



# Aspectos Metodológicos

## How fruitful is the case study research?<sup>1</sup>

Melina Ocampo González<sup>2</sup>, Sebastián Arboleda Cardona<sup>3</sup>

### ● Abstract

This paper analyses the case study research methodology to answer the question about how fruitful is this method and whether or not it is worthy to be applied in social sciences. The case study method has been questioned and criticised along the history by some methodologists; others have defended it. The authors concluded that the case study method is generally criticized because it is arguably misunderstood. They recommend to researchers to follow a framework or pre-specified procedures to avoid false hypotheses and generalize from relative and ambiguous conclusions.

**Key words:** Case study, multi-case study, research methods, methodology.

<sup>1</sup> This article derives as a result of the project “Colombia y los flujos mixtos de migrantes: diagnóstico, necesidades y soluciones duraderas”. This research is financed by the development fund research of Corporación Universitaria Lasallista.

<sup>2</sup> Melina Ocampo Gonzalez has an MA in Migration Studies from the University of Sussex and is a full-time professor of international law at Corporación Universitaria Lasallista.

<sup>3</sup> Sebastian Arboleda Cardona is a specialist in commercial law from Universidad del Rosario and is a full-time professor of business law and intellectual property at Corporación Universitaria Lasallista. Sebastian Arboleda is currently studying a Master’s Degree in Intellectual Property and New Technology Law from the Universidad Internacional de la Rioja.

Address correspondence to Melina Ocampo González. E-mail: meocampo@lasallistadocentes.edu.co

Address correspondence to Sebastian Arboleda Cardona. E-mail: searboleda@lasallistadocentes.edu.co



## ¿Qué tan provechosa es la metodología de estudio de caso?

### ● Resumen

Este artículo analiza la metodología de estudio de caso para responder a la pregunta acerca de qué tan provecho es y para analizar la validez de su aplicación en las investigaciones sociales. Este método ha sido cuestionado y criticado a lo largo de la historia por parte de algunos metodólogos; otros la han defendido. Los autores concluyeron que el método de estudio de caso es generalmente criticado porque es mal interpretado. Recomendamos a los investigadores seguir un procedimiento marco o guía para evitar hipótesis falsas y generalizar a partir de conclusiones relativas y ambiguas.

**Palabras clave:** Estudio de caso, estudio de caso múltiple, métodos de investigación, metodología.

## Que tão frutífera é a investigação de estudo de caso?

### ● Resumo

Neste trabalho se analisa a metodologia da investigação estudo de caso para responder à pergunta sobre de quão frutífera é este método e se é ou não digna de ser aplicada nas ciências sociais . O método de estudo de caso há sido questionado e criticado ao longo da história por parte de alguns metodólogos ; outros hão defendido . Os autores concluíram que o método de estudo de caso é geralmente criticado porque se entende mal, se poderia dizer . Recomendamos aos investigadores a seguir um procedimento marco ou pré - especificada para evitar hipóteses falsas e generalizar a partir das conclusões relativas e ambíguas.

**Palavras Chave:** Estudos de caso, estudo de vários casos, os métodos de investigação, metodologia.

## ● Introducción

The case study is but one of numerous ways of doing social research, it has specific advantages and disadvantages and it depends upon the researcher whether or not to take the risks of using it and managing the limitations of this research method. Cases Studies have been openly used in psychology, sociology, social work, education, political science, anthropology, business and marketing, public administration, accounting and evaluation (Robert K. Yin 1992, p.131 & 2009, pp.4 – 5).

Nevertheless, the case study has been strongly criticised by some methodologists (Achen & Snidal 1989, pp.143 – 144) (Maoz 2002, pp.164 – 165) (Campbell & Stanley 1973, pp.6 – 7). They claim there are problematic factors that question the validity of social sciences research carried out under this methodology. This method is viewed with great caution, as it is sometimes understood as an informal, undisciplined, unrepresentative and weak study of a simple and non-generalizable case, with often ambiguous results, lack of rigour, and subjective and relative conclusions (R. K. Yin 1981, p.97) (Gerring 2007, p.6 - 43).

Others defend this research method and emphasise its strengths (Flyvbjerg 2006) (Simons 2009, pp.23 – 24), sometimes arguing that the case study is a “*remarkably hard*” (Robert K. Yin 2009, p.21) method and that it offers an in-depth analysis, richness, completeness and wholeness explanation of the research’s outcomes (Gerring 2007, p.49).

Along these lines, this paper will discuss the paradox surrounding cases studies, contrasting the arguments for and against and finally trying to answer the question about how fruitful is the case study research and whether or not it is worthy to be applied. In this way, before discussing its strengths and limitations, a definition of this research method will be briefly described for clarifying its possible

meanings and variants; hopefully, giving the lector a clear idea of what the case study method is.

## What is a Case Study?

Many definitions about the case study research have been drafted, and it has been continually confused (Robert K. Yin 2009, p.17) with the ethnographic method and the participant-observation data collection technique. This is because the case study method usually implies a qualitative analysis of a real-life phenomenon in-depth (Simons 2009, p.23), as these other methods and techniques do, but the difference is that the case study implies as well the analysis of the context or the environment of the real-life singularity under study.

It has been understood in the following way: “*Case connotes a spatially delimited phenomenon (a unit) observed at a single point in time or over some period of time. It comprises the type of phenomenon that an inference attempts to explain*” (Gerring 2007, p.19).

In accordance, it relies on different kinds of sources of information, data collection and analysis strategies, which can be qualitative or quantitative techniques for gathering evidence (Gerring 2007, p.33). But it cannot be confused with the gathering data techniques that it implies, even if the technique is an independent method or a method approach by itself. This characteristic represents the flexibility of this research method.

According to Robert K. Yin (2009), the study case has at least four different applications: to “*explain*” causal links in real-life complex events, that surveys and experimental strategies cannot explain; to “*describe*” a situation and the context in which it occurred; to “*illustrate*” or describe again the specificities of an evaluation; and lastly, to “*enlighten*” the evaluation set of outcomes, when they are unclear (Robert K. Yin 2009, pp.19 – 20).



That means that its nature is primary descriptive of a phenomenon and its surroundings and also that it can be used to do evaluations. Robert Yin recommends using this method when the research questions are “how” and “why”, considering it more for explaining a phenomenon, when experiments and histories cannot explain its context or the contemporary events (Robert K. Yin 2009, pp.10 – 18).

Additionally, case studies may incorporate multiple case studies, even though, the focus on a single case is not unusual (Gerring 2007, pp.21 – 22). It is a matter of whether it is important or not to focus in a single case in depth or if it is more representative to do a larger sample, which is probably the more superficial analysis.

Single-case analysis is usually used for testing a well-formulated theory, when it has specified a set of propositions that are believed to be true and that the case study can confirm, challenge, or extend (Robert K. Yin 2009, p.47). Also, it can be used to represent a unique case or a revelatory case, where the researcher has access to a situation previously inaccessible; or the opposite, a typical case where the objective would be to capture an everyday situation. Finally, it is of value to analyse the same situation at two or more different points in time, to examine how certain conditions change over time (Robert K. Yin 2009, pp.47 – 49) (Flyvbjerg 2006, pp.231 – 232).

Finally, the case study method has an important variant that is the cross-case or multi-case study, which offers the possibility of analysing more than one unit of analysis; a larger sample, probably for gathering a more representative evidence, but essentially with a more superficial analysis. The samples or cases can be spatially or/and temporally different (Gerring 2007, pp.17 – 36) (Robert K. Yin 2009, pp.50 – 60). The distinction between a single case and a cross-case study is a matter of degree.

## The Paradox

The case study research has been stereotyped as an unserious way of doing research, valid only during the first stages of the research (Flyvbjerg 2006, p.229). It has been said that if it is used it can lead to “unconfirmable” conclusions (R. K. Yin 1981, p.97), because it is impossible to generalise from a single case. Its validity, reliability and theory are at issue. Nonetheless, this is a very popular method within the social sciences that seems to be appearing more and more frequently.

According to Bent Flyvbjerg, there are 5 misunderstandings about case-study research:

(a) Theoretical knowledge is more valuable than practical knowledge; (b) one cannot generalize from a single case, therefore, the single-case study cannot contribute to scientific development; (c) the case study is most useful for generating hypotheses, whereas other methods are more suitable for hypotheses testing and theory building; (d) the case study contains a bias toward verification; and (e) it is often difficult to summarize specific case studies (Flyvbjerg 2006, p.219).

Apparently, the authorities in the subject; John Gerring and Robert K. Yin agree on the seriousness of the case study research and its strengths, but also, agree on some of its disadvantages. They recognize other methods as more appropriate for different kinds of social research enquiries. Particularly, they would not defend the method against every single criticism, making distance from Flyvbjerg work (2006). Otherwise, they helpfully analysed the strengths of the case study research and built a framework of systematic procedures for people interested in using it, as a safeguard for evading the risks that accompany this method.

The points in common between them are that the case study facilitates causal analysis and its “quasi-experimental” nature; which is ideal because it

often provides a close proximity to the case that is observed over time, giving a rich understanding of the phenomenon (Gerring 2007, pp.9 – 12) and preventing the research to become unclear and untested (Flyvbjerg 2006, p.223). Also, they carefully concur in the idea that this method is completely necessary for studying a phenomenon that cannot be separable from its context and that study cases are good at generating hypotheses and theories (Flyvbjerg 2006, p.222) (Gerring 2007, p.19) (Robert K. Yin 2009, p.18).

Nevertheless, Yin recommends this method as it was mentioned before, only when the research questions are “why” or “how” (Robert K. Yin 2009, p.10) (R. K. Yin 1981, p.100), making a difference from Gerring who did not mention this requirement in his book “Case Study Research: Principles and Practices”. In this way, Gerring arguably admits that the case study is not the strongest suit for confirming or disproving hypotheses, because evidence gathered from a single case could lead to “*falsify hypothesis*” (Popper 2002, p.10) and theory testing is not its best quality (Gerring 2007, p.42). This misapprehension probably comes from the idea that one cannot generalise from a single case.

In contrast, Yin and Flyvbjerg well disagree with Gerring and they recognize the importance of generalization for scientific development and they mentioned it in the theory about critical cases. This theory fixes the dilemma, it states that the strategic selection of cases (“most likely cases” or “least likely cases”) can irrefutably falsify propositions or hypotheses, when the selection is a “most likely case”; or the opposite, clearly confirm or be appropriate in testing or verifying hypotheses with a “least likely case” (Robert K. Yin 2009, p.47) (Flyvbjerg 2006, pp.231 – 233).

Other important aspect to take into account is the difference between case studies and cross-case studies highlighted by Gerring, because each of these case study’s variants have their

own potencies and debilities. As he mentions, cross-case evidence can overcome the risk of rejecting a hypothesis or considering it proved on the basis of a single case, also it can overcome the unrepresentativeness of the sample, making it’s results more reliable (Gerring 2007, pp.43 – 44), because it estimates causal effects across population under different spatial or temporal circumstances.

Unfortunately, as it was previously mentioned, cross-case studies are more superficial and consequently, they are least likely to explain in detail the reason of specific correlations between inputs and outputs, often ending in a de-contextualization of social behaviour. Differently to the study case that offers a depth analysis of the causal argument that the researcher may wish to prove or demonstrate, with an abundant description of events, and giving the researcher regularly the opportunity to consult and check primary sources (Gerring 2007, pp.44 – 59).

Resultantly, the case study is holistic by nature which is why it is difficult to summarize, but indeed, it is not a problem of the method by itself, it is a general problem of summarizing the reality studied.

## ● Conclusions

The case study method is generally criticized because it is arguably misunderstood and it is not defragmented in its variants, since a researcher may use a single case study or a cross- case study depending on one’s needs and objectives. Indeed, both sub-methods should be threatened separately as they contain different procedures and rules, and they may lead to different results. The researcher should be aware of its variances, choosing the right one for their social enquiry.

For researchers using the case study method, it is important to follow a framework or pre-specified



procedures, that support them with some principles, practices for their social research. Following procedures and having a social research design may avoid arbitrary and subjective case studies that lead to false hypotheses and generalize from relative and ambiguous conclusions.

Undoubtedly, case studies are one of the best options when studying a social phenomenon and its context in depth for descriptive purposes and also for creating theories and propositions. Nevertheless, in my opinion, this method is useful as well for testing theories and hypotheses, it is a matter of choosing a "most likely" or "least likely" case, depending on the researcher's needs. The case should be linked to the design of the study, as well as to the specific case's properties; it should be a good suit.

Case studies are not "soft research" as they have been considered by some methodologists (Robert K. Yin 2009, p.21). An in-depth study demands a disciplinary force as it allows the researcher to use different data gathering strategies, that can be qualitative or quantitative. Because of its nature, the case study allows the researcher to double-check the evidence and the theory in the field and to cast off preconceived notions and theories.

If the case study method's procedures are followed with discipline, it can be very fruitful to gain an in-depth insight of a specific real-life phenomenon, and to obtain a real-life story as a result, which cannot be acquired only from theory.

## ● References

- Achen, C.H. & Snidal, D., 1989. "Rational Deterrence Theory and Comparative Case Studies". *World Politics*, 41(02), pp.143-169.
- Campbell, D.T. & Stanley, J.C., 1973. *Experimental and quasi-experimental designs for research*, Rand McNally.
- Flyvbjerg, 2006. "Five Misunderstandings About Case-Study Research". *Qualitative Inquiry*, 12(2), pp.219-245.
- Gerring, J., 2007. *Case Study Research: Principles And Practices*, Cambridge University Press.
- Maoz, Z., 2002. Case Study Methodology in International Studies: From Storytelling to Hypothesis Testing. En *Evaluating Methodology in International Studies*. University of Michigan Press, pp. 161 - 184.
- Popper, K.R., 2002. *The Logic of Scientific Discovery*, Psychology Press.
- Simons, H., 2009. *Case Study Research in Practice*, SAGE Publications Ltd.
- Yin, R. K., 1981. "The Case Study as a Serious Research Strategy". *Science Communication*, 3(1), pp.97-114. Available at: <http://scx.sagepub.com/cgi/doi/10.1177/107554708100300106> [Accesses June 11, 2012].
- Yin, Robert K., 2009. *Case Study Research: Design and Methods*, Sage Publications.
- Yin, Robert K., 1992. "The Case Study Method as a Tool for Doing Evaluation". *Current Sociology*, 40(1), pp.121-137. Available at: <http://csi.sagepub.com/content/40/1/121> [Accessed June 11, 2012].