

RESEARCH DESIGN

INTRODUCTION

This course aims to lay a foundation for your empirical research. The goal is to help you to design and develop your future research projects.

OBJECTIVES

The main objective of this course is to improve the *design* of your research projects. To this end, we will focus on the importance of careful theoretical thinking and on the conceptual difficulties associated with establishing causality in empirical work.

Although this is not an econometrics course, econometric concepts, problems, and analyses will be considered, making explicit connections with what you have seen and will see in econometrics courses as well as in other methods courses.

LEARNING OUTCOMES

When you have completed this course, you will be (better) able to:

- Identify the best (feasible) research design for your research questions;
- Understand, apply, and criticize the main research methods that are typically applied in management studies;
- Develop and practice the skills necessary to conduct, review, and publish management research;
- Present and defend your research ideas.

COMPETENCIES

GENERAL COMPETENCIES

CG6: Use appropriate tools and techniques for problem solving, correction contrasting and decision validation.

SPECIFIC COMPETENCIES

CE1: Understand the concepts of social and human sciences relevant and necessary to carry out research projects of international level in the area of management.

CE3: Organization, planning and implementation of a research project related to social sciences.

CE4: Distinguishing of the different fields of management sciences and acknowledgement of the research methodologies related to them.

CE5: Ability to understand state-of-the-art research in organization theory published in the top academic journals and compare and contrast the arguments developed in the papers from a logical and empirical point of view.

CE7: Ability to articulate research questions that could extend our understanding of the field, and design a research program to answer them.

CE9: Analyze and relate the main contributions of the economy to the study of organizations and contrast them with statistical, econometric or qualitative methods.

CE17: Ability to critically establish, the relevance and significance of the results obtained with respect to the proposed objectives, and prepare conclusions within the framework of current scientific knowledge on the topic in question.

CE18: Develop a scientific / technical report or research work with the objective to inform the scientific community on the contribution of the research conducted, making use of adequate information technology for both acquisition and dissemination of research results.

EVALUATION

There are three main requirements for successfully completing this course, each of them having equal weight towards your final grade:

1. Class participation, including in-class or at-home exercises (20%)

You are expected to come to class prepared to discuss **all** the material assigned and to contribute to class discussion.

2. Research project (40%)

You will have to develop a research project. This does not need to be a full-blown research proposal that will necessarily lead to your thesis, but rather an opportunity for you to choose an issue that is of interest to you, and spend some time thinking about what you need to do in order to accomplish it (with particular emphasis on the methodological issues and empirical strategy) – see Assignments 1 and 2 below.

3. Final exam (40%)

There is also a final exam, which will cover the entire content of the course and test your ability to apply it.

RESEARCH PROJECT – ASSIGNMENTS

1. Write a brief statement (max 1 page of a Word/PDF document, single space, font size 11) on a research question you are interested in. Due on January 20, 5:00 pm (please upload the document on virtual campus).
2. Present and discuss an “ideal” research design and empirical strategy to test your research question. I expect to see a description of your data (clearly, you do not need to have the data you would like to use, but it should be feasible to collect them), a specification for the regression(s) / empirical analyses you will perform, and a discussion

of the assumptions that are necessary in order to believe that your analyses provide a valid answer to your research question. This document should be a Power Point. Due on March 21, 11:59 pm (please upload the document on virtual campus).

Please notice that late submissions will not be considered.

COURSE OUTLINE AND REQUIRED READINGS

Sessions 1 and 2. Introduction to the course.

- Harton R. 2015. Offline. What is medicine's 5 sigma? *The Lancet*, 385: 1380.
- Website: <https://www.buzzfeednews.com/article/stephaniemlee/dan-ariely-honesty-study-retraction>
- Gulati R. 2007. Tent poles, tribalism and boundary spanning: The rigor-relevance debate in management research. *Academy of Management Journal*, 50: 775–782.
- West M. 2002. *Legal Determinants of World Cup Success*. Working paper, University of Michigan.
- King A., Baatartogtokh B. 2015. How useful is the theory of disruptive innovation? *Sloan Management Review*, Fall: 77-90.
- Amrhein V., Greenland S., McShane B. 2019. Scientists Raise Up Against Statistical Significance, *Nature*, 567: 305-307 <https://www.nature.com/articles/d41586-019-00857-9>

Sessions 3 and 4. Research design.

- King G., Keohane R.O., Verba S. 1996. *Designing social inquiry: Scientific inference in qualitative research*. Princeton University Press. Chapter 1.
- De Vaus D. 2001. *Research design in social research*. SAGE. Chapter 1.

Discussion of students' research questions. See assignment 1.

Sessions 5 and 6. Philosophy of science (guest lecturer: Prof. Vaccaro).

- Kuhn, T.S. 1970. *The structure of scientific revolutions*, 2nd Ed. We will discuss Chapters 1 to 7.
<https://www.lri.fr/~mbl/Stanford/CS477/papers/Kuhn-SSR-2ndEd.pdf>

Preparation questions:

- What is the epistemological basis and approach used by Kuhn to develop his theory? And its limitations?
- What is a paradigm? To which construct adopted in the organizational literature is it similar to?

Assignment:

Each student will be requested to deliver a 20 minute-presentation about one or more chapters of the book. Each presentation (ppt file, at least 10 slides), for *all* chapters, should be sent on February 3 (before 5:00 pm) to Rosario Magre (assistant of Prof. Vaccaro): rmagre@iese.edu

JunHyung Byun: Chapter 1 and 2 (20 minutes for 2 chapters)

Ming Ding: Chapter 3

Yang En: Chapter 4

Ann-Sophie Kowaleswski: Chapter 5

Stefano Lazzeri: Chapter 6

Rocio Moraleda: Chapter 7 and 8 (20 minutes for 2 chapters)

Felipe Moreno Chapter 9

Guillermo Ramirez Chiang: Chapter 10

Alim Yimaz Chapter 11 and 12

Jiamin Zhao Chapter 13 and postscript

Sessions 7 and 8. Philosophy of science (cont'd) (guest lecturer: Prof. Vaccaro).

- Kuhn, T.S. 1970. *The structure of scientific revolutions*, 2nd Ed. We will discuss Chapters 8 to 13.

Preparation questions:

- Why does Kuhn speak about "invisibility of revolutions?"
- Can we apply Kuhn theories to social sciences? Why?

Sessions 9 and 10. What is 'theory' and why do we need it?

- Stinchcombe A. 1968. *Constructing social theories*. The University of Chicago Press. Chapter 2.
- Hambrick DC. 2007. The field of management's devotion to theory: Too much of a good thing? *Academy of Management Journal*, 50: 1346-1351.
- Barney J. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17: 99-120.

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- Priem RL., Butler JE. 2001. Is the Resource-Based Theory a Useful Perspective for Strategic Management Research? *Academy of Management Review*, 26: 22–40.
 - Klepper S. 1996. Entry, exit, growth, and innovation over the product life cycle. *American Economic Review*, 86: 562-583.

Sessions 11 and 12. Identification.

- Angrist J., Pischke JS. 2009. *Mostly harmless econometrics*. Princeton University Press. Chapter 1 and chapter 2.
- Shaver J.M. 1998. Accounting for endogeneity when assessing strategy performance: Does entry mode choice affect FDI survival? *Management Science*, 44: 571-585.
- King G., Keohane R.O., Verba S. 1996. *Designing social inquiry: Scientific inference in qualitative research*. Princeton University Press. Chapter 3.5 (notice: only 3.5, not the whole chapter 3).
- Gelman A., Imbens, G. 2013. *Why ask Why? Forward Causal Inference and Reverse Causal Questions*. NBER Working Paper No. 19614.

Sessions 13 and 14. Randomized trials and field experiments.

- Angrist J., Pischke J. 2015. *Mastering Metrics*. Princeton University Press. Chapter 1.
- Ewens M., Tomlin B., Wang LC. 2014. Statistical Discrimination or Prejudice? A Large Sample Field Experiment. *Review of Economics and Statistics*, 96: 119-134.
- Atkin D., Khandelwal A.K., Osman A. 2017. Exporting and Firm Performance: Evidence from a Randomized Experiment. *Quarterly Journal of Economics*, 132: 551-615.
- Deaton, A., Cartwright, N. 2018. Understanding and misunderstanding randomized control trials. *Social Science & Medicine*, 210: 2-21.
- List, J. 2011. Why Economists Should Conduct Field Experiments and 14 Tips for Pulling One Off. *Journal of Economic Perspectives*, 25(3): 3-16.

Sessions 15 and 16. Quasi-natural experiments and DiD.

- Waldinger F. 2010. Quality Matters: The Expulsion of Professors and the Consequences for PhD Student Outcomes in Nazi Germany. *Journal of Political Economy*, 118: 787-831.
- Azoulay P., Graff Zivin J., Wang J. 2010. Superstar extinction. *Quarterly Journal of Economics*, 125: 549-589.

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- Conti R., Valentini G. 2018. *Super Partes?* Assessing the Effect of Judicial Independence on Entry. *Management Science*, 64: 3517-3535.

Sessions 17 and 18. Inferring causality from non-experimental data.

- Villalonga B. 2004. Does Diversification Cause the 'Diversification Discount'? *Financial Management*, 33: 5-27.
- Feldman E., Villalonga B., Amit R. 2016. Corporate Divestiture and Family Control. *Strategic Management Journal*, 37: 429-446.
- Flammer C., Bansal P. 2017. Does a Long-Term Orientation Create Value? Evidence from a Regression Discontinuity. *Strategic Management Journal*, 38: 1827-1847.
- Bronzini R., Iachini E. 2014. Are incentives for R&D effective? Evidence from a regression discontinuity approach. *American Economic Journal: Economic Policy*, 6: 100-134.

Sessions 19-20. Case studies, qualitative research, and scientific inference.

- Siggelkow N. 2007 Persuasion with case studies. *Academy of Management Journal*, 50: 20-24.
- Eisenhardt K. 1989. Building theories from case study research. *Academy of Management Review*, 14: 532-550.
- Eisenhardt K., Graebner M. 2007. Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50: 25-32.
- Ichniowski C., Shaw KL. 2009. *Insider econometrics: Empirical studies of how management matters*. NBER Working Paper No. 15618.
- Abadie A., Gardeazabal J. 2003. The Economic Costs of Conflict: A Case Study of the Basque Country. *American Economic Review*, 93: 113-132.

PROFESSOR'S BIOGRAPHY

Giovanni Valentini (Ph.D., IESE Business School) is professor of Strategic Management at IESE Business School, where he is also the Director of the PhD Program. Prior to joining IESE, he was an Associate Professor of Strategy at Bocconi University, Milan. He has held visiting positions at Harvard University, KU Leuven, LUISS University, SKEMA Business School, and University of Toronto.

Most of his research has tried to contribute to a better understanding of how firms can combine internal and external knowledge to gain competitive advantage through technological innovation and growth. His academic work has been published in journals such as *Global Strategy Journal*, *Industrial and Corporate Change*, *Journal of International Business Studies*, *Long Range Planning*, *Management Science*, *Organization Science*, *Research Policy*, *Strategic Organization*, and *Strategic Management Journal*.

He has served on the Research Committee, Executive Committee, and Award Committee of the Strategy Division of the Academy of Management, and as Representative-at-Large for the Technology and Innovation Management Division of the Academy of Management. Currently, he is the Chair of the Knowledge and Innovation Interest Group of the Strategic Management Society.

He is co-editor of *Industrial and Corporate Change*, Associate Editor at *Management Science*, and a member of the editorial board of the *Strategic Management Journal*.