Cost-benefit analysis

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Cost-benefit analysis

- When assessing the viability of a large project, governments are increasingly likely to commission a cost-benefit analysis (CBA)
- The aim is to provide an impartial, evidence-based judgment of the costs and benefits

Reality

- In theory, putting together a CBA is simple
- But the reality is rather more complex

Consumer surplus

- The simplest and most important concept is a dull economic term: “consumer surplus”
- This is the difference between what you are willing to pay for something and what you end up paying
- Big projects like railways are often not sustainable from a purely commercial perspective

One estimate

- In the case of HS2 (high-speed rail in UK) one estimate puts the expected revenue from fares at £15 billion, but the overall costs at £25.5 billion
- Consider the case of someone who is used to paying £100 to get from Manchester to London. If HS2 is built, they could pay £40
- The commercial benefit of the project is a mere £40; but the CBA will take into account the £60 worth of consumer surplus as well

Big projects

- Big infrastructural projects often make economic sense only when consumer surplus is taken into account

Further economic trickery

- Adjusting for inflation
- Convert the calculated costs and benefits at various times to values at a single point in time, so that they can be compared
  (net present value, or opportunity cost of capital)
- Monetary values on things like environmental quality