

Changing the Narrative: Economics After Covid-19

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Abstract: In this article, we argue that societies' unpreparedness and inadequate responses to the Covid-19 pandemic expose weaknesses in the foundations of the dominant economic paradigm. We document how economics came to disembed itself from broader societal analysis and how this has influenced public policy in problematic ways, leading to privileging of efficiency over resilience. We then go a step further to consider the role of economic evidence in public policy more generally. Furthermore, we demonstrate how heterodox economics can enrich our understandings of our economies' weaknesses and of how to build a more resilient and just economy. We conclude that we need an explanation of the crisis that is capable of seeing the economy as more than just markets and as embedded in society; one that is capable of linking the causes and consequences of the pandemic to our systems of production and distribution.

Keywords: Mainstream economics, heterodox economics, Covid-19, evidence-based policy.

INTRODUCTION

The weaknesses of the field of economics have long been known, but the Covid-19 pandemic has laid them bare. Of particular concern in the wake of this pandemic is the discipline's understanding of economies as markets separated from the rest of the societies in which they are embedded and heavy reliance on methodological individualism and quantitative modelling. We argue that society's unpreparedness and inadequate response expose weaknesses in the very foundations of the dominant economic paradigm.

Unlike the 2007-08 financial crisis, there are no banks or financial markets to blame this time. Nor can we blame Keynesianism as we did in the 1970s. By contrast, the pandemic forces us to evaluate the structural problems inherent in the global system of

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provisioning. These problems are the results of decades of market-oriented reform and underfunding of social services. Therefore, rather than engage in debates about appropriate monetary policy tools and whether we are facing a demand or supply shock, we take a step back and explore some of these structural problems, how we got here, and the role of the economics discipline in this story. The fact that we find ourselves in a moment of deep uncertainty should not distract us from this broader and more fundamental critique.

In this article, we document how economics came to dissociate itself from broader societal analysis and rely heavily on mathematical modelling and stringent assumptions, and how this has influenced public policy in problematic ways. We then go a step further to consider the role of economic evidence in public policy more generally. Finally, we demonstrate how heterodox economics can enrich our understanding of our economies' weaknesses to build a more resilient and just economy.

FROM POLITICAL ECONOMY TO AN EXACT SCIENCE

Economics has long been criticised for its treatment of the economy as a separate entity, rather than situating it within broader societal aspects related to, for example, nature, ethics, and power (De Martino 2013; Foster 1997; Hirsch 1977; Marglin 1974; Palermo 2014; Sen 1999). This critique builds on a tradition of critical political economy that originated before economics became a separate discipline, thus allowing for analysis of societal issues such as gender, ecology, and politics (Fine and Milonakis 2009; Mearman, Guizzo, and Berger 2018).

From the period of classical political economy to the marginalist revolution and the formalisation of economics in the 1950s, the social and historical contexts have been increasingly removed from economics. Indeed, Léon Walras was convinced that economics would gradually evolve into a scientific discipline similar to the hard sciences, with economic laws being rational, precise and as incontrovertible as the laws of astronomy (Jaffé 1965). Instead of embedding the economy in society, the discipline has taken a more inductive approach, largely limited to viewing social behaviour through the lens of methodological individualism and economic macrodynamics through the lens of equilibrium solutions of mathematical models. Economists have generally seen this shift as a positive development, believing it to be in the interest of "coherence and consistency" (Arrow and Hahn 1971, p. 2).

Through the formalisation and also uniformisation of the economist profession since the 1950s, the discipline came to embrace "an absolute preference for the form of an economic argument over its content" (Blaug 2003, p. 145). This involved the development of economic principles abstracted from society and considered apolitical and ahistorical, building on European positivist assumptions of a universal objective truth (Kayatekin 2009). Perhaps because of this narrow view of economic

principles, the discipline is also the least interdisciplinary of the social sciences (Fourcade, Ollion, and Algan 2015) and is “unique among the social sciences in having a single monolithic mainstream, which is either unaware of or actively hostile to alternative approaches” (King 2013, p. 17). With this backdrop, it should not be surprising that the discipline will struggle to grapple with the cross-cutting nature of the current crisis.

The fact that economists see the Covid-19 pandemic as an external shock (Baldwin and di Mauro 2020) is in itself revealing and can be seen as a reflection of their view of the economy as separate from the rest of society. The external aspect is in line with the view of externalities in economics, which are conceived ahistorically and thought to arise because of technological, institutional, or other problems that prevent effective functioning of markets.

THE DISCIPLINE’S OBSESSION WITH MARKETS

With the above changes in the economics discipline, culminating with the rise of the Chicago School of Economics in the 1970s, economists largely stopped challenging the standard choice of taking market equilibrium and human rationality as starting points. These theoretical and methodological choices echo the origins of modern economics, wherein the discipline broadly came to be seen as the study of “human behaviour as a relationship between ends and scarce means” (Robbins 1932, p. 15); the market was considered the most efficient allocating mechanism (Walras 1954). Within this understanding, human interactions are thought to happen mainly through the market, and markets are theorised as being about the mutual interactions of demand and supply, with equilibrium as a central concept (Wootton 1938).¹ This also had implications for how the discipline came to view that state and paved the way for the likes of Nozick and Buchanan, who presented a market version of contractarianism to justify a minimal state whose actions are limited to necessities such as law enforcement and providing national defence.

As we move further into the second half of the twentieth century, an increasing number of economists think of themselves as modellers, “simplifying” reality through models and invoking the necessary assumptions regarding equilibrium, representative agents, and optimisation.² This led Lawson (2013) to characterise mainstream economics in terms of its enduring reliance upon methods of mathematical modelling – analysing economic phenomena with the help of mathematical deduction, laws, or uniformities. A consequence of this turn is that economists find it increasingly difficult to imagine different ways to do economics. An example is

¹ Even though the market/economy became detached from society, there have been attempts within the mainstream to forge a link between the economic and the social, but always through the application of economic principles to the social sphere and treating social entities as though they are only to exist within and according to market principles.

² It is worth noting that there are many alternative ways of modelling the economy that do not rely on such assumptions (Kvangraven and Alves 2019).

Colander and Kupers's (2014) view of the economy as a complex adaptive system, which has been seen as a paradigm shift in economics. However, as Kirman (2016) observes, the system still relies on an equilibrium or steady state as an organising tool and thus remains firmly placed within the dominant theoretical framework; this is hardly a paradigm shift.

More broadly, the developments in the discipline that have led to the influential role of general equilibrium theory (first sketched by Walras and developed by Arrow-Debreu), which assumed conditions such as perfect market competition, reinforced the turn towards seeing the state as an institution supporting the market. Essentially, within mainstream economics, deviations from the basic assumptions that underpin market equilibrium are considered “imperfections” or “externalities,” thus retaining a form of market fundamentalism at its core.³ Similarly, behavioural economics has become a booming subfield, studying how behaviour deviates from *homo economicus* and thus retaining the same starting point for understanding human rationality. Naturally, policy recommendations emanating from this theoretical framework largely revolve around solving market failures and nudging individuals to behave rationally. Now that the economy is partially shut down and “normal” market mechanisms are put on hold, it is perhaps not surprising that the discipline may struggle to propose effective policy solutions.

PUBLIC POLICY IMPLICATIONS: WEAKENING OF SOCIAL PROVISIONING

The discipline's narrow view of the “economic sphere” equated to markets has had a strong influence on public policy over the past half century. Indeed, the market fundamentalism at the heart of modern economics lies behind much of the weakening of the state that occurred in Europe and the US in the 1980s, which led to increased participation of the private sector in health care, education, and housing. In the same period, reliance on the market was now a condition for developing countries to obtain loans from the International Monetary Fund and the World Bank (the so-called Washington Consensus).

The discipline's bias towards markets as an efficient allocator of resources has led to two key trends that weakened the structures of economies and their capacities to engage in social provisioning across the world. The first is the vilification of “the state” alongside a celebration of market efficiency, which has led to a lack of resilience in the organisation of social provisioning. The second and more recent one, is the austerity that has driven government deficit reductions, spending cuts, and attempts to dismantle social welfare systems across the world (Konzelmann 2019; Mkandawire 2006; Williams and Maruthappu 2013; Noy 2017).

³ Note, we do not argue that all economists believe in laissez-faire (e.g. Naidu, Rodrik, and Zucman's (2019) understanding of market fundamentalism), but rather that markets are employed within economic theory as a frame through which to understand human rationality and behaviour (Wootton 1938).

Market precepts and axioms have heavily influenced the development of the New Public Management (NPM) paradigm in public policy, both in terms of reliance on market mechanisms and rational choice theory (Gruening 2001; Osborne 2006).⁴ NPM includes policies of managerialism, marketisation, privatisation, and public-private partnerships (Christensen and Laegreid 2011). The paradigm gained traction under Reagan and Thatcher in the 1980s but has since increasingly become a global phenomenon (Sekera 2016). Despite its market-centric approach, it has broadly been supported by all major political parties in Anglo-Saxon and European countries (Diefenbach 2009).

The strong influence of economics on public policy has led to *efficiency* itself becoming a core public goal (Davis 1985), implying the elimination of any idle resources to ensure all capital is put to efficient use. Although scholars have contested the expected positive effects derived from this efficiency (Cook 2015; Harford 2014), the economic system has largely been oriented towards profit-making, cost minimisation, and efficiency in the last forty years or so (Jacobin Magazine 2020). The focus on efficiency has not only led to poor monetary remuneration to essential workers such as nurses but also to “just in time” and “lean work” procedures that justify decades of systematic underinvestment in planning and surge capacity (Carter *et al.* 2016; Toynbee and Walker 2017).⁵ For hospitals, this has contributed to a reduction in the total number of hospital beds. For example, the number of National Health Service hospital beds in England dropped by more than half during 1987 to 2017 (Ewbank *et al.* 2017).

In parallel, there has been an increasing focus on the connection between public debt and macroeconomic outcomes by economists and policymakers across the world. Initially, based on the balanced budget approach, ideas about crowding-out effects, and fiscal costs associated with public projects and welfare provisioning, this focus guided much of the reforms of the 1980s and 1990s. Since then, the prevailing narrative has shifted towards a more rigid focus on a negative correlation between high public debt and economic growth as well as between fiscal deficits and financial investor confidence. This has, at times, prevented democratically elected governments from acting to enhance their people’s welfare.

The idea of the state as this potential Leviathan that needs to be restrained together with an “efficient” approach to the organisation of society has engendered worrisome fragilities, inequalities, and vulnerabilities, leaving us completely unprepared and incapable of responding effectively to the pandemic. If we thought of structuring

⁴ Rational choice theory is a cornerstone of the economics discipline and encompasses three central tenets: methodological individualism, a view of rationality linked to constrained optimisation, and the role of equilibrium as a descriptive and explanatory device.

⁵ For example, in the UK, the shrinking capacity has recently been exacerbated by both austerity policies and Brexit (Toynbee and Walker 2017). In April 2020, *The Times* reported that the UK government limited emergency stockpiles of personal protective equipment due to austerity measures and suspended training for essential pandemic workers for two years while directing their efforts to a possible no-deal Brexit (Calvert, Arbuthnott, and Leake 2020).

our society along the lines of resilience and robustness rather than efficiency, our societies' preparedness for a pandemic would be much greater (Trosper 2009; Derissen, Quaas, and Baumgärtner 2011). In such a case, we would be more likely to have had adequate equipment and structures in place to respond effectively.

ECONOMICS AND EVIDENCE-BASED POLICY: WHITHER PUBLIC DEBATE?

The rise of econometrics in economics has been accompanied by a critique of empirical practices in the field (Leamer 1983). By the 1980s, credible empirical work in economics was considered a pipe dream, but much has changed with empirical developments in labour economics and microeconomics, wherein data is taken seriously, for example, through random experiments and quasi-experiments (Angrist and Pischke 2010).⁶ This so-called empirical turn has been used to justify an increase in economics' policy relevance and scientific impact. Though this is positive because it means abstract economic principles can be empirically tested, the type of policies and interventions "tested" by economists remain within a narrow frame of what public policy can be, thus constraining policy choices significantly.

Also, in line with the empirical turn, randomised control trials (RCTs) have gained traction as the gold standard for providing microeconomic evidence. Given the narrowness of the theoretical and methodological approach underlying RCTs, this form of evidence tends to be removed from analyses of power and wider social change (Chernomas and Hudson 2019) as well as the underlying social, economic, and cultural structures that affect the results (Deaton and Cartwright 2018). This has been exacerbated by the fact that evidence produced through RCTs, or modelling in economics more broadly, is usually presented as atheoretical. This is nowhere made more lucid than when Esther Duflo famously likened economists to plumbers, suggesting that economists' work is purely technical, objective, and value-neutral, despite being rooted in a particular theoretical framework (Kvangraven 2020b).

With the rise of RCTs, we have also seen a rise in so-called evidence-based policy. While this term is a bit of a misnomer, suggesting policy was not based on evidence before the randomista revolution, it reflects a paradigm wherein a specific type of evidence is currently accepted as rigorous and "lie[s] at the top of the hierarchy" (Drèze 2020, p. 1).⁷ This means that, in effect, the policy options available are limited by the requirement of a certain kind of evidence (Manski 2011; Kelly and Linsey 2018; Parkhurst 2017; Spiegler 2015). Given that RCTs are often used to test how people react to certain policy interventions, behavioural economists often make use of this methodology; behavioural insights are increasingly being connected to

⁶ Empirical development in macroeconomics has happened at a much slower pace.

⁷ Duflo and Kremer (2005) stated that "all too often development policy is based on fads, and randomised evaluations could allow it to be based on evidence," suggesting that pre-RCTs policies did not draw on evidence (p. 206).

evidence-based policy (Bogliacino, Codagnone, and Veltri 2016; Chetty 2015; Thaler 2016).

This discussion is of utmost importance to understand the role of evidence in the current policy response to the pandemic, particularly in light of the UK's response. In contrast to the scientific advice of the World Health Organisation (WHO) about the importance of lockdown as well as testing and tracing, the UK considered that locking down early may cause negative psychological effects and a risk of demoralising people in case of an extended lockdown (Brooks *et al.* 2020; Lunn *et al.* 2020). However, this evidence was largely based on behavioural experiments in entirely different contexts, thus assuming that behaviour is independent of the situation in which it takes place (e.g., the specific argument on the demoralising effects of an extended quarantine was based on a randomised experiment on extending military deployment). In effect, the UK government acted against WHO evidence, and its policy response differed greatly from regions and countries such as Ghana, New Zealand, Kerala in India, Vietnam, Singapore, and South Korea that more successfully managed the pandemic in the beginning.

In these initially successful cases, despite weak healthcare capacity, policy responses often combined early action by the government, rigorous testing and contact tracing, full or partial lockdown, support for unemployed workers, and effective public communication.⁸ Strong proactive lockdown measures like in Vietnam and early closed borders like in Ghana seem to have been crucial measures for success. Policy responses often went beyond what could be derived from epidemiological modelling to addressing hospital staff and bed shortages via, for example, the efforts of community health workers and volunteers (Ghana) and adding new beds to existing healthcare facilities (South Korea). At the outset, the engagement with science, evidence, and experts was more comprehensive in these countries than in the UK. Undoubtedly, many of these governments had a structure and expertise in place due to experiences with SARS or Ebola, whereas others drew on knowledge from the WHO and carefully acknowledged the complexity of the situation.

The model developed by Neil Ferguson and his team at Imperial College London (ICL) crucially influenced the UK government to act and lockdown the economy (Adam 2020). It provided evidence as early as the end of January to support general social distancing. However, there are some drawbacks to the approach worth mentioning. While the ICL model is not an economic one, it illustrates more general issues with modelling applicable to economics. Economic expertise, as well as modelling expertise more broadly, has gained status as an almost unquestionable guide for policy, despite the fact that any model will only represent a particular perspective (D'Ippoliti 2020). For example, the ICL model focuses on Covid-19 mortality and

⁸ Vietnam, for example, has 8 doctors per 10,000 people, whereas the average for OECD countries is 3.5 doctors per 1,000 people (World Bank 2020).

does not appraise other health and non-health implications of the pandemic. It thus does not deal with broader economic and social costs of various interventions (Reddy 2020). Considering the broad and comprehensive approaches of the successful responses to the pandemic, the ICL model is not a sufficient basis for an effective and comprehensive policy response to the pandemic. In this sense, the UK response demonstrates both the over-influence of a particular expertise on policy and its disproportionate influence of models; it highlights the fact that policymaking requires broader judgements about policy effects on society at large. This heavy bias towards quantitative models and narrow behavioural insights led many to protest the government's judgement (Horton 2020).

Beyond the problematic assumptions behind evidence informing the UK's response to the pandemic, there are two broad lessons to learn from its response. The first is that any narrow view of what counts as evidence and expertise limits a government's ability to comprehensively understand the pandemic and its consequences. Having a limited team of experts means that important perspectives will inevitably be neglected. Rather than restricting the advisory group to mostly clinical academics, microbiologists, and modellers (as was the case in Britain), an interesting example to follow could be that of Germany, where philosophers and historians of science were a part of the government's advisory group. Drawing on expertise from countries with experience from previous outbreaks would also be helpful.

The second lesson is related to the problematic discourse of "expertise" in the public debate about the Covid-19 response. Though science must, of course, play an important role in policymaking, narrowly defined expertise obscures value judgments that policymakers have to make, including decisions about who to select for their advisory committees. Given that "coronavirus advice is political" (Bacevic 2020), forming a more diverse scientific advisory group would be a first step to broadening the evidence available to the government and making the tensions and value judgments inherent in any response explicit. Indeed, this would lead to increased public scrutiny and understanding, which would be healthy for democratic debate.

HETERODOX ECONOMICS: FOR BETTER AND BROADER ANALYSES

Rather than being centred on the study of the allocation of scarce resources, heterodox economics is concerned with the study of production and distribution of economic surplus, including the role of power relations in determining economic relationships, the study of economic systems beyond market relations, and the employment of theories focusing on these issues (Kvangraven and Alves 2019). This alternative view of and approach to the economy can help us understand the causes and consequences of the Covid-19 pandemic in crucial ways.

First of all, heterodox economics relies on alternative views of human behaviour, moving away from the rational optimising agents and the methodological individualism of the mainstream. Indeed, understanding rationality as being about more than optimising personal advantage given certain constraints has been understood by scholars going back to Adam Smith and Immanuel Kant; the mainstream approach to rationality has long been criticised for being conceptually and empirically flawed (Lukes 1968; Nandy 2012; Ostrom 1990; Ostrom 2005; Sen 1977). Essential here are insights from feminist economists, who have long pointed to the importance of understanding both social reproduction and social relations between actors (Nelson 1995). As the spread of the virus between individuals has led to measures such as school closures, society has been forced to grapple with the importance of social reproduction as a core activity that keeps the economy going (this insight has been long recognised in social reproduction theory, e.g. Bhattacharya 2017).⁹

As heterodox economists do not rely on methodological individualism, there is also more space for exploring inequalities related to aggregate societal categories such as gender, class, and race (Kvangraven and Alves 2019; Mearns, Guizzo, and Berger 2019; Tilley and Shilliam 2017). This is particularly relevant in the wake of the pandemic, which is no “great leveller,” as some pundits have claimed, but rather a process of exacerbating and highlighting existing inequalities. For example, as demonstrated by Nassif-Pires *et al.* (2020), the virus is hitting low-income neighbourhoods and minority communities the hardest. This would not be surprising to stratification economists, who have long pointed out the deep racial wealth gap in the US, rooted in socio-economic and political structural barriers (Hamilton and Darity 2017).

In terms of methodology, Lawson’s (2013) view of heterodox economics as a scientific programme that emphasises an ontology of openness, relationality, and totalities helps us understand how many economic models fail to grasp human interaction and complex networks. This is particularly important for policymakers across the world as they try to make sense of the unfolding crisis.

It should also be highlighted that heterodox approaches enable seeing the economy as embedded in society. For example, Lee’s (2009) emphasis on heterodox economics as the “historical process of social provisioning” has led to a focus on the structures of production and reproduction in society, with their historical determinations and causal mechanisms not limited to the sphere of the market (pp. 8–9). Such a perspective can, for example, open the door for fruitful insights about household dynamics during the crisis and how they relate to both production and reproduction. Another implication of this view is that we cannot expect the same

⁹ The substantial relative drop in women academics’ productivity during the pandemic is also a telling example of working women’s reliance on institutions of social reproduction (Minello 2020).

behavioural responses or societal outcomes across different social communities, given differences in history, culture, and economic organisation. Instead, the perspective forces us to consider how responses to the pandemic are mediated by institutional, social, and economic factors.

Situating the economy in society enables exploration of the intricacies between the economy and nature, for example, by food systems researchers (Worstell 2020) or ecological economists (Derissen, Quaas, and Baumgärtner 2011; Trosper 2009). Indeed, to scholars with a broader understanding of how production affects food and ecological systems, the rise and spread of Covid-19 was less of a surprise (Wang *et al.* 2006; Wallace 2016). Such a perspective starkly contrasts to viewing the pandemic as an exogenous shock. Therefore, it is now time to emphasise that capitalist production is intertwined with nature and cannot be seen as separate – an important lesson for many heterodox economists as well.

The inherent instability of capitalism and the need to put distributional conflicts at the centre of any economic analysis is also a recurring characteristic of heterodox approaches. Vernengo (2011) emphasises how distribution is determined exogenously by social and institutional conditions in heterodox economics, which can help us understand that structural weaknesses in our economies are due to political choices. For example, the low wages among essential workers are determined by policy, rather than being a reflection of a market-determined price. Some of these weaknesses bluntly exposed by the pandemic include the high degrees of homelessness, precarious workforces, and poverty, all of which impact the governments' ability to respond effectively. For once, policymakers are forced to consider public health as a broader societal issue as well as including shelters for the homeless, paid sick leave, and universal health coverage as a part of their pandemic response. In light of this, a framework that allows us to see the enduring structural aspects of these socio-economic problems is needed.

Furthermore, heterodox economists identify and analyse structural forces that lie behind the polarising tendencies within the global economy. This is central at a moment when deepening global economic integration over the past decades has led to improved economic efficiency as well as new vulnerabilities. Global value chains are now very complex systems, and rather than being decentralised, they are hierarchical and imbalanced with core hubs that exert disproportionate influence (Panitch and Gindin 2004; Durand and Milberg 2020). To understand developing economies' constraints in the wake of the pandemic, it is therefore essential to look beyond their health systems to also consider constraints related to their subordinate or dependent position in the global economy (Alves and Toporowski 2019; Bonizzi *et al.* 2019; de Paula, Fritz, and Prates 2017; Kaltenbrunner 2018; Kvangraven 2020a; Patnaik and Patnaik 2016; Suwandi 2019).

Finally, the heterodox critique of mainstream economics goes beyond a simple state–market dichotomy, wherein heterodox economists want “more” of the state and the mainstream wants “less.” The role of the state in the economy is much broader than in just rectifying market failure (Bernstein 2018); in addition, heterodox economics and especially the literature on the public economy points us to a broader understanding of economies as non-market environments (Sekera 2016). Within this view, there is a public economy comprised of multiple economic systems, wherein the public sector is not governed by the same principles and axioms as that of the market.¹⁰ This view leads us to consider the advantages of a collective-choice and collective-financing system that produces goods, services, benefits, and protection aimed at the well-being of society as a whole (*ibid.*). Within the context of a Covid-19 response, this perspective is crucial because it recognises that the public sector is an integral part of the economy and directly affects many, if not all, socio-economic issues (Bernstein 2018). Such analyses of the state should not only be conducted by social and political theorists.

THE BATTLE FOR THE NARRATIVE

Though this crisis is indeed unprecedented, the question remains whether we will see any fundamental change in the economics discipline. After all, if the 2007–08 global financial crisis did not drastically change the profession, it is not a given that the pandemic will either. The crisis has certainly made it clear that fiscal austerity is a political choice rather than a necessity, a principle that we must remember once the lockdown eases. It has also publicly exposed weaknesses and inequalities in our economies, including weak and underfunded health systems, weak state capacities to provide social services, and the precarity among underpaid essential workers. Exposing these weaknesses and the political choices that lie behind how our economies are organised is a first step towards building a more just society.

In this article, we go beyond describing societal problems to analysing the role of the economics discipline in particular. Two broad problems emerge. Firstly, the nature of the discipline makes it difficult for economists to understand the economy in a comprehensive and realistic manner. Economists’ view of Covid-19 as an external shock poses problems for the discipline’s ability to grapple with the interconnected crises that this pandemic represents. At this juncture, it is more important than ever to open up the debate about how to understand and tackle these crises, with a view to make our economies more resilient and just, rather than simply more “efficient.” It is time to revisit the field’s flawed conception of the economy as a market equilibrium economy and obsession with narrow forms of evidence and modelling.

¹⁰ The public economy literature also highlights the necessity of socially constructive economies that focus on both a broader array of goals not simply defined by profit maximisation (i.e., the public purpose economy) and on the survival, nurturing, and welfare of its constituents (i.e., the core economy) (Goodwin 2018).

The second problem is the discipline's claim to neutrality and objectivity that obscures the ideological assumptions behind economic research. As heterodox economists tend to be more explicit about the political and ideological aspect of their academic work, their analyses are more concerned with social conflicts and different group interests in the economy, which could pave the way for a broader and more informed public debate about economics. For such a debate to be effective there is also a need to revise the role of so-called evidence-based policy in economics and public policy. There have already been calls to hold the UK accountable for its inadequate response to the pandemic – this should ideally include a thorough reassessment of how models and evidence are used to determine policy and how some forms of expertise are prioritised over others. This pandemic exposes the fact that data and evidence are never entirely neutral.

In the coming months and years, there will be a battle to define the narrative of the pandemic. We need an explanation of the crisis that is capable of seeing the economy as more than just markets and, rather, as embedded in society. It should be capable of linking the causes and consequences of the pandemic to our systems of production and distribution. A fundamental change in the prevailing economic narrative is necessary for a more just, robust, and democratic society.

REFERENCES

- Adam, David (2020), "Special Report: The Simulations Driving the World's Response to Covid-19," *Nature*, April 2, available at <https://www.nature.com/articles/d41586-020-01003-6>, viewed on June 13, 2020.
- Alves, Carolina, and Toporowski, Jan (2019), "Capital Flows and the Growth of International Finance in Emerging Economies: An Alternative Approach," *PSL Quarterly Review*, vol. 72, no. 288.
- Angrist, Joshua D., and Pischke, Jörn-Steffen (2010), "The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con out of Econometrics," *Journal of Economic Perspectives*, vol. 24, no. 2, pp. 3–30.
- Arrow, Kenneth J., and Hahn, F. H. (1971), *General Competitive Analysis*, Holden-Day, San Francisco.
- Bacevic, Jana (2020), "There's No Such Thing as Just 'Following the Science' – Coronavirus Advice is Political," *The Guardian*, April 28, available at www.theguardian.com/commentisfree/2020/apr/28/theres-no-such-thing-just-following-the-science-coronavirus-advice-political, viewed on April 29, 2020.
- Baldwin, Richard, and di Mauro, Beatrice Weder (2020), *Mitigating the COVID Economic Crisis: Act Fast and Do Whatever It Takes*, Centre for Economic Policy Research Press, London.
- Bernstein, Michael A. (2018), "Reconstructing a Public Economics: Markets, States, and Societies," *Real-World Economics Review*, no. 84, pp. 2–15.
- Bhattacharya, Tithi (2017), *Social Reproduction Theory: Remapping Class, Recentering Oppression*, Pluto Press, London.

Blaug, Mark (2003), "The Formalist Revolution of the 1950s," *Journal of the History of Economic Thought*, vol. 25, no. 2, pp. 145–56.

Bogliacino, Francesco, Codagnone, Cristiano, and Veltri, Giuseppe A. (2016), "An Introduction to the Special Issue on 'the Behavioural Turn in Public Policy: New Evidence from Experiments,'" *Economia Politica*, vol. 33, pp. 323–32.

Bonizzi, Bruno, Kaltenbrunner, Annina, and Powell, Jeff (2019), "Subordinate Financialisation in Emerging Capitalist Economies," in Philip Mader, Daniel Mertens, and Natascha van der Zwan (eds.), *The International Handbook of Financialisation*, London, Routledge, pp. 177–87.

Brooks, Samantha K., Webster, Rebecca K., Smith, Louise E., Woodland, Lisa, Wessely, Simon, Greenberg, Neil, and Rubin, Gideon James (2020), "The Psychological Impact of Quarantine and How to Reduce It: Rapid Review of the Evidence," *The Lancet*, vol. 395, no. 10227, pp. 912–20.

Calvert, Jonathan, Arbuthnott, George, and Leake, Jonathan (2020), "Coronavirus: 38 Days When Britain Sleepwalked into Disaster," *The Times*, April 18, available at <https://archive.is/20200418182037/https://www.thetimes.co.uk/edition/news/coronavirus-38-days-when-britain-sleepwalked-into-disaster-hq3b9tlgh#selection-695.0-695.59>, viewed on April 30, 2020.

Carter, Bob, Danford, Andrew, Howcroft, Debra, Richardson, Helen, Smith, Andrew, and Taylor, Phil (2016), "Uncomfortable Truths – Teamworking Under Lean in the UK," *International Journal of Human Resource Management*, vol. 28, no. 3, pp. 449–67.

Chernomas, Robert, and Hudson, Ian (2019), "Omission and Commission in the Development Economics of Daron Acemoglu and Esther Duflo," *Canadian Journal of Development Studies*, vol. 40, no. 4, pp. 447–63.

Chetty, Raj (2015), "Behavioral Economics and Public Policy: A Pragmatic Perspective," *American Economic Review*, vol. 105, no. 5, pp. 1–33.

Christensen, Tom, and Laegreid, Per (eds.) (2011), *The Ashgate Research Companion to New Public Management*, Routledge, London.

Colander, David, and Kupers, Roland (2014), *Complexity and the Art of Public Policy: Solving Society's Problems from the Bottom Up*, Princeton University Press, Princeton.

Cook, Chris (2015), "Risks of Government Schools Strategy," *BBC*, February 2, available at <http://www.bbc.co.uk/news/uk-politics-31094670>, viewed on April 30, 2020.

Davis, Charles R. (1985), "A Critique of the Ideology of Efficiency," *Humboldt Journal of Social Relations*, vol. 12, no. 2, pp. 73–86.

Deaton, Angus and Cartwright, Nancy (2018), "Understanding and Misunderstanding Randomised Controlled Trials," *Social Science and Medicine*, vol. 210, pp. 2–21.

DeMartino, George (2013), "Epistemic Aspects of Economic Practice and the Need for Professional Economics Ethics," *Review of Social Economy*, vol. 71, no. 2, pp. 166–86.

de Paula, Luiz Fernando, Fritz, Barbara, and Prates, Daniela M. (2017), "Keynes at the Periphery: Currency Hierarchy and Challenges for Economic Policy in Emerging Economies," *Journal of Post Keynesian Economics*, vol. 40, no. 2, pp. 183–202.

Derissen, Sandra, Quaas, Martin F. and Baumgärtner, Stefan (2011), "The Relationship Between Resilience and Sustainability of Ecological-Economic Systems," *Ecological Economics*, vol. 70, no. 6, pp. 1121–28.

Diefenbach, Thomas (2019), “New Public Management in Public Sectors Organisation: The Dark Sides of Managerialistic ‘Enlightenment’,” *Public Administration*, vol. 87, no. 4, pp. 892–909.

D’Ippoliti, Carlo (2020), *Democratising the Economics Debate: Pluralism and Research Evaluation*, Routledge, New York.

Drèze, Jean (2020), “Policy Beyond Evidence,” *World Development*, vol. 127, pp. 104797, available at <https://doi.org/10.1016/j.worlddev.2019.104797>, viewed on April 30, 2020.

Duflo, Esther and Kremer, Michael (2005), “Use of Randomisation in the Evaluation of Development Effectiveness,” in George Keith Pitman, Osvaldo N. Feinstein, and Gregory K. Ingram (eds.), *Evaluating Development Effectiveness*, Transaction Publishers, London.

Durand, Cédric and Milberg, William (2020), “Intellectual Monopoly in Global Value Chains,” *Review of International Political Economy*, vol. 27, no. 2, pp. 404–29.

Ewbank, Leo, Thompson, James, McKenna, Helen, and Anandaciva, Siva (2017), “NHS Hospital Bed Numbers: Past, Present, Future,” *The King’s Fund*, available at <https://www.kingsfund.org.uk/publications/nhs-hospital-bed-numbers>, viewed on April 30, 2020.

Fine, Ben, and Milonakis, Dimitris (2009), *From Political Economy to Economics Method, the Social and the Historical in the Evolution of Economic Theory*, Routledge, London.

Foster, John Bellamy (1997), *Valuing Nature?: Economics, Ethics and Environment*, Routledge, London.

Fourcade, Marion, Ollion, Etienne, and Algan, Yann (2015), “The Superiority of Economists,” *Journal of Economic Perspectives*, vol. 29, no. 1, pp. 89–114.

Goodwin, Neva (2018), “There is More Than One Economy,” *Real-World Economics Review*, vol. 84, pp. 16–35.

Gruening, Gernod (2001), “Origin and Theoretical Basis of New Public Management,” *International Public Management Journal*, vol. 4, pp. 1–25.

Hamilton, Darrick and Darity Jr., William A. (2017), “The Political Economy of Education, Financial Literacy, and the Racial Wealth Gap,” *Review*, vol. 99, no. 1, pp. 59–76.

Harford, Tim (2014), “Public Service Performance,” *Time Harford Undercover Economist*, July 15, available at <http://timharford.com/2014/07/underperforming-on-performance/>, viewed on April 30, 2020.

Hirsch, Fred (1977), *Social Limits to Growth*, Routledge and Kegan Paul Ltd., London.

Horton, Richard (2020), “Covid-19 and the NHS—‘A National Scandal’,” *The Lancet*, vol. 395, no. 10229, pp. 1022.

Jacobin Magazine (2020), “James K. Galbraith and Aaron Benanav,” *Jacobin Radio*, available at <https://blubrry.com/jacobin/58228982/jacobin-radio-james-k-galbraith-and-aaron-benanav/>, accessed April 28, 2020.

Jaffé, William (ed.) (1965), *Correspondence of Leon Walras and Related Papers*, vol. III, North-Holland, Amsterdam.

Kaltenbrunner, Annina (2018), “Financialised Internationalisation and Structural Hierarchies: A Mixed-Method Study of Exchange Rate Determination in Emerging Economies,” *Cambridge Journal of Economics*. Oxford Academic, vol. 42, no. 5, pp. 1315–41

- Kayatekin, Serap A. (2009), "Between Political Economy and Postcolonial Theory: First Encounters," *Cambridge Journal of Economics*, vol. 33, pp. 1113–8.
- Kelly, Ann H., and McGoey, Linsey (2018), "Facts, Power and Global Evidence: A New Empire of Truth," *Economy and Society*, vol. 47, no. 1, pp. 1–26.
- King, John E. (2013), "A Case for Pluralism in Economics," *Economics and Labour Relations Review*, vol. 24, no. 1, pp. 17–31.
- Kirman, Alan (2016), "Complexity and Economic Policy: A Paradigm Shift or a Change in Perspective? A Review Essay on David Colander and Roland Kupers's Complexity and the Art of Public Policy," *Journal of Economics Literature*, vol. 54, no. 2, pp. 534–72.
- Konzelmann, Suzanne J. (2019), *Austerity*, Polity Press, London.
- Kvangraven, Ingrid Harvold (2020a), "Beyond the Stereotype: Restating the Relevance of the Dependency Research Programme," *Development and Change*.
- Kvangraven, Ingrid Harvold (2020b), "Impoverished Economics? A Critical Assessment of the New Gold Standard," *World Development*, vol. 127, pp. 104813, available at <https://doi.org/10.1016/j.worlddev.2019.104813>, viewed on April 30, 2020.
- Kvangraven, Ingrid Harvold, and Alves, Carolina (2019), "Heterodox Economics as a Positive Project: Revisiting the Debate," ESRC GPID Research Network Working Paper 19, Global Poverty and Inequality Dynamics Research Network.
- Lawson, Tony (2013), "What is This 'School' Called Neoclassical Economics?," *Cambridge Journal of Economics*, vol. 37, no. 5, pp. 947–83.
- Leamer, E. Edward, (1983), "Let's Take the Con Out of Econometrics," *The American Economic Review*, vol. 73, no. 1, pp. 31–43.
- Lee, Fred (2009), *A History of Heterodox Economics: Challenging the Mainstream in the Twentieth Century*, Routledge, London.
- Lukes, Steven (1968), "Methodological Individualism Reconsidered," *The British Journal of Sociology*, vol. 19, no. 2, pp. 119–29.
- Lunn, Peter, Belton, Cameron, Lavin, Ciarán, McGowan, Féidhlim, Timmons, Shane, and Robertson, Deirdre (2020), "Using Behavioural Science to Help Fight the Coronavirus," ESRI Working Paper No. 656, Behavioural Research Unit, ESRI, available at www.esri.ie/publications/using-behavioural-science-to-help-fight-the-coronavirus, viewed on April 30, 2020.
- Manski, Charles (2011), "Policy Analysis with Incredible Certitude," *Economic Journal*, vol. 121, no. 554, pp. 261–89.
- Marglin, Stephan A. (1974), "What Do Bosses Do? The Origins and Functions of Hierarchy in Capitalist Production, Part 1," *Review of Radical Political Economics*, vol. 6, pp. 60–112.
- Mearman, Andrew, Guizzo, Danielle, and Berger, Sebastian (2018), "Whither Political Economy? Evaluating the CORE Project as a Response to Calls for Change in Economics Teaching," *Review of Political Economy*, vol. 30, no. 2, pp. 241–59.
- Mearman, Andrew, Guizzo, Danielle, and Berger, Sebastian (2019), *What is Heterodox Economics? Conversations with Leading Economists*, Routledge, London.

- Minello, Alessandra (2020), "The Pandemic and the Female Academic," *Nature*, April 17, available at <https://www.nature.com/articles/d41586-020-01135-9>, viewed on April 30, 2020.
- Mkandawire, Thandika (2006), "Disempowering New Democracies and the Persistence of Poverty," Democracy, Governance and Human Rights Programme Paper 21, United Nations Research Institute for Social Development, Geneva, Switzerland.
- Naidu, Suresh, Rodrik, Dani, and Zucman, Gabriel (2019), "Economics After Neoliberalism," *Boston Review*, February 15, available at <http://bostonreview.net/forum/suresh-naidu-dani-rodrik-gabriel-zucman-economics-after-neoliberalism>, viewed on April 30, 2020.
- Nandy, Ashis (2012), "The Idea of Happiness," *Economic and Political Weekly*, vol. 47, no. 2, pp. 45-48.
- Nassif-Pires, Luiza, de Lima Xavier, Laura, Masterson, Thomas, Nikiforos, Michalis, and Rios-Avila, Fernando (2020), "Pandemic of Inequality," Public Policy Brief No. 149, Levy Economics Institute of Bard College, Annandale-on-Hudson, New York.
- Nelson, Julie A. (1995), "Feminism and Economics," *The Journal of Economic Perspectives*, vol. 9, no. 2, pp. 131-48.
- Noy, Shiri (2017), *Banking on Health The World Bank and Health Sector Reform in Latin America*, Palgrave Macmillan, Cham, Switzerland.
- Osborne, Stephen P. (2006), "The New Public Governance?" *Public Management Review*, vol. 8, no. 3, pp. 377-87.
- Ostrom, Elinor (1990), *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press, Cambridge.
- Ostrom, Elinor (2005), *Understanding Institutional Diversity*, Princeton University Press, Princeton.
- Palermo, Giulio (2014), "The Economic Debate on Power: A Marxist Critique," *Journal of Economic Methodology*, vol. 21, no. 2, pp. 175-92.
- Panitch, Leo, and Gindin, Sam (2004), "Global Capitalism and American Empire," *Socialist Register*, vol. 40.
- Parkhurst, Justin (2017), *The Politics of Evidence: From Evidence-Based Policy to the Good Governance of Evidence*, Routledge, Abingdon.
- Patnaik, Utsa, and Patnaik, Prabhat (2016), *A Theory of Imperialism*, Columbia University Press, New York.
- Reddy, Sanjay (2020), "How Epidemiological Models Fooled Us Into Trusting Bad Assumptions," *Barrons*, April 29, available at <https://www.barrons.com/articles/the-danger-of-overreliance-on-epidemiological-models-51588179008>, viewed on April 29, 2020.
- Robbins, Lionel (1932), *An Essay on the Nature and Significance of Economic Science*, MacMillan & Co Limited, London.
- Sekera, June A. (2016), "Developing an Intellectual Infrastructure," *The Public Economy in Crisis: A Call for a New Public Economics*, Springer, Switzerland, pp. 93-102.
- Sen, Amartya (1977), "Rational Fools: A Critique of the Behavioral Foundations of Economic Theory," *Philosophy & Public Affairs*, vol. 6, no. 4, pp. 317-44.

- Sen, Amartya (1999), *On Ethics and Economics*, Oxford University Press, Oxford.
- Spiegler, Peter (2015), *Behind the Model: A Constructive Critique of Economic Modeling*, Cambridge University Press, Cambridge.
- Suwandi, Intan (2019), *Value Chains: The New Economic Imperialism*, Monthly Review Press, New York.
- Thaler, Richard H. (2016), "Behavioral Economics: Past, Present, and Future," *American Economic Review*, vol. 106, no. 7, pp. 1577–600.
- The World Bank (2020), "Physicians (Per 1,000 People)," World Health Organisation's Global Health Workforce Statistics, available at <https://data.worldbank.org/indicator/SH.MED.PHYS.ZS>, viewed on April 30, 2020.
- Tilley, Lisa, and Shilliam, Robbie (2017), "Raced Markets: An Introduction," *New Political Economy*, vol. 23, no. 5, pp. 1–10.
- Toynbee, Polly and Walker, David (2017), *Dismembered: How the Conservative Attack on the State Harms Us All*, Faber & Faber, London.
- Trosper, Ronald L. (2009), *Resilience, Reciprocity and Ecological Economics: Northwest Coast sustainability*, Routledge, London.
- Vernengo, Matías (2011), "The Meaning of Heterodox Economics, and Why It Matters," *Naked Keynesianism*, May 18, available at <http://nakedkeynesianism.blogspot.com/2011/05/meaning-of-heterodox-economics-and-why.html>, viewed on April 30, 2020.
- Wallace, Robert (2016), *Big Farms Make Big Flu: Dispatches on Influenza, Agribusiness, and the Nature of Science*, Monthly Review Press, New York.
- Walras, Léon ([1874] 1954), *Elements of Pure Economics*, translated by William Jaffé, Richard D. Irwin, Inc., Homewood, Illinois.
- Wang, Ming, Di, Biao, Zhou, Duan-Hua, Zheng, Bo-Jian, Jing, Huaiqi, Lin, Yong-Ping, Liu, Yu-Fei, Wu, Xin-Wei, Qin, Peng-Zhe, Wang, Yu-Lin, Jian, Li-Yun, Li, Xiang-Zhong, Xu, Jian-Xiong, Lu, En-Jie, Li, Tie-Gang, and Xu, Jianguo (2006), "Food Markets with Live Birds as Source of Avian Influenza," *Emerging Infectious Diseases*, vol. 12, no. 11, pp. 1773–5.
- Williams, Callum, and Maruthappu, Mahiben (2013), "'Healthconomic Crises': Public Health and Neoliberal Economic Crises," *American Journal of Public Health*, vol. 103, no. 1, pp. 7–9.
- Wootton, Barbara (1938), *Lament for Economics*, George Allen and Unwin Ltd., London.
- Worstell, Jim (2020), "Ecological Resilience of Food Systems in Response to the COVID-19 Crisis," *Journal of Agriculture, Food Systems, and Community Development*, vol. 9, no. 3, pp. 1–8.