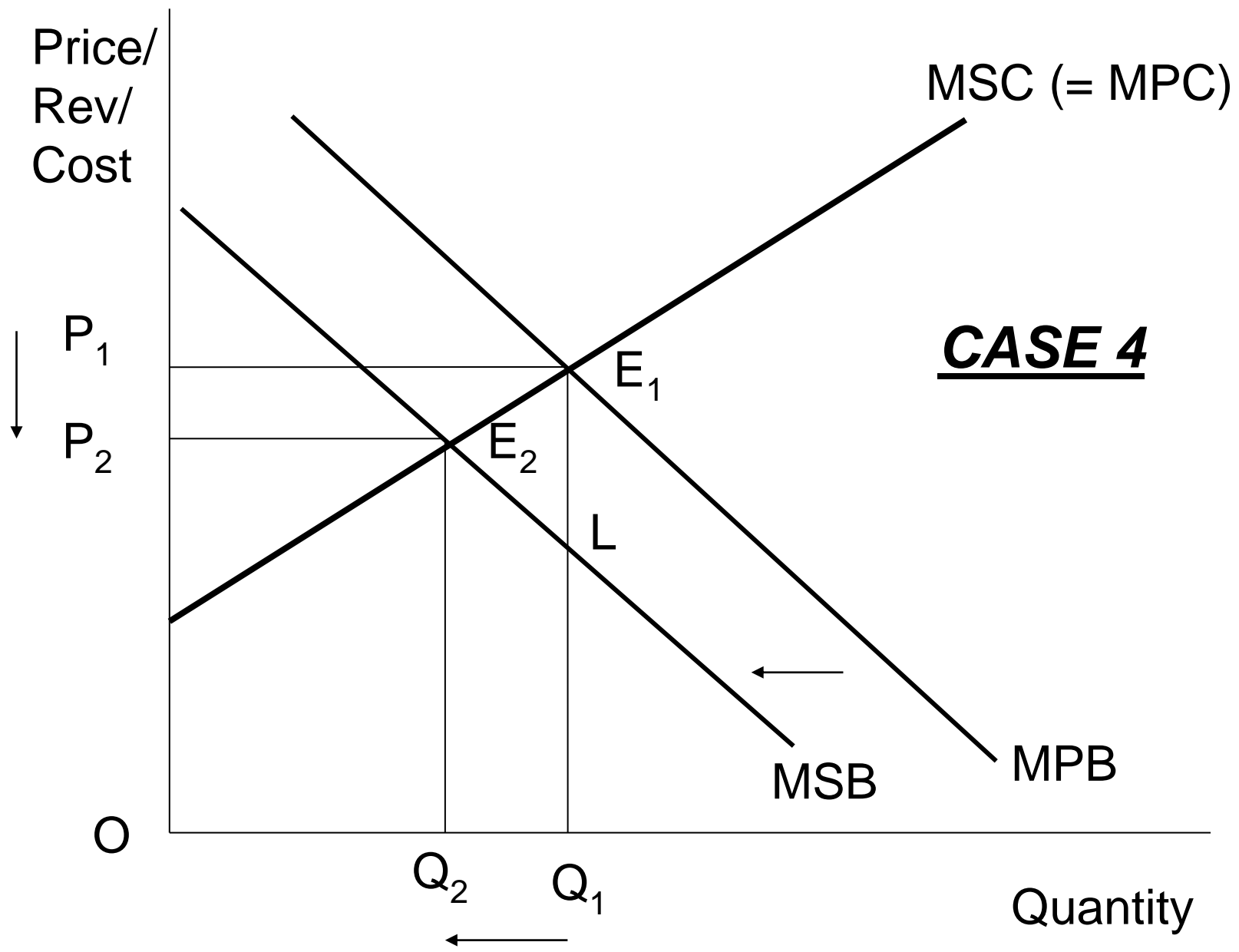
SPILL-OVER BENEFITS CREATED BY PRODUCERS (e.g. warm factory water encouraging fish) SHOWN AS A NEGATIVE COST (MSC of any given quantity is less than MPC)



## CASE 3

POSITIVE EXTERNALITIES IN  
CONSUMPTION, e.g.  
CONSUMPTION OF A MERIT  
GOOD.

Triangle E1-E2-L = Deadweight Loss  
(Eliminated by shifting MPB to the  
right, giving a Welfare Gain)



## CASE 4

NEGATIVE EXTERNALITIES IN  
CONSUMPTION, e.g. CONSUMPTION OF  
A DE-MERIT GOOD.

Triangle E1-E2-L = Deadweight Loss  
(Eliminated by shifting MPB to the left giving  
a Welfare Gain)

SPILL-OVER COSTS IMPOSED BY  
CONSUMERS (e.g. passive smoking)  
SHOWN AS A NEGATIVE BENEFIT (MSB  
of any given quantity is less than MPB)

Cases 2 and 4, in particular, must be fully understood before you can use this scheme in exams.

The thought and discussion needed to understand “negative costs = a benefit” and “negative benefit = a cost” is well worth the time and effort investment

## Advantages of this scheme

1. Just 4 possible cases, and 4 possible diagrams, instead of more than 24 !
2. Hold Supply constant and shift a **Demand** curve (MPB) when a policy affects **Consumers**; hold Demand constant and shift a **Supply** curve when a policy affects **Producers**. THIS MAKES SENSE: ignore alternative diagrams in textbooks, or adapt them to THIS scheme.

3. If a case involves shifts of both supply and demand, use TWO separate diagrams, not one combined diagram. Then use elasticities to assess the likely relative strength of each shift.

4. You could also go on to discuss the “incidence” of taxes or subsidies (but this is an “extension” topic, or even a different topic: don’t focus on this unless it is in the specific exam question.)

5. Your diagrams will make more sense and will follow your policy discussion (e.g. raising prices and reducing quantity to discourage costs, lowering prices and increasing quantity to encourage benefits)

6. Less confusion and clearer thinking for you...

7. + Relief and gratitude from your examiner...

8. = More marks for you!

End