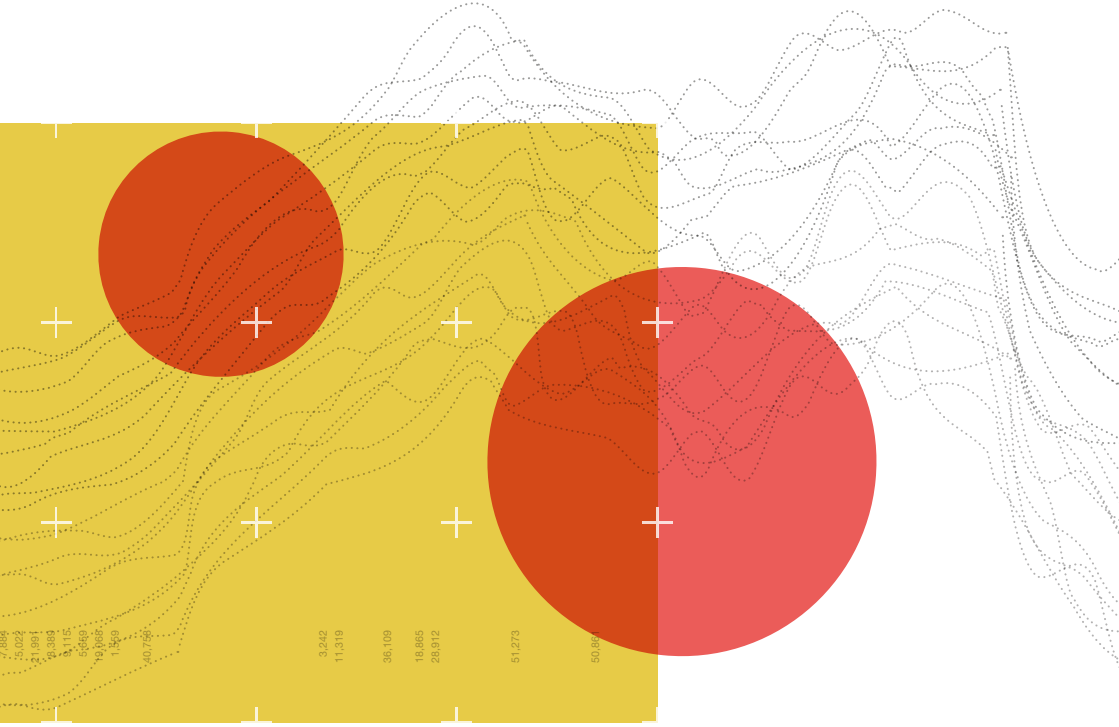
# Guidelines to using evidence from research to support policymaking



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## Foreword

To stimulate an exchange of views and best practices, the chief economists of the intellectual property (IP) offices sponsoring this guide have held regular meetings since 2010. Some of the discussions have focused on the kinds of approaches the different offices have taken to promote high quality research work. This short guide summarizes these practices, hoping to ensure their wide adoption by researchers conducting studies. It is also meant to guide those who use the evidence generated by studies on IP in support of policymaking. IP offices that have not been part of these discussions so far are invited to join the development of future editions of this guide.

## Introduction

The provision of evidence to support policymaking has become a cornerstone of the work of many intellectual property (IP) offices worldwide. This guide provides an overview of best practices that can ensure the highest possible quality of evidence is used in the decision-making process at IP offices and in government generally.

Policy choices involve wide-ranging trade-offs and affect diverse stakeholders in different ways. Societies are best served when decision-makers carefully consider all possible consequences of these choices and evaluate their quantitative importance.

The spread of information and communication technologies has enabled the collection of new and more granular data. Increased computing power has, in turn, enabled richer statistical analyses. The result is that opportunities for generating sound evidence in support of policymaking are greater than ever.

This guide elaborates on the best practices in conducting empirical studies in the IP field. In so doing, it seeks to improve the credibility of studies, enhance transparency about what conclusions can and cannot be drawn from such studies, and encourage responsible use of studies by IP stakeholders. The discussion is divided as follows: clarity, data collection, data analysis, validating results and drawing conclusions.

## Clarity

Documents should be written in clear language, with a summary and conclusions written, without over-use of technical language. Assumptions made in the study should be stated explicitly, along with an explanation of why they are being made. This makes it both clearer what is being done and why, and allows others to test the impact of different assumptions.

language

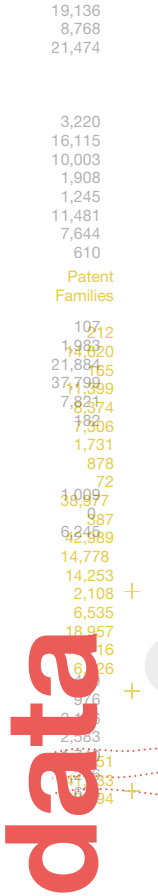
## Data collection

The credibility of research to support evidence-based policymaking depends crucially on the relevance, representativeness, reliability and comparability of the underlying data. IP offices collect data in their role as administrators and regulators, and in developing evidence non-IP data is often integrated with IP data. The following best practices are appropriate when collecting data:

1. **Publish underlying datasets**: whenever possible publish the data along with the research work or make them available on request. Even when underlying data are already publicly available, publishing them in a 'single package' may help others to replicate results and engage in follow-on research.

2. **Transparent data sources**: reveal the sources of all the data used in research work, along with clear explanations on how relevant, reliable and representative each variable is. Summary statistics are part of this.

3. **Exercise care in processing and combining data**: methods for cleaning and matching data need to be explicit so that others can evaluate their robustness, replicate the results and build on the research. Carefully rationalize and document how data points are transformed and/or normalized to enable meaningful comparisons.



## Data analysis

Available data cannot always directly speak to the socioeconomic phenomena of interest. Modeling and statistical techniques can address some of these difficulties though they may come with limitations that affect the strength of the results. The following best practices are appropriate when analyzing data:

1. **Be transparent about all assumptions**: state all assumptions underlying an investigation and explain the implications.

2. **Causation**: when designing research methodologies be clear about whether you can draw causal conclusions.

3. **Exercise care in using proxy indicators**: where proxy indicators are the only data available, present evidence on the reliability of the proxy data.

4. **Analyze robustness of empirical findings**: carefully document this analysis in the study write-up. Empirical findings are often sensitive to key modelling assumptions, estimation samples and choice of variables.

analysis

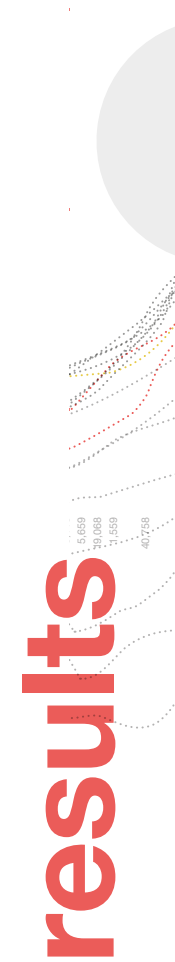
## Validating results

In addition to the practices mentioned above, validating the results derived from the research plays an important role in promoting the quality and credibility of a study. The following best practices have emerged as particularly important:

1. **Engage in peer review**: studies benefit from external review by experts familiar with the research topic at hand. For example, studies could undergo a peer review, performed anonymously and preferably by at least two experts. Wherever possible, public peer review events with a range of interested stakeholders should be held to expose the research in advance of publication.

2. **Address all comments**: each reviewer's comments should be given due consideration. Where there is founded disagreement on research conclusions, this should be presented in the study to ensure transparency.

3. **Transparency**: sound research evidence can come from a variety of institutions. However, as some institutions may have a direct stake in the policies that studies seek to inform, it should be made clear who has conducted the research, who has funded it and who was consulted. In addition, the methodological design and tools – e.g. survey questionnaire or data strategy – should be published to allow for potential replication and academic interrogation.



## Drawing conclusions and review

You should consider whether your research addresses what you need it to, in a robust analytical way. The following final points to consider therefore are:

1. **Do a sanity check**: are the results sensible in view of other knowledge?

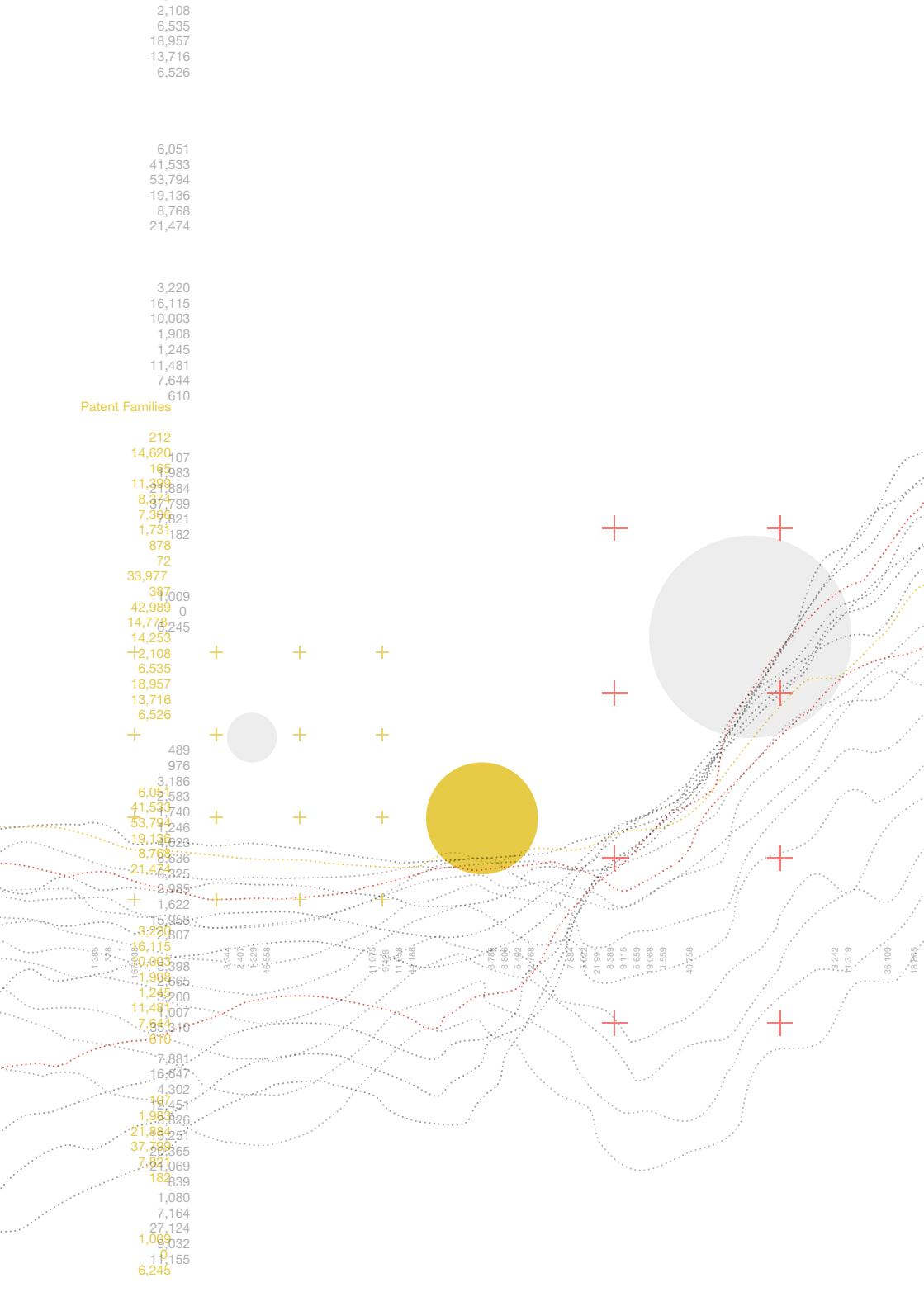
2. **Credibility**: when presenting conclusions, do they properly reflect the weight or credibility of the evidence being presented? Are they appropriate for the target audience?

3. **Correlation does not equal causation**: be mindful of using purely statistical outputs to assume there is a relationship in your data and make sure your messaging is clear.

4. **Has the research answered the initial questions?** Does the research address the original problem which was posed?

5. **Lessons learned**: remember to have a post-research review to ensure that future projects can benefit from any best practice gained.

review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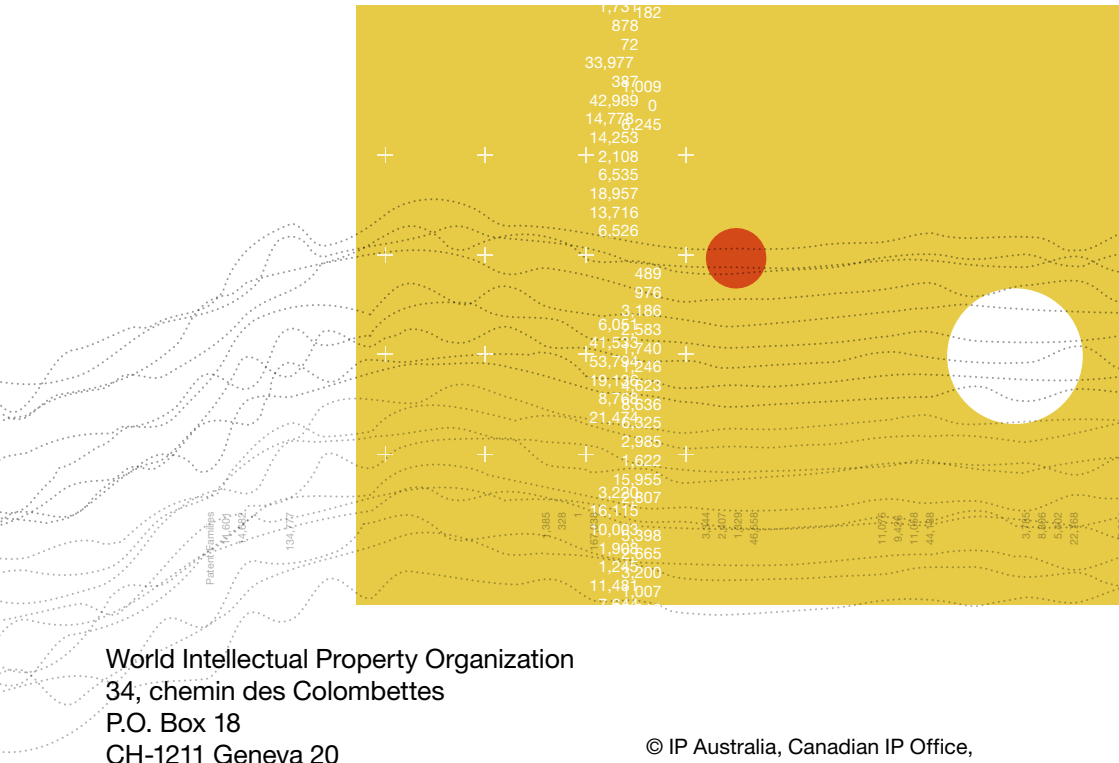

World Intellectual Property Organization
34, chemin des Colombettes
P.O. Box 18
CH-1211 Geneva 20
Switzerland

Tel: +41 22 338 91 11
Fax: +41 22 733 54 28

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