COVID-19, universities, and economics

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Abstract: Government lockdowns and restrictions to arrest the COVID-19 pandemic caused widespread societal and economic disruptions. Also exposed has been the pernicious impact of the past 40 years of neoliberal policies including the transformation of the perceived role of universities from serving the public good, through knowledge creation, to the pursuit of profit and efficiency with consequential impacts on knowledge production and reproduction. This article contends that the praxis of conventional mainstream economics reproduces the ideology of neoliberalism and legitimates the neoliberal form of the university through constitutive and co-constitutive relationships. It is also argued that the discipline of economics needs to return to its social science roots of pluralism and interdisciplinarity if it is to contribute understanding of, and policy advice to address, complex and pressing real-world problems like global pandemics and the climate crisis. This 'return' will also jettison a key support for the ideology of neoliberalism.

Keywords: COVID-19; economics; interdisciplinarity; neoliberalism; knowledge; pluralism; universities.

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Biographical notes: Lynne Chester is recognised as a leading Australian heterodox economics scholar through her application of Régulation Theory which is informed by Marxian and original institutional economics. Her research focuses on a range of energy issues and advancing the project of heterodox economics. She is a co-editor of the *Handbook of Heterodox Economics* (Routledge, 2018), a former co-editor (2013–2019) of the *Review of Political Economy*, and her research has been published as book chapters and in leading heterodox economics journals. She is an advisory board member for Diversifying and Decolonising Economics, and one of her current projects is an edited collection (with Tae-Hee Jo), provisionally titled *Heterodox Economics: Legacy and Prospects*, to be published online by the World Economics Association.

1 Introduction

In early 2020, the world started to experience an unprecedented health pandemic – COVID-19. Infection rates and deaths varied across the globe. Nevertheless, the speed with which this coronavirus spread was rapid, and it did not discriminate between

developed and developing countries, gender, age, wealth, or power. Government lockdowns and restrictions in response to this pandemic have caused widespread societal and economic disruptions. More fundamentally, COVID-19 exposed the pernicious impact of the past 40 years of neoliberal policies including the transformation of the perceived role of universities from serving the 'public good', through knowledge creation, to the pursuit of profit and efficiency with consequential impacts on knowledge production and reproduction.¹

This article contends that the praxis of conventional mainstream economics reproduces the ideology of neoliberalism and legitimates the neoliberal form of the university through constitutive and co-constitutive relationships.² It is also argued that to break the hegemony of conventional mainstream economics the discipline of economics needs to return to its social science roots of pluralism and interdisciplinarity if the discipline is to contribute understanding of, and policy advice to address, complex and pressing real-world problems like global pandemics and the climate crisis. This 'return to its roots' will jettison a critical support for the ideology of neoliberalism.

Deploying a content analysis of government documents, media articles, and other published materials, this article is structured as follows. Section 2 presents a broad overview of COVID-19's dimensions, impacts and implications which establishes the context for the ensuing discussion. Section 3 discusses the transformation of the role of universities in knowledge formation and knowledge reproduction, and the reorganising influence of neoliberalism. Section 4 focuses on the praxis of conventional mainstream economics which dominates the teaching of university economics and has infused the policymaking of neoliberal governments. Section 5 concludes.

2 A broad overview of COVID-19's dimensions, impacts and implications

By mid-January 2021, the coronavirus responsible for the COVID-19 pandemic had been detected in nearly every country, with close to 96 million confirmed cases and over 2 million deaths (John Hopkins University, 2021).³ The lockdowns, curfews, and restrictions – the lockdown – imposed by governments to arrest this pandemic, immediately caused widespread disruption across society and to already stagnating economies.⁴ Millions of businesses, schools, universities, and childcare centres closed. Tens of millions of workers became unemployed. Global supply chains collapsed. International trade and travel were severely curtailed.

The governments of nearly 200 countries initiated in 2020 fiscal and monetary policy measures in response (International Monetary Fund, 2020a). Unprecedented spendathons swiftly reversed the longstanding antagonisms to government budget deficits. Trillions of dollars were pledged "to maintain financial stability, maintain household economic welfare, and help companies survive the crisis" [McKinsey & Company, (2020), p.2]. Announced fiscal policy responses include: cash payments to households; wage protection (furlough) schemes; increased unemployment benefits; and, direct payments, loans, loan guarantees and debt restructuring for vulnerable small and medium-size businesses, and for the most affected sectors like tourism and transport.⁵ Monetary policy measures include liquidity injections and near-zero interest rates.

The scale and scope of these policy measures dwarf those following the 2007–2008 Global Financial Crisis (GFC) which were perceived by many, at the time, as quite radical. Initially conceived as temporary measures with economies assumed to have a

swift 'V-shaped' recovery and pre-pandemic life returning quickly, reality has not panned out this way. COVID-19 rapidly spread, the infection rate accelerated in some geographic areas, and containment proved elusive in many European countries, the United Kingdom (UK), and the USA. This situation was initially exacerbated by shortages of necessary medical and protective equipment, inadequate systems of contact tracing, and no effective vaccine. Households did not 'behave' as policy measures assumed, saving instead of spending cash payments from government. Also, the restoration of consumer and business confidence did not occur as assumed by policymakers.

Consequently, towards the latter part of 2020, the removal of restrictions slowed in many countries, and forms of lockdown were reinstated in others. As the second year of COVID-19 unfolds at the time of this writing, more transmissible variants (or strains) of the virus have rapidly emerged and spikes in infection rates have returned, leading to many governments quickly re-imposing border closures, mandating face masks, curtailing the numbers attending public gatherings like funerals and sporting events, and restricting the movement of people to 'essential purposes' like to obtain food, travel to work, or to obtain medical care.

As the race to vaccinate the world gathered pace, political rhetoric shifted to the need – over the next year or so – for 'stimulus' measures funded by budget deficits to be continued although the longer-term suitability of "interventions designed for a short-lived crisis must be revisited" [Susskind and Vines, (2020), p.S6]. In addition, the International Monetary Fund (2000b) revised downwards its 2020 forecast growth of world output to minus 4.4%. This is the biggest forecast contraction of the international economy since the Second World War and is far greater than that of 0.1% in 2009 caused by the GFC.

During this pandemic's course, social practices have rapidly changed although sometimes with significant effects. For example, contactless payment, social distancing, the use of hand sanitiser and the wearing of face masks quickly became new norms – when outside the home – for billions of people. YouGov (2020) suggests that those living in Asian countries are most likely to wear face masks or when governments have mandated wearing as occurred, for example, in July 2020 for those in the UK. Yet, the wearing of face masks has sparked political conflict and social unrest: some have claimed, and protested, the infringement of their civil liberties and personal freedom; and, sharp division was evident between the US Democrat and Republican political parties and their respective candidates during the 2020 Presidential election (McKelvey, 2020; Pew Research Center, 2020). It has also been claimed that the emergency powers assumed by governments – under the guise of the pandemic – have been harmful to democracy and human rights in at least 80 countries through the banning of mass gatherings and protests, harassment of dissidents and minorities, and media restrictions (Abramowitz and Rosner, 2020; The Economist, 2020).

Government-mandated international and domestic travel bans, border closures, curfews, lockdowns, and other public health measures, designed to contain and slow the spread of COVID-19, have created *inter alia* seismic shifts in consumption patterns, working practices, household functioning, and social reproduction. Household expenditure has markedly transferred to online purchasing and food deliveries creating a surge in the demand for transport logistics and delivery services, a restructuring of the production of take-away food, and massive increases in demand for commodities like 'comfort clothing' and to undertake DIY renovations.⁶ Many households were suddenly expected to provide, for the first time, home schooling and full-time child care while schools and child care centres remained closed for indefinite or lengthy periods. The

move to 'remote working' – working-from-home (WFH) – for millions of jobs not requiring people to be at a place of work (located in office settings and largely performed on computers or by telephone), created a temporary surge in demand for 'home work' items, and a longer-term growth in technical services to support WFH.

Concurrently, WFH households incurred higher than usual utility costs while, in many cases, under pressure to manage 'full-time' caring responsibilities and/or home schooling in often constrained spaces never intended for any of these activities. WFH may have benefited workers through reduced commuting times and costs, and greater flexibility in working hours (Pennington and Stanford, 2020). However, it has also been found that the length of the working day has significantly increased for these workers (nearly an hour), more time is spent on 'out-of-hours' email activity, and the number of meetings has increased – through the use of videoconferencing like Zoom or Microsoft Teams – although less time is spent in meetings than previously (DeFilppis et al., 2020). This possibly explains the claim that WFH has increased the productivity of many workers (Quiggin, 2020).

So-called 'remote technology' has been critical to the shift to WFH. This technology enables workers to connect to networks, devices, 'the cloud,' and teleconferences from smartphones and computers from locations other than their usual physical place of employment. Videoconferencing platforms like Zoom have experienced a massive uptake – and accelerated profits –since the advent of COVID-19 (The Guardian, 2020).

Nevertheless, new ways of online working, collaborating with colleagues, teaching, and maintaining contact with family and friends – over many months within a myriad of ever-changing restrictions, rules, warnings and disrupted social networks and day-to-day living –have contributed to the emotional toll of the lockdown. Widespread heightened levels of anxiety and stress have been experienced, and even more so for those with pre-existing mental health problems (World Health Organisation, 2002b). In addition, new surges of the virus occurring from mid-2020 onwards collided with a growing public weariness and frustration – pandemic fatigue – with people openly displaying demotivation, apathy and even complacency towards observing behaviours recommended for protecting themselves and others from the virus.

The official narrative has been a contributor to this situation of heightened anxiety levels across populations morphing, for many, into pandemic fatigue. Daily announcements by political leaders and public health officials – using various forms of traditional and social media like Twitter and Facebook –have become commonplace to report infection rates and the number of deaths, to admonish 'bad behaviours', to exhort testing for those who have been present at proclaimed hot spots during specified dates and times, and to assure the body politic that governments are actively managing COVID-19 and solutions are being implemented. Data visualisations – infographics like interactive and choropleth maps, and bar and line charts—fuelled primarily by fear have become generic tools, used by a wide range of government agencies, international organisations, and the media, to communicate information to the public about COVID-19, and to make visible the invisible virus in real time (Chatterjee, 2020; Dong et al., 2020; Kennedy and Engebretsen, 2020).

Social media and data visualisations are not neutral lenses or windows. These windows privilege particular views and problematisations, and often coin new terms or phrases (Kennedy and Engebretsen, 2020). Thus, the official narrative and media reporting – deploying these tools – quickly transformed our everyday lexicon and knowledge to be framed around, and informed by, COVID-19 terms like pandemic, the

virus, flattening the curve, personal protective equipment (PPE), pop-up testing stations, genome testing, contact tracing, locally-acquired or community transmission, super-spreader, active cases, stay-at-home, self-isolate, stay alert, closures, bans, bubbles, quarantine, self-isolation, hotspot, red zone, outbreaks, and clusters (Thorne, 2020).

Social media, disseminating most information about the pandemic to billions of people around the world and at an exponential rate, has also spread misinformation – an 'infodemic' (World Health Organisation, 2020c) – just as fast as the virus (Das and Ahmed, 2020). It has been claimed, inter alia, that: hot temperatures, ingesting bleach, Vitamin C, UV rays, hydroxychloroquine, and hand dryers are effective treatments; 5G masts spread the symptoms of COVID-19; Ibuprofen (used to treat pain and inflammation) exacerbates the virus; garlic eating, holding your breath for 10 seconds and drinking water will prevent infection; face masks can be sanitised in microwaves; and, mosquitoes and parcels from China spread coronavirus (Australian Government, 2020a; Roosenbeek et al., 2020).

The social practice of academic research has also contributed to the COVID-19 infodemic. As publishers quietly and seamlessly established fast-paced publishing by removing access controls to COVID-related material and the creation of 'preprints' – submissions not subject to formal peer review processes – an unprecedented amount of research quickly became available. According to Kiley (2020), by September 2020 there were over 13,000 COVID-19 preprints available for that calendar year compared to 26,500 for *all subjects* in 2019. However, the number of article retractions has exposed many cases of analysis and information as not being 'scientifically robust' nor meeting a reasonable standard of academic scholarship (Das and Ahmed, 2020; Kiley, 2020).

Software programs (apps) and QR codes have been developed, and quickly adopted by governments, to provide updates of COVID-19 risk levels and record the presence of people at venues to help track those who might have been exposed to the coronarvirus.⁷ The effectiveness of these apps depends on high smartphone use and high voluntary take-up rates across populations. Smartphone use is quite varied across the world, and across different age groups. These apps and codes also raise privacy issues such as who will have access to the data, will the data be only used for tracing purposes and will the data be destroyed when the pandemic is over by these users. In the UK, it has been found that COVID-19 app users have been sent risk information contradicting official government advice (Manthorpe, 2020).

Disproportionate impacts have been experienced across working populations from the COVID-19 health crisis and the policy responses of governments. These disproportionate impacts starkly highlight the extent of socio-economic inequalities, inequities and labour market precarity which have increased, and become systemic, from the policies of neoliberalism over the past 40 years. These policies have demolished nation-state capacities, bolstered the prerogatives of employers, weakened trade unions and community voice, and privileged labour market 'flexibility' to generate a massive rise in insecure and casualised work arrangements (Baccaro and Howell, 2017).

The differences in infection and death rates for some groups of workers may be explained partly by underlying health issues (like obesity or diabetes) due to insufficient income for health, dental and eye care, or healthy food options. More fundamentally, these differences reflect other inequities such as which workers do not have the opportunity of WFH, and must travel by public transport, which means their risk of exposure to COVID-19 is much higher. Infections and deaths have been far higher for those whose job requires proximity to other people and cannot be performed remotely.

These jobs, concentrated in manufacturing, construction, traditional face-to-face retail, tourism, hospitality (accommodation and food), health care, personal and emergency services, and the informal economy, are lower-paid, more casualised and insecure than WFH jobs, and have an overrepresentation of women, people of colour, immigrants, and younger workers (Dingel and Neiman, 2020; Oppel et al., 2020). One study estimated that 37% of jobs in the US can be performed entirely from home; this study also concluded that less developed lower-income economies have far fewer opportunities for WFH jobs (Dingel and Neiman, 2020).

Further disproportionate labour impacts are evident from the lockdowns and mobility restrictions applied by governments. The largest job losses – following the lockdowns and restrictions – have been for women and young people, and those working in the hospitality, arts, recreation, and retail sectors which have the lowest hourly earnings, the highest rates of casualisation and job insecurity (Coates et al., 2020; Lowe, 2020; Peck, 2020). Moreover, "with women over-represented in lower-paid, insecure and casual jobs, and shouldering the majority of unpaid domestic and care labour prior to the pandemic, the crisis has rapidly widened the gap between men and women's economic security" [Hill, (2020), p.2]. It has also been observed that female academics have faced "a higher workload due to the move to online teaching and a rising demand for pastoral care" (D-ECON, 2020), and

"female academics and those with caring responsibilities were struggling the most ... disciplines are being impacted differently ... 27% of male scholars said lockdown was providing them with more time to research and write compared to 18% of female academics." (Smith and Watchorn, 2020, original emphasis)

The Governor of Australia's central bank recently remarked on the 'striking uneveness' of the pandemic-induced recession across the Australian economy:

"the finance industry, the public sector and mining – have been much less affected ... people who work in lower-paid occupations have, on average, been the hardest hit ... while employment has actually increased for occupations with the highest paid earnings." [Lowe, (2020), p.3]

Gender, racial, ethnic, income, health, education, cultural and power inequalities – and inequities – have been persistent problems since the emergence of capitalism.⁸ The COVID-19 health crisis, and ensuing economic crisis, have reinforced prevailing disparities and exposed the pernicious impact on, and exacerbation of, these inequalities and inequities of the past 40 years of neoliberalism.

The global health and economic crises of 2020 have also exposed a further array of vulnerabilities caused by the hegemony of neoliberalism imbued with the imperative of fiscal austerity, the mantra of the globalisation of production, and the moral standard of market efficiency. The outcomes of neoliberal policies – underpinned by conventional economic theories – have been sharply epitomised by inter alia: aggregate demand being sustained by a 'global wave of debt' given labour's declining share of income (Kose et al., 2019); profits and tax cuts funding dividends and share buy-backs not an expansion of productive capacity (Krein, 2018); the inadequacies of health system capacities to protect citizens (Pollock and Price, 2013); a high dependence on imports from 'just-in-time' global supply chains for life-saving equipment (like PPE and ventilators) severely disrupted with the virtual shutdown in early 2020 of China which accounts for nearly 30% of global manufacturing output (Chowdhury, 2020); and, a system of global

health governance, structured around agencies of the United Nations, weakened by progressive funding reductions from the most developed countries (Mahbubani, 2020).

Higher education sectors around the world present one of the most striking exemplars of the vulnerabilities and inequalities created by neoliberal policies. The neoliberal model has applied to higher education the policies of corporatisation, marketisation, labour market 'flexibility', user pays, fiscal austerity and withdrawal of the state. The assumptions and values of these policies are very closely aligned with those of conventional mainstream economics: fairness and equity based on the moral right and supremacy of the market; a market view of citizenship antithetical to state-guaranteed rights; the individual is responsible for her own well-being; citizens as economic maximisers driven by self-interest achieved through choice; and, education is a 'service' to be delivered through markets to those who can afford the 'price', i.e., cost.

The COVID-19 pandemic quickly revealed the accumulative effect of these neoliberal policies on higher education provision in contemporary capitalist economies which include high dependencies on: precarious workers to 'produce' education; university revenue from student fees financed in many cases by income-contingent loans; and, the education-migration nexus. Less transparent, and discussed, has been the co-constitutive relationship of higher education and conventional mainstream economics as neoliberalism has transformed the role of universities from the public good to a new corporate form focused on profit and efficiency.

3 Universities: what do they do?

Knowledge is socially structured and distributed. Universities play the most significant role in developing and distributing knowledge (Holmwood and Servós, 2019). However, the conditions of 'knowledge production' have been radically transformed during the past 40 years.

The first Western university, the University of Bologna, was established in Italy, in 1088. This university became a model for others such as Oxford and Paris initially structured around faculties for the liberal arts, theology, medicine, and law.

"The evolution of the modern university, funded increasingly over time by governments, moved the focus from promulgating religious tenets to values that are civic-minded, and centred on knowledge transmission ... the overarching purpose of the university was to advance human discovery, promote diversity of thinking and enhance the common good." (Fischetti and Colborne, 2020)

Historically, universities were proclaimed and perceived as institutions for the public good, the creators of knowledge produced for the greater good of humanity. The extent to which this has been achieved is contestable given the longstanding evidence of class inequality in education, active support for the formation of the inegalitarian professional classes of welfare states across Europe and the Anglophone economies, and the hierarchical and patriarchal internal structures and operations of universities (Lynch, 2006). Public interest values have been further undermined as governments have sought to shape the role of universities to align with, and reinforce, their neoliberal agendas.

As public policies have been transformed by the doctrines of neoliberalism, a wide range of public services have been 'privatised' in that citizens are required to purchase them at 'market value' rather than these services being provided by the state. In the case of education, this has meant a significant reduction in public funding and students being required to pay tuition fees through income-contingent loans. This latter method of funding was introduced in Australia in the 1980s and widely adopted around the world.

By 2017, private financing for higher education - primarily from households accounted for more than 60% of the total funding of tertiary institutions in Australia, the UK, the USA, Japan, Korea, and Chile (OECD, 2020). Calhoun (2006, p.258, emphasis added) wrote some years earlier that "state funding for some of America's greatest public universities has shrunk to as low as 8% of their costs". More recently, it was estimated that US federal government funding of colleges and universities had fallen to 13% and state funding contributed 24% (Pew Charitable Trusts, 2019). By 2020, the debt of US university and college students was estimated to have reached US\$1.6 trillion (Benjamin and Ferguson, 2020). Correlatively, this means that government revenue (and that of private loan providers) – through the repayment of student debt – has become dependent, in part, on the level of wages generally across national economies and the employment rate of new graduates. Wage levels have remained stagnant across the world following the GFC, and subdued wage growth is forecast. The advent of COVID-19 has not only led to high increases in unemployment but created a climate of uncertainty about the prospects for future job creation, including the types of jobs and the extent of employment (in)security.

Neoliberal 'education privatisation' quintessentially means that the perception and treatment, by governments, of tertiary education has become one of "simply another market commodity [which] has become normalised in policy and public discourses" [Lynch, (2006), p.1]; another 'commodity' which can be 'demanded' and 'supplied' through markets "premised on the assumption that the market can replace the democratic state as the primary producer of cultural logic and value" [Lynch, (2006), p.3]. It is also indicative of the neoliberal view that:

"students as 'bearers of loans' would be competed for by universities in pursuit of revenue ... students should orient to their choice of courses as 'consumers' oriented towards investment in their human capital and its future returns within the labour market ... [because] students [have] 'key knowledge sets' to make consumer choices." [Holmwood and Servós, (2019), p.312]

This public education funding shift, managed through the disciplining device of debt and underpinned by the concept of student 'investors', is reflective of the increasing marketisation of higher education. It is an exemplar of the neoliberal position of the individual being responsible for her own well-being and the state should be no more than facilitator, treating education as a market-delivered commodity, for those who can afford to purchase, and rationalised as providing people with 'choice'. The marketisation of higher education has also been advanced by several other changes to university operations and governance.

As public funding for higher education has been progressively reduced, caps on the number of student enrolments have been removed to enable 'competition' amongst universities for students and to maximise opportunities to make profits. Bequests and endowments have also become important sources of university funding and to which significant organisational resources are now applied in the competitive pursuit of big-pocketed donors. Marketing and advertising campaigns directed at potential students, alumni, and private benefactors have become commonplace day-to-day university operations.

Concurrently, public funding of university research has been 'commercialised' (Benman, 2012; Radder, 2010). University research funding has become increasingly tied to evidence of relevance and impact for industry, the identification of specific beneficiaries, and the need to meet the designated 'science and research priorities' of governments (see for example, Australian Research Council, 2019). These priorities are biased against the humanities and social sciences thus acting as a mechanism narrowing new knowledge creation. In addition, unlike students and degree programs, the beneficiaries of most publicly funded university research are not required to make a financial contribution.⁹

Education has come also to be defined as a tradeable service worldwide reflecting the neoliberal agenda of the World Trade Organisation's General Agreement on Trade in Services (Robertson et al., 2002). Subsequently, universities, and other post-secondary education institutions, have become major contributors to the recorded export income of national economies. For example: by 2008, education had become Australia's third largest export behind only coal and iron ore, and of which higher education contributed some 60% to the value of total exports (Reserve Bank of Australia, 2008); in the UK, by 2011–2012, universities were contributing about 3% to GDP and similarly to total employment (Kelly et al., 2014); and, in the USA, by 2019, education ranked sixth in export services (US Department of Commerce, 2020).

The reported higher education 'export income' is generated through students studying in countries other than their place of domicile, and paying for tuition fees, food, accommodation, transport, entertainment and other goods and services. It has been estimated that the 2018 contribution to the US economy by international students was US\$45 billion (Mitropoulos, 2020). For Australia, 'international higher education' accounted for 22% of all 2018 enrolments although this varied across those universities receiving some public funding from 4% to 50%; in 2019, international higher education contributed an estimated 3% to Australia's GDP (Australian Government, 2020b, 2020c).¹⁰

International students typically pay higher tuition fees than local (domestic) students (OECD, 2020; Mitropoulos, 2020). Those from China, India, and other Asian countries have increasingly dominated international student enrolments in US, Canadian and Australian universities; in the UK, those from European countries have far higher representations. The advent of COVID-19 induced travel restrictions and visa cancellations sharply illuminated the extent of dependence that higher education institutions now have on revenue from international student tuition fees following the withdrawal of public funding and the increasing marketisation of universities. For example, more than 23% of Australian university revenue was from fee paying international students in 2017 compared to 16% in 2008 (Ferguson and Sherrell, 2019).

With substantially less student fee revenue because of COVID-19, universities have reduced curriculum offerings and programs of study – further narrowing the reproduction of knowledge – and accelerated the use of 'technical solutions'. New technologies, such as digitalisation, have shifted in recent decades from being audit measures "to a managerial device to ensure corporate goals in a competitive education market" [Holmwood and Servós, (2019), p.313]. Measuring downloads and citations of online publications, the creation of virtual libraries, 'lecture capture' (the recording and archiving the content of a lecture), monitoring student 'product consumption', the creation of massive open online courses (MOOCs), the use of web-based learning management systems (e.g., Blackboard, Canvas), incorporation of plagiarism software

like Turnitin with assessment tasks, the integration of online polling into teaching tools (e.g., Socrative, Mentimeter), digital research data storage, and Open Access publishing, are part of the 'avalanche' that "derives not from the intrinsic qualities of new technology, but from the entry of for-profit providers and their use of new technologies to monetise the commons and, at the same time, put its reproduction under threat" [Holmwood and Servós, (2019), p.316].

Following the decisions to rapidly close university campuses as the COVID-19 pandemic spread in early 2020, cloud-based video conferencing (e.g., Zoom, Microsoft Teams, Skype) became the new norm for online synchronous teaching and discussions. Widespread application of other technologies also swiftly occurred through, for example, the recording and uploading of lectures as videos for asynchronous teaching, the gamification of activities previously integral to face-to-face classes, the creation of online exams, and the use of blogs and virtual discussion boards to maintain a level of 'engagement' with students.

Not only has COVID-19 accelerated new technological applications to very quickly transform the methods and forms in which the university function of teaching is delivered, this pandemic starkly exposed – to the wider community – the extent to which university teaching has become so highly dependent on a precarious academic workforce as a result of the marketisation and commodification of higher education. As public funding of higher education has declined and competition has increased, universities have restructured academic positions to increasingly separate teaching from research, and 'drive down' teaching costs. Teaching only positions using casual short-term contract or adjunct staff have been widely adopted across higher education sectors. These forms of precarious employment reduce a university's teaching costs because the hourly wage rates paid for teaching are much lower than the equivalent for 'continuing' staff, employment rights like annual and sick leave are not provided, and contracts only cover a short-term specified teaching period. Academia today:

"is structured in many respects like a drug gang, with an expanding mass of outsiders and a shrinking core of insiders ... Dualisation is the strengthening of this divide between insiders in secure, stable employment and outsiders in fixed-term, precarious employment. Academic systems more or less everywhere rely at least to some extent on the existence of a supply of 'outsiders'." (Afonso, 2013)

Research by the American Association of University Professors (2017) indicates that tenured and tenure-track academics accounted for 29% of US academic staff in 2015 compared to 45% in 1975; the corresponding shift in (contingent) non-tenure track, part-time and graduate student employees was 55% in 1975 to 71% by 2015. This 'dualisation' trend has accelerated noticeably since the early 2000s (Curtis, 2014). Many of this casualised/contingent 'reserve army' of academics are paid around the same hourly rate as a drug dealer although they are more highly skilled (Afonso, 2013).

Similar evidence and trends of academic casualisation go well beyond the USA. For example, in Australia, the National Tertiary Education Union reports that the casualisation of academic employment in Australian universities is – on average – around 45%, and as high as 58% in some universities (Cahill, 2020). In Germany, those who graduate with PhDs (usually in their 20s) face indefinite periods of insecure fixed-term contract employment generally being unable to obtain permanent academic positions until their mid-40s (Afonso, 2013). And, in the UK higher education sector, in 2017–2018, 33% of academic staff held fixed-term contract positions, 3% had

'zero-hours' contracts (i.e., no specified minimum hours) and nearly 70,000 academic staff held 'atypical' contracts (Higher Education Statistics Agency, 2019).

With the rapid shift to online teaching, the loss of revenue from international student fees and the subsequent reduction in program and course offerings, the casual academic workforce has been significantly impacted. Many casual jobs have been abolished; for others, contract terms have been changed such as reclassifying teaching which 'attracts' a lower rate of pay, or workloads have been intensified by requiring assessment marking to be completed in shorter timeframes. Notably, many casual academics have not been eligible for wage protection schemes introduced by governments responding to the impact of COVID-19. Eligibility for many of these schemes has been tied to a minimum period of 'continuous' employment that exceeds the period of a casual contract for a 10- or 12-week semester teaching period (for example, see Australian Taxation Office, 2020).

Extensive casualisation of higher education academic staff has become a key operating feature of the business model now used to run universities. This model, framed by the neoliberal objectives of the marketisation and commodification of higher education, has transformed universities as public institutions with public functions. Universities are now operated like corporations with forms of generic commercial operations as applied throughout the private sector. Competition between institutions for 'consumers', vast marketing budgets, ever-increasing demands for higher staff productivity, casualisation of the workforce, a disaggregation of functions problematised as needing technical solutions, a high reliance on outsourcing for a wide range of services (like expense management, travel bookings, IT, security, catering), and an astonishingly highly paid cohort of senior and executive managers are some of the features that have become pervasive to universities' operations but equally apply to operations across the commercial corporate sector.

A further indication of the significant shift of universities to a profit-pursuit business model is the use of university 'league tables' or rankings, propagated by commercial operators, for marketing and student (especially international) recruitment. These rankings are narrow and selective, biased against the humanities and most social sciences, focused on what can be measured and do not consider, for example, the student learning experience or "the role of universities in developing the civil, political, social or cultural institutions of society" [Lynch, (2006), p.6].

The shift in the purpose of universities has been reinforced by government policy changes under the stealth of COVID-19. For example, in mid-2020, the Australian federal government announced major changes to the fee structure for undergraduate degrees. Student fees will fall by 20% to 62% for degrees in teaching, nursing, clinical psychology, English and languages, agriculture, mathematics, science, health, architecture, environmental science, IT and engineering. However, student fees will increase for law and commerce by 28% and for the humanities and social sciences by up to 113%. The proclaimed objectives of these changes are:

"[to] address the misalignment between the cost of teaching a degree and the revenue that a university receives to teach it ... incentivise students to make more job-relevant choices, that lead to more job-ready graduates, by reducing the student contribution in areas of expected employment growth and demand ... support universities to produce job-ready graduates." (Tehan, 2020)

The notion of universities existing to 'produce' job-ready graduates – within a specified set of disciplinary fields – is reflective of neoliberal governments advancing their agendas through regulatory control of institutions of the state. Moreover, it sharply illustrates how the doctrines of neoliberalism seek to control – and narrow – the knowledge creation and reproduction role historically performed by universities. The Australian federal government has 'decreed' that degrees in the humanities and social sciences are not appropriate for 'future graduates' (Fischetti and Coleborne, 2020). The notions of aligning teaching 'costs' and teaching 'revenue', and 'incentivising' students, seeks to depoliticise "debates about education by hiding its ideological underpinnings in a language of economic efficiency" [Lynch, (2006), p.7], namely the lexicon and assumptions of conventional mainstream economics "which is not neutral knowledge or practice" [Birch, (2016), p.320].

The next section turns to the role of conventional mainstream economics in advancing the neoliberal transformation of the 'knowledge creation and reproduction' role of universities.

4 The praxis of conventional mainstream economics

Disciplines are particularly significant to knowledge formation. Disciplinary fields organise and evaluate scholarly activity reflecting discipline environments, skills that members acquire and jurisdictional claims that may be disputed (Leahey et al., 2017). Disciplinary specialisation dominated the structure of Western scholarship throughout the twentieth century. Nevertheless, specialised domains within disciplines were evident, distinct 'cultures' – natural sciences, social sciences, and humanities – were maintained, and the practice of interdisciplinarity in curricula and research, particularly in general education and the social sciences, became progressively prevalent as universities reorganised to facilitate these practices (Thompson Klein, 1990; Turner, 2017).

The social science discipline of economics dramatically changed after the Second World War. The accepted and respected pluralism past and commitment to interdisciplinarity was usurped by scientific monism (based on mathematical formalism) as it gained a 'stranglehold' through the disciplinary field of Neoclassical Economics; alternative economic theoretical perspectives were increasingly proclaimed as 'unscientific' (Garnett et al., 2009; King, 2016).¹¹

"For a discipline that traces its roots to moral and social philosophy, this is a remarkable metamorphosis ... a disciplinary trajectory characterised not only by increasing autonomy in respect of neighbouring disciplines and alternative approaches ... but also by an increasing autonomy from (its) history." [Arena et al., (2009), pp.1–2]

In 1992 a one-page 'plea', signed by more than 40 leading economists including J.K. Galbraith and Robert Heilbroner, was published in the *American Economic Review*, expressing concern:

"with the threat to economic science posed by intellectual monopoly. Economists today enforce a monopoly of method or core assumptions, often defended on no better ground that it constitutes the 'mainstream' ... we call for a *new spirit of pluralism in economics* involving *critical conversation and tolerant communication between different approaches*. Such pluralism should not undermine the standards of rigor; an economics that requires itself to face

all the arguments will be a more, not a less rigorous science. We believe that the new pluralism should be reflected in the character of *scientific debate*, in the range of contributions in its *journals*, and in the *training and hiring of economists*." [Hodgson et al., (1992), p.35, original emphasis]

Nevertheless, pluralism and interdisciplinarity are the antithesis of conventional mainstream economics (the orthodoxy) that has come to dominate university economics teaching around the world for at least the past 60 years, and steadily infused policymaking in the neoliberal era. Indeed, conventional mainstream economics has been found to be the least interdisciplinary of the social sciences despite the consideration of some topics more traditionally associated with sociology, political science and/or psychology (Fourcade et al., 2015). In fact, the disciplinary trajectory of conventional mainstream economics has been characterised by an aggressive 'economics imperialism' which has reconceptualised contiguous disciplines in economic terms, based on the belief that the neoclassical framework, and its methods, are greatly superior to that of the other social sciences if they are to be truly 'scientific' (Fine, 2002). Moreover, no other social science discipline is dominated by a monist methodology or is openly hostile to alternative approaches (King, 2013). Methodological pluralism and pluralist methodology are evident in all other social science disciplines (Backhouse and Fontaine, 2010).¹²

Not only did the shift to relative insularity and monism lead to a narrow analytical focus of conventional mainstream economics. Its mathematical formalisation also facilitated the development of purported economic 'laws' or principles which abstracted the economy from society. The reality denoted by mathematical-deductivism is of a closed system, one in which event regularities occur and events have causal sequence. A closed system is devoid of its social, political, and historical contexts. Consequently, the knowledge produced by conventional mainstream economics does not accord with social reality and is thus unable to address persistent issues and crises such the climate emergency, inequality, and COVID-19.

In addition, the mathematical emphasis and associated models have reduced conventional mainstream economic thinking about issues to be ones of 'quantification', to assign probabilities to every possibility, and solutions lie in trade-offs between costs and benefits. This assumes that all 'values' can be expressed monetarily, and in practice is generally equated with how much people are willing to pay. In terms of COVID-19, one example has been expressed as:

"how to understand the trade-off between the cost of, on the one hand, the likely illness and death – however valued – and, on the other hand, the costs of the policies being adopted to reduce such illness and death ... Rowthorn and Maciejowksi (2020) argue that how long lockdown should be made to last depends fundamentally on the valuation attached to a life: a lower value implies that a shorter lockdown is desirable ... They argue that a full lockdown of even as little as 10 weeks would only be optimal if the value of a life for COVID-19 victims exceeded £10m ... A robustness check, performed by changing the parameter values in the social welfare function used in the policy optimization algorithm, reduces this number to £4m." [Susskind and Vines, (2020), pp.S2–S3]

This passage starkly illustrates the narrow, insular approach of quantification the mainstream applies which eviscerates an issue from its context. Thus, an issue is falsely framed which engenders the risk of policy complacency and government inaction. Other examples of this false framing, in terms of the COVID-19 pandemic, has been to pose the 'issue' as one of economic costs vs health costs, or of achieving herd immunity vs.

minimum transmission. Such framing privileges some elements (usually with wealthy vested interests) and dismisses all other key dimensions, impacts and implications as discussed in Section 2.

Also illustrated in the above passage, and COVID-19 examples, is the dichotomisation, or binary, in which the thinking of conventional mainstream economics is 'caged'. This quantification and monetisation approach – combined with a rhetorical zealotry for 'free' markets and the mantra of efficiency – similarly frames the many policy prescriptions of conventional mainstream economics as taught in undergraduate and postgraduate university education across the world. These policy prescriptions, and their underlying premises, closely align with, and provide legitimisation for, the political and economic doctrines of neoliberalism.

Broadly conceived, neoliberalism is the "political, economic, and social arrangements within society that emphasize market relations, re-tasking the role of the state, and individual responsibility ... as the extension of competitive markets into all areas of life" [Springer et al., (2016), p.2]. Neoliberalism rests on a belief in markets and individual responsibility as well as social conservatism such as law and order, the family, xenophobia, and moral conservatism. Human well-being is considered best achieved through private property rights and free markets, and the role of the state is to create an institutional framework which promotes such practices, not to be an active player in economic activity. This has been epitomised by a policy agenda in the neoliberal era of inter alia fiscal restraint-austerity, deregulation, reduced taxation, the removal of trade and investment 'barriers', the promotion of competition in all areas of economic activity, legal systems to ensure strong private property rights, and the privatisation of government-owned assets and public services like health and education. These policies are underpinned by strong beliefs about the ideal properties of markets and freedom of choice.

Conventional mainstream economics focuses almost exclusively on markets treating the economy as a set of interconnected – and self-regulating markets – in which buyers and sellers freely interact, and in which the 'efficient' allocation of resources will occur. Competition within markets is considered to maximise benefits for consumers allowing 'freedom of choice' at a price they can afford. Underlying this faith in markets is the notion that private property and private economic activity are the most desirable because: markets maximise individual and society's well-being; markets encourage innovation and risk-taking, so are conducive to economic growth; and a substantial role for the state will distort the efficient allocation of resources because it is best to let individuals organise their own transactions to satisfy their needs. Thus, markets are conceived by the mainstream – like the ideology of neoliberalism – as having a dynamic 'virtuous' character, and government 'intervention' in the economy should be as minimal as possible.

Through principles and concepts such as "scarcity, rationally preferring more or less, (profit or growth) maximization, (investment and consumer) choice and allocation, marginal analysis, preferences and factor costs, equilibrium, efficiency and optimization, opportunity cost, cost-benefits, economic surplus, elasticity, and so forth" [Gills and Morgan, (2020), pp.4–5], university economics students are 'taught' about markets. Moreover, these principles and concepts teach economics students a "way of 'thinking' ... [which] is extended to different subject areas and scales" [Gills and Morgan, (2020), p.5]. Thus, the praxis – the teaching and practices – of conventional mainstream economics serves to legitimise the ideology of neoliberalism and provides a site of

reproduction for neoliberalism within higher education. By so doing, conventional mainstream economics provides legitimation for the neoliberal form of the university as discussed in Section 3.

Birch (2016) contends that university business schools, as specific sites of economic knowledge, reproduce neoliberalism through financial economics. The reproduction of neoliberalism extends well beyond the sub-discipline of financial economics. The teaching and practices of conventional mainstream economics (and all its sub-disciplines) – through many different forms of organisational units within universities like schools of business, management, innovation, and economics – not only reproduces neoliberalism but in doing so, I contend, acts to support the legitimacy of the neoliberal university through both constitutive and co-constitutive relationships.

The praxis of mainstream conventional economics is a constitutive entity of the neoliberal university. There is also a co-constitutive relationship. The concept of co-constitutiveness recognises that entities may not only constitute other entities, but they can do so mutually; they can be co-constitutive of one another which means there can be bilateral causality (Archer, 2008). In other words, the entity of conventional mainstream economics – through its praxis – can (and does) have causality over the neoliberal university and the neoliberal university can have causal powers over the praxis of conventional mainstream economics. Direction, governance regimes, consultation processes, research arrangements, budgets and communications are a few examples as to how, in practice, institutional operations (like a university) involve continuous occurrences of co-constitutive causes and effects.

5 Conclusions

The pandemic of COVID-19 has changed the fabric and economic structure of society. Day-to-day lives and the myriad of economic activities that comprise social provisioning have been rapidly transformed. Remote working, digitalisation of government services, mass quarantine and vaccination programs, reconfigured traffic and commuting patterns, a surfeit of buildings and infrastructure, digital crimewaves, and contactless payments are just a few examples of the myriad of structural changes accelerated by the advent of COVID-19, and which are reshaping global and local business strategies.

COVID-19 is a story of multiple dimensions and impacts. It is also a story of the pernicious impact of the accumulative effects of the past 40 years of neoliberal policies underpinned by conventional mainstream economics. Longstanding inequalities have been sharply exposed; these inequalities have been exacerbated by this pandemic given the disproportionate impacts across populations. Although it is evident that the COVID-19 stimulus policy responses of governments do not neatly align with the tenets of neoliberalism, many of these policies have been shrouded around neoliberal rhetoric with a consistent refrain of being temporary with budgets needing to be 'repaired', skewed towards business, and the winding back of some measures of assistance to those most in need has commenced.

COVID-19 has also exposed the weaknesses of the neoliberal business model around which higher education universities and colleges are structured. High dependencies on precarious workers as teachers, student fees financed by income-contingent loans and international students (the education-migration nexus) have become central to the operation of higher education sectors around the world. Since pluralism and interdisciplinarity were stripped from the discipline, conventional mainstream economics has offered little to address pressing and persistent issues facing society – the crises of the climate, extreme inequality, the automation of work, and now global pandemics. The use of abstract models that do not match social reality, and very narrowly focused, are unable to provide real-world policy advice. Yet, this is the economics that dominates teaching in the academy and has infused the policymaking of neoliberal governments.

Since COVID-19, there have been several calls for the 'narrative of economics to change' (for example, Alves and Kvangraven, 2020; Bowles and Carlin, 2020). Others have suggested the teaching of economics should include the history of economic thought, economic history, and bio-physical science (Gills and Morgan, 2020). These are calls for economics to return to the practice of methodological pluralism and restore history to economics. I concur that the praxis of economics should actively engage with alternative methodologies and history to go beyond the monism of contemporary mainstream economics. "No one system of knowledge can claim to have captured reality; each is partial, reflecting one vision of reality" [Dow, (1996), p.45]. The application of multiple schools of economic thought will each yield different insights into the workings of, and problems generated by, the capitalist economic system.

However, I posit that more is needed than a change in narrative if the social science discipline of economics is to develop the capacity to provide understanding of, and policy advice to address, complex and pressing real-world problems. Pluralism will contribute, but a return to the discipline's interdisciplinary roots is also needed. The pressing real-world problems of, for example, climate change or COVID-19 cannot be explained or addressed from one economic perspective nor from the view of one discipline given the politics, spatialisation, behavioural, health, technological and other aspects involved.

"We are living in an era of intense systemic crises and system failure ... Given the power and influences of mainstream economics, in order to transform society in response to these deep crises, the field of economics must also be radically transformed and Covid-19 has only served to reinforce this point." [Gills and Morgan, (2020), p.12]

A return to the practices of pluralism and interdisciplinarity will also break the co-constitutive relationship between the praxis of conventional mainstream economics and the neoliberal university. It will also jettison a key part of the armoury which has legitimised the 'corrosive ideology' of neoliberalism (Giroux, 2002).

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Notes

- 1 The term 'public good' is used here in the sense of knowledge produced for the greater good of humanity. This is not akin to the concept of public goods used by conventional mainstream economics to refer to 'goods' provided by government and commonly funded through taxation, such as national defence, law enforcement, street lighting or disaster management.
- 2 The term 'conventional mainstream economics' refers to the dominant form of economics taught at universities around the world. Despite claims that neoclassical economics' dominance of the mainstream has changed, diffused, specialised and even heterodoxised (for example, Cedrini and Fontana, 2017), "core deductivist principles remain as the exclusive methodological approach [Dow, (2011), p.1163]. It is to this approach the term is used to

refer. The discourse of neoclassical economic liberalism is embedded within the ideology of neoliberalism.

- 3 According to the World Health Organisation (2020a), the previous most devastating infectious disease event in recorded history was the 1918-19 influenza pandemic (colloquially known as 'Spanish flu') which infected about 500 million people and caused an estimated 40 million deaths.
- 4 Lockdowns and travel bans, mandated by governments, have contributed significantly to the COVID-19 induced economic crisis. Voluntary social distancing, as recommended by governments, has also contributed (International Monetary Fund, 2020b).
- 5 Governments have also announced financial and contractual support for the development of vaccines to combat COVID-19.
- 6 The increase in online spending has been accompanied by a sharp acceleration in cybercrime. COVID-19 themed email phishing, fraudulent websites and malicious domains mimicking government agencies or impersonating legitimate companies, for example, have been used to dupe people into revealing passwords, login details and financial information, or to take payment for non-existent goods (Interpol, 2020).
- 7 It was reported to an Australian Parliament Senate Estimates Committee that the Australian Federal Government spent around A\$70 million on a tracing app which, by late October 2020, had only uncovered 17 contacts not found by manual contact tracing teams.
- 8 Inequities (injustices) can lead to or cause inequalities (distributive imbalances). Equity is about providing resources, when needed, to ameliorate unfairness; equality is about treating everyone equally.
- 9 One exception is the Australian Research Council's (ARC) Linkage Projects although these require a very minimal cash contribution (25% of the total funding sought from the ARC).
- 10 Australia has 43 universities of which 40 receive some public funding.
- 11 Interdisciplinarity is often treated as being synonymous with multidisciplinarity and/or transdisciplinarity. I am referring to interdisciplinarity as the application of disciplinary approaches to which the integration of concepts and methodologies of approaches is central (compared to transdisciplinarity as a specific form of interdisciplinarity with multiple disciplines integrated through the application of a common perspective that transcends the worldviews of the individual disciplines involved; and multidisciplinarity as the juxtaposition of disciplinary approaches applied to a research question, as an additive not an integrative process and the extent of integration is limited to the linking of research results). Pluralism also suffers from ambiguous definition. The 'Roundtable dialogue on pluralism' published in the IJPEE (Reardon, 2015) is illustrative of the diversity of conceptualisations. I am referring to pluralism as methodological pluralism which I conceive as active engagement with, and debate about, the contribution of alternative methodologies to economic analysis (compared to pluralist methodology which I conceive as the use of a range of methods simultaneously).
- 12 One distinction that is often overlooked is the difference between methodological pluralism and the plurality of method. Pluralism and plurality are not synonyms. Pluralism is a normative concept and plurality is a descriptive term meaning more than one of something.