The Environmental Paradox of the Welfare State: The Dynamics of Sustainability

DANIEL BAILEY

Thus far, there has been a reluctance to instigate a dialogue and engage with the tensions between two literatures with significant insights for each other. The first is the literature on the fiscal sustainability of welfare states, which is invariably predicated upon future growth primarily to manage demographic changes. The second is the post-growth literature, which has enjoyed a renaissance in recent years due to an environmental critique of economic growth. Both literatures contain implications for the analysis of welfare state sustainability. The primary contribution of this paper will be to explore the intractability of the tensions between these discourses and the difficulty of mapping out a progressive policy direction in the twenty-first century which meets both our environmental and social sensibilities. It is claimed that in the post-industrial world the fiscal sustainability of welfare capitalism is dependent upon public expenditure financed indirectly an environmentally unsustainable growth dynamic, but that ironically any conflagration of public welfare programmes is likely to be counter-productive as the welfare state is able to promote de-carbonisation strategies and notions of the public good as well as promoting monetarily and ecologically efficient public welfare services.

Keywords: welfare state, post-growth, environmental sustainability, fiscal sustainability, climate change, beyond GDP

Introduction

Despite both being embraced primarily by those on the left, the body of work on the fiscal sustainability of welfare states and the post-growth literature have, thus far, remained segregated from each other. The former is centred on fiscal viability with progressives typically prescribing additional state expenditure financed by further economic growth in order to address demographic changes or economic crises, or promote inclusive development more generally. Currently, quasi-
Keynesian strategies (aligned to a prominent role for welfarism as part of a crisis management approach) are central to this perceived crisis of growth. The latter is concerned with a crisis for growth and prescribes a curtailment of economic expansion in order to ward off further environmental degradation and the onset of climate change; a position which significantly problematises the solutions of the former. These prominent progressive discourses have, thus far, only fleetingly spoken to each other. In an attempt to engage with their insights and frictions, and in an attempt to decipher how we should think about welfare state sustainability, this paper will explore the following questions:

- How fiscally sustainable are welfare states in the transition to environmental sustainability, if this entails a transition to post-growth?
- Are the effects of demographic changes and climate change manageable in a fiscally constrained post-growth society?
- If welfare state retrenchment is the implicit corollary of a post-growth transition, what are the socio-environmental implications of this?
- How should the environmental critique of the post-growth movement impact upon the way we analyse welfare state sustainability?

Indeed, it is remarkable that these questions have not previously been posed. This article does not claim to offer definitive answers to these questions, but hopes to offer a clear account of the problematic and prompt a preliminary debate. Silence on these issues will no longer do.

Ian Gough has done most to pioneer the inchoate literature that does exist on the socio-economic and environmental effects of climate change on social policy. Gough has thrown light onto the substantial carbon footprints of welfare services and the need to decarbonise, the abilities of different welfare state typologies to handle increased demands, and the need to encompass climate change and social policy goals within welfare programmes and broader paths of development (Gough et al. 2008, Gough 2010, 2011a, 2011b, 2013a, Gough and Therborn 2010, Gough and Meadowcroft 2011).

Yet the relationship between social policy and environmental policy may not be as symbiotic as has previously been implicitly assumed. This is particularly the case if an environmentally sustainable economy which operates within the parameters of the biosphere cannot be reconciled with *ad infinitum* economic growth; as is suggested by the proponents of the post-growth tradition of thought.1

Although the environmental crisis and its relationship with economic growth clearly pre-date the financial crash, the post-growth and de-growth literatures have enjoyed a renaissance since 2008. Authors such as Victor (2008), Jackson (2009), Latouche (2009) and Simms (2013) have built on the work of Mishan and Mishan (1967), Meadows *et al.* (1972), Boulding (1981) and Daly (1972, 1977) to offer sophisticated critiques of growth-centric systems in post-industrial countries which invite potentially calamitous environmental, social and economic risks. Pointing to the wealth of empirical evidence that suggests that economic growth is environmentally unsustainable and that the decoupling of growth from carbon output is without precedent and extremely unlikely, they offer bold and provocative visions of economic reform.
Yet the ramifications of making a transition to a post-growth economy (and subsequently deliberately suppressing levels of taxable economic activity) for public finances and welfare states are scarcely recognised. If decarbonisation cannot be reconciled with economic growth, this poses serious problems for the tax base from which public sector spending is funded, particularly in (or because largely because of) the context of an ageing society in which costs were projected to escalate anyway. With welfare states (particularly existing pension and healthcare commitments) in their current form predicated on upon a growth in ‘the tax take’ and the transition to post-growth likely to add their own strains onto welfare services – both of which will be expanded upon shortly – this mooted economic reform is likely to curtail the state’s fiscal capacity at a time of growing welfare need. The fiscal sustainability of the public welfarism consequently seems to rest profoundly upon an environmentally unsustainable growth dynamic. It looks as though the welfare state, and public spending is general, is a problem for the post-growth literature which is not being explored because the fear is that the implications may be to problematise the traditional tools of progressive politics. Meanwhile, the radical uncertainty surrounding economic growth seems to pose just as great a problem for the welfare state literature, which has normalised a political position rooted within the parameters of a business-as-usual form of economics.

This paper will attempt to adopt a more holistic understanding of the contemporary economic challenges faced today (i.e. the environmental as well as the economic and fiscal) before delving into a practical plane of analysis (involving a series of imperfect but analytically useful ceteris paribus assumptions) which demonstrate how problematic these challenges and economic constraints are to negotiate within the framework of the current political and economic settlements of the post-industrial world.

Synthesising notions of fiscal and environmental sustainability into welfare state analysis breeds a new paradox for welfarism. If we are to reduce levels of (taxable) economic activity as post-growth theorists suggest, we ceteris paribus threaten the public sector funding base of welfare states and impede the state’s traditional mechanisms of ‘crisis management’. Simultaneously, the welfare state is required more so than ever in what could be a tumultuous transitional period, not only in terms of protecting society’s poorest and most vulnerable but also in terms of facilitating decarbonisation attempts and providing efficient modes of insuring against a confluence of socio-economic and environmental risks. We, thus, have a scenario where it is problematic for welfare states to be financed by (or to justify) environmentally unsustainable growth, whilst welfare states themselves must be regarded as crucial transitional mechanisms. Current levels of welfare expenditure may be considered fiscally unsustainable but ironically it may be that welfare state atrophy should be considered environmentally unsustainable.

I will start by exploring the fiscal ramifications of the transition to a post-growth economy on the public finances and the constraints this imposes upon public welfarism, before discussing the extent to which this funding gap can be addressed within orthodox monetary frameworks. I will then conversely analyse the potential consequences of cutbacks in welfare expenditure in exacerbating socio-environmental risks, in order to assess the sustainability of welfare state
retrenchment. Situating the conclusion on the crux of this sustainability paradox, I will suggest that maintaining the realist-inspired ontological centrality of the state may no longer be optimal when analysing and constructing welfare policy, and argue that post-growth makes a renewal of welfarism through multiple layers of governance more urgent than ever before.

The environmental unsustainability of welfare capitalism

The proposition of the post-growth literature is that tackling climate change is not reconcilable with further economic growth and there is a great deal of empirical evidence to support this hypothesis.

Economic growth carries a significant carbon footprint and currently uses unsustainable levels of natural resources (IPCC 2012). The New Economics Foundation reported that ‘it takes the Earth almost 18 months to produce the ecological services that humanity uses in one year’ (NEF 2011: 5). Adopting a business-as-usual approach to economics in spite of this environmental degradation – which appears to be broadly the consensus amongst the major political parties of the post-industrial welfare societies – is forecast to produce the exacerbation of processes which may ultimately frustrate economic efficiency even in its own terms; leading to large reductions in GDP across the world (Stern 2007).

A discourse of green growth realised through a variety of technical fixes has long been the (largely implicit) mainstream political riposte to the tensions between the economic and the environmental, but there is a great deal of empirical evidence to suggest that the ‘easy compatibility between economic growth and climate change [which underlines the green growth discourse] is an illusion’ (Helm 2009: 11).

Whilst ‘greening’ the processes of capitalism is the implicit source of hope for continuing status quo high-consumption lifestyles, achieving growth without expending resources and increasing carbon output has no historical precedent and, thus far, decoupling growth from carbon on the scale required has failed to materialise (Jackson 2009: 14). Any improvement in carbon efficiency has been entirely overshadowed by the effects of further growth and post-industrial countries have only succeeded in reducing their own national carbon footprints through ‘outsourcing’ manufacturing to countries such as China (Helm 2012). The United Nations Conference on Trade and Development adopted a global outlook and calculated that in order to keep below the 2°C climate threshold, the carbon intensity of each dollar’s worth of output would have to fall from 770 g to just 6 g . . . requiring a daunting 11 per cent average annual reduction in carbon intensity (Simms 2013: 276). Post-growth theorists, therefore, are extremely sceptical of any slogans of ‘green growth’ or ‘sustainable growth’ in terms of how achievable and universalisable such concepts are (Victor 2008, Latouche 2009, Jackson 2009). Consequently, there should be no a priori assumption that the recent absence of growth was a temporary interlude from the economic equilibrium.

Some have claimed that environmental clean-up projects may actually boost GDP growth as it is a significant economic space for potential productivity growth, investment and demand; based on the observation that GDP is
fundamentally an aggregated measurement of revenue flows rather than capital stocks. Yet public sector environmental protection expenditure is hardly a major driver of GDP, but even if it were it is not the type of economic activity which would profit the Exchequer, as most environmental clean-up programmes would not be taxable private sector activity but either heavily subsidised or entirely state-funded projects. Indeed, it would most likely add to the competition between government ministries for budget financing rather than provide a sustainable tax base for enabling state expenditure.

Even the costs of climate change adaptation (rather than the mitigation enabled by a post-growth transition) could, ironically, be enough to eradicate growth in many countries. The IPCC (2014: 19) estimated that the costs of adaptation could be 2 per cent of global GDP per annum or higher, substantial enough to choke off growth in some parts of the world.

This ecological reasoning dovetails with pre-existing and more narrowly economic concerns above the trend towards a long-term slowdown in growth since the 1970s; a fear articulated by Gordon (2012), Cowen (2011) and Streeck (2014). This only serves to underline the importance of countenancing a world without the bountiful levels of growth we became accustomed to before 2007.

Post-growth theorists tend to be sanguine about prospects of living without economic expansion primarily because growth has long been decoupled from wellbeing and it is believed other metrics could offer a more substantial index of development. Yet it may well be the case that there are wellbeing costs to not having economic growth; one of which may be that public spending can no longer be financed to quite the same extent.

The fiscal pressures of the transition to post-growth

The authors associated with the post-growth literature have offered a compelling vision of economic change rooted in a critique of a priori neo-classical understandings of wellbeing. Yet the elephant in the room in such discussions is that the transition to post-growth means a reduction in taxable economic activity and a circumscribed fiscal capacity for state actors.

Welfare state expansion in recent years, primarily due to demographic pressures manifested in the increased costs of public pensions and public health care, has been aided enormously by economic expansion, which has allowed politicians to avoid countenancing unpopular tax hikes or dedicating a greater proportion of state resources to welfare services.

In recent decades, the growth rates experienced by Western economies have only been marginally inferior to the growth of spending, and if growth can be maintained it is fair to suggest that the additional fiscal burdens upon welfare services due to demographic pressures are not insuperable (Taylor-Gooby 2013: 75).

The absence of growth, however, would render welfare commitments increasingly prohibitive as well as potentially endangering a host of private sector jobs dependent on corporate profit. As Latouche (2009: 16) fleetingly acknowledged, ‘jobs, retirement pensions and increased public spending (education, law and
order, justice, culture, transport, health, etc.) all presuppose a constant rise in Gross Domestic Product’.

An ageing population is key here as it makes the prospect of this transition significantly more difficult than would have otherwise have been the case. Although the counter-factual would still have prompted challenges, it would have been far easier if a constant level of welfare generosity could have been assumed. However, this is not the case and we cannot afford to postpone climate change mitigation until the demographic make-up of post-industrial countries have changed.

In fact, the fiscal position of some states may be even worse than this. Even in the ‘boom’ years, it became politically normalised in a host of European countries to consistently run budget deficits. The UK, Germany, Italy and France have achieved a meagre and diminishing number of budget surpluses since the 1970s – a trend which perhaps substantiates Schumpeterian fears – and this suggests that even current levels of public spending would be rendered unsustainable if growth were to be choked off in the immediate future.

Such a scenario of instantaneous post-growth is admittedly highly improbable if not impossible. Any transition to post-growth must be an incremental and non-linear process. But it remains a crucial point as it illuminates the state of the public finances heading into such a period of profound transformation. Not only is future welfare spending predicated on economic expansion, but current levels of welfare spending are based on assumptions of future expansion as well! The corollary of restricting (taxable) economic activity is that severe limits would be imposed upon the ‘tax take’ compared to public expenditure w. This means that not only future commitments, but even present expenditure levels may be seen as fiscally unsustainable when circumscribed by post-growth expectations.

Particularly (but not exclusively) in times of recession, welfare spending can be justified by heterodox economists through reference to quasi-Keynesian concepts such as macroeconomic stabilisers, counter-cyclical spending and the multiplier effect. In other words, current state expenditure can be seen as temporary, counter-cyclical spending designed to revive the locomotives of growth through re-generating demand and capital investment projects. Budget deficits can, thus, be remedied by the budgetary surpluses of a future economic boom – allowing the state to smooth over the business cycle. However, in an economy which recognises the complications of growth it is more difficult to see public debt in such terms. The end of growth involves challenging the business cycle and thus fundamentally problematises the idea of counter-cyclical spending that can be neutralised by future budgetary surpluses.

This includes the budgetary surpluses that have been sustained in recent years on the premise that future growth would allow us to see the current budget imbalances in Keynesian terms. The public sector debt already accrued has been largely due to sustaining budget deficits (rather than the re-capitalisation of the banks) since the financial crisis of 2008 (Hay and Wincott 2011: 220).

It is difficult to disagree with the many commentators who have stated that the emphasis upon public debt in political discourse is remarkably overstated, and responds to the symptom rather than the cause of the financial crash (Krugman 2012, Blyth 2013). In an environment where growth is foreseeable, public
sector debt can be gradually eroded down to sustainable levels by the eventual increase in taxable economic activity. Yet in the post-growth mindset, where future growth is being questioned and future budgetary surpluses problematised, high levels of expenditure and public debt must be seen as being a more structural facet of the economy.

Public debt is consequently a serious post-growth concern as it becomes synonymous with the ‘structural deficit’; understood today as an estimate of how much debt will not be eradicated through a return to ‘normal’ growth levels and will thus need to addressed through austerity measures. To put it another way, if economic growth is unable to take much of the burden of fiscal consolidation, public debt will only be eroded through deliberate political action. This would lead to a deficit reduction plans far more vigorous than the types currently being experienced. This would be true even if the transition to post-growth did not incite the capricious and potentially punitive reactions of the financial markets and the credit ratings agencies, which could potentially heighten the cost of borrowing. Such reactions could well compound these fiscal concerns.

Reducing public debt in a post-growth economy is possible, but it would constitute a significant proportion of state expenditure. Whilst it is possible to maintain debt reduction targets in a post-growth economy through prioritising debt repayments within a state’s budget, this would seem to be extremely problematic alongside a commitment to maintaining the entirety of welfare expenditure in contemporary post-industrial economies.

When a more holistic understanding of the current political economy challenges is adopted, it is clear that it is more difficult to rationalise any heterodox progressive response based on re-animating environmentally unsustainable dynamics of economic growth and counter-cyclical spending to be remedied by future budgetary surpluses. If the starting point of the post-growth literature is correct then we must acknowledge the irony that, in the long run, Keynesianism is dead.

To re-appropriate Offe’s felicitous phrase, this presents a ‘crisis of crisis management’ in that the welfare state would be, in this context, no longer quite as potent a tool for responding to and managing the nature of this multi-dimension and profoundly de-stabilising period of crisis (Offe 1976). The magnitude of this development cannot be underestimated for progressive politics.

The future national finances of post-industrial countries are subject to numerous (and sometimes incalculable) unintended consequences and (agential) unpredictability in the political and financial arenas. And we should remain aware that historically welfare reform has not followed economic change in a deterministic way (Cox 2001, Hay and Watson 2003). Institutional structures and the ideas held about fiscal constraints tend to play key roles in dictating public policy and so reform would remain a politically contingent and heterogeneous path, rather than economically inexorable one. However, even with these caveats in mind it is axiomatic that post-growth transitions would place certain structural constraints upon government spending. Welfare states, as large constituents of state expenditures, will be subject to strenuous fiscal audits.

Indeed, this is why growth has for so long been seen as the great palliative of politics. The elixir of growth can reduce national deficits, fund welfare
programmes, reduce unemployment and a whole range of other remedial benefits. The end of growth may be economically unavoidable or environmentally necessary, but it brings substantial headaches to policy-makers tasked with allocating scarce resources. These are repercussions seldom acknowledged by those propounding a post-growth vision of the future.

Of course, a plethora of subsidiary consequences emerge from this transition which invites an amalgam of unstable forces. Many scholars do not even consider a post-growth economic system to be a capitalist one – although crucially many post-growth authors such as Daly (1972), Victor (2008) and Jackson (2009) do – but what is clear is that the consequences of a post-growth transition to a society which continues to respect capitalist concepts such as debt relations and balanced budgets are extremely difficult to project. It seems fair to forecast, however, that the pressures upon the welfare budget will be compounded by a loss of private sector jobs, uncertainties over asset-based welfare and private pensions based on investments in any of the transitional countries, potentially punitive reactions from credit rating agencies and financial institutions, and cuts elsewhere in state spending which may generate dangerous feedback loops adding strains upon numerous welfare benefits. Victor (2008) through his attempts to model various economic scenarios under conditions of zero growth has been a key figure in exploring these themes. Looking at the Canadian economy specifically, Victor forecast varying degrees of concerning consequences for unemployment, poverty, incomes, debt levels, investment and trade balances. Victor advocated the final, and least calamitous of his scenarios, which was a stabilising of the economy based on greater redistribution and state investment *inter alia*. Yet how this state investment is to be financed was not touched upon in the analysis, in spite of its importance for mitigating the tumultuousness of unstable economic forces in this renewed international political economy.

A comprehensive analysis of the strain on welfare services cannot end here, however. It is also fair to forecast that the strain on welfare services will be exacerbated by climate change; which would be mitigated but not halted by post-growth. Firstly, a host of climate change adaptation projects will still be required and are likely to be financed (at least partially) by the state. These projects will compound the fiscal predicament of the state and create even greater fiscal competition within the state departments for scarce monetary resources. Secondly, climate change will itself create greater welfare need. A range of forecasts have estimated that we will see an increase in climate migration, resource scarcity and flooding (Stern 2007, IPCC 2012). Extreme weather events are likely to become frequent and (as Hurricane Katrina showed) it is the poorest that will be less likely to have adequate insurance and less able to escape affected areas (Meadowcroft 2008). Global supply chains will be persistently threatened, including those connected to the food and fuel industries (Simms 2013). Less directly, the policy actions necessary to drive the transition to environmental sustainability may also generate welfare need. These include carbon and consumption taxes, which are likely to hit the poorest the hardest. Gough (2013a) has demonstrated that carbon mitigation policies tend to be regressive and, thus, will squeeze the incomes of the low earners even further.
The above are difficult to predict or quantify with any confidence as there is little historical precedent for such changes and there will be a great deal of variation amongst the transitional economies. However, it is prudent to tentatively project that additional costs to welfare states will be accrued. The onset of climate change and the policies undertaken to make this transition to environmental sustainability heralds a tumultuous time for the most vulnerable individuals and communities in post-industrial societies. It ostensibly leaves us with intensified tensions and a prospective funding gap in state finances. As Chancel et al. (2013: 62) put it ‘weak growth makes social protection reforms all the more necessary and all the more difficult’. Welfare states are unpropitiously projected to consume ever greater public resources ceteris paribus whilst the fiscal capacity of the state to respond to welfare need is likely to shrink.

The post-growth literature has not yet systematically engaged with these implications. Prioritising welfare spending over other areas of public expenditure is certainly possible. Some limited space may exist for retrenchment in other areas of the budget, and it is vital that post-growth exponents explore differing forms of austerity measures. One would imagine, however, that a progressive post-growth theorist when faced with such a quandary would attempt to calculate the potential for cuts in other areas of state spending and the additional funds that could be raised through taxation.

Chancel et al. (2013) remain bullish that these constraints can be significantly mitigated by a renewed tax system and emphasise the agential space that remains within these constraints. They argue that ‘it is not so much society’s economic growth that matters, but rather the individual and collective choices we make’ (Chancel et al. 2013: 5). There are, however, significant limits to even the most progressive architectures of taxation in a context where the very point of such transitions is to move towards economies based on lower levels of production, consumption and work. The aim is to engender economies with lower levels of output and, as a corollary, producing tax bases which are diminished.

A full discussion of progressive taxation can be found elsewhere, but there is a point of diminishing returns to income tax and corporation tax. This is true even under present conditions (particularly in age of ‘tax havens’) but it is even more the case within a transition to post-growth where the very point is to suppress carbon-intensive forms of economic activity. Green taxes on carbon, advertising and selective VAT modifications (to both the rate and the commodities it is levied upon) which facilitate the transition to environmental sustainability would also be prudent. Yet these taxes will hardly be buoyant revenue streams and even if they were they would (hopefully) constitute declining revenue streams as environmentally harmonious behaviour becomes normalised.

Therefore, there would need to be a significant change in the emphasis of taxation towards ‘immovables’ on land and property, and perhaps even global forms of taxation such as the one imposed upon wealth advocated by Piketty (2014). It would be unwise to be prescriptive about the rates which could be applied to immovable here – such an issue must remain open-ended and subject to the relevant democratic processes – but it would be wise to view these areas of taxation as the most lucrative long-term avenues of funding state activity in a post-growth era.
Clearly, there are a range of taxation systems internationally, and the need to enact reforms will be mediated by a plethora of democratic and political institutions and localised discourses. As such, it is sufficient to say that a more progressive system of taxation is a key political component of addressing the post-growth funding gap, but that it must remain an open question. Clearly increases in income, corporation, wealth, carbon and financial transaction taxes and a clamp down on tax havens are capable of making a significant contribution and can be seen as entirely equitable. Furthermore, international cooperation is capable of mutually enabling progressive action on taxation as nations are able to multilaterally widen the scope of each other’s tax bases, if they can avoid a deleterious race to the bottom.

In the face of such unknowable variables and political heterogeneity throughout the heartlands of welfare capitalism, it would be prudent to remain sceptical that simply relying on tax hikes is the start and end of this conversation. *Ad infinitum* economic growth cannot be simply substituted in public accounts by a short-term growth in taxation, particularly in light of the need to reduce governmental debt, the growing welfare need brought about by contemporary circumstances and the effects of the post-growth transition itself. These fiscal constraints and increasing welfare need should breed a scepticism that post-industrial societies can continue to enjoy welfare systems as robust as they have become accustomed to. As long as nation-states operate within the monetary frameworks of capitalism, fiscal restrictions will continue to underwrite political action.

Indeed, moving beyond growth seemingly precipitates an invidious degree of public sector retrenchment. This is tragically ironic for progressives who have long resisted, understandably, the emaciation of state spending.

It is clear, then, that post-growth proposals have severe and unacknowledged implications for the size and nature of the state. The end of growth provokes a point of enormous tension between the left’s environmental sympathies (and a broader social critique of GDP as a measurement of wellbeing) and the left’s deep-seated tendency to view the state as an instrument of progressive politics and welfare provision. This is profoundly unsettling. Should progressives then eschew the notions of environmental sustainability put forward by the post-growth literature in order to protect cherished social programmes and re-energise efforts to inspire another, more inclusive wave of growth?

This may be a seductive conclusion, but it is entirely inadequate; not least because current growth patterns carry ramifications for welfare need as well as the planet. Growth itself (has generated costs to the welfare bill (although relationships between the two differ from country to country), partly through its socio-environmental effects.

A ‘business-as-usual’ approach may be seductive for some but it is clear that the status quo invites ever greater socio-environmental risks and the exacerbation of anthropogenic climate change (which ironically threatens economic growth subsequent according to Stern 2007: xv). Indulging a set of environmentally illiterate economic discourses will not allow us to come to terms with the ‘dilemma of growth’, as Jackson (2009) termed it, or the need to reconcile our social and environmental sensibilities. As Simms (2013: 62) dramatically stated: ‘economics…becomes redundant if it can rationalise an exchange that sells the
future of humankind’; and the logic of indefinite welfare state expansion conforms to this mode of economics. This thinking caused Gough and Therborn (2010: 757) to state that ‘the 20th century formula of economic growth and social security/justice will no longer be adequate’.

This is a key point for the academic literature on welfare state sustainability. Its foci cannot continue to simply be upon state-funded programmes financed indirectly by a carbon-intensive growth dynamic. In short, the academic literature on welfare state sustainability needs to think about sustainability in a more sustainable way! That is to say, that it needs to factor in not only notions of fiscal sustainability, but also the environmental sustainability of the economic system its funding is derived from and in whose language this funding is justified.

This accumulation of fiscal, socio-environmental and economic pathologies delivers a far more profound and systemic challenge to the welfare system than at any other time in the post-war period. This does not alone spell out the inevitable demise of welfarism, but underlines the importance of a transformation more radical than is currently being countenanced in public discourse.

The unsustainability of welfare state retrenchment?

The fiscal predicament of welfare states under post-growth conditions is clear. Welfare states are financed by environmentally unsustainable growth dynamics and, subsequently, they must be deemed environmentally unsustainable by proxy if we are to make a transition towards post-growth sustainability. However, we should remain sceptical of this logic also. This is because welfare state retrenchment as aligned to an environmentally minded macroeconomic shift could be environmentally deleterious and, thus, ultimately self-flagellating.

This is not least because of the higher environmental footprint of privatised services which are concerned purely with profit compared to their counterparts in the public sector. By way of comparison, Chung and Meltzer highlight that the US healthcare system is reported to be accountable for 8 per cent of total CO₂ emissions, whereas in the UK the National Health Service is accountable for only 3 per cent of total emissions (SDC 2008); a disparity largely due to upstream supply chain procurement according to Chung and Meltzer (2009) themselves. Thus, if we are to assume that privatisation and state retrenchment are two sides of the same coin, retrenchment may well lead to even greater ecological degradation.

The higher carbon output attributable to private services demonstrates the extent to which decarbonisation can be facilitated by a larger public sector less prone to the profit motive and more likely to account for ecological considerations.

The ecological output of privatised health care has led some to conclude that ‘a free market and insurance-based healthcare system … might struggle to reach lower levels of CO₂ emissions’ found in comparable public healthcare systems (Nordensvard 2013: 69). There is, therefore, cause for concern that privatising collective public goods and basing them on a criteria even more fixated on cost and profit could exacerbate environmental degradation.

Furthermore, it appears that privatised services consume a greater proportion of monetary resources as well as ecological resources! Maintaining a myopic and asymmetrical focus on public sector spending may lead us to think that any
reduction in costs would be beneficial to ‘the taxpayer’. Yet the example of health care demonstrates that this is not necessarily the case. European governments furthering the trend of privatising vital healthcare services ostensibly serves to laterally shift the costs from the public sector finances towards the finances of households. Rather than a way of cutting costs, it is instead a way of shifting expenditure from the collective balance sheet to the individual. Taking this broader view of finances is important as the OECD data seems to illustrate as a percentage of GDP just how reasonable nationalised models of health care are (OECD 2012).

As the comparative OECD graph shows (Figure 1), attempting to reduce the financial burdens on the state may be counter-productive if it is realised through the privatisation of healthcare services as those countries inclined towards such models of health care tend to be less cost-efficient as a percentage of overall GDP. The constriction of national resources brought about by a post-growth transition is, thus, an even greater incentive to collective healthcare services in a cost-effective manner. Privatisation derived from the maintenance of an asymmetrical focus on the state’s finances cannot be considered an optimal approach under such conditions.

The asymmetrical focus on public finances and the state is also palpable in the debate on pensions, as an ageing society has harnessed calls for a reduction of state spending by encouraging private pension saving. But this discursive framing also produces fallacious conclusions. As Esping-Andersen notes,

if it is our aim to sustain our welfare commitments, shifting the costs to either market transactions or to familial support will not reduce the amount of additional resources that need to be mobilised. The elderly of the future may perhaps absorb less

---

**Figure 1.** Total health expenditure per capita, public and private, 2010 (or nearest year)

*Source: OECD (2012).*

804
government expenditure, but that does not mean that they will absorb less of the national GDP. (2009: 150–1)

Examining both public and private healthcare costs is instructive in determining if and how welfare costs can be brought down. If it is true that the transition to sustainability implies some form of public sector retrenchment, it would be imprudent to ignore the substantial private costs and public sector risks which accompany the individualisation and privatisation of welfare provision.

The argument that collective provision of welfare services is more appropriate in age of constrained ecological and monetary resources is only aided by the wealth of evidence which demonstrates that decarbonisation strategies are accelerated by the presence of robust welfare states. Perhaps the most significant ecological rationale for a robust welfare regime is that they possess the ability to fundamentally modify how citizens relate to each other and the planet. Large welfare states are able to alleviate inequalities and engender a stronger sense of community and the ‘public good’; all of which tends to promote decarbonisation strategies.

The core message of Wilkinson and Pickett’s The Spirit Level (2009) was that more equal societies perform better on a range of indices, including those relating to ecological footprints. It is difficult to explaining these correlations with confidence or precision, but there is a sense in which inequality seems to erode community spirit and social responsibility – or what Putnam (2000) referred to as ‘social capital’. These trends intersect with the notion that ‘policies to reduce carbon emissions depend on a wider sense of social responsibility, of co-operation and public spiritedness’ (Wilkinson and Pickett 2009: 227).

Therborn (2014) more recently made the point that ‘increasing social distance between the poorest and the richest diminishes social cohesion, which in turn means more collective problems and fewer resources for solving all our other collective problems’. The Harvard philosopher, Michael Sandel, concurred in the 2009 Reith Lectures that ‘a common citizenship so that people from different walks of life encounter one another and so acquire . . . a sense of a shared life’ was useful in cultivating civic virtue and enabling individuals to ‘meaningfully think of one another as citizens in a common venture’ (Sandel 2009).

In the individualistic, consumer cultures of the Anglophone world it has been difficult to promote a sense of the public good or for the state to take decisive action, but in more equal societies with a stronger sense of civic virtue ‘institutions and political culture enable an interventionist state acting to promote the public good’ (Gough and Meadowcroft 2011: 500). Accordingly, research has shown that people in individualised, unequal and liberal economies tend to have higher per capita carbon emissions (Kasser 2001) and be more resistant to environmental legislation comparison to countries in Scandinavia and the Netherlands (Dryzek cited in Gerhards and Lengfeld 2008, Gough et al. 2008).

Furthermore, inequality appears to constitute a significant barrier to instigating environmental change through the price mechanism. Changing prices through carbon taxation (to reflect the environmental costs of emissions) is recognised as one of the primary levers available to governments hoping to encourage low-carbon behaviour, yet it has been shown that this lever is significantly less
effective in unequal countries as the relatively affluent tend to be immune from price rises designed to engender more sustainable consumption patterns (Weitzman 1977). This is known as the Weitzman paradox. More equality thus seems to aid the effectiveness of the price in prompting environmentally judicious change.

Following on from this point, the relationship between inequality and the environment is also important in terms of levels and types of consumerism, with citizens in more unequal countries tending to indulge in higher levels of conspicuous, carbon-intensive and disposable consumption (Druckman and Jackson 2009, Wilkinson and Pickett 2009: 222, Gough et al. 2011). Current consumption patterns have accumulated economic, social and environmental critiques in recent years for their carbon-intensive, conspicuous and debt-fuelled character. Not transforming these consumption patterns through significant state intervention and redistribution is simply not an option if we are to make this shift towards a sustainable society.

Redistributing disposable income, partly through the apparatus of welfare states, acts as a catalyst for engendering more environmentally sustainable consumption patterns as well as allocating national resources more equitably. Following Wilkinson and Pickett (2009: 215),

given what inequality does to a society, and particularly how it heightens competitive consumption, it looks not only as if the two are complimentary, but also that governments may be unable to make big enough cuts in carbon emissions without also reducing inequality.

We should not understate the importance of a robust welfare regime in instigating this behaviour. Gough and Meadowcroft (2011) speculated that

it may well be that different welfare states will prove more or less capable of arriving at effective and equitable solutions, returning us to the distinction between different welfare regimes . . . evidence within the developed world that welfare regimes map on to environmental regimes.

Indeed, the values which underpin an effective response to climate change – altruism rather than egoism, collectivism rather than individualism, cooperation rather than competition, inter-dependence rather than inequalities, de-commodification rather than the free market – seem to also promote the core values underpinning public welfarism. The interdependencies between the two are considerable. Research suggests that it is social democratic countries with more substantial welfare regimes which will more effectively be able to prioritise the reduction of their carbon footprints (Gerhards and Lengfeld 2008).

The question, therefore, perhaps should not be: is the welfare state fiscally sustainable? But rather: is welfare state retrenchment environmentally sustainable? There is cause to believe that welfare state retrenchment policies are a self-flagellating policy direction even if aligned with an environmentally minded post-
growth transition. Welfare states can, thus, be seen as vital transitional mechanisms, if only because they are more environmentally sustainable than the privatised alternatives.

Therefore, there remains an ecological and financial rationale to the collective, single-payer model of welfare services, which should be taken into account when discussing welfare sustainability. Martyring public provision of essential services in order to cut costs would at the aggregate level constitute an extremely self-defeating policy direction. Substantial mechanisms of collective action can continue to be vital in keeping aggregate costs down as well as protecting the poorest and most vulnerable in our societies.

There is a parallel here with the work of Bruce Weston in that there seems to be financial costs of preserving only a residual welfare regime. This is a more environmental argument, but it is still worth deliberating the stark ramifications of welfare retrenchment and privatisation in this scenario (as well as the effects this has on inequality and social mobility) upon healthcare costs, education and the potential costs of increased criminality that can accompany reduced state support and growths in inequality (Weston 1999, Wilkinson and Pickett 2009, Jennings et al. 2012).

All of this is to marginalise the more normative case that combining pre-existing inequalities and vulnerabilities with the socio-economic implications of both climate change and the transition to post-growth conditions ethically demands social models which de-commodify market forces and protects the most vulnerable. If regressive welfare retrenchment were to accompany the radically destabilising processes of climate change and economic reform, it is difficult to forecast anything other than a painful and counter-productive transitional period. In this scenario, social unrest and distributional questions would surely arise from considerations of social justice. Chancel et al. (2013: 4/59) make this case and they conclude ‘a low-growth society... needs to redouble its efforts as far as redistribution is concerned’ and that this could be achieved still through ‘taxation, social protection and legal means’.

Welfare states, therefore, have prominent roles to play in any transition towards low-carbon economies and their pervasive retrenchment at the current time should be regarded as environmentally unsustainable. Paradoxically, this is the case even if aligned to a post-growth mentality of governance which circumscribes the state’s fiscal capacity. If the hypothesis of the post-growth literature that environmental sustainability cannot be reconciled with growth is correct, then it appears as if the transition towards environmental sustainability cannot live with, or be operationalised without, robust welfare states.

Conclusion

Bringing together these literatures, therefore, generates significant insights for the analysis of welfare state sustainability and brings us to this incongruity. The transition to an environmentally sustainable economy may rely upon a constriction of economic activity but it also relies upon a mode of governance which possesses the ability to reduce inequalities, engender new consumption patterns (partly through redistribution), insure against collective risks and
de-commodify market forces. The evidence seems to indicate that welfare states are a precondition for any developmental path which successfully reduces carbon output.

The traditional solutions for promoting a positive outlook for the welfare state – specifically, more growth, tax and expenditure – are no longer acceptable, at least normatively, when we adopt a more sophisticated notion of welfare state sustainability. The warranted claims of the post-growth movement, however quixotic it remains, problematise these traditional solutions. So where do we go from here?

One thing is for sure, we cannot simply resort to welfare state abatement, which appears to be a self-flagellating policy direction. Concerns over the fiscal sustainability of the welfare state are therefore pertinent, but we should be equally attempting to determine the extent to which welfare state retrenchment is sustainable in light of socio-environmental interdependencies.

Two routes forward for policy-makers are clear. Firstly, the *ceteris paribus* assumptions made about taxation here need to be interrogated. The issues relating to tax collection have already been discussed, but a more progressive architecture of taxation would surely be part of the policy response to such phenomena. Taxes on not only income but on wealth would still garner significant amounts, particularly if coordinated internationally. Secondly, perhaps it would be wise to meditate on why we require welfare states of this size in the first place. In many respects they offer a range of public services which are both cost-effective and relatively low carbon. Yet in other respects welfare states are concerned with mitigating the shortcomings of particular growth models (which entail differing levels of welfare expenditure) through redistribution. From this perspective, a smaller welfare state would perhaps be entirely acceptable as long as it is embedded with a wider economic system which provides relatively egalitarian outcomes without such a reliance on the state. This clearly dovetails with the research conducted on ‘predistribution’ (Hacker 2011), those who advocate a cap on the costs of housing, the health effects of inequality (Wilkinson and Pickett 2009, Therborn 2014) and preventative health care (Gough 2013b), the redistribution of work through a recalibration of convention work–life balances (Skidelsky and Skidelsky 2012), and how such a reconfiguration of work–life balance could be married off to a postponement in the retirement age in order to reduce the cost of public pensions (NEF 2010: 21); all of which would allow for potentially progressive modes of welfare state retrenchment, however bizarre that notion sounds.

These are already quite radical recommendations in that they go against the grain of the current political settlement, but these policy routes are likely to be only very partial solutions. As such, it may also be worth questioning whether maintaining the realist-inspired ontological centrality of the state is an optimal mode of analysing and constructing welfare policy. What is more urgently required in such a context is a more profound renewal of the welfare state which spans multiple levels of governance. For example, certain co-production approaches complement state welfarism with an attempt to tackle and manage certain forms of welfare need at the local or community level.² Projects such as Time Banking (NEF 2008), which allows citizen to contribute their time and skills in areas such as elderly care and mental health care, operate outside the
market economy and would hold clear relevance here. At the international level, a broader set of institutions perhaps under the jurisdiction of the European Union or the G20 could feasibly set the parameters for state expenditure through coordinating *inter alia* deficit reduction, financial sector regulation and investment policy, or indeed implement welfare policies at the supranational level (Deacon 2007). Such policy coordination would multilaterally widen the policy-space for states to pursue more expansive fiscal policies. The existing state institutions of welfarism will continue to play prominent roles but they would be situated within a broader and more diverse set of institutional arrangements. A renewal of welfarism on these lines would be appropriate and urgently required in a post-growth economy and society.

The policy routes offered here are certainly not ‘meta-solutions’, but instead fruitful and open-ended (if flawed) ways of thinking beyond the accumulation of problems and paradoxes in this nascent research area. There is a need here to theorise more intensely on the intractability of these problems and the radicalness of the policy approaches they demand. Sadly, it is currently difficult to be sanguine about the future of public welfarism or the planet within a political economy framework centred upon conventional ideas and institutions.

**Acknowledgements**

I would also like to thank Prof. Colin Hay, Dr Owen Parker and Xavier Mathieu for their insightful comments which have undoubtedly strengthened the paper.

**Disclosure statement**

No potential conflict of interest was reported by the author.

**Funding**

I am grateful for the financial support of the UK Economic and Social Research Council which has allowed me to conduct my research.

**Notes**

1. I do not intend to explore the feasibility of a ‘green growth’ paradigm here, but will simply use the post-growth hypothesis – that environmental sustainability is irreconcilable with *ad infinitum* economic growth – as the working (if fallible) assumption of this article in order to tease out the broader implications of a socio-economic shift ‘beyond GDP’.
2. Much of the ideas under the co-production umbrella have been co-opted by the Big Society discourse in recent years. However, many of these ideas retain a great deal of merit and relevance in the cost of post-growth.

**Notes on contributor**

Daniel Bailey is a doctoral candidate at the University of Sheffield. His research interests include the political economy of the welfare state, ecological economics and the how notions of unsustainability shape political outcomes. His research has been published in, amongst others, *New Political Economy and British Politics*. 809
References

Blyth, M. (2013), *Austerity: A History of a Dangerous Idea* (Oxford: Oxford University Press).

Boulding, K. (1981), *Evolutionary Economics* (London: Sage).

Chancel, L., et al. (2013), *A Post-growth Society for the 21st Century: Does Prosperity Have to Wait for the Return of Economic Growth? New Prosperity* (Paris: Institut du Développement durable et des Relations Internationales), No. 08/13.

Chung, J. and Meltzer, D. (2009), ‘Estimate of the Carbon Footprint of the US Health Care Sector’, *Journal of American Medical Association*, 18, pp. 1970–2. Available from: http://jama.ama-assn.org/cgi/content/full/302/18/1970 [accessed 20 January 2013].

Cowen, T. (2011), *The Great Stagnation: How America Ate All the Low-Hanging Fruit of Modern History, Got Sick, and Will (Eventually) Feel Better* (London: A Penguin eSpecial from Dutton).

Cox, R.H. (2001), ‘The Social Construction of an Imperative: Why Welfare Reformed Happened in Denmark and the Netherlands, But Not in Germany’, *World Politics*, 53 (3), pp. 463–98.

Daly, H. (1972), *Toward a Steady State Economy* (London: W.H. Freeman).

Daly, H. (1977), *Steady States Economics* (San Francisco: W.H. Freeman).

Deacon, B. (2007), *Global Social Policy and Governance* (London: Sage).

Druckman, A. and Jackson, T. (2009), ‘The Carbon Footprint of UK Households 1990–2004: A Socio-economically Disaggregated, Quasi-Multi-Regional Input-Output Model’, *Ecological Economics*, 68 (7), pp. 2066–77.

Esping-Andersen, G. (2009), *The Incomplete Revolution: Adapting to Women’s New Roles* (Cambridge: Polity Press).

Gerhards, J. and Lengfeld, H. (2008), ‘Support for European Union Environmental Policy by Citizens of EU-Member and Accession States’, *Comparative Sociology*, 7 (2), pp. 215–41.

Gordon, R. (2012), *Is U.S. Economic Growth Over? Faltering Innovation Confronts the Six Headwinds* (The National Bureau of Economic Research), Working Paper 18315. Available from: http://www.nber.org/papers/w18315 [accessed 11 May 2014].

Gough, I. (2010), ‘Economic Crisis, Climate Change and the Future of Welfare States’, *21st Century Society*, 5 (1), pp. 51–64.

Gough, I. (2011a), ‘From Financial Crisis to Fiscal Crisis’, in K. Farnsworth and Z. Irving (eds), *Social Policy and Economic Crisis* (London: Policy Press), pp. 49–50.

Gough, I. (2011b), *Climate Change and Public Policy Futures: New Paradigms in Public Policy* (The British Academy Policy Centre. Working Group included Andrew Gamble, Tarig Modood, Anne Power, Gerry Stoker and Pat Thane). Available from: http://www.britac.ac.uk/policy/Climate-change-and-public-policy-futures.cfm [accessed 1 September 2013].

Gough, I. (2013a), ‘Carbon Mitigation Policies, Distributional Dilemmas and Social Policies’, *Journal of Social Policy*, 42 (2), pp. 191–213.

Gough, I. (2013b), ‘The Political Economy of Prevention’, *British Journal of Political Science*, pp. 1–21. Available from: http://eprints.lse.ac.uk/55022/ [accessed 10 March 2014].

Gough, I. and Meadowcroft, J. (2011), ‘Decarbonizing the Welfare State’, in J. Dryzek, R.B. Norgaard and D. Schlosberg (eds), *Oxford Handbook of Climate Change and Society* (Oxford: Oxford University Press), pp. 490–503.

Gough, I. and Therborn, G. (2010), ‘The Global Future of Welfare States”, in F.G. Castles et al. (eds), *The Oxford Handbook of the Welfare State* (Oxford: Oxford University Press), pp. 703–876.

Gough, I., et al. (2008), ‘JESP Symposium: Climate Change and Social Policy’, *Journal of European Social Policy*, 18 (4), pp. 325–44.

Gough, I., et al. (2011), *The Distribution of Total Embodied Greenhouse Gas Emissions by Households in the UK, and Some Implications for Social Policy* (London: Centre for the Analysis of Social Exclusion, London School of Economics), CASE Paper No.152.

Hacker, J.S. (2011), *The Institutional Foundations of Middle Class Democracy* (Policy Network), 6 May 2011. Available from: http://www.policy-network.net/pno_detail.aspx?ID=3998&title=The+institutional+foundations+of+middle-class+democracy [accessed 20 November 2013].

Hay, C. and Watson, M. (2003), ‘The Discourse of Globalisation and the Logic of No Alternative: Rendering the Contingent Necessary in the Political Economy of New Labour’, *Policy and Politics*, 31 (3), pp. 289–305.

Hay, C. and Wincott, D. (2011), *European Welfare Capitalism in Hard Times* (Basingstoke, UK: Palgrave Macmillan).

Helm, D. (2009), ‘Environmental Challenges in a Warming World: Consumption, Costs and Responsibilities’, Tanner Lecture, New College, Oxford, UK, 21 February 2009.

810
The Environmental Paradox of the Welfare State

Helm, D. (2012), The Global Financial Crisis and the Prospects of Green Growth (Policy Network). Available from: http://www.policy-network.net/pno_detail.aspx?ID=4266&title=The+global+financial+crisis+and+the+prospects+for+%28Green+Growth%29 [accessed 12 July 2013].

IPCC (2012), Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. Available from: http://www.ipcc-wg2.gov/SREX/images/uploads/SREX-All_FINAL.pdf.

IPCC (2014), Climate Change 2014: Impacts, Adaptation and Vulnerability. Working Group II Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available from: http://ipcc-wg2.gov/AR5/images/uploads/WG2AR5_SPM_FINAL.pdf.

Jackson, T. (2009), Prosperity Without Growth: Economics for a Finite Planet (London: Earthscan).

Jennings, W., Farrall, S. and Bevan, S. (2012), ‘The Economy, Crime and Time: An Analysis of Recorded Property Crime in England & Wales 1961–2006’, International Journal of Law, Crime and Justice, 40 (3), pp. 192–210.

Kasser, T. (2001), Presentation to a RESOLVE Seminar at the University of Surrey, November 2007. Available from: www.surrey.ac.uk/RESOLVE [accessed 8 August 2012].

Krugman, P. (2012), End this Depression Now! (New York: WW Norton & Company).

Latouche, S. (2009), Farewell to Growth (Cambridge: Polity Press), English Edition, David Macey (trans.).

Meadowcroft, J. (2008), ‘From Welfare State to Environmental State’, Journal of European Social Policy, 18 (4), pp. 325–44.

Meadows, D.H., et al. (1972), The Limits to Growth (New York: Universe Books).

Mishan, E.J. and Mishan, E.J. (1967), The Costs of Economic Growth (New York: FA Praeger).

NEF (2008), Co-production: A Manifesto for Growing the Core Economy (London: New Economics Foundation). Available from: http://www.neweconomics.org/publications/co-production [accessed 1 April 2012].

NEF (2010), 21 Hours: Why a Shorter Working Week Can Help Us All to Flourish in the 21st Century (London: New Economics Foundation). Available from: http://www.neweconomics.org/publications/entry/21-hours [accessed 2 April 2012].

NEF (2011), Growth Isn’t Possible (London: New Economics Foundation). Available from: http://www.neweconomics.org/publications/growth-isnt-possible [accessed 13 October 2013].

Nordensvärd, J. (2013), ‘Social Policy and Low Carbon Development’, in F. Urban and J. Nordensvärd (eds), Low Carbon Development: Key Issues (London: Routledge), pp. 66–77.

OECD (2012), OECD Health Data 2012: U.S. Health Care System from an International Perspective, release on 28 June 2012. Available from: http://www.oecd.org/health/HealthSpendingInUSA_HealthData2012.pdf [accessed 13 May 2014].

Offe, C. (1976), ‘Crisis of Crisis Management: Elements of a Political Crisis Theory’, International Journal of Politics, 6 (3), pp. 29–67.

Piketty, T. (2014), Capital: In the Twenty-First Century (Boston: Harvard University Press).

Putnam, R.D. (2000), Bowling Alone: The Collapse and Revival of American Community (New York: Simon and Schuster).

Sandel, M. (2009), ‘A New Politics of the Common Good’, BBC Reith Lectures 2009. 4 July 2009. Available from: http://www.bbc.co.uk/programmes/b00lb6bt [accessed 13 May 2012].

Simms, A. (2013), Cancel the Apocalypse: The New Path to Prosperity (London: Hachette Digital).

Sk德lsky, R. and Sk德lsky, E. (2012), How Much Is Enough? Money and the Good Life (London: Penguin Books).

Stern, N.H. (2007), Stern Review: The Economics of Climate Change (Vol. 30) (London: HM Treasury).

Streeck, W. (2014), ‘How Will Capitalism End?’, New Left Review 87 (May–June), pp. 36–64.

Sustainable Development Commission (SDC) (2008), NHS England Carbon Emissions: Carbon Footprinting Report (London: SDC).

Taylor-Gooby, P. (2013), The Double Crisis of the Welfare State (London: Palgrave).

Therborn, G. (2014), The Killing Fields of Inequality (London: Polity).

Victor, P.A. (2008), Managing Without Growth: Slower by Design, Not Disaster (Cheltenham, UK: Edward Elgar).

Weitzman, M.L. (1977), ‘Is the Price System or Rationing More Effective in Getting a Commodity to Those Who Need It Most?’, The Bell Journal of Economics, 8 (2), pp. 517–24.

Weston, B. (1999), ‘How Unregulated Is the U.S. Labor Market? The Penal System as Labor Market Institution’, American Journal of Sociology, 104 (4), pp. 1030–60.

Wilkinson, R. and Pickett, K. (2009), The Spirit Level: Why More Equal Societies Almost Always Do Better (London: Penguin).