

# GUIDELINES ON RESEARCH TRANSPARENCY AND ETHICS IN GIF-RELATED IMPACT EVALUATION

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## Introduction

Research advances GIF's goals via three channels:

- Research associated with investment into an innovation informs decisions on whether, or how, to scale up and replicate the innovation.
- Impact measurements feed into GIF's system for reporting achieved impact and forecasting long-term prospective impact.
- Research findings and data contribute general learning on development issues, which is part of GIF's mandate.

To maximise these benefits, GIF supports research that reflects the core principles of credibility, transparency, accessibility and ethical conduct. This note provides guidelines on how to do so.

This policy should be read in conjunction with GIF's Global Access and Intellectual Property Policy (IP Policy), which sets out GIF's approach to ownership, use and licensing of Project IP (intellectual property created as a result of GIF's funding) and its related Background IP (intellectual property that is needed to maximise use of the Project IP). The treatment here of human subjects research and confidentiality of personally identifiable information should be read in conjunction with GIF's ESG policy.

## Scope

These guidelines focus on formal impact evaluation, which features in many GIF projects. This includes experimental, clinical, and nonexperimental studies. It pertains to studies that are intended to result in peer-reviewed journal publications and are either:

- contractually described as an output or objective of GIF support (*directly sponsored research*)

or

- funded by other parties but are integrally associated with a GIF-supported investment, and are critical to the achievement of GIF's objectives for that investment. (*associated research*)

**GIF cannot impose requirements on associated research, but consistency of that research with the guidelines would be an important factor in deciding whether GIF's support for the investment can achieve its objectives.**

An addendum describes how the core principles of apply to other types of evaluations or research.

## Guiding principles

Research transparency is an ethical value in itself. It is also an essential foundation for supporting and enhancing the usefulness of publicly-funded, GIF sponsored research. The ways in which transparency (and associated values including reproducibility and ethical conduct) does this have been articulated at length in some of the resources in the Annex. (See in particular IPA, JPAL, 3ie and DIME.) These resources also provide links to detailed toolkits on the nuts and bolts of transparency and more generally to good practice in research design and implementation.

The avenues through which transparency supports good research may be summarized as follows.

### *Credibility*

To achieve the goals stated in the introduction, research results must be credible. Credibility is supported by the principles outlined below.

### *Transparency*

Research transparency increases the impact of GIF-funded research by exposing it to a broader audience. Crucially, for both ethical and practical reasons, the research must be made available to research subjects and to stakeholders affected by GIF's investments. GIF's research will often have implications beyond the project to which it is attached and offers the potential for additional insights on the research question. Transparency supports credibility by exposing the details of analysis to public scrutiny, providing a check against errors or misrepresentation, and allowing independent assessments of rigor.

### *Accessibility*

Transparency has limited value unless the work is easily and freely accessible. This means that reports and data should be accessible at no charge via the internet in a timely fashion. Data should be documented, machine-readable, indexed and findable via search engines.

### *Reproducibility*

The ability of other researchers to reproduce a complex analysis provides a quality assurance check against data, coding or computational errors.

### *Avoidance of bias*

There is a well-documented tendency for null results to be less likely to be published than those that can support a hypothesis of impact. There are also concerns that, when research looks at multiple outcomes with multiple possible measures, researchers will focus on a subset of results that supports their prior beliefs. These biases do not imply deliberate misrepresentation by researchers. However, such biases undercut GIF's goal of trying to understand whether supported innovations actually achieve impact.

### *Ethical conduct*

Experimentation, and use of confidential information about individuals, must be conducted ethically.

### *Minimisation of the reporting burden*

GIF understands that fostering transparency and accessibility can involve additional time and effort. GIF seeks to balance the costs and benefits of documentation requirements. In general, larger research efforts with more consequential implications will require greater documentation and preparation. Research activities that plan for transparency from the start will incur lower costs – and possibly realize increased efficiency overall – compared to those that assemble documentation after completion of an analysis. Because the benefits and burdens will differ between cases, this note sets out minimum requirements together with general guidelines to inform GIF’s grant and investment documents.

Reasonable costs associated with complying with these standards can be built into research budgets. GIF investment team members should work with investees and associated researchers to set clear expectations early-on about what is required and budget appropriately. Team members will also ensure that these guidelines budgetary requirements are included in GIF contracts where required.

## **Practices**

GIF may choose to modify these guidelines for specific cases when justified. The guidelines will evolve as GIF gains experience and the research community continues to improve its practices.

## **Registration**

Registration of studies helps to avoid publication bias—the tendency for published studies to reflect an unrepresentative sample of significant results. Also, by creating public, searchable databases with basic information on all ongoing and completed studies, secondary researchers can get a more comprehensive picture of the research landscape. This facilitates meta-analysis and literature reviews and increases the likelihood that a given study will be referenced, regardless of the result.

The minimum standard is registration consistent with American Economic Association guidelines. The guideline for GIF-supported studies is pre-registration, before the start of an experiment’s intervention. Registration can be on the American Economic Association registry (for RCTs) [<https://www.socialscienceregistry.org>] or the Registry for International Development Impact Evaluations (RIDIE), (which includes both experimental and nonexperimental studies). [<https://ridie.3ieimpact.org>]. Both allow for some fields to be kept private during the study period. On a case-by-case basis, other registries (for instance, Evidence in Governance and Politics) may be used to reach the right audience. Clinical trials should follow standards associated with leading journals in the appropriate field.

Registration information should be updated with completion date and information on data and code repository and publications when this information is available.

## **Pre-analysis plans**

### *Background*

Pre-analysis plans allow researchers to pre-commit to the analysis that they will conduct before seeing the final data. This provides several benefits, the most often cited of which is by enhancing the credibility of the research findings by avoiding actual or perceived specification

searching or data mining. It also enables researchers, investees, and policymakers to identify and resolve disagreement beforehand (for example, choosing which among multiple indicators is the most relevant measure of a particular outcome).

However, pre-analysis plans have disadvantages. They are time-consuming to construct. Journals may reject the idea of 'pre-analysis with *ex post* flexibility' and reject papers that deviate from pre-analysis plans. This could discourage valuable exploratory data analysis and pursuit of insights from unexpected findings.

GIF has a specific interest in pre-specification of outcomes. For many investments involving an impact evaluation, the results of that evaluation are a critical element of the scaling thesis: the prospects of scale up are deemed to hinge on a robust demonstration of some threshold impact. In this case, as part of its Practical Impact approach, GIF estimates the probability that the study succeeds in demonstrating that level of impact.

### *GIF guidelines*

Balancing these pros and cons, GIF's minimum expectation for non-clinical research is consistent with the information required by the AEA registry (<https://www.socialscienceregistry.org/site/instructions>). The researchers should describe at least:

- at least one primary outcome, including how it is constructed
- definition of the treatment or intervention
- main control variables (e.g. stratification variables)

For GIF-sponsored research, this information should be pre-registered.

Where successful demonstration of impact is a critical part of the scaling thesis, GIF should work with researchers and implementers to define the research outcome that would be considered to be a 'successful' outcome. This should be initially incorporated in the investment memo and can be updated before analysis begins. If possible, this specification should be made public, to contribute to transparency of Practical Impact forecasts and to allow placement on the Social Science Prediction Platform [<https://socialscienceprediction.org>]. It need not constitute a formal pre-analysis plan.

GIF encourages researchers to do more complete pre-analysis plans where this could contribute to the research planning or credibility.

### **Publication of research results**

GIF-sponsored research is intended to inform decisions about an innovation's scale-up and to underpin GIF's impact projections. Timely reporting of research results is essential for these purposes.

Consequently, an essential deliverable of GIF-sponsored research is a report of key decision-relevant results that can be made public in time to inform decisions. This can be satisfied (at

minimum) by an ‘insight note’ that concisely describes the research context, purpose and methodology, presents essential descriptive statistics and discusses the key results of interest.

However, the goal of transparency is satisfied only when the full complement of research results, methodology and data are published and are accessible regardless of ability to pay.

GIF requires that all papers produced from GIF-funded research:

- a) Be published initially, in an open-access, search-engine indexed working paper version or in a preprint archive. On a case-by-case basis, GIF may exempt papers that are aimed for publication in certain journals that disallow submissions that have had prior preprint or working paper versions. The guideline is for publication within 18 months after the end of data collection or acquisition, though a tighter deadline may be contractually agreed.
- b) Be submitted for publication in a peer-reviewed journal. If accepted, the paper should be published under a licence which allows free access to all. In accordance with the IP Policy, the preferred licence is an open access licence agreed with GIF, which may be the [Creative Commons Attribution 4.0 Generic License \(CC BY 4.0\)](#). The paper should be immediately accessible to all (without embargo) upon publication.

There may be rare exceptions to open access in the case of proprietary and commercially sensitive or politically sensitive studies.

## Publication of data

### *Content*

At a minimum, GIF applies the data availability policy of the American Economic Association (AEA), (<https://www.aeaweb.org/journals/data/data-code-policy>) which currently (Sep 2020) requires

“For econometric, simulation, and experimental papers, the replication materials shall include (a) the data set(s), (b) description sufficient to access all data at their original source location, (c) the programs used to create any final and analysis data sets from raw data, (d) programs used to run the final models, and (e) description sufficient to allow all programs to be run.

For papers collecting original data through surveys or experiments, the replication materials shall also include (f) survey instruments or experiment instructions, (g) computer code for experiment or survey collection mechanisms, and (h) original instructions and details on subject selection. See the supplementary [Policy on Experimental and Survey Papers](#).”

GIF follows also the AEA standard on data and code formats, metadata, and data availability statement. The data should be made available even if the complete analysis is not finished or published.

For GIF-sponsored research the expectation is that *all* collected data directly relevant to the impact evaluation should be made available (subject to the anonymisation, proprietary, bid-data and confidentiality exceptions discussed below). Coverage would include all variables, observations, and treatment conditions collected by survey instrument or sensors, together with documented code that describes how raw data was filtered and transformed into variable used for analysis. In the case of voluminous instrumented data (e.g. remote or ground

sensors), some degree of pre-processing of raw data may be acceptable, with documentation on methods. Where public datasets have been used, the data source and code used to access the data should be fully documented. Internal operational data would be excluded unless central to the analysis.

#### *Proprietary, confidential and 'big' data*

Exceptions are made to the disclosure rule in the case of confidential, proprietary, commercially sensitive data, or 'big' data.

GIF recognises that some data elements may be covered by third-party agreements, including with governments, commercial data suppliers, or the respondents themselves. GIF encourages its investees to obtain licences to make this data available for non-commercial reanalysis/replication purposes, where it is an essential component of the impact evaluation.

In the case of proprietary, sensitive, 'big' or confidential information, GIF follows JPAL guidelines<sup>1</sup> as follows. Researchers should:

- Explain and justify the restrictions to the data materials;
- To the extent possible, provide access to the exempted data through a restricted access repository, subject to appropriate usage and access rights;
- Comply with all aspects of this policy for which the constraints do not apply; and
- Agree to provide detailed information on how, where, and under what conditions an independent researcher can access the data

GIF's investment policy emphasises willingness to share lessons as a criterion for project selection. Inability of a proposed evaluation to provide access to essential third-party data (for non-commercial reanalysis/replication) would make the proposal less attractive.

#### *De-identification of personally identifiable information*

Personally identifiable information should be removed from working datasets and any publicly disclosed datasets. For publicly disclosed datasets, de-identification should consider the possibility of re-identification via combinations of variables, including from other datasets. Documentation should record the way data was de-identified and any impact that this may have on the ability to replicate subsequent analyses.

#### *Data repository*

Data and accompanying documentation and code should be published in a machine-readable format on a publicly accessible, free-to-use, indexed, secure data warehouse site. To ensure data is secure, accessible and easily discoverable, GIF requires primary publication on a reputable repository acceptable to GIF such as the Interuniversity Consortium for Political and Social Research (ICPSR) (<https://www.icpsr.umich.edu/>) or Dataverse (<https://dataverse.org>). Published papers should provide a DOI (digital object identifier) reference to the storage location.

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<sup>1</sup> <https://drive.google.com/file/d/0B97AuBEZpZ9zZE5ncHEzTWZnNjg/view?resourcekey=0-1Tds5k7m3XXuNCy2WV3CWw>

Data should be published under a licence which allows users, at a minimum, to replicate the original analysis and to perform new analyses for non-commercial purposes. As set out in the IP Policy and these guidelines, this may be the [Creative Commons Attribution 4.0 Generic License](#) (CC BY 4.0).

The repository should enable immediate public access to the data upon publication of the associated research paper, but not more than 36 months after data collection or assembly is complete. GIF may extend this deadline at its discretion.

#### *Documentation*

Data should include appropriate documentation and metadata.

### **Ethical considerations**

#### *Protecting the rights of human subjects*

All research with which GIF is associated should protect the rights of human subjects. For any study involving experimentation or use of personally identifiable information, ethics approval should be obtained from an Institutional Review Board (IRB). Ideally, there should be a review by the researchers' institution's IRB and one by an IRB in the study location (if that is different). If necessary, an independent IRB can be engaged or an ad hoc one convened.

#### *Encryption*

All confidential information, and especially personally identifiable information, should be suitably encrypted.

#### *Ethics statement*

Asediu and others (2021)<sup>2</sup> point out that IRBs consider only a subset of the ethical issues that can arise in a research study. They propose that a structured ethics statement accompany a report on an experimental study. GIF endorses the practice of including a discussion of ethical issues that arose in the course of a study, with the structured format of Asediu and others as one model.

### **User involvement**

As a good practice guideline, GIF subscribes to the principle articulated by the Adaptation Research Alliance:

Research is transdisciplinary, collaborative (South-South and North-South) and co-produced from the outset with multiple stakeholders and users (local and international partners, grass-roots organisations, decision makers, and the private sector in addition to researchers).

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<sup>2</sup> Edward Asiedu, Dean Karlan, Monica Lambon-Quayefio, Christopher Udry. A call for structured ethics appendices in social science papers. *Proceedings of the National Academy of Sciences* Jul 2021, 118 (29) e2024570118; DOI:10.1073/pnas.2024570118

## Evaluation independence

There is no general rule on whether GIF, or the investee, should be responsible for funding and approving an evaluation of the investee's innovation. In many cases GIF will want to promote an investee's capacity to evaluate its own work. This can help build a learning culture, promote feedback and incorporate operational and local insights into assessment. In these cases, GIF will build the evaluation into the investee's funding and assign contracting and management of the evaluation to the investee. This approach will rely on the other tools described in this note to protect the credibility of results.

When evaluations are aimed at informing key economic or policy decisions by external stakeholders, avoiding perceptions of potential evaluation bias may be paramount. In these cases, it may be advisable for GIF to directly contract for the evaluation.

## Guidelines for research other than impact evaluations

GIF sponsors other research that assesses the performance of an investment or contributes to general knowledge about development. GIF will distinguish between purely internal studies (for instance, to guide implementation) and those intended for informal external dissemination. Ethical principles apply to all, including protection of confidential and personally identifiable data. The general principles of transparency and accessibility apply to disclosed data, but the burden of reporting should be commensurate with the scale of effort.

Here are two illustrative examples.

### *Impact or cost-effectiveness analysis from a pilot project for dissemination*

Pilot projects may include low-budget (<\$50K) efforts to assess take-up, impact, or cost-effectiveness of an innovation, often via non-random sampling. Minimum appropriate documentation for this analysis might, for instance, include a description of the data collection procedure, definitions of principal variables, and descriptive statistics on treatment and comparison groups. Permanent archiving is not required.

### *Qualitative research and evaluation intended for publication*

Reports of this kind should include at a minimum appropriate methodological documentation, including for instance, how interviewees were selected, interview guidelines, and coding protocols. For instance, it could explain how focus groups or respondents were chosen and how interviews were conducted.

## APPENDIX: ONLINE RESOURCES FOR RESEARCH TRANSPARENCY

### General resources on research transparency

- **Berkeley Initiative for Transparency in the Social Sciences (BITSS)** – Includes best practices for research transparency, pre-analysis plan templates, and free statistical and methodological consulting for reproducible research.  
<https://www.bitss.org>
- **International Household Survey Network (IHSN)** – Provides guidance and best practices on data archiving and dissemination particularly for household surveys.

Guidance includes the documentation, anonymisation, cataloguing, dissemination and preservation of household data.

<http://www.ihsn.org/guidelines>

- **iDSI reference case** - Provides “a systematic way in which to conduct and report on economic evaluations.” <https://www.idsihealth.org/resource-items/idsi-reference-case-for-economic-evaluation/>
- **IPA Research Transparency** – Provides guidance and services for research transparency. <https://www.poverty-action.org/researchers/research-resources/research-transparency>
- **J-PAL Transparency & Reproducibility** – Provides guidance and services for research transparency <https://www.povertyactionlab.org/page/research-transparency-and-reproducibility>
- **3ie Transparency, Reproducibility and Ethics Policy** <https://3ieimpact.org/sites/default/files/2021-09/3ie-transparency-reproducibility-ethics-policy.pdf>
- **World Bank DIME wiki.** – Detailed guidelines and tools for conducting transparent, reproducible research. <https://dimewiki.worldbank.org>

## Registries

- American Economic Association RCT Registry - <https://www.socialscienceregistry.org>
- 3iE Registry of International Development Impact Evaluations (RIDIE) - <https://ridie.3ieimpact.org>

## Data Warehouses and Catalogs

- DataVerse - <https://dataverse.harvard.edu>
- Inter-university Consortium for Political and Social Research (ICPSR) - <https://www.icpsr.umich.edu/web/pages/>
- World Bank Microdata Library: Contains datasets that have been produced by the World Bank, and other international organisations. <http://microdata.worldbank.org/index.php/about>
- IHSN <http://catalog.ihsn.org/index.php/catalog>