



Approaches to economic analysis

This short paper outlines the uses and limitations of different types of economic assessments and what to look out for. Any additions to this paper are welcome.

Economic Impact Analysis/Assessments.

- SG appears to use the term Economic Impact Assessment whereas more generally the term Economic Impact Analysis is used. Sometimes shortened to EconIA or EIA – not to be confused with Environmental Impact Assessments (also shortened to EIA).
- They aim to quantify the net economic impact in terms of Gross Value Added (GVA) and jobs of a proposed intervention for a given region.
- EconIA generally use input/output tables which identify how a change in demand for one product of one industry can impact on other industries and the economy.
- EconIA tend to be narrow in terms of the affected industries they consider. For example, the effect of mining on the jobs and GVA associated with local tourism would not be covered as these industries are not linked through the input/output methodology.
- Multipliers are used to estimate the direct, indirect and induced effects as changes in business and employee spending ripple through a region or economy.
- An appropriate multiplier needs to be used for the industry and geographical area.
- The area chosen for the analysis is critical to the findings. Often jobs and GVA created locally are at the expense of jobs and GVA elsewhere and depending on the geographical coverage of the analysis this net change may or may not be factored in.
- EconIAs do not look at wider social and environmental impacts of developments beyond GVA and jobs
- Generally EconIAs give predictions for various points in the future eg 1 year, 5 years, 20 years.

Cost Benefit Analysis (CBA)

- CBA weighs up the costs and benefits of different options to ensure gains to society are maximised.
- It aims to capture the change in economic welfare to society overall in terms of non-market as well as market values.
- Market values include anything that people or organisations pay for, e.g. timber, fish, boat trips, guided tours.
- Non-market values include things that people value for which there is no market, e.g. air quality, views, biodiversity, friends; and forms of recreation such as walking, cycling and diving.
- In practice, it is difficult to include all the non-market values as they are challenging to quantify reliably and to monetise.
- If non-market values are missing or incomplete, the findings of the analysis will be affected accordingly.
- The findings of a CBA are specified for a given time period, with future years discounted to a present day value.
- Discounting future benefits means that environmental improvements in the future have a low present day value.



Multi-criteria Analysis (MCA)

- MCA enables one to compare different scenarios across a range of criteria.
- If aggregated, MCAs can give an indication of a preferred scenario or option.
- MCA is methodologically less robust than CBA as results depend on criteria chosen and weighting. Any study needs to be transparent regarding how each of these were arrived at.
- Carrying out a MCA is a useful exercise around which to focus discussions.
- It is important to include a range of stakeholders when discussing criteria and weighting.