Peter HOWITT
Doctorat Honoris Causa Université Côte d'Azur

Thursday, 8 September 2022

Scientific Folder for PhD students

This short presentation aims to introduce to UCA PhD Students the seminal contributions of Peter HOWITT to the scientific advances in the field of economics. We present below both a short Bio and a short overview of some of his master pieces of research. Peter HOWITT's complete CV and some selected original papers are downloadable from the following link (as a zip folder).

Peter HOWITT short BIO

Peter Wilkinson Howitt (born May 31, 1946) is a Canadian economist. He is the Lyn Crost Professor of Social Sciences at Brown University. Peter Howitt is a Fellow of the Econometric Society since 1994 and a Fellow of Royal Society of Canada since 1992. He served as President of the Canadian Economics Association in 1993–1994 and was the editor of the Journal of Money, Credit, and Banking in the period 1997–2000. For 2020, he received the BBVA Foundation Frontiers of Knowledge Award in Economics.

Among his seminal contributions to economic science, we emphasis his contribution to monetary theory including the analysis of inflation, his contribution to the theory of endogenous technological change and economic growth (with Philippe Aghion) and, last for not least, his contribution to the analysis of coordination issues (with Robert Clower among others) that he developed in different frames including the frame of multi-agent modelling.

See more from his full CV in the folder.

Peter HOWITT's selected papers.

The richness of Peter HOWITT contribution to economic analysis is illustrated by the selection of papers below. Those papers have been selected both because they are non-technical and because they are still highly relevant to key challenges our economies are facing nowadays: the tendency towards secular stagnation, the difficulty to adapt to the AI revolution, and the return of inflation.

Also, Peter HOWITT has always been a strong defender of the usefulness of promoting diverse approaches in economic theory in order to better design efficient macro-economic policies. This basic claim is still of primary importance in our research field.

You will find below an introduction to 4 of his seminal papers that have been grouped together in the dedicated Peter Howitt Doctorat Honoris Causa Folder. As a PhD student, you will be more than welcome to raise questions during the academic sessions of September, 8 based on these readings or based on additional readings from the pool of Peter Howitt's works.

Creative Destruction and US Economic Growth. *Capitalism and Society* (2022, with P. Aghion)

For the past 35 years, Philippe Aghion and Peter Howitt have worked developing, testing, and refining a theory of economic growth based on Joseph Schumpeter 's "Creative destruction", the celebrated idea that the technological progress needed for sustained growth in a dynamic capitalist economy needs to be continually renewed with waves of innovations that render previous technologies obsolete. Creative destruction sets up a conflict between the disruptive outsiders who gain from creative destruction and the entrenched incumbents who are threatened by it and therefore try to suppress it. This conflict is further complicated by the fact that the disruptive innovators will, if they succeed, eventually become reactionary incumbents themselves. Indeed, the more successful they are at innovating, the better positioned they will be to suppress future innovations by outsiders. So, the very same rents whose prospect induces innovations and growth can later be used to finance the suppression of innovation and growth.

The authors believe that this is now happening in the US economy. The very firms whose innovations have brought us great benefits, including the IT revolution, have become so successful and have grown so large and powerful that they are becoming a formidable force opposing further technological progress. Their paper elaborates on these ideas and discusses possible policy remedies.

What have central bankers learned from modern macroeconomic theory? *Journal of Macro-economics, 2011*

Apart from his contribution to growth theory, Peter Howitt has been a key contributor to monetary theory. His works help us to better understand the current challenges that Central banks are facing with the return of inflation. In this early paper, Peter Howitt argue that modern macroeconomic theory has fallen behind the practice of central banking. After briefly summarizing the current state of macro theory, he focuses on what strikes him as the two most important developments in monetary policy in the last two decades: inflation targeting and dealing with financial crises. He explains why he think that modern macro-economic fail to give useful guidance to policy in both domains. He concludes with a plea for a more diverse ecology of approaches to macroeconomic theory, one that finds room for agent-based computational economics as well as for more conventional equilibrium theories.

Adjusting to Technological Change. *Canadian Journal of Economics* (1994)

"*If there is one profession that has not yet seen much of the darker side of technological change, it is macroeconomic theory*" (page 1)

This seminal contribution of 1994 has been selected because it emphasizes the difficulty of adjusting to technological change, something that a lot of people were doing in 1994 with the IT revolution and that a lot are still doing nowadays with the AI revolution. Peter Howitt emphasizes that those changes constitute a social process that involves more than the sum of our individual struggles with inanimate nature as people must adjust not only to changes in technology but also to changes that others are making to technology. He then points to the limits of conventional macroeconomic theory including, the new growth theory framework, that he contributed to develop, to tackle properly the coordination and adjustment problems that are induced by technological change. Once again, he advocates in favor of developing complementary equilibrium and out-of-equilibrium theory to make decisive advances in our understanding of innovation-driven economic dynamics.

Beyond DSGE Models: Toward an Empirically Based Macroeconomics (2008, with David Colander, Alan Kirman, Axel Leijonhufvud, Perry Mehrling), *American Economic Review*, P&P

Last but not least, we selected a co-authored introduction to a special session of the *American Economic Association Congress of 2007* that was dedicated to discussing complexity and dynamics issues in macroeconomics through alternatives to dynamic stochastic general equilibrium (DSGE) models. In this paper, the authors advocate in favor of developing more empirically based macroeconomics, a tendency that has indeed expanded a lot over the very last 15 years. That paper is still of great use to understand where lie the main caveats along this path. It also offers very interesting thoughts on how economists can efficiently branch new empirically based macroeconomics to sound economic policy design.

Two short excerpts of the paper give you the flavor of the contribution.

"Einstein once said that models should be as simple as possible but not more so. If the macro economy is a complex system, which we think it is, existing macro models are "more so" by far. They need to be treated as such. We need to acknowledge that our current representative agent DSGE models are as ad hoc as earlier macro models. There is no exclusive right to describe a model as "rigorous." This does not mean that work in analytical macro theory should come to a halt. But it should move on to models that take agent interaction seriously, with the hope that maybe, sometime in the future, they might shed some direct light on macro policy, rather than just provide suggestive inferences. In the meantime, the best approach to macro policy is to come back to earth and to adopt an engineering approach in which macro econometricians see themselves as builders, not architects." (page 240)

"In short, the modern macro engineering researcher cannot be a technician who applies technical tools to data, but rather must be a craftsman who integrates the best computer-aided statistical analysis possible with the best general theoretical and institutional knowledge, allowing him or her to interpret the data" (page 240).