# Professor Steve Keen

# Friede-Gard-Preis 2022



Steve Keen 6/25/2022

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### Curriculum Vitae

#### Work History

#### September 2022-ongoing (to be confirmed)

• Researcher at the Budapest Centre for Long Term Sustainability (BC4LS): see <a href="https://bc4ls.com/">https://bc4ls.com/</a>.

#### May 2022-ongoing

• Author on *Substack*: see https://profstevekeen.substack.com/

#### **February 2016-ongoing**

• Crowdfunding on *Patreon*: see <a href="https://www.patreon.com/ProfSteveKeen">https://www.patreon.com/ProfSteveKeen</a>

#### January 2018-ongoing

- Honorary Professor, *University College London*, United Kingdom.
- Distinguished Research Fellow at *Institute for Strategy, Resilience & Security* (ISRS) at UCL: see https://www.isrs.org.uk/our-people.

#### July 2014-November 2018

• Professor of Economics, Kingston University, United Kingdom

#### July 2014-January 2016

• Head of the School of Economics, History and Politics, *Kingston University*, Kingston Upon Thames, United Kingdom.

#### **January 2015-July 2017**

• Columnist for Forbes Magazine: http://www.forbes.com/sites/stevekeen/

#### April 2013- January 2015

Columnist for Business Spectator
 (http://www.businessspectator.com.au/contributor/steve-keen)

#### 2011-March 2013

- Professor of Economics and Finance, School of Business, *University of Western Sydney*
- Columnist for Business Spectator
   (http://www.businessspectator.com.au/contributor/steve-keen)

#### 2000-2011

• Associate Professor of Economics and Finance, School of Economics and Finance, University of Western Sydney

#### 1996-2000

• Senior Lecturer in Economics and Finance, School of Economics and Finance, University of Western Sydney

#### 1993-1996

• Full-time PhD student (on priority rate Australian Postgraduate Award scholarship and Supplementary Scholarship from the School of Economics, *University of New South Wales*)

#### 1989-1993

• Senior Tutor, Department of Economics, University of New South Wales

#### 1987-1989

• Tutor, Department of Economics, University of New South Wales

#### 1984-1987

- Senior Projects Officer, Trade Development Council Secretariat, *Department of Trade*
- Software Reviewer, *Your Computer*, Hannan Press (contemporaneous part-time position)
- Contributing Editor, *Australian Computing*, McGraw-Hill (contemporaneous part-time position)

#### 1980-1984

- Media Liaison Officer, United Nations Association of Australia
- Contributing Editor, *Australian Computing*, McGraw-Hill (contemporaneous part-time position)
- Freelance database designer and software consultant

#### 1977-1980

• Education Officer, Australian Freedom from Hunger Campaign

#### 1977

• School Librarian, Kanahooka High School Dapto

#### Academic Qualifications

- PhD (Economics), University of New South Wales, 1998
- Masters in Commerce Honours (Economics and Economic History), *University of New South Wales*, 1990
- Diploma of Education, Sydney Teachers' College, 1977
- L.L.B, Sydney University, 1976
- Bachelor of Arts, Sydney University, 1974

# Photos

These photos are all free of copyright issues.









# Selected list of publications

I have approximately 100 refereed academic publications. These are my favorites, listed in reverse chronological order, and are indicative of the range of my intellectual interests. Books are highlighted in bold.

- 1. Keen, S., T. Lenton, T. J. Garrett, J. W. B. Rae, B. P. Hanley and M. Grasselli (2022). "Estimates by Dietz et al. of economic and environmental damages from tipping-points cannot be reconciled with the scientific literature." *Proceedings of the National Academy of Sciences* 2021-17308RRR.
- 2. Keen, S. (2021). The New Economics: A Manifesto. Cambridge, UK, Polity Press.
- 3. Hanley, B. P., S. Keen and G. Church (2020). "A Call for a Three-Tiered Pandemic Public Health Strategy in Context of SARS-CoV-2." *Rejuvenation Research*.
- 4. Keen, S. (2020). "The appallingly bad neoclassical economics of climate change." *Globalizations*: 1-29.
- 5. Keen, S. (2020). Burying Samuelson's Multiplier-Accelerator and resurrecting Goodwin's Growth Cycle in Minsky. *Feedback Economics : Applications of System Dynamics to Issues in Economics*. R. Y. Cavana, B. C. Dangerfield, O. V. Pavlov, M. J. Radzicki and I. D. Wheat. New York, Springer.
- 6. Keen, S. (2020). "Emergent Macroeconomics: Deriving Minsky's Financial Instability Hypothesis Directly from Macroeconomic Definitions." *Review of Political Economy* 32(3): 342-370.
- 7. Keen, S., R. U. Ayres and R. Standish (2019). "A Note on the Role of Energy in Production." *Ecological Economics* 157: 40-46. https://doi.org/10.1016/j.ecolecon.2018.11.002
- 8. Keen, S. (2018). "Kornai and anti-equilibrium." *Acta Oeconomica* 68: 55-75.
- 9. Keen, S. (2017). *Can we avoid another financial crisis?* Polity Press, Cambridge. ISBN 978-1509513734.
- 10. Keen, S. (2015). "Is neoclassical economics mathematical? Is there a non-neoclassical mathematical economics?", in *What is Neoclassical Economics? Debating the origins, meaning and significance*. J. Morgan. Abingdon, Routledge, pp. 238-254.
- 11. Schandl, H., K. Alexander, et al, 2011, *Resource Efficiency: Economics and Outlook (REEO) for Asia and the Pacific*, Bangkok, United Nations Environment Programme.
- 12. Keen, S., 2011, *Debunking economics: The naked emperor dethroned?* London, Zed Books. 2<sup>nd</sup> Edition.
- 13. Keen, S.. and R Standish, 2010, Debunking the theory of the firm—a chronology, *Real World Economics Review* 54(54): 56-94.
- 14. Gallegati, M., S. Keen, et al, 2006, Worrying trends in econophysics, *Physica A: Statistical Mechanics and its Applications* 370(1): 1-6.
- 15. Keen, S., 2003, Standing on the toes of pygmies: Why econophysics must be careful of the economic foundations on which it builds, *Physica A: Statistical Mechanics and its Applications* 324(1-2): 108-116.
- 16. Keen, S. (2003). The Russian defeat of economic orthodoxy. *The Crisis in Economics* E. Fullbrook. London, Routledge.
- 17. Keen, S., 2000, The Nonlinear Economics of Debt Deflation, Commerce, complexity, and evolution: Topics in economics, finance, marketing, and management: Proceedings of the

Twelfth International Symposium in Economic Theory and Econometrics. W. A. Barnett, C. Chiarella, S. Keen, R. Marks and H. Schnabl. New York, Cambridge University Press: 83-110.

- 18. Barnett, W. A., C. Chiarella, S. Keen, R. Marks & H. Schnabl, 2000, Commerce, complexity, and evolution: Topics in economics, finance, marketing, and management: Proceedings of the Twelfth International Symposium in Economic Theory and Econometrics. New York, Cambridge University Press.
- 19. Keen, S., 1995, Finance and Economic Breakdown: Modeling Minsky's 'Financial Instability Hypothesis.', *Journal of Post Keynesian Economics* 17(4): 607-635.
- 20. Keen, S., 1995, Comment on Fel'dman's structural model of economic growth, *Socialist Thought in the Post Cold War Era*. P. Groenewegen and B. McFarlane. Manila, Journal of Contemporary Asia Publishers: 39-47.
- 21. Keen, S., 1993, Use-Value, Exchange Value, and the Demise of Marx's Labor Theory of Value, *Journal of the History of Economic Thought* 15(1): 107-121.
- 22. Keen, S., 1993, The Misinterpretation of Marx's Theory of Value, *Journal of the History of Economic Thought* 15(2): 282-300.
- 23. Keen, S., 1982, News or Propaganda?, *The Australian Journal of Chinese Affairs* 8: 153-158.

# Research Agenda

The primary focus of my research is the development of a monetary, biophysical, far-from-equilibrium approach to economics, which I hope will completely supplant Neoclassical economics.

Neoclassical economics is fundamentally flawed and misguided, and criticism to highlight its many flaws is necessary—but it is not sufficient. It takes a paradigm to replace a paradigm, and that is what I am attempting to build.

This involves both theoretical work, and building a modelling framework in which this theory can be demonstrated and tested—specifically, my *Minsky* software.

The theoretical work has two main cores: properly modelling and analyzing the monetary dynamics of capitalism; and properly modelling the role of energy and raw materials in production—and therefore, necessarily, the role of economic waste in affecting the ecology of the planet.

I have completed all the foundations needed for this research: modeling Minsky's Financial Instability Hypothesis; constructing *Minsky* as a platform for modelling complex systems and monetary dynamics; and incorporating energy into single sectoral models of cyclical growth.

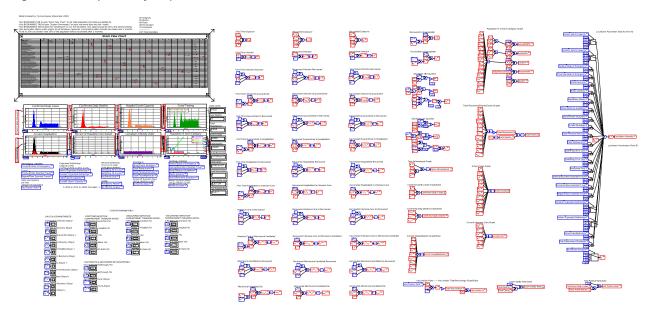
Over the next decade, I plan complete the critique of Neoclassical economics in a 3<sup>rd</sup> and final edition of *Debunking Economics*, and write the foundational text for biophysical monetary economics, *Principles of Political Economy and Ecology*.

We also need economic and financial systems that will enable a transition to a sustainable economic system. I will model a dual currency system of carbon rationing, and systems for preventing excessive private debt and excessive economic inequality.

My research will cover monetary dynamics, economic complexity, the role of energy in production, and the development of a suitable philosophical foundation for the economics of sustainability. Topics include:

- A model of production in which energy is the essential input (the model is already built but not yet published);
- A model of production in which energy and raw materials are essential inputs (the model is already built but not yet published);
- Further critiques of Neoclassical climate change economics;
- Designing a parallel currency system for carbon rationing via Central Bank Digital Currencies;
- Developing and extending Minsky's capabilities for monetary input-output modelling;
- Extending my existing cyclical single sectoral models of production with essential energy and raw materials inputs to multi-sectoral models;
- A third and final edition of *Debunking Economics*; and
- A first edition of *Principles of Political Economy and Ecology*. This will be the culmination of my life's work.

Figure 1: A Minsky model of the pandemic



#### Debunking Economics, 3<sup>rd</sup> Edition

The main changes compared to the 2<sup>nd</sup> edition will be:

- Drastically improving the chapters on money, using what I have learnt in building Minsky;
- Adding a critique of Neoclassical work on climate change, which, as I say in the title of one of my
  papers, is "appallingly bad"; and
- Reorganizing the opening chapters to commence with the empirical refutation of the concept of rising marginal cost.

#### Principles of Political Economy and Ecology

This will be radically different to any existing work of economics. It will

- Commence by describing Adam Smith as not the "father of economics", but as the errant uncle who led economics astray into a largely pointless ideological contest over theories of value;
- Argue that the proper foundations of economics were laid by the Physiocrats, who are the only school of thought to date whose work is consistent with the Laws of Thermodynamics;
- Explain how dialectical philosophy can provide a structural basis for a complex-systems, monetary, energy-based analysis of capitalism; and
- Develop a structural biophysical macroeconomics, using my program *Minsky* as its main analytic tool.

# Research Funding

Most of my research has been unfunded—this is the fate of someone who works outside the mainstream of economics. Despite the absence of funding, my research agenda has been one of the most influential in non-mainstream economics, and there is still plenty of room for its further development.

The three main research projects for which I have received funding are:

- The initial development of Minsky, an Open Source system dynamics program for non-equilibrium monetary modelling (<a href="https://sourceforge.net/projects/minsky/">https://sourceforge.net/projects/minsky/</a>), via a \$128,000 grant from the Institute for New Economic Thinking (INET): see
   <a href="https://www.ineteconomics.org/research/grants/extending-macroeconomics-and-developing-a-dynamic-monetary-simulation-tool">https://www.ineteconomics.org/research/grants/extending-macroeconomics-and-developing-a-dynamic-monetary-simulation-tool</a>.
- The further development of Minsky via a £197,000 grant from Friends Provident Foundation: see <a href="https://www.friendsprovidentfoundation.org/grants/projects/isrs-of-ucl-bringing-realism-to-the-economics-of-climate-change/">https://www.friendsprovidentfoundation.org/grants/projects/isrs-of-ucl-bringing-realism-to-the-economics-of-climate-change/</a>.
- The integration of energy into economic theory via a £60,000 grant from the Rebuilding Macroeconomics program of the UK's Economic and Social Research Council (ESRC). See <a href="https://www.rebuildingmacroeconomics.ac.uk/integrating-macroeconomics.">https://www.rebuildingmacroeconomics.ac.uk/integrating-macroeconomics.</a>

All 3 projects were successful. *Minsky* was firstly developed with the INET, then turned into a powerful and user-friendly system dynamics program thanks to the FPF grant. The work on integrating energy into macroeconomics has been successful, though much of the research needs to be written up for publication.