Economist Handbook

Guide for commissioned economists

Summary of Key Points in this Handbook

- Copenhagen Consensus' mission is to influence spending towards interventions / policies that do more good per $ spent
- Your role is to write an academic paper estimating the costs and benefits of interventions
- An 'intervention' is a concrete action that can be taken by policy makers such as 'scale up TB treatment' or 'build more schools' – it should be **prominent** and / or **effective.**
- Benefit-cost ratio (BCR) is our measure of effectiveness and each paper should include a summary table of BCRs
- To make a good research paper you should use the best and latest evidence to establish the impact of the intervention, note the strength of the body of evidence, accurately model it to the local context and be willing to estimate the BCR for an intervention even if some data is imprecise (which can be included in a sensitivity analysis)
- All papers can be based on analysis of secondary data – no new data collection required – and take maximum 15-20 weeks to produce
- We will work closely with you over the course of the engagement to help choose prominent and/or impactful interventions and provide academic support
- You (and all other commissioned economists) will present your findings at an Eminent Panel Event held in the target country

Our mission is to influence spending towards policies that do more good for the world per $

How Copenhagen Consensus Creates Impact

RESEARCH

Research papers analyze benefits and costs of interventions across numerous topic areas

PRIORITIZATION

Eminent Panel scrutinizes research to create ***Prioritized List of Top Interventions***

OUTREACH

Copenhagen Consensus works with media and policy makers to promote top interventions, ***shifting public opinion and spending towards policies that do more good per dollar spent***

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Your role

You participate here

We get your research out

Your role is to estimate the costs + benefits of interventions / policies in scope of the topic area

EXAMPLES

Previous research briefs

- Estimate the costs and benefits of social protection / poverty programs in Bangladesh
  from [Bangladesh-Priorities project]
- Estimate the costs and benefits of Air Pollution targets in the Post-2015 agenda
  from [Post-2015 Consensus project]
- Estimate the costs and benefits of the best interventions to improve education outcomes, globally
  from [Copenhagen Consensus III project]

Output

- Academic paper estimating all social, environmental and economic costs and benefits of interventions
- Provides an appropriately comprehensive literature review and explanation of context, assumptions and calculations
- Typically uses secondary data and economic modeling
- If appropriate, tests results with government or donor group stakeholders
- Reports benefit-cost ratio (BCR) for each intervention and policy implications

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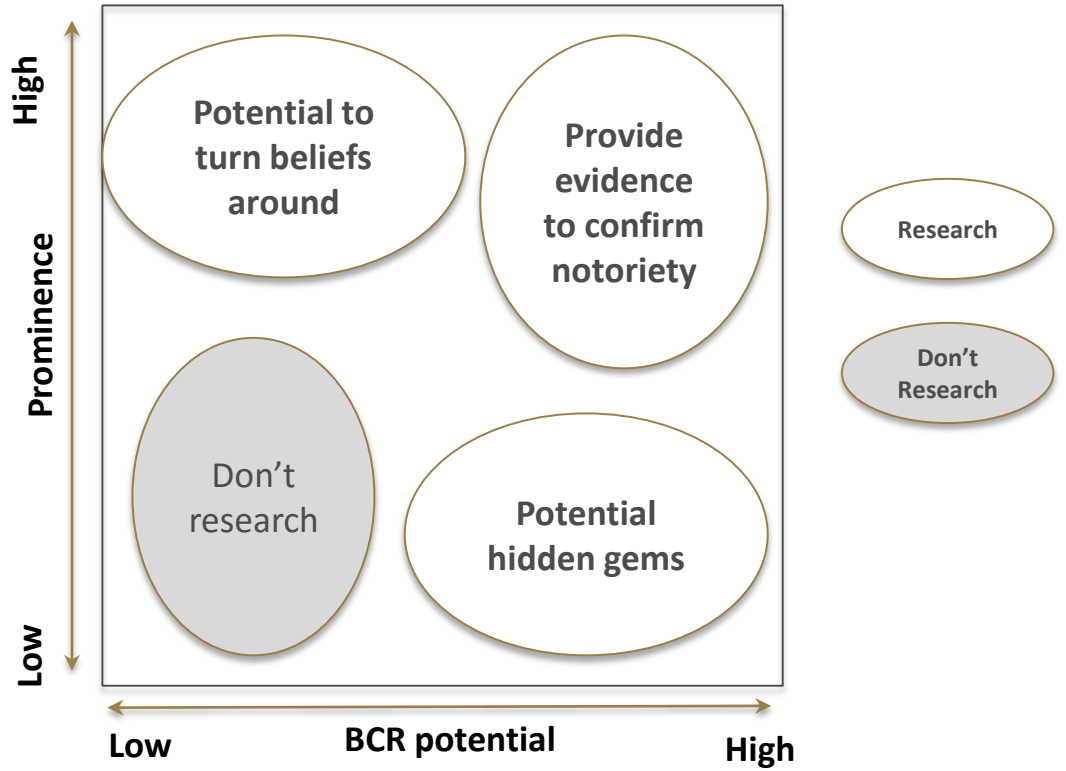
An ‘intervention’ is a concrete action that can be taken by policy makers

Interventions for Research

- An ‘intervention’ is a specific, concrete action that can be taken by policy makers It is not an aspiration without means, e.g. ‘Eliminate poverty’. Examples from previous projects include:
  - **More TB screening and treatment**
  - **Provide micronutrients and deworming for 0-2 year olds**
  - **Allow free movement of vehicles from India through Bangladesh**
- Copenhagen Consensus will suggest / require interventions to be researched depending on the paper topic. These interventions are based on input from hundreds of sector experts, including a Local Advisory Council, as well as CCC’s experience in conducting cost-benefit analysis
- You are also free to suggest interventions for research in consultation with Copenhagen Consensus, based on the framework for choosing interventions (see right)
- It is important to ‘right-size’ interventions such that they are neither too narrow nor too broad – we will help you with this. The economist may review variations of a particular intervention or set of interventions if it reveals useful policy insight.
- The interventions must be relevant to the country

Research highly prominent AND / OR highly effective interventions



Prominence measures how visible or important the intervention is in the eyes of the government, donor groups and public. It is affected by factors such as i) extent of policy discussion around idea ii) plans by government and stakeholders to enact intervention iii) public knowledge of intervention and iv) cultural or national significance
BCR Potential measures the likelihood of the intervention having high benefits relative to costs

Benefit-cost ratio, our measure of effectiveness, should be summarized in a table

BCR Summary Table Template

Intervention	Discount	Benefit	Cost	BCR	Quality of Evidence
Intervention 1	5%				
	12%				
Intervention 2 (if required)	5%				
	12%				
Intervention 3 (if required)	5%				
	12%				
Intervention 4 (if required)	5%				
	12%				

Analysis should be framed in terms of 'interventions' – concrete actions that can be taken by policy makers

Quality of Evidence will be described on a five point scale using DFID's assessment rating.

Ratings
Very Strong
Strong
Medium
Limited
No evidence

See **appendix** for more information as well as DFID's guide: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/291982/HTN-strength-evidence-march2014.pdf

IMPORTANT: Our measure of effectiveness is **benefit-cost ratio**. Please include it. Other measures (NPV, IRR) can be included if you wish, but we will focus on BCR.

Estimates under all discount rate scenarios reported

Absolute values of costs and benefits reported, as well as benefit-cost ratio

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Several approaches have been used to craft papers in the past – all use secondary data

Ways to approach a Copenhagen Consensus paper

Approach	Examples from Previous Projects
1. Draws upon multiple pieces of publicly available evidence, literature and secondary data to model the likely costs and benefits of intervention in the country / situation at hand	**Note: Most CCC papers fall under this approach** • Larsen, B, 2016, Benefits and Costs of Household Cooking Options for Air Pollution Control, research paper for Bangladesh-Priorities (link) • Nugent, R., 2014, Benefits and Costs of the Non-Communicable Disease Targets for the Post-2015 Development Agenda, research paper for Post-2015 Consensus (link)
2. Uses primary data from another research effort (e.g. a previous randomized controlled trial) to conduct a cost-benefit analysis	• Mobarak and Akram., 2016, Seasonal Migration to Increase Incomes of Poor Households in Bangladesh, research paper for Bangladesh-Priorities (link) • Abdallah, 2016, Electronic Public Procurement in Bangladesh, research paper for Bangladesh-Priorities (link)
3. Uses sophisticated modeling (from a previously-created model e.g. IFPRI partial equilibrium IMPACT model or CGE models)	• Rosegrant et al, 2014, Benefits and Costs of the Food Security and Nutrition Targets for the Post-2015 agenda, research paper for Post-2015 Consensus (link) • Anderson, 2012, Trade Barriers Assessment Paper, research paper for Copenhagen Consensus III (link)
4. Purely draws upon literature review and BCR results in other papers to estimate BCR with no economic modeling	• Psacharopoulos G.,, 2014, Benefits and Costs of the Education Targets for the Post-2015 agenda, research paper for Post-2015 Consensus (link)
5. Uses scenario analysis to give a range of BCRs depending on beliefs about magnitude of benefit / cost	• Cobham, A. 2014, Benefits and Costs of the Illicit Financial Flows Targets for the Post-2015 agenda, research paper for the Post-2015 Consensus (link)

All Copenhagen Consensus papers should aim to include several elements

- Clear outline / context of the problem, description of interventions and how they address the problem
- Strong literature review that *builds a case* for the interventions:
  - **demonstrates the robustness and magnitude of link between intervention and benefit, using best and latest evidence**
  - **justifies the parameter estimates used in the economic model, and assesses the quality of evidence**
  - **covers both local and international case studies**
- BCRs that are 'reproducible' based on the prose in the paper
  - **explicit description of the assumptions, parameters, underlying logic and calculations (potentially in appendix)**
  - **based on accurate, well-structured, logically sound economic modeling using latest data**
- Willing to estimate all costs and benefits related to intervention even if information on some benefits or costs is imprecise
  - **In many cases some costs and benefits will be difficult to directly quantify due to say imprecision of data**
  - **CCC (and most policy makers) would much prefer an attempt be made to estimate these costs or benefits, even with less precision, rather than to be left off altogether**
  - **Typically it is possible to include the less precise / more speculative aspects as part of sensitivity analysis to get a sense of the scale of potential omitted benefit or cost**
- If possible, unearthing of new insight / pushing frontier of literature

Other technical aspects for consideration in crafting your papers

- Forward looking analysis
  - **All analysis should be framed as hypothetical new interventions, not previously completed ones. I.e. your analysis is a CBA on a new program, not a previous program (However, data from previous programs, pilots can and should be used to estimate the BCRs).**
- Time horizon for costs and benefits
  - **In considering an intervention the researcher is free to choose how many years the intervention will be implemented for – typically long enough to reap the steady state, long-term benefits (for some interventions this will be 1 year, for others it will be 10 years or longer)**
  - **For measuring the costs and benefits resulting from the actions, the researcher should choose the cutoff which appropriately captures the effects of the intervention over the long term (theoretically to infinity)**
  - **If, for practical reasons, the timing is cut off sooner, it may be appropriate to include a terminal value at the end of the time period**
- All political costs regarding *the decision to implement* should be ignored, while political fall-out *in actual implementation* should be considered
  - **All cost-benefit analyses should take as a starting the hypothetical scenario where the decision is already made to implement the intervention. Costs associated with advocacy, campaigning, etc. to encourage implementation should be ignored.**
  - **If the completed decision may make politicians decide to cheat or skim the process, this simply means a smaller benefit or a larger cost and should be included (along with all other risks, and challenges in implementation)**
- Covers all costs and benefits
  - **Try not to look just at the direct cost and benefits of your intervention. For instance, when looking at climate change adaptation by planting mangroves, the benefit is not just climate protection, but also improved biodiversity and potential higher incomes to fishers. Likewise, an education intervention will not just increase earnings, but also make it less likely for girls to marry young and teach future mothers to feed their children better.**
  - **Outline the potential impact on both costs and benefits across all topic areas (most will likely be zero, a few will be small/negligible, and a few will be potentially large). Then discuss each of the large impact areas, attempting to estimate the impact quantitatively.**
- Assumptions (to be provided)
  - **Copenhagen Consensus will provide assumptions for key parameters: GDP per capita + forecasts, wage rates + forecasts, population etc. – please follow them closely to ensure consistency across papers**

Ideally a paper should take 15-20 weeks to complete

RESEARCH PLAN DELIVERED
Identifies interventions to be considered, costs and benefits to be estimated, logic underlying the estimation and data sources

APPROVAL OF SPREADSHEET
BCRs and associated calculations agreed

FINAL DRAFT OF PAPER DELIVERED
- Should address reviewer comments
- May involve several minor iterations before final sign off

We will work closely across the entire research process providing support / guidance as needed

INTERNAL REVIEW OF SPREADSHEET

INTERNAL + EXTERNAL REVIEW OF 1ST DRAFT + UPDATE DRAFT

INITIAL DISCUSSION
Expression of interest

REEARCH PLAN APPROVED, PAPER COMMISSIONED

EXCEL SPREADSHEET DELIVERED
Must contain the initial estimates of benefits + costs and any information required to understand the spreadsheet

FIRST DRAFT OF PAPER DELIVERED
- Reflects agreed spreadsheet
- Ready for external review

PRESENTATION DELIVERED
- For eminent panel event
- Based on final paper

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NB: We will provide templates for all deliverables (research plan, spreadsheet, report and presentation)

You will also participate in an Eminent Panel Event after all research papers are complete

- After research papers are complete, all commissioned economists will meet to present a case for their interventions to an Eminent Panel of Nobel Laureates + other eminent scholars
- The Eminent Panel will read all papers, hear all presentations, question the author on the details of the work, and rank interventions into a prioritized list
- The event is usually held in the capital city of the relevant country (e.g Dhaka in Bangladesh, Port-au-Prince in Haiti)
- Copenhagen Consensus will cover reasonable costs for your participation over 3-4 days

Top 10 Prioritized Interventions – Bangladesh Priorities Project

Rank	Intervention
1	TB treatment
2	e-procurement across government
3	Nutrition & micronutrients, ½-5 year olds
4	Land records digitization
5	Bus Priority for Dhaka
6	Increase secondary education for girls
7	Iron and folic acid in pregnancy
8	Psycho-social stimulation for stunting
9	Immunize children in urban slums
10	Hypertension medication

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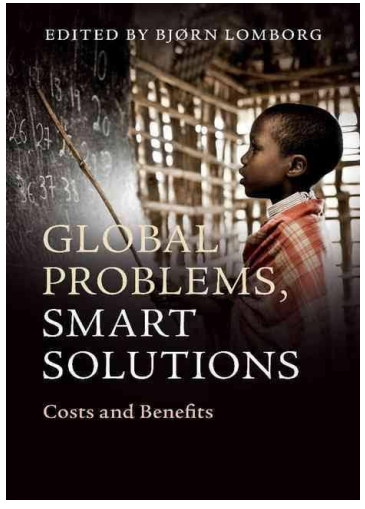
We will communicate your research findings to a wide audience to maximize impact

Examples of Outreach Methods

Overview of Bangladesh Priorities research in *The Economist*

Post-2015 Consensus research featured in 100+ newspapers



Academic book published by Cambridge University

Youth Forums engaging young people from 15 nations for Post-2015 Consensus

Policy papers available online helping philanthropists + governments to make better decisions

Bjorn Lomborg speaking to UN representatives about prioritization

Working with Prime Minister's Office in Bangladesh

Lomborg interview on Freakonomics Radio Podcast: 'Bang for the Buck' Edition

Bangladesh Priorities research featured in the largest Bangla and English language newspapers in the country

Benefits of working with us: impact policy, influence public opinion and widen professional networks

By working with us, Copenhagen Consensus will provide you an honorarium and an opportunity to:

- Have a real impact on policy
  - **CCC has pioneered the application of benefit cost ratios as an invaluable tool in policy making - your work will contribute to helping policy makers make smart policy decisions by facing the the tough choices with the most relevant and up to date evidence and analyses available**
  - **there may be additional opportunities for you to work more closely with policy makers/influencers, should you be interested and the research findings support this**
  - **Copenhagen Consensus has demonstrated 10+ years of being able to influence billions of dollars in spending towards highly effective interventions**
  - **We have been named a Top 20 advocacy think-tank by the University of Pennsylvania's Go-to-think-tank rankings**
- Profile your research in media worldwide
  - **Copenhagen Consensus research is regularly featured in global elite media such as The Economist, The New York Times, The Wall St Journal, The Guardian (UK) and others**
  - **Our research appears in local / national media on a daily basis – e.g. research from our Post-2015 Consensus project was featured in 1000s of articles in media across the world**
- Collaborate with top economists
  - **You will have the opportunity to be part of a group of expert economists across a range of different fields and sectors**
  - **We consistently work with top economists from around the world and in the target countries**
- Publish your research in an academic publication
  - **The research from all our projects has been published by academic publishing houses such as Cambridge University Press**
- Present to an Eminent Panel
  - **Consisting of Nobel Laureate Economists and leading national scholars**

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Appendix

Health benefits are measured as DALYs avoided; DALY = Value of Statistical Life Year (VSLY)

- There are several methods to calculate health benefits – for consistency it is important that all economic researchers follow the method outlined below
- Broadly, the equation for health benefits can be summarized as:

*Health Benefit = DALYS * VSLY * discount factor*

- For a given intervention, first estimate the DALYs avoided with reference to e.g. the Global Burden of Disease, and identify the years in which those DALYs are avoided
- For lives saved:
  - **Discount the DALYs avoided and multiply by the VSLY in the year *when the life is saved* (this may be different to the year when the intervention is implemented)**
- For illness avoided:
  - **Step 1: In every year in which illness is avoided, multiply the disability weight by the VSLY relevant to that year**
  - **Step 2: Discount the stream of benefits from Step 1 to estimate the present value of illness avoided**
- Copenhagen Consensus will provide the VSLY for every year as well as examples of how to calculate health benefits in the excel spreadsheet template

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All papers should assess Quality of Evidence using DFID's scale across four metrics…

- Four metrics are used to assess quality of evidence:
  1. **The (technical) quality of the studies constituting the body of evidence (or the degree to which risk of bias has been addressed)**
  2. **The size of the body of evidence (large, medium or small – there is no 'magic' number for these thresholds; the economist should make clear the size of literature)**
  3. **The context in which the evidence is set (global or local)**
  4. **The consistency of the findings produced by studies constituting the body of evidence (do findings generally point in the same direction, or is there conflicting evidence?)**
- We strongly suggest all authors consult the DFID guidebook (particularly Part III: Summarising the main characteristics of the body of evidence)
  - **https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/291982/HTN-strength-evidence-march2014.pdf**

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… and assess the body of evidence for the country into one of five categories

Table adapted from DFID guidebook

Categories of Evidence	Quality + Size + Consistency + Context	Typical features of body of evidence	What it means for proposed intervention
Very Strong	High quality body of evidence, large in size, consistent and contextually relevant.	Research questions aimed at isolating cause and effect (i.e. what is happening) are answered using high quality experimental and quasi-experimental research designs, sufficient in number to have resulted in production of a systematic review or meta-analysis. Research questions aimed at exploring meaning (i.e. why and how something is happening) are considered through an array of structured qualitative observational research methods directly addressing contextual issues.	We are very confident that the intervention does or does not have the effect anticipated. The body of evidence is very diverse and highly credible, with the findings convincing and stable.
Strong	High quality body of evidence, large or medium in size, highly or moderately consistent and contextually relevant.	Research questions aimed at isolating cause and effect (i.e. what is happening) are answered using **high quality quasi-experimental research designs and/or quantitative observational studies**. They are sufficient in number to have resulted in the production of a systematic review or meta-analysis. Research questions aimed at exploring meaning (i.e. why and how something is happening) are considered through **an array of structured qualitative observational research methods** directly addressing contextual issues.	We are confident that the intervention does or does not have the effect anticipated. The body of evidence is diverse and credible, with the findings convincing and stable.
Medium	Moderate quality studies, medium size evidence body, moderate level of consistency. Studies may or may not be contextually relevant.	Research questions aimed at isolating cause and effect (i.e. what is happening) are answered using **moderate to high-quality quantitative observational designs**. Research questions aimed at exploring meaning (i.e. why and how something is happening) are considered through a **restricted range of qualitative observational research methods** addressing contextual issues.	We believe that the intervention may or may not have the effect anticipated. The body of evidence displays some significant shortcomings. There are reasons to think that contextual differences may unpredictably and substantially affect intervention outcomes
Limited	Moderate-to-low quality studies, medium size evidence body, low levels of consistency. Studies may or may not be contextually relevant.	Research questions aimed at isolating cause and effect (i.e. what is happening) are answered using **moderate to low-quality quantitative observational studies**. Research questions aimed at exploring meaning (i.e. why and how something is happening) are considered through a **narrow range of qualitative observational research methods** addressing contextual issues.	We believe that the intervention may or may not have the effect anticipated. The body of evidence displays very significant shortcomings. There are multiple reasons to think that contextual differences may substantially affect intervention outcomes.
No evidence	No / few studies exist	Neither cause and effect, nor meaning is seriously interrogated. Any available studies are of low quality, and are contextually irrelevant.	There is no plausible evidence that the intervention does/does not have the effect indicated.

Definitions of frequently used terms in Copenhagen Consensus projects

Topic Areas - An initial division of research areas to create subjects to explore for research. This division is based upon previous experience, the biggest problem areas, and the structure used to address them.

Sector Expert Roundtable - A gathering of experts sourced from a diverse set of stakeholders to brainstorm the biggest problems in a Topic Area and potential interventions with the intent of capturing known interventions of known problems, identifying the interventions that are unknown for known problems and perhaps identify some previously unknown problems

Research Paper - The final document that includes the narrative and calculations for the cost-benefit analysis conducted on a specific intervention or set of interventions.

Review Paper – A concise review of the Research Paper that identifies any potential gaps in the research and gives recommendations to correct and refine the information presented.

Policy Maker – A person responsible to make decisions on the usage of resources by a development organization, NGO or government.

Viewpoint Paper – A method to source information outside of academic research to add further understanding and depth and follow-on policy implications.

Perspective Paper – catch all for papers that do not fit into any of the above categories yet potentially add value to the project such as papers from the members of the Advisory Council.

Advisory Council – a group of 4 to 5 economists/scholars that are experts and thought leaders in the local context that provide support throughout the course of the project.

Reference Group – a group of the top decision makers responsible for allocating resources for development in the local context – government, donor groups and foundations.

Eminent Panel – A group of 4-5 renowned economists/scholars, including some Nobel Laureates, sourced internationally and locally that will prioritize the research results.

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