QUANTIFICATION AND BALANCING: A CONSUMER PERSPECTIVE

PROS AND CONS OF SUSTAINABILITY CONSIDERATIONS

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PASSIVE USE VALUE
1/2

- Sustainability can increase utility with and without consumption

$$U = U\ (x, S) = T[\emptyset\ (x, S), S]$$

x: market good
S: sustainability

- Three potential paths to utility:
  - Some individuals consume X. They leave behind a behavioural trail from which the value of the sustainability improvement can be estimated
  - Others may not consume X but they may value X through its impact on another market good Y
  - Others may value X because of the impact on the planet.

PASSIVE USE VALUE
2/2

- Passive-use values are those portions of total value that cannot be measured using indirect measurement techniques which rely on observed market behaviour.
- Failure to properly consider passive use value can lead to significant errors for two reasons:
  - Failure to fully capture the value of sustainability.
  - Failure to identify the relevant population of valuers.
- The value of sustainability will be very different across individuals as it is influence by many factors, including socialization (Inderst et al., 2021).
- In order to fully incorporate the value of sustainability in the competitive assessment, it is necessary to utilize the total-value concept for all relevant valuers.

IMPLICATIONS

Benefits without behavioural trail	▪ **Metric: Willingness to pay, the most income that would be foregone in order to get the sustainability improvement instead of staying at the initial level with a given income** ▪ **Tool: Contingent valuation/choice modelling techniques**
Collective consumption of individual consumption goods	▪ **Need to identify the relevant valuers**

CONTINGENT VALUATION/CHOICE MODELLING
BENEFITS

- Provides a commensurable measure for balancing
- Provides information required for proper passive use value assessment
- Standard, used often, well studied so potential issues can be identified and addressed
- Meets standard of proof, has been used before the courts and by the authorities
- Allows for differential benefits of green and “dirty” alternatives
- Allows quantifying the importance of collaboration (i.e., WTP may vary with penetration of sustainable good)
- Allows incorporating future benefits (i.e., how individuals today value benefits in the future)
- Can be rolled out to *all relevant valuers* (Krutilla 1967, Weisbrod 1964)
- Need not infer why people value or don’t value (existence, bequest, option)

CONTINGENT VALUATION/CHOICE MODELLING
LIMITATIONS

:

- Difficulty of valuing unfamiliar attributes
- Influence of elicitation methods on responses
- Presence of behavioural effects
- Hypothetical bias
- Difficulty of valuing unfamiliar attributes

CHICKEN FOR TOMORROW

- ACM has analysed the sustainability arrangements of the 'Chicken of Tomorrow' to give businesses an example of what a competition-law assessment of sustainability arrangements entails
- Conducted a choice experiment on an online household panel of over 2,000 households (over 3,000 people), only consumers
- Calculated the avoided emissions of ammonia and particulates and used shadow prices to monetise the environmental impacts

Found that WTP depends significantly on the number of consumers buying meat with the same level of animal welfare

Only partially captured passive use: only consumers, only animal welfare

€ 0.68 per kg of chicken breast for higher level of animal welfare

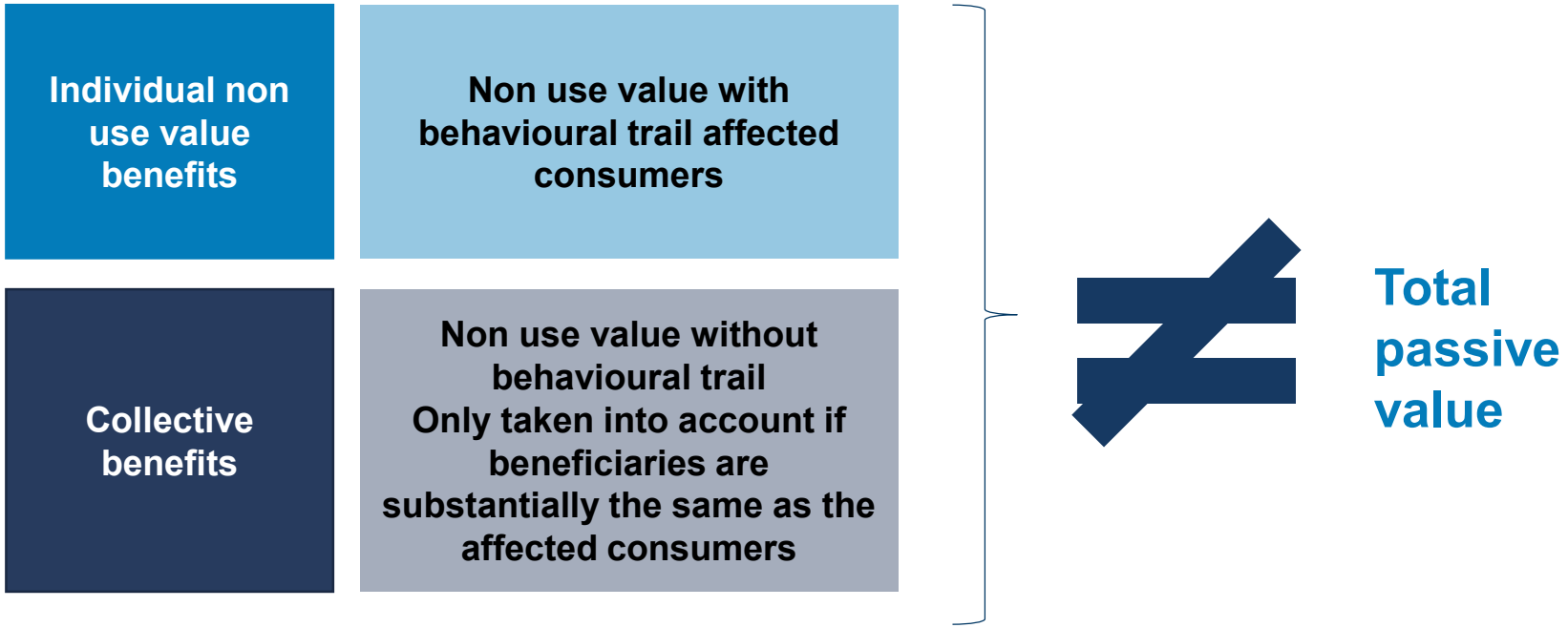
€ 0.14 per kg of chicken breast for reduced emissions of ammonia and particulates

Additional cost of €1.46 per kg of chicken breast

€ -0.64 per kg chicken breast

DRAFT HORIZONTAL GUIDELINES

DIRECT AND INDIRECT CONSUMERS IN THE RELEVANT MARKET



REFERENCES

- Carson, R., N. Flores and R. Mitchell (1999), “The theory and measurement of passive use value”, in I.J. Bateman and K.G. Willis (eds.), *Valuing Environmental Preferences:Theory and Practice of the Contingent Valuation Method*, Oxford: Oxford University Press.
- Inderst, R., F. Rhiel and S. Thomas (2021), “Sustainability Agreements and Social Norms”, Available at SSRN: https://ssrn.com/abstract=3887314 .
- Krutilla, J. (1967), “Conservation Reconsidered”, *The American Economic Review,* Vol. 57 (4), pp. 777- 786.
- Mulder, M. and S. Zomer (2017), “Dutch Consumers’ Willingess to Pay for Broiler Welfare”, *Journal of Applied Animal Welfare Science*, Vol. 20/2, pp. 137-154.
- Weisbrod, B. (1964), “Collective consumption services of individual consumption goods”, *The Quarterly Journal of Economics*, Volume 78 (3), pp. 471-477.

THANK YOU!

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