The Poverty of Economism

Disinformation and the Misuse of Social Science

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Economism is the ideology that economic considerations should have primacy in all aspects of life. It is a major source of disinformation worldwide and is based on use and misuse of the social science of economics. This discipline is indispensable in the modern world, however, much of its public discourse is both simplistic and compelling. “Basic economics” has served as “the raw material for a deliberately created ideology and a powerful belief system,” Simon Johnson explained.

Economics is of course not unique among disciplines in being exploited for political or commercial purposes and related propaganda. In certain fields such types of disinformation are often compelling when promoted by experts, despite this being a time when many people in Canada, the US and elsewhere deny scientific findings by climate experts on global warming.

At issue is that the views of economics experts are compelling even when they are not well founded, or their advice is against the common good: why did they come to be widely trusted?

One means by which experts in a field can establish trust is to “imitate success” of fields in which experts already enjoy trust and prestige. Another is for some experts to produce sufficient genuinely scientific work that work by others in the same field benefits by reflection. A third is to serve as spokespersons for the current ruling class which has the power to have its interests strongly promoted through mainstream and other media, thus generating prestige that boosts trust.

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1 I thank Charlene Mayes and Vladimir Tasić for helpful comments on the draft.
2 Title adapted from that of Karl Popper, The Poverty of Historicism (London: Routledge, 1987 [1957])
3 Simon Johnson, Foreword to James Kwak, Economism: Bad Economics and the Rise of Inequality (New York: Vintage Books, 2018 [2017]), xvii. Johnson called for significant revisions to “basic economics” courses, for which he also used the term “Economics 101” courses.
5 https://cfe.ryerson.ca/blog/2018/01/facilitated-disinformation
8 https://cfe.ryerson.ca/blog/2017/03/climate-change-information-and-disinformation
Emergence of Economic Science

Emulation of mathematics, physics and their combination has been one of the means by which economics gained public trust and prestige, the path followed by many disciplines. They were inspired by the philosophy, methods and successes of Isaac Newton who combined and developed physics and mathematics, revolutionizing both. His work became widely known and his prestige grew in Europe after Voltaire made ‘Newton’ a household word. Much wider public awareness of and still greater prestige for physics and mathematics arrived in 1919, when Arthur Eddington made ‘Einstein’ a household word with observational confirmation of a surprising 1915 prediction by Albert Einstein.

Mathematics and physics have long maintained rigorous standards of logical proof, empirical validation and publication of the details of their work. As a result, experts in these fields have enjoyed a high level of public trust.

The founders of economics as a modern discipline were political economists and most adhered to the dominant political ideology of their time. Central tenets were that prosperity derived from individual merit while penury was self-inflicted, and the state should not intervene to limit exploitation of the labouring classes. Key founders “were spokesmen for the new ruling class in a new economic order,” capitalism. Their writings were based in part on selective readings of their precursor, the political economist and moral philosopher Adam Smith. But in contrast to many others in his own time and later, Smith held a democratic view of wealth and was sympathetic toward the disadvantaged.

A century ago political economy bifurcated into a field called economics and another called political science, with the former embracing concepts and methods from mathematics (including mathematical statistics) and physics. The change was “in pursuit of an earnestly sought reputation as a science,” John

10 Newton: used experiment and observation of natural phenomena along with physical and mathematical intuition to devise theories in the form of general principles in axiomatic mathematical form; developed and used new mathematics to draw conclusions or make predictions from his theories; and validated the results by testing them against wider sets of empirical data. Only then did he declare broad applicability of his conceptual frameworks, and thus worthy of the term ‘laws of nature’. Discussions can be found in Anton Pannekoek, A History of Astronomy (Mineola NY: Dover, 1989 [1961]), 297-307, and in Subrahmanyan Chandrasekhar, Newton’s Principia: For the Common Reader (New York: Oxford University Press, 1995), which provides a detailed exposition of Newton’s most influential work in a modern style.


12 https://www.aps.org/publications/apsnews/201605/physicshistory.cfm

13 Einstein made a precise numerical prediction of the amount by which light rays from distant stars would be bent by the sun’s gravitational force field due to the resulting curvature of space-time. For this calculation he used the radical extension and generalization of Newtonian physics he developed using advances in mathematics and physics by Gaspard Monge, Bernhard Riemann, Michael Faraday, James Clerk Maxwell and others. Acclaim in the mass media and in the scientific community for Einstein’s revolution in science is summarized by Abraham Pais in, ‘Subtle is the Lord’: The Science and the Life of Albert Einstein (Toronto: Oxford University Press, 1983), 303-312.


15 Adam Smith, in An Inquiry into the Nature and Causes of The Wealth of Nations (Chicago: University of Chicago Press, 1976 [1776]) wrote, regarding the attitude of “the great proprietors” toward less favoured classes: “All for ourselves, and nothing for other people, seems, in every age of the world, to have been the vile maxim of the masters of mankind.” Book III, Chapter IV, 437
Kenneth Galbraith observed.\textsuperscript{16} Both before and after the bifurcation there was tension in economics between theoretical speculation and empirical validation, with the former sometimes accorded greater weight despite contrary evidence.

Examples of Economic Science

The following illustrate developments in the Newtonian scientific tradition: rigorous, widely applicable, and led to significant theoretical or applied advances within economics or in other fields.

\textit{Optimal Transport}. In 1781 Gaspard Monge posed and solved a problem of optimal allocation of resources by using geometry: minimization of the cost of transporting construction materials from several source sites to several building sites. Such problems were not studied systematically until the 1930s-40s when more effective mathematical methods were developed independently by Leonid Kantorovich and Tjalling Koopmans.\textsuperscript{17} Kantorovich later constructed a more general framework and more powerful methods, and these enabled others to achieve breakthroughs by using optimal transport formulations in physics, geometry, meteorology, computer science and economics,\textsuperscript{18} such as those by Alessio Figalli\textsuperscript{19} and Constantinos Daskalakis.\textsuperscript{20}

\textit{Interindustry Analysis (Input-Output Method)}. In the 1930s Wassily Leontief\textsuperscript{21} developed a method for collecting and analyzing production and consumption data on industries and their inter-relationships. This facilitated cooperation and improved efficiencies, and assisted industry and state planning. With subsequent advances in statistical and computational methods, Leontief and other economists provided an indispensable tool for managing complex industries and national economies. A measure of the Input-Output method’s versatility is that it was used extensively both in the US and the USSR.\textsuperscript{22}

\textit{Examination of Wealth inequality}. In 2014 Thomas Piketty\textsuperscript{23} published an extensive study on wealth (assets and incomes) distributions. The work was novel in several respects: its diverse and extensive data sources, international scope, historical depth, and account of political reasons for the patterns found in various countries. It also made policy suggestions to address steeply rising inequality and discussed possible adverse social and political effects of failure to act.\textsuperscript{24}

\textit{Addressing Externalities}. Most economists have treated our finite planet as if it were unlimited as a source of materials and unlimited as a sink for environmental pollutants. The latter are ‘externalities’ in quests for growth or profit. William Nordhaus and Paul Romer are exceptions.\textsuperscript{25} They recognized

\begin{thebibliography}{99}
\bibitem{16} Galbraith, op. cit., 266
\bibitem{17} https://www.nobelprize.org/prizes/economics/1975/press-release/
\bibitem{18} Cédric Villani, \textit{Optimal Transport: Old and New} (Berlin: Springer-Verlag, 2009), Chapter 3
\bibitem{19} https://www.quantamagazine.org/alessio-figalli-a-mathematician-on-the-move-wins-fields-medal-20180801/
\bibitem{20} https://www.mathunion.org/fileadmin/IMU/Prizes/Nevanlinna/daskalakis-final.pdf
\bibitem{22} Galbraith, op. cit., 260-261
\bibitem{23} https://www.youtube.com/watch?v=XC_SdUvMBUc
\end{thebibliography}
“fundamental externalities that—absent well-designed government intervention—will lead to suboptimal outcomes.” Such outcomes include increasing the risk of adverse climate change, a focus of Nordhaus’ work.26

Counter Examples

Despite scientific aspirations, persistent or recurrent errors have been prominent in economics, as illustrated by long-standing belief in Say’s Law. In 1803 Jean-Baptiste Say advanced a general principle he claimed valid for all markets. His Law of Markets declared that “production [of goods] creates its own demand,” so that a shortage of aggregate demand and consequent market gluts could never occur.27 Thomas Malthus promptly disputed the claim, suggesting that violations could readily be found. Thus “the possibility of crises” could be “inherent in the capitalist system.”28

However, another contemporary, David Ricardo “rescued Say’s Law from Malthus’ attack” by expanding Say’s reasoning. The Law survived and “acceptance of it became the index of a decent sophistication in economics.” This was despite subsequent contrary evidence provided by “recurrent and increasingly painful periods of crises and depression, in which goods went unsold and labour ... went without employment.” After 130 years as an article of faith, Say’s Law “was repealed by John Maynard Keynes” during the Great Depression when the “shortage of demand” reached the level of international crisis. A new subfield, macroeconomics, then arose to address “management of demand”.29

Despite this history, Say’s Law was resurrected in modified form a half century later, as ‘supply-side economics’ and incorporated within the ascending political-economy ideology, neoliberal capitalism. In this form, production of goods (by manufacturing or agriculture) was replaced by supply of money (by the state to the affluent through tax cuts). In the US these actions were paralleled by cuts to social programs that assisted the poor. The theory was that tax cuts would stimulate economic demand and thus indirectly benefit the poor. Galbraith commented: “both policy for the rich and policy against the poor must have a covering doctrine.”30

During several US presidencies (from Ronald Reagan to Donald Trump) various tax cuts and social-program cuts were implemented. These and similar actions in other countries are among the causes of the rapid growth in wealth inequality during the neoliberal era.31 Neoliberal ideology is reminiscent of ideology in the early decades of capitalism. And once again many economists serve, unintentionally or otherwise, as spokespersons for the ruling classes by disseminating propaganda in academic and media

27 Piketty, op. cit., 9
28 Galbraith, op. cit., 80
29 Galbraith, op. cit., 76-77, 80
31 Piketty, op. cit., 496-497, 508-510 and elsewhere
discourse. Galbraith gave examples, for instance, because “‘capitalism’ evokes a sometimes sour history … the reputable expression of economists … is now ‘the Market System.’”

Economic forecasting provides other counter examples: when economists either failed to recognize a major financial crisis when in the midst of it or failed to recognize the development of a major crisis despite mounting evidence. Galbraith explained that “financial euphoria” could influence the professional judgment of eminent economists, among others. His examples included Irving Fisher who was a pioneer in importing physics metaphors and mathematics techniques to his discipline. In autumn 1929 Fisher repeatedly denied there was a crisis.

In 2010, discussing the international financial crisis of 2008 and the Great Recession, Joseph Stiglitz wrote: “Relatively few [economists] saw the coming disaster. It was not an accident that those who advocated the rules that led to the calamity were so blinded by their faith in free markets that they couldn’t see the problems it was creating.” In 2012 Volker Wieland wrote: “Media and other commentators have criticized macroeconomists in particular for failing to predict the great recession of 2008-09 or at least failing to provide adequate warning of the risk of such ahead of time.”

Criticism from Within

In his 1970 presidential address to the American Economic Association (AEA) titled “Theoretical Assumptions and Nonobserved Facts,” Leontief made a number of incisive criticisms about the quality of methodologies and analyses in the field. His concerns predated neoliberal ascendancy, and some were not addressed adequately during the subsequent half century.

Leontief opened by commenting on “the palpable inadequacy of the scientific means” used by economists. A basic issue was that “The weak … empirical foundation clearly cannot support the proliferating superstructure of … speculative economic theory.” He added that ever greater reliance on introduction of new mathematical or statistical methods could not “compensate for the glaring weakness of the data base available.” Yet mathematical modeling “has grown into … possibly the most prestigious branch of economics.” Further, “the validity of the statistical tools depends itself on the acceptance of certain convenient assumptions pertaining to stochastic properties of the phenomena …

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34 Mirowski, op. cit., 222-231


38 Leontief later explained that much of the data used by economists came from government statistics “compiled for administrative or business, but not scientific, purposes.” Letter to Science, 1982, cited below.)
assumptions that can seldom be verified.”  

In summary, “the consistently indifferent performance [by economists] in practical applications” was “a symptom of a fundamental imbalance” in the discipline.

By the end of the 1980s neoliberal doctrine increasingly defined state economic policies advised by economists—despite the deficiencies in their discipline identified by Leontief. In the US, William Vickrey made clear in his 1996 inaugural address to the National Academy of Sciences that the deficiencies continued.

Vickrey analyzed 15 points of neoliberal doctrine, explaining why each was fallacious. He also summarized the responsibility of the economics profession: “Much of the conventional economic wisdom prevailing in financial circles, largely subscribed to as a basis for governmental policy, and widely accepted by the media and the public, is based on incomplete analysis, contrafactual assumptions, and false analogy.” He concluded: “These fallacious notions ... are leading to policies that are not only cruel but unnecessary.”

Vickrey suggested that continuation of such policies could lead to crises. The debt-fueled 2008 crisis led Stiglitz to comment: “If the United States is going to succeed in reforming its economy, it may have to begin by reforming economics.”

Criticizing the field in 2014, Thomas Piketty wrote in terms reminiscent of Leontief’s in 1970:

For far too long economists have sought to define themselves in terms of their supposedly scientific methods. In fact, those methods rely on an immoderate use of mathematical models, which are frequently no more than an excuse for occupying the terrain and masking the vacuity of the content.

In a 2015 essay Romer commented that unrigorous use of mathematics by economists allows their work to “masquerade as science.” By way of contrast, he lauded a recently published article by Piketty for “admirable clarity and precision” in its rigorously scientific analysis of extensive empirical data. The coexistence of scientific work by some economists with less-than-scientific work by others can be viewed as an aspect of what Philip Mirowski called “the poverty of economics.”

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40 https://blogs.warwick.ac.uk/files/dennisleech/leontieftheoassnonfacts.pdf

41 https://www.nobelprize.org/prizes/economics/1996/summary/

42 http://www.pnas.org/content/95/3/1340


44 J. Stiglitz, op. cit., 238

45 Piketty, op. cit., 574

46 https://www.jstor.org/stable/43821857?seq=1#page_scan_tab_contents

47 Mirowski, op. cit., 356
Then and Now: A Comparison

In 1982 Leontief wrote a letter to *Science* summarizing the concerns expressed in his 1970 AEA address and elaborating on some. For instance, economics held itself in “splendid isolation” from advances other fields, not only the natural sciences, engineering, medicine and history, but also other social sciences. He suggested the isolation was facilitated by too many economists not having learned “the harsh discipline of systematic fact-finding” accepted by their counterparts in other fields.\(^{48}\)

An “empirical turn” did emerge during the next three decades with “experiments” of various types gaining favour.\(^{49}\) However, in 2014 Piketty observed that substantive improvements to the discipline had been limited and thus failed to resolve fundamental issues. “Economists today are full of enthusiasm for empirical methods based on controlled experiments” but, while useful, “these new approaches themselves succumb at times to a certain scientistic illusion.” This is because in focusing on the secondary issue of “proving the existence of a pure and true causal relation,” economists can miss the core “social and political problems one is trying to resolve.” This is often due to “neglect of history and of the fact that historical experience remains our principal source of knowledge.”\(^{50}\)

Direct and Reflected Prestige

In 1968, to celebrate its tercentenary the *Sveriges Riksbank* (state bank of Sweden) established a Prize in Economic Sciences in Memory of Alfred Nobel (ENP). This was not one of the original five prizes established by Nobel himself, prizes that acquired great international prestige over the years. Three were in the natural sciences: physics, chemistry, and physiology or medicine.

In their 2016 study of the ENP, Avner Offer and Gabriel Söderberg discussed origins and controversies. The ENP “came out of the strife between Social Democrats and business elites in Sweden, a local instance of class conflict in the West.”\(^{51}\) They added: “The happy windfall of the prize was seized eagerly by Sweden’s anti-socialist economists, and was kept firmly in their grip.”\(^{52}\) Ever since there has been a concern that economics inherited prestige from the original three Nobel science disciplines.\(^{53}\) There is no reason not to accept that each ENP laureate was recognized for a significant body of intellectual work. Nevertheless, there is a substantive matter distinguishing the ENP from the original science prizes, namely, “a good deal of economic theory is not borne out by either experience or results.”\(^{54}\)


\(^{50}\) Piketty, op. cit., 574-575

\(^{51}\) Offer and Söderberg, op. cit., 13

\(^{52}\) Ibid., 104

\(^{53}\) [https://www.lemonde.fr/idees/article/2008/10/15/nobel-d-economie-coup-de-maitre-par-patrick-moynot_1107132_3232.html](https://www.lemonde.fr/idees/article/2008/10/15/nobel-d-economie-coup-de-maitre-par-patrick-moynot_1107132_3232.html)

\(^{54}\) Offer and Söderberg, op. cit., 2
There has been diversity in perspectives among ENP winners, including some who supported limited or specific aspects of social democracy and some neoliberal economists who opposed social democracy. But in the entire group, Gunnar Myrdal\textsuperscript{55} “was unique as a theorist and activist of social democracy.”\textsuperscript{56}

After additional neoliberals received ENPs in the early 1990s, controversy arose over possible selection committee bias. The result, following “two secret investigations” by the Swedish Academy of Sciences, was that Assar Lindbeck,\textsuperscript{57} a long-serving and influential committee member “had to step off” in 1994. But by this time, “the Nobel Prize [had] swelled the prestige of market liberalism [neoliberal capitalism].”\textsuperscript{58} Several years later, controversy re-emerged when a member of the Nobel family publicly criticized the ENP and political exploitation of it.\textsuperscript{59}

Poverty of Economics and Econmomid

Galbraith observed that after political economy bifurcated, “economic instruction and policy advice were ever more severely separated from political constraints.”\textsuperscript{60} This transformation facilitated rise of the derivative ideology, economism and the adverse effects of both economics and economism became more severe in the neoliberal era. These include: giving primacy to efficiency construed in narrow economic terms, focusing on growth beyond sustainability, denigrating government on the basis of the fiction that the private sector has been solely responsible for technological innovation,\textsuperscript{61} and the misguided belief that every human endeavour can be quantified.\textsuperscript{62}

The transformation’s significance was emphasized by Offer and Söderberg: “The validity of economics would matter less if it were not used constantly to implement courses of social action in the purported interests of ‘efficiency’, often without specifying clearly what the benefits might be and for whom.”\textsuperscript{63} All courses of social action by the state are inherently political. Thus, economics was impoverished by separating its discourse from political considerations, as well as by the methodological deficiencies discussed above. This also applies to economism.

A recent example is the failure to set a price for carbon fuel usage, a key ingredient for a widely discussed economic measure to help control global warming. Despite international conferences of economists and others, “willingness to pay a price for carbon is a function of political, economic and social beliefs.” Thus, to date there is “no consensus,” despite a renewed IPCC call for action.\textsuperscript{64} It is of

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\textsuperscript{56} Offer and Söderberg, op. cit., 109-121, 142, 159. Among other things, they suggested that, “for ideological reasons,” Lindbeck’s committee “denied the prize” to “the accomplished social democrat J. K. Galbraith.”
\textsuperscript{57} Offer and Söderberg noted that Lindbeck was much influenced by the theories of Friedrich von Hayek, and that Lindbeck “dominated the selection of Nobel Prize winners during the first twenty-five years of the prize.” (179)
\textsuperscript{58} Ibid., 226-228
\textsuperscript{59} https://www.thelocal.se/20050928/2173
\textsuperscript{60} Galbraith, A History of Economics, 266-267
\textsuperscript{62} https://cfe.ryerson.ca/blog/2018/05/disinformation-quantification
\textsuperscript{63} Offer and Söderberg, op. cit., 2
\textsuperscript{64} http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf
note that, even if agreement on a carbon price is reached and implemented, “a majority of [greenhouse gas] emissions remains outside of carbon pricing schemes.”

Examples of the latter are methane emissions from the warming Polar Regions, understated by the IPCC. In order to compensate for such indirectly anthropogenic greenhouse gas emissions, it will be necessary to reduce direct emissions by regulatory measures broader than economic incentives. Concerted political action by an engaged public on a global scale is urgently required.

From his study of the neoliberal economics literature and examination of its influences and adverse effects, Alain Supiot concluded that economics has now “defined itself as a total science, capable of analysing in terms of the market all aspects of human life.” Notably, it “limits democracy” by its over-emphasis on quantifications and marketizations. He observed that such indeed was a long-standing objective of neoliberalism as declared by one of its founders, Friedrich von Hayek. Supiot called for “solidarity”—“people coming together around known goals”—to strengthen democracy and for “protection of the planet.” Piketty issued a similar call, for similar reasons: “if we are to regain control of capitalism, we must bet everything on democracy.”

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65 https://www.nature.com/articles/s41558-018-0256-0.pdf
69 Supiot, op. cit., 287-288
70 Piketty, op. cit., 573