



London Symposium
Spatial Models & Economic Assessment

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Spatial Models & Economic Assessment

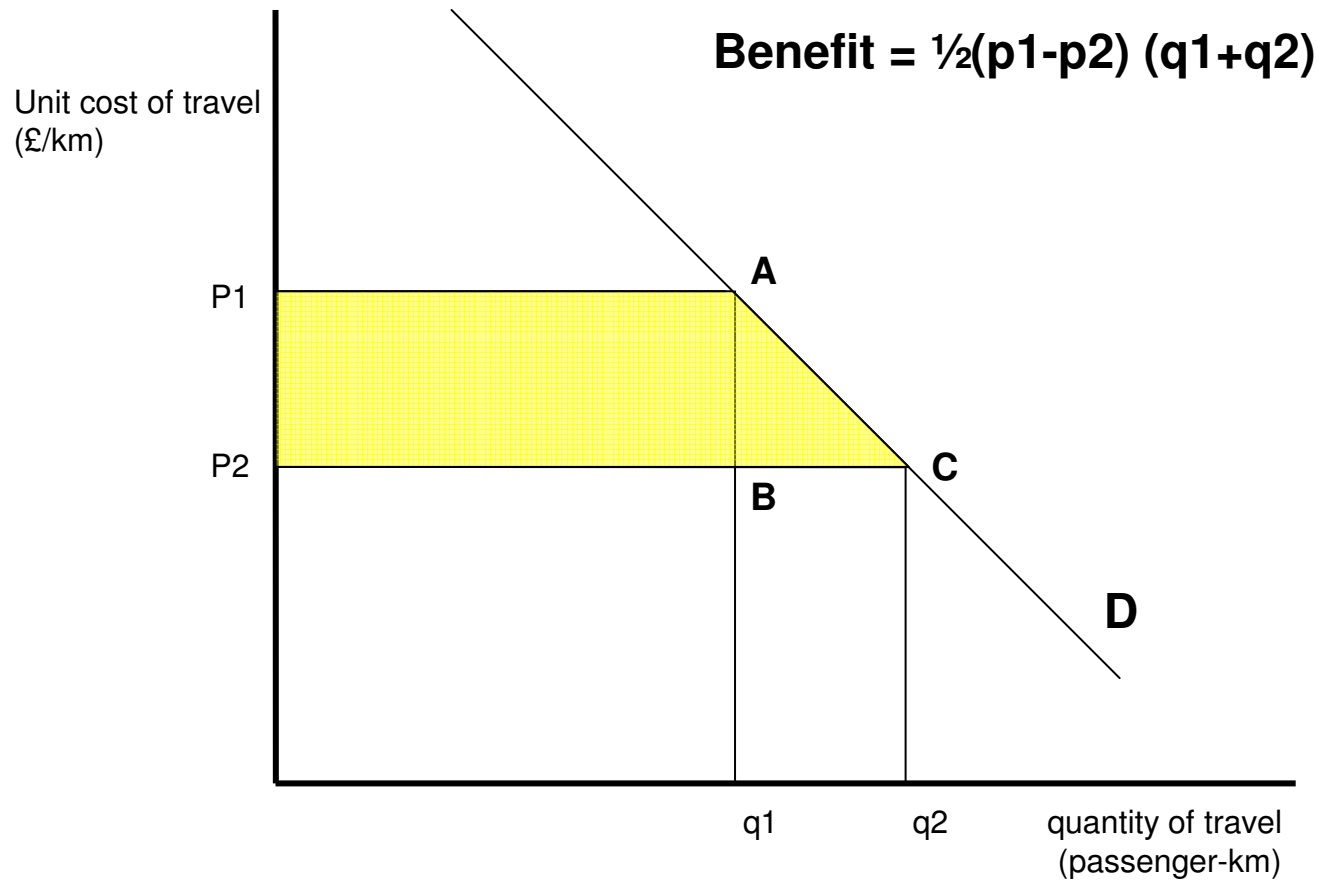
- Introduction to Economic Assessment
- Economic benefits
- Users benefit
- An example: transport improvement and commuting costs
- Distributional aspects
- Conclusions

Spatial Models & Economic Assessment

- Economic Assessment
 - ❑ Capital cost of implementing a project or policy
 - ❑ Annual benefits accrued after implementation
 - User's benefits (user's or consumer's surplus)
 - Operator's benefits (producer's surplus)
 - Government's benefits (changes in taxes & subsidies)
 - Environmental benefits
 - ❑ Social rate of return
- Social Assessment (distribution)
- Environmental assessment

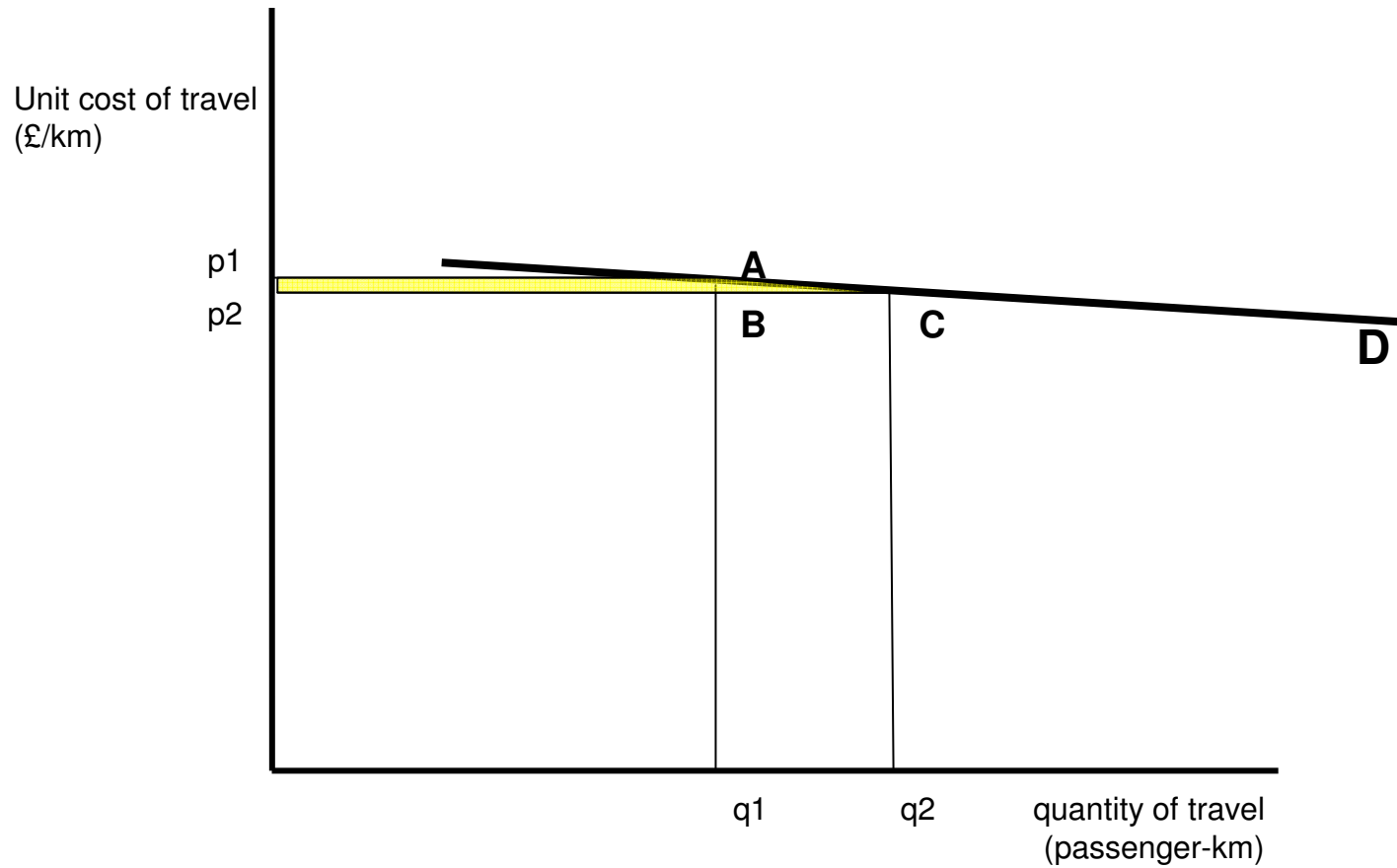
- COMPARISON ALTERNATIVE VS BASE

Conventional Assessment of economic benefits: consumer surplus

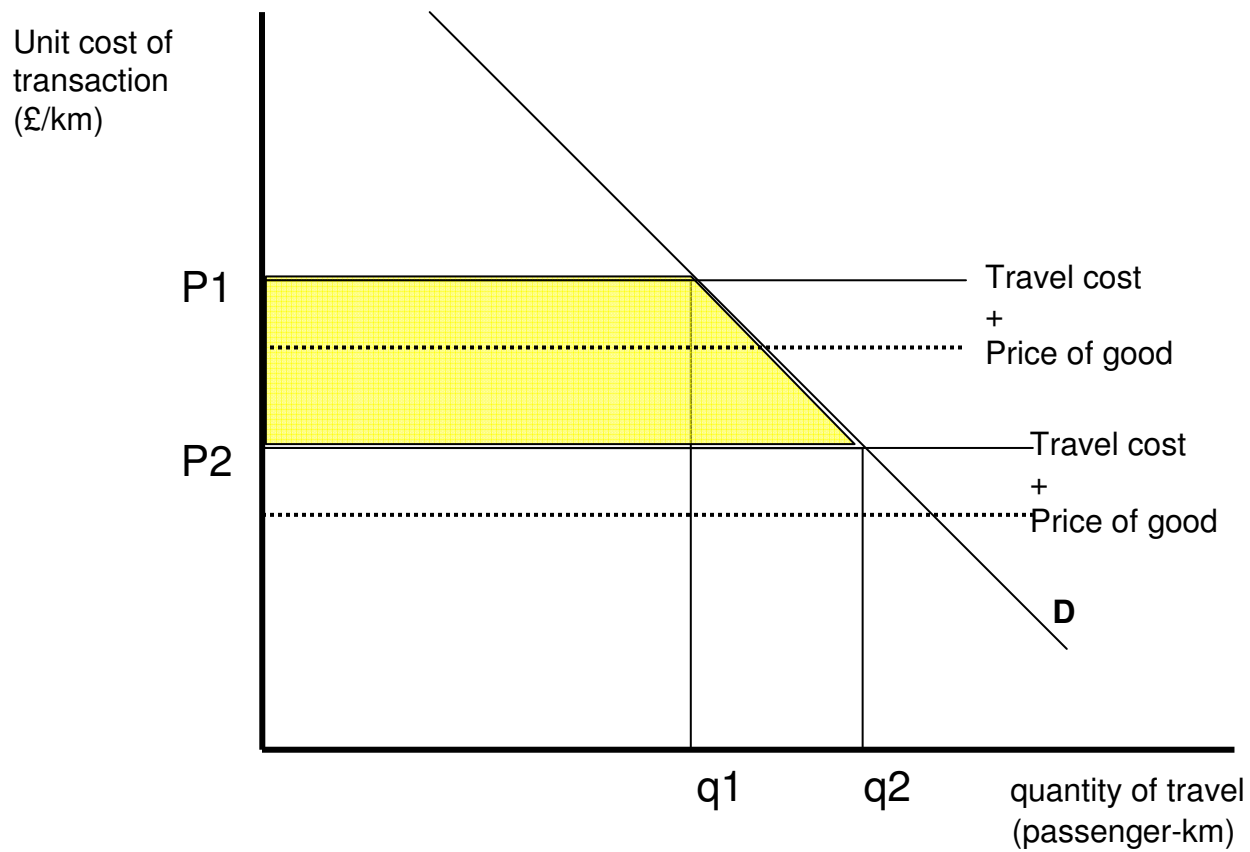


Conventional Assessment of economic benefits: consumer surplus

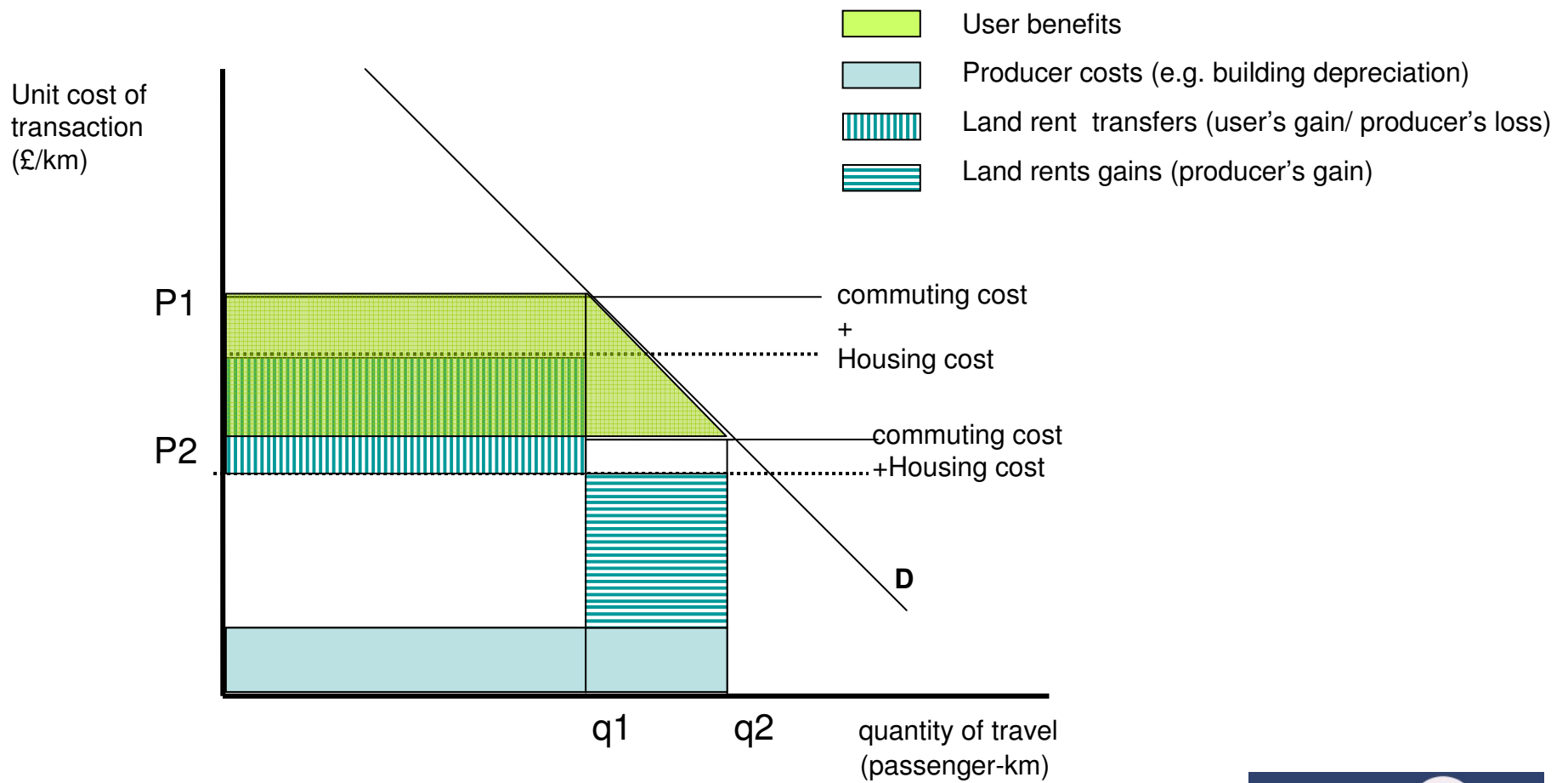
$$\text{Benefit} = \frac{1}{2}(p_1 - p_2)(q_1 + q_2)$$



Improved method of assessment: Transaction cost



Improved method of assessment: Commuting



Conclusions

- In situations where market imperfections exist (cities) transport policies can affect the prices paid for the goods & services obtained at the end of the trip
- Space creates monopolistic situations: transport reduces monopoly. This is specially important in the property market
- Thus comprehensive transport assessment requires forecasting price changes, specially land and labour, after implementation of policies to estimate correctly the wider economic impacts