

# The History of Macroeconometric Modeling

---

---

## FUNDING PROPOSAL

**Roger Backhouse**

Professor of the History and Philosophy of  
Economics

*University of Birmingham*

Department of Economics

JG Smith Building

Birmingham

B15 2TT – UK

Tel.: +44 (0)121 414 6655

[r.e.backhouse@bham.ac.uk](mailto:r.e.backhouse@bham.ac.uk)

**Marcel J. Boumans**

Associate Professor History and  
Methodology of Economics

*Utrecht University*

School of Economics

Kriekenpitplein 21-22

3584 EC Utrecht

Netherlands

Tel.: +31 30 253 6287

[m.j.boumans@uu.nl](mailto:m.j.boumans@uu.nl)

**Béatrice Cherrier**

Assistant Professor

*University of Caen*

IUT Alençon – Département CS

Pôle Universitaire de Montfoulon

61250 Damigny – France

Tel.: +33 2 33 80 85 34

[beatrice.cherrier@gmail.com](mailto:beatrice.cherrier@gmail.com)

**Pedro Garcia Duarte**

Professor of Economics

*University of São Paulo*

Depto. Economia (FEA-USP)

Av. Prof. Luciano Gualberto, 908

Butantã

São Paulo, SP - Brazil

05508-010

Tel.: +55 (11) 3091-5944

[pgduarte@usp.br](mailto:pgduarte@usp.br)

**Kevin D. Hoover**

Professor of Economics and Philosophy

*Duke University*

Department of Economics

213 Social Sciences Building

Durham, NC – USA

27708-0097

Tel.: +1 (919) 660-1876

[kd.hoover@duke.edu](mailto:kd.hoover@duke.edu)

May 2017

---

## Project Objectives

The history of macroeconomics is often told as the evolution of theoretical claims among different schools of thought, each with a great mind behind: Keynes and the (American) Keynesians, Friedman and the monetarism, Lucas and the new classical macro, Kydland and Prescott and the real business cycle theory, Mankiw, Akerloff, Romer and many others and the new Keynesian macroeconomics. In such accounts, empirical disputes play a minor role. But looking more closely, the development of macroeconomics (starting in the 1930s when econometrics was also organizing itself as a field within economics) had a lot to do with the building of empirical models and the measurement of the economic activity: the macroeconomic models of Jan Tinbergen, Lawrence Klein and others; Wassily Leontief's input-output analysis; and Simon Kuznet's national accounting.

As for the macroeconomic models, after the initial efforts of Tinbergen (1939) and those of Klein (1950) at the Cowles Commission, and the seminal "Klein-Goldberger model" (Klein and Goldberger 1955), economists in the 1960s in many countries developed large-scale econometric models. These models analyzed sectors of the economy in great detail, often comprising hundreds of equations, and were used by central banks and treasuries for both forecasting and policy analysis. They were built and maintained by large teams of researchers who spanned academia and government. These models flourished in the 1960s before being called into question in the 1970s. Though academics generally moved away from such work in the 1980s, they remained in use both in central banks (as in the US Federal Reserve; Brayton, Levin and Williams 1997) and in the private sector (where consultancy companies sell model-based forecasts).

Our claim is that a satisfactory history of such modeling is important for the history of macroeconomics and macroeconomic policy making since the Second World War, but it has not yet been written. While the econometric modeling is not completely absent from the existing histories of macroeconomics, the treatment of large-scale econometric modeling remains unsystematic in comparison with the detail in which theory is discussed in both the macroeconomics and econometrics literatures. The result is that the history of macroeconomics has been left to the practitioners themselves. The only book-length coverage is *A History of Macroeconometric Model-Building*, edited by Bodkin, Klein and Marwah (1991).

On the other hand, the narratives so far constructed by historians of economics are inadequate. Because historians of macroeconomics and of econometrics focus on their own fields, insufficient attention has been paid to the place of large scale macroeconometric modeling, input-output analysis and national accounting in macroeconomics more generally. Our conjecture is that when fuller historical analysis is undertaken, the history of empirical modeling will turn out to be far more central to the history of macroe-

---

economics than has previously been recognized. For instance, with respect to the large macro-econometric models, several leading figures were involved in them, as well as many doctoral students, and there appears to have been feedback between theorizing and modeling. For example, experience with the MIT-Penn-FRB model they were building caused Franco Modigliani and Albert Ando to modify their theories of consumption; and their decision to build the model appears to have been a response to the inconclusiveness of their debates with monetarists.

We are also convinced that when the history is examined more carefully, some widely accepted beliefs will turn out to be either wrong or oversimplified. For example, though the Lucas critique was undoubtedly significant, serious doubts were being raised about the coherence of large scale modeling efforts much earlier. Several years before Lucas's critique, economists were concerned that "nice looking equations grouped together don't necessarily make a good model," giving as example that though every equation in the MIT-Penn-FRB and Brookings model looked good individually, they gave nonsensical results when grouped together.

Central to this project is the idea that macro-econometric models should not only encompass the large-scale models originated in Tinbergen's and Klein's works, much developed in the 1960s, but should also include other types of empirical models designed for policy discussions or for intervention in the economy, that explore the interface between macroeconomic models and econometrics, such as input-output analysis and national accounting. Moreover, the institutional diversity, both in terms of academic / policy related / private distinctions, and also in terms of national traditions, is also key to a richer story that we want to initiate. In particular, we are much interested in exploring this issue taking the economics profession at large, and going beyond the typical narratives of high-level academics, by paying much attention at the economics produced at Central Banks and multilateral agencies (IMF, World Bank, UN).

Therefore, this is an innovative project that aims to write a new kind of history of macroeconomics, with a team of eleven researchers (see below) that includes several younger scholars who are either initiating or consolidating their research agendas. For us this is very much in line with the goals of the History of Economics Society and its New Initiatives Fund.

## Research Questions

In order to provide a more satisfactory history, that explores the interface of macroeconomics, econometrics and policymaking, there are many questions that we want to start addressing:

---

1) *The role played by macro-econometric modeling in the history of macroeconomics as a whole*

- How many macroeconomists were involved in macro-econometric modeling compared with the numbers doing only theoretical work or conducting alternative empirical investigations?
- Did macro-econometrics influence the agenda of macroeconomics?
- Also, how much macro-econometrics was there in macro textbooks in the 1970s and 1980s, and how far were graduate students trained in those techniques?

2) *Relationships between theoretical and applied work*

- Did experience of macro-econometric modeling influence the direction of theoretical development?
- Did macro-econometric modeling cause macroeconomists to engage with econometricians, and if so what form did this cross-fertilization take?
- How did policy makers engage with these different types of macro? How many and what types of model were used?

3) *Technology and computation*

- What were the relationships between macroeconomists, econometricians and software developers?
- How did progress in IT shape the way macro-econometric modeling developed?
- How did the development in IT shape the model-building methodology?

4) *Places and communities*

- What was the position of models in the institutions in which they were based?
- What were the relationships between the universities, central banks, consultancy firms and others involved in producing large-scale models?
- Was there convergence between the agendas and methods pursued by academics and central banks and if so what form did it take?

5) *Modelers and their clients*

- Who were the clients?
- How did modelers engage with their clients?
- How did clients engage with the modelers?

## Research Team

It is important to emphasize that this project was conceived to bring together historians of economics from different countries and with complementary interests to shed

---

new light on the history of empirical macro, policymaking, monetary theories, policies and institutions. This is clearly a large project on an under-researched topic, that will involve more people than the five project coordinators (listed on the cover page).

Very fortunately we were able to gather a core group of historians from 8 different countries (Brazil, Colombia, France, The Netherlands, Switzerland, Taiwan, USA, UK) doing high-quality work on the project topic, with a great mix of younger and established researchers. For the other collaborators to this project, they are:

- Hsiang-Ke Chao (National Tsing Hua University, Taiwan)
- Ariane Dupont-Kieffer (Université Paris 1: Panthéon-Sorbonne, France)
- Verena Halsmayer (University of Luzern, Switzerland)
- Erich Pinzón-Fuchs (Universidad de Los Andes, Colombia)
- Goulven Rubin (Université de Lille 2, France)
- Aurélien Saïdi (Université Paris Ouest Nanterre La Défense, France)

## Project Development and Financial Needs

The goal of this project is to have a collective book (with no chapters assigned to individual contributors) written in the next two years. We have obtained partial funding for this project from the European Society for the History of Economic Thought (ESHET) through their ESHET-European Central Bank (ECB) grant (for projects on the history of monetary theories, policies and institutions). We were granted € 18,000 (net of administrative charges) for a two-year project, starting on March 2017.

With part of this money and some conference grants obtained by Marcel Boumans, we organized a first exploratory conference that took place in Utrecht, the Netherlands, on April 6-7, 2017. This conference was critical to help us shape the book project and define the list of contributors.

The plan now is to have two longer (one week) meetings for us to get together and work on the book, one in the Summer of 2018, and another in the Spring or the Summer of 2019. In the first, the idea is to have people bringing drafts of research topics of our interest, and the second being more focused on the finishing up the book chapters.

It is clear that we need additional funding for each of these events, and we **ask the Society to partially cover the costs of the 2018 workshop** (with costs detailed below).

## Project Budget

Each of the two workshops (in 2018 and 2019) will in principle involve paying 8 or 9 **hotel nights** to 11 participants, plus **transportation costs**. Thus, in addition to the ESHET-

---

ECB grant and the HES funds, if granted, we will need to obtain additional grants to cover the total expenses (lodging and transportation). Each of us is looking for such funding opportunities in our own countries and, therefore, we do not know where the workshops will take place.

As we are a group of 11 people from 8 different countries, it is reasonable to say that we will have at least three long-distance air tickets to buy. In addition, the hotel bill will surely be much higher than US\$ 5,000.

**Therefore, we ask the Society to partially fund the 2018 workshop with a grant of US\$ 5,000, covering part of our lodging and transportation costs.** This will be combined with the ESHET-ECB grant (and any additional grants obtained by the local organizer) to cover the entire budget of the 2018 workshop.

*Tentative timeline for using HES funds: **March-April 2018** to buy flight tickets of the participants (in case we allocate this money for lodging bills instead, we can postpone the use of the HES money to July 2018).*