

LSE Research Online

Gough, lan

Welfare states and environmental states: a comparative analysis

Article (Published version) (Refereed)

Original citation: Gough, Ian (2015) Welfare states and environmental states: a comparative analysis. <u>Environmental Politics</u>. pp. 1-24. ISSN 0964-4016 DOI: <u>10.1080/09644016.2015.1074382</u>

Reuse of this item is permitted through licensing under the Creative Commons:

© 2015 The Authors CC-BY-4.0 This version available at: <u>http://eprints.lse.ac.uk/63153/</u> Available in LSE Research Online: September 2015

LSE has developed LSE Research Online so that users may access research output of the School. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. You may freely distribute the URL (http://eprints.lse.ac.uk) of the LSE Research Online website.

http://eprints.lse.ac.uk

Welfare states and environmental states: a comparative analysis

Ian Gough*

CASE (Centre for the Analysis of Social Exclusion), London School of Economics and Political Science, London, UK

A framework is presented for thinking about state intervention in developed capitalist economies in two domains: social policy and environmental policy (and, within that, climate-change policy). Five drivers of welfare state development are identified, the 'five Is' of Industrialisation: Interests, Institutions, Ideas/Ideologies, and International Influences. Research applying this framework to the postwar development of welfare states in the OECD is summarised, distinguishing two periods: up to 1980, and from 1980 to 2008. How far this framework can contribute to understanding the rise and differential patterns of environmental governance and intervention across advanced capitalist states since 1970 is explored, before briefly comparing and contrasting the determinants of welfare states and environmental states, identifying common drivers in both domains and regime-specific drivers in each. The same framework is then applied to developments since 2008 and into the near future, sketching two potential configurations and speculating on the conditions for closer, more integrated 'eco-welfare states'.

Keywords: welfare state; environmental state; climate mitigation policy; social policy; comparative research

Introduction and conceptual framework

Here, I present a framework for thinking about state intervention in developed capitalist economies in two domains: social policy and environmental policy (and, within that, climate-change policy). I take up Meadowcroft's (2005) suggestion that the growth of welfare states provides interesting parallels and lessons for the more recent emergence of the 'environmental states'. He argues that both welfare states and environmental states are faced with the task of mitigating negative market externalities. Just as the welfare state took on gradually increasing responsibilities for mitigating the social and human costs of the market economy, we have for about four decades been witnessing a similar, halting development within the environmental realm.

^{*}Email: I.Gough@lse.ac.uk

^{© 2015} The Author(s). Published by Taylor & Francis.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http:// creativecommons.org/Licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Since the welfare state predates the environmental state by at least one generation, and on some measures by a century, what if any lessons can students of environmental policymaking learn from welfare state scholarship? This scholarship comprises both historical and comparative research with a rich variety of methodologies. Broadly speaking, it addresses both common historical trends and drivers of the epochal shift in public responsibilities for the welfare of national populations, and the immense variety we see in welfare systems across the developed capitalist world (on which I focus here).

Early theories of welfare states emphasised the rise of industrial capitalism, urbanisation, and population growth. The novel conditions and problems these created fostered collective organisation initially on class interest lines. These problem pressures and countermovements encountered different political contexts and state legacies, which founded divergent institutional patterns of public welfare regulation and provision. They also encountered distinct traditions and ideologies which shaped public debates and actors. Over the past century, these factors have intermeshed and reacted with international and global shifts, notably in the post–Second World War period from predominantly closed to predominantly open economies, which have reshaped welfare systems since around 1980.

Based on this cumulative research, I set out a framework of five drivers of welfare states, the 'five Is' of Industrialisation: Interests, Institutions, Ideas and, cutting across all of these, International Influences. 'Drivers' here refer to all factors that together condition and mediate the development of the social and environmental interventions of states. They include factors that lead to their different configurations in different national contexts. Figure 1 sets out a

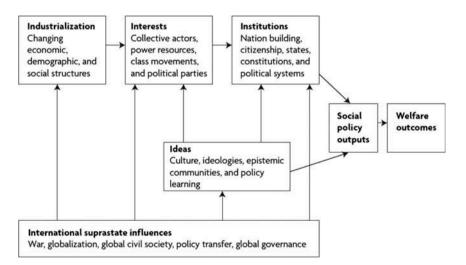


Figure 1. A simple model of drivers of welfare state development and differentiation. Note: Gough (2008, p. 44).

Source: Author's diagram, based on Easton 1965 and Hill 2003.

simplified model of policymaking based on these five drivers. It also identifies the social policy outputs, which can take a wide variety of forms, such as public services, money transfers, taxation systems, regulations, and other interventions in markets, households, and communities. These *outputs* are typically distinguished from final social *outcomes*, which encompass the welfare and well-being situations of citizens and their distribution.

The five Is framework is not itself a theory but a heuristic which embraces all the major theoretical currents in comparative welfare state research (see Gough 2008 for a fuller explanation). It evidently operates at a high level of abstraction and cannot be applied to explain specific social policy outputs or welfare outcomes. But it does enable us to explore, in Tilly's (1984) words, 'big structures and large processes' pertaining to modern welfare states. These include common trends over time and systematic cross-national differences in such features as social protection systems or health systems, and welfare outcomes, such as levels of poverty, inequality, health, and security.

Nevertheless, it is important to recognise the complexity of this collective scholarly enterprise. Baldwin (1990, pp. 36–37) notes that hardly a variable has been neglected in explaining the emergence and diversity of modern welfare states: 'industrialisation, free trade, capitalism, modernisation, socialism, the working class, civil servants, corporatism, reformers, Catholicism, war' are some of these. Castles (1998, p. 4) also warns about the difficulties in using comparative research to help distinguish the salience of all these factors: 'complex policy processes are rarely likely to have singular determinants; there is no guarantee that the factors influencing policy will be invariant over time; there is no reason to suppose that different kinds of policy outputs will have the same determinants; different policy outputs impact on different welfare outcomes in complex ways'. Nonetheless, the corpus of his own work and that of others demonstrates how seriously these problems are taken and how they can be confronted (Castles 1998, Castles *et al.* 2010).

Having briefly reviewed the literature and findings on welfare states, I proceed to explore what light, if any, this framework can throw on the development and cross-national variations in the environmental activities of modern states. Following the Introduction to this volume, an environmental state is defined as 'a state that possesses a significant set of institutions and practices dedicated to the management of the environment and societal-environmental interactions' (Duit *et al.* 2016, p.??). At first sight, the differences between state social and environmental policy would seem to be so wide that an exercise such as this is doomed to failure. First, state welfare responsibilities have been driven from the start mainly by domestic challenges and forces; whilst this is true of some state environmental responsibilities, it is not true of global threats, such as climate change, which are more evidently the product of global drivers and discourses and multilateral policy processes (Meadowcroft 2005). Second, state welfare interventions began with regulations of public health, hours of work, and so forth but gradually developed in the direction of public financing and

provisioning on a massive scale. At present, environmental interventions rely on the regulatory state and, though moves towards trading, fiscal, and economic innovations can now be seen, they remain relatively marginal compared with the welfare state (Feindt, 2013). Third, several environmental challenges, notably climate change, are policy domains of great uncertainty and complexity compared with our understanding of threats to human welfare. Fourth, science and scientists play a role in defining, measuring, modelling, and mitigating climate change in a way without parallel in the social policy arena.

This discussion is organised in four subsequent sections plus a short conclusion. The first section applies this framework to the development of welfare states in the OECD since the Second World War, distinguishing two periods: up to 1980, and from 1980 to 2008. The second section explores how far this framework can help understand the emergence and differential patterns of environmental governance and intervention across advanced capitalist states, drawing on the growing research into comparative environmental governance (Duit 2014). The third section compares and contrasts the respective determinants of welfare and environmental state development and their cross-national variations. The fourth section is more speculative. It utilises the same framework to explore future drivers, sketches potential configurations of the two, and speculates on the conditions for their further integration in some form of 'eco-welfare' state. The final section concludes by advocating closer scholarly collaboration between researchers into welfare states and environmental states.

Explaining welfare states

This part draws on the cumulative scholarship summarised in *The Oxford Handbook of the Welfare State* (Castles *et al.* 2010).¹ It is divided into two periods, before and after 1980.

Drivers of welfare states up to 1980

Industrial capitalism and 'problem pressures'

Industrial capitalism in the nineteenth century produced both new social challenges and new resources to meet them. It tore apart the social patterns of minimal protection of the subsistence family, the village, and the guilds, and it brought together large numbers of men and women outside traditional tutelage, in factories and new cities, creating and incessantly increasing the challenges of social disintegration and of social protest. At the same time, industrial economic growth, and the new medical and scientific knowledge associated with it in European modernity, provided novel resources to deal with poverty, disease, and premature death. Thus, the common findings of comparative research emphasise the importance of industrialisation (and concomitant 'de-ruralisation'), economic growth, and the demographic transition in initiating state social responsibilities in the nineteenth century and in driving their expansion in the twentieth century.

Interests

In the new societies of industrial capitalism, two powerful, opposite interests converged in generating public social policies. There was the interest of the industrial proletariat in at least some minimally adequate housing and social amenities in the new industrial cities, and in acquiring some kind of security in cases of injury, sickness, unemployment, and old age. That interest was soon organised, in trade unions, mutual aid societies, and labour-based parties. On the other side of the fence, there was the interest of political elites in social order and the quality of the population, more often out of concern for soldier material than for productivity. The French revolutions of 1789, 1830, 1848, and 1870–1871 meant that elite interest in making efforts to prevent disorder and rebellion was quite rational.

In the post–Second World War period of democratic consolidation, this model of class-based interests could explain both welfare expansion and cross-national variations. The 'power resources theory' postulated that the distribution of economic and political resources across the main social classes, and notably between business and labour, would determine the extent, range, and redistributive effects of economic and social policies (Korpi 1983). It could begin to explain, for example, the contrasts between the Scandinavian and American welfare states.

Institutions

Institutions turned challenges, resources, and interests into consolidated, selfreproducing realities. The welfare state is part of a longer-term process by which power is accumulated in nation states by building state capacities, collecting taxes, and constructing citizenship. The European welfare state emerged out of the coalescence of the bureaucratic Rechtsstaat (state of public law) and insurance, prompted by the fear of workers' rebellion and with a view to the strengthening and development of nation states. This happened in Bismarck's Germany, setting an example for the rest Europe. In other countries, statism and social rights (France), corporatism (Italy), and social liberalism (the UK) provided the initial impetus. In the period after the Second World War, different national origins and institutions consolidated into the 'three worlds of welfare capitalism' conceived by Esping-Andersen (1990). His theory brought together socio-economic development, interests, and institutions into three distinct patterns of welfare regimes, each evincing considerable path dependency – the worlds of liberalism in the Anglosphere, social democracy centred in the Nordic countries, and a third world variously labelled conservatism or corporatism in Western continental Europe (with some distinguishing here a fourth, Mediterranean world comprising Italy, Spain, Portugal, and Greece).

Ideas

In addition, ideas influence public policies as human practices (putting to one side whether they are considered major autonomous forces or as derivations from large social processes and the interests generated by these). Formative ideas behind the emergence and development of European welfare states included the European rights tradition, the civic republican tradition modernised into two major branches – British social liberalism and French post-revolutionary republicanism, plus social democracy and social Catholicism (Gough and Therborn 2010). These too contributed to the variety of welfare regimes within Western Europe. Later inputs have come from Keynesian economics and post-Keynesian economic theories of 'human capital' and 'productive social policy', and more recently still from neo-liberal and Hayekian schools of thought.

International influences

Finally, the international environment must be considered. The outcome of the Second World War popularised the 'welfare state' idea, of British wartime coinage, and the Beveridge report became for a short while a new European model. In different ways, the European social contract had been set. For fear of Communism, US leaders refrained from trying to impose their own model of capitalism on Western Europe; rather, they were supportive of attempts at European integration and at sustaining Western European institutions. Postwar welfare states flourished in a supportive international environment of a West-dominated capitalism, with little low-wage competition and nationally governed currencies and capital flows.

What clinched the rise of especially the European welfare state to its present size was the postwar boom. Welfare systems expanded remarkably as a share of GDP and much more in absolute terms: by 1980, public social expenditure (excluding education) reached on average 17.5% of GDP in the OECD, highest in 'continental' and Nordic Europe (22–23%) and lowest in southern Europe (13.5%) and the English-speaking world (15%) (Obinger and Wagschal 2010). Much research confirmed the independent significance of the first three factors in explaining these and other trends and differences across welfare states in the *trente glorieuses*: industrial and concomitant economic and demographic shifts, the mobilisation and power of different interests, and the institutional structures of nations (e.g. Huber *et al.* 1993). By the 1970s, the welfare state had become an established feature of the polity, economy, and society of the developed world.

Drivers of welfare states 1980–2008

The 1970s generated increasing strains within capitalist economies. Though these were theorised in very different ways, there was background agreement that rising real wages and rising welfare provision (the 'social wage') was reducing the share and rate of profit and thus the dynamism and growth rates of Western capitalism. Social policy was argued by the new right to be increasingly misaligned with the economy. The two oil crises of the 1970s further impaired growth and thus tax revenues. The 'fiscal crisis of the welfare state' was discussed, and was met by decisive countermovement, notably in the USA and the UK under Reagan and Thatcher. Keynesian capitalism was succeeded by neo-liberal capitalism, though to varying degrees in different economies. Again, we can consider the roles of the five factors in bringing this about and their implications for social policy.

Post-industrialism and other socio-economic shifts

Industrialisation peaked in the late 1970s in the OECD world, as measured by the share of manufacturing in national output, the scale of the industrial workforce, and trade union membership. Subsequently, the 'service economy' grew and grew, and growth rates fell. With lower productivity growth, this led to new distributional trade-offs between three core policy objectives: wage equality, expansion of employment, and budgetary restraint. The 'trilemma' of the service economy argues that while it is possible to pursue two of these goals, it has so far proved impossible simultaneously to achieve all three (Iversen and Wren 1998). At the same time, profound social changes altered the nature of families and fostered new demands on public services. To population ageing was added a sharp decline in fertility rates in many countries, which further raised the share of the 'dependent' population. Thus, economic resources grew more slowly while demands on the welfare state escalated. At the same time, inequality trended steeply upwards during this period, exerting new pressures on the postwar social settlement.

International influences: 'globalisation'

At the international level, economies were being opened up with globalisation, following the collapse of the Bretton Woods system of international monetary management. Capital became more mobile, and constraints on this mobility were rapidly removed, initially by the Reagan and Thatcher administrations, and capital flows as a share of GDP escalated after 1983. This was augmented by the growing influence of the IMF and World Bank in setting international economic policy. Finally, the collapse of communism and the Soviet Bloc in 1989–1990 signalled not only the triumph of capitalism over state socialism, but also the triumph of deregulated capitalism over any substantial public economic steering.

Interests

At the same time, the balance of class interests reversed: the power of capital increased while the membership and power of trade unions decreased, especially in

the liberal regime. Globalisation enhanced Lindblom's (1977) privileged position of business, the power of 'exit' rather than voice. The *structural* power of capital increased the ability of business and finance to influence government policy, including social policy, without having to apply direct pressure on governments through its agents (Gough 2000, ch. 4). The spate of deregulation augmented this power. In turn, this has boosted the 'agency power' of corporate and finance capital and its ability to set important limits on state intervention.

Institutions

At the institutional level, the features of 'organised capitalism', such as neocorporatist forms of wage bargaining and societal bargaining, were weakening. Starting in the Anglosphere, 'disorganised capitalism' gained ground (Lash and Urry 1987). Business, and notably the financial sectors, began to exert more influence over economic and social policymaking, heralding the rise of what Hacker and Pierson (2010) label 'winner takes all politics'. The balance between voters and corporate interest groups tilted in favour of the latter.

Ideas

Neo-liberal ideas became more dominant within economic and social policymaking, initially within the Anglosphere, but increasingly influential across Europe. Two decades of unrelenting intellectual attack on the idea of public welfare challenged the faith in big government. The state was to be rolled back; instead, markets were insistently advocated or, where these were not possible, 'quasi-markets'. Though welfare states continued to be publicly financed, growing areas of social policy provision were contracted out to private providers, with ambiguous results in terms of cost control and service quality.

These three decades can be summarised in two ways: common trends over time, and systemic differences between 'welfare regimes'. First, welfare spending continued to rise across the OECD, though much more slowly than in the previous three decades. Total social spending in the OECD increased by five percentage points of GDP in the quarter-century after 1980, but much of this was driven by big expansions in southern European countries (Spain, Portugal, and Greece) that were catching up after democratisation in the 1970s. The rate of growth in the Anglophone countries was around three percentage points. This indicates substantial retrenchment in some countries, when slower economic growth, ageing populations, new social needs, and slower productivity growth in services is taken into account. In no country did the share of social expenditure in GDP decline, but this was the period in which Flora's (1986) prediction of 'growth to limits' was broadly confirmed: the welfare state up to 2008 was consolidated but constrained. Welfare outcomes improved across a range of variables, notably health and incomes, but this was offset by ballooning inequality.

However, research also tends to show that, if anything, differences *between* welfare regimes continued to diverge in this period (Goodin *et al.* 1999, Hay and Wincott 2012). For example, there is no evidence that generous Nordic welfare states have been disadvantaged in international competition; rather, the contrary. 'Cameron's law' (Cameron 1978) – that more open economies almost always have *more* extensive welfare states – was confirmed (Scharpf and Schmidt 2000a, 2000b). This was also the time when ideas of 'productive welfare states' and 'social investment' gained ground, led by the example of the Nordic countries, in particular Sweden (Hemerijck 2012).

Thus, Swank's (2002) comparative research demonstrates that the rise in international capital mobility has not contributed in a systematic way to the retrenchment of developed welfare states or the tax state. Domestic institutional features have been important in mediating these global factors. Prowelfare interests are favoured by inclusive electoral systems, social corporatist interest representation, centralised political authority, and universal and social insurance–based programmes. On the other hand, rollbacks in social protection are more likely in countries with majoritarian electoral systems, pluralist interest representation and policymaking, decentralised policymaking authority, and liberal, targeted social programmes. Institutional features of the polity and welfare state determined the extent to which the economic and political pressures associated with globalisation are translated into cost containment, re-commodification or recalibration of social protection and the welfare state (Pierson 2001).

Exploring environmental states

Can the above framework throw light on the much more recent emergence of the 'environmental state'? According to Meadowcroft (2012), this state developed in two phases. The first, starting around 1970, witnessed an independent realm of law, policies, administration, and regulation to clean up the environment. The second, emerging in the late 1980s, strengthened linkages between this apparatus and broader state concerns with the economy, security, and welfare, often under the banner of promoting 'sustainable development'. These two phases exhibit a weak correspondence with the two stages of postwar welfare development, so I will not distinguish the pre- and post-1980 periods here. This section explores a variety of hypotheses concerning the impact of the five Is on the environmental state, concentrating wherever possible on climate-change mitigation programmes. In lieu of a systematic survey of the research literature, it also cites some relevant research under each heading.

Industrial capitalism and structural 'problem pressures'

The role of industrial capitalism in escalating environmental problems and later crises is evident. The pursuit of profit coupled with industrial technology pushes the global economy towards and in some cases beyond environmental limits. To date, the entire global expansion of capitalist economic throughput has rested on cheap energy in the form of first coal and then oil (and now gas): industrial capitalism has been 'carboniferous capitalism'. Though the productivity of natural resources can be enhanced using technology, there are limits to the substitutability of natural and man-made capital. At many points, a relentless accumulation machine runs up against these natural limits (Rockström et al. 2009). Thus, rising levels of socio-economic development and incomes can serve as relevant indicators of structural 'problem pressures' in the environmental field. The 'environmental Kuznets curve' is supported by some evidence that higher levels of economic development result in lower levels of, for example, air and water pollution.² However, there is general agreement that it does not apply to resource use including energy and to CO₂ and greenhouse gas (GHG) emissions, which tend to rise monotonically with GDP.

Interests

The influence of class interests, so central to welfare state research, is virtually absent in the environmental field. Rather, there is evidence that environmental concerns are more prevalent among more educated and affluent groups. Thus, mounting climate-change problems foster new interests to pressure for collective, and increasingly governmental, responses. There has been an 'efflorescence of non-state activism': protest groups, countercultural movements, green parties, and so on spring up to fight against the exploitation of the earth. These new environmental social movements impact on the role of civil society and the nature of governmentality (Dryzek *et al.* 2003, Lipschutz and Corina 2011).

However, business interests have played a more explicit role in shaping environmental policy, compared with social policy. Rationalists might predict that states reliant on fossil fuels would be climate 'laggards', and indeed there is a remarkably close link between countries with large carbon reserves and opposition to global climate agreements, and *vice versa* (Berners-Lee and Clark 2013). Such reserves generate large economic rents and powerful constituencies wanting to defer climate action as long as possible. On the other hand, some sectors of business see profitable opportunities in Green products and processes. Countries far advanced towards service economies with large import surpluses are also likely to witness less business opposition to climate-mitigation measures.³ 'Brown capitalist' interests are now opposed by a growing force advocating Green growth and 'Green capitalism', and the balance between the two will impact on national climate policies (Falkner 2008).

Institutions

A wide range of institutional factors can be hypothesised as drivers of the environmental state. First, the formal rules of representative democracy, such as presidential versus parliamentary, or federal versus unitary systems, can be important. Second, the degree of *devolution* of powers might be significant given the potential importance of local capacities in decarbonising economies (Duit 2014). A third is the organisation of economic interests and their links with government (Scruggs 2003, Fiorino 2011). These include the representation of business and financial interests at a national level and their incorporation in state agencies, and the related contrast between pluralist modes of interest representation and negotiated forms of coordination. This last promises a link with different 'varieties of capitalism'. Finally, the environmental state has necessarily been built on top of preceding welfare states. Thus, the prior welfare regimes may be expected to influence environmental policies. They may also affect the extent to which nations can devise and implement integrated 'eco-social' programmes, rather than 'layering' environmental policies on top of social policies with no discernible policy integration (discussed below).

Ideas

The ethics of environmentalism and Green politics challenge all dominant ideologies of the postwar period that rely on a productionist economic framework and an assumption of continuing economic growth (Dryzek *et al.* 2003, Eckersley 2004). In particular, they sit uneasily alongside today's dominant ideology of neo-liberalism. Bernstein (2001) identifies a 'compromise of liberal environmentalism', whereby environmental governance since the 1970s has been progressively predicated on the promotion and maintenance of a liberal economic order. Green and climate-change agendas have largely risen in the era of dominant neo-liberal ideas, a denigration of state capacities and hostility to public initiatives. In the case of climate change, there is also an empirical link between neo-liberal beliefs and denial of the science, which could explain the relative strength of opposition to climate policy in the Anglosphere (Painter and Ashe 2012).

In countries where social democratic or corporatist ideas continue to have purchase, the paradigm of 'ecological modernisation' and now 'Green growth' can act as a bridge between sustainable and productionist perspectives. This relates to the 'issue framing' of climate-change concerns. In some nations, such as the USA and Australia, climate change has become a crucial 'ideological marker' generating strongly polarised positions, in contrast to Northern Europe. These discourses can affect the balance of interests discussed above, but are in turn significantly produced by them (Christoff and Eckersley 2011). It seems reasonable to conclude that the degree of hegemony of neo-liberal ideas in a country will constrain the scope and depth of environmental states.

International influences

The international dimension is integral to most environmental issues and is absolutely central to climate change. This is a major contrast with welfare states, which have been predominantly driven by domestic factors, with discussion of policy learning and diffusion only in recent years. The role of policy diffusion and the importance of nations' international political and economic linkages is much discussed in explaining the speed and extent of environmental policy innovation (Knill *et al.* 2014). Fears that more globalisation and regulatory competition might lead to a deregulatory race are mostly unfounded (Duit 2014). Indeed, it can be argued that 'globalisation' has aided the spread of environmental states, in contrast to its absent or negative impact on contemporary welfare states.⁴

There is a growing body of research on the respective importance of these five factors in explaining the uneven emergence of environmental states. These include Scruggs (2003), Duit (2008), Liefferink *et al.* (2009), Fiorino (2011), and a range of authors contributing to Duit (2014), including Knill *et al.*, Jahn, and Sommerer. These differ in numerous respects: the scope of environmental regulation assessed, the countries and time periods covered, the conceptual frameworks, and methodologies. Studies of specific *climate* policies and achievements are scarcer, but they include Christoff and Eckersley (2011), Fankhauser *et al.* (2014), and some of the findings in Duit (2014). To survey this research is beyond the scope of this discussion, but is covered elsewhere in this volume. However, I draw on some of these findings in the comparison of welfare states and environmental states that follows.

Comparing welfare states and environmental states

This section draws together these hypotheses and findings, and explores contrasts and commonalities in the drivers of welfare states and environmental states. Table 1 provides a summary.

Industrialisation and problem pressures

Globalisation, financialisation, de-industrialisation, and ongoing but slower growth have been critical background drivers in both domains but in contradictory ways. Welfare states have been premised on growth states, and the slide in growth rates during and after the 1970s contributed to various forms of retrenchment over the next three decades. On the other hand, continuing growth of production and – increasingly more detached – personal consumption in the OECD precipitated new environmental problem pressures.

Other problem pressures have impacted differently on different welfare states and environmental states. One factor that heightens regime differences has been the presence of fossil-fuel reserves in most Anglosphere countries compared with

The five Is	Welfare state (post 1980)	Environmental state
Industrialisation and structural 'problem	Growth plus de-industrialisation	Consumption growth plus carboniferous capitalism
pressures'	Demographic and social shifts Rising inequality	Environmental vulnerability
Interests	Balance of class interests	Balance of 'brown' and 'green' business interests
	Rising structural power of capital	Green movements and their political expression
Institutions	Pluralist versus corporatist interest representation	Pluralist versus corporatist interest representation
	Centralised administrative state	Devolved powers
	Prior welfare regime	Prior welfare regime
Ideas	Neo-liberalism versus social citizenship	Neo-liberalism versus 'Green growth'
	'Social investment' paradigm	'Green growth' paradigm
	Degree of political polarisation	Degree of political polarisation
International influences	Economic globalisation and its management	International linkages Policy diffusion

Table 1. Major drivers of welfare states and environmental states.

the EU (Berners-Lee and Clark 2013). Yet, vulnerability to climate change appears to be a poor predictor: Australia is vulnerable on many fronts but is a 'laggard' country (Christoff and Eckersley 2011).

Interests

Working-class interests have been weakened in the social domain, and they feature little in the environment domain. The impact of their replacement by environmental and Green mobilisations has yet to be evaluated. Business interests have a renewed salience in both domains but in different ways. Welfare states have been constrained by the growing structural power of business and finance alongside globalisation. However, the scope and impact of environmental states is affected by the configuration and power of 'green' and 'brown' business interests.

Institutions

The impact of political and economic institutions has been more similar across the two domains. Factors favouring both welfare and environmental states appear to be both political (proportional representation with substantial Green parties vs. first-past-the-post electoral systems, etc.) and economic (long-term vs. short-term financial structures, corporatist vs. liberalised corporate and labour market institutions). Such institutional configurations supported earlier conclusions that coordinated market economies with social democratic welfare states tend to see economic and ecological values as mutually reinforcing (Dryzek *et al.* 2003, Meadowcroft 2005, Gough *et al.* 2008). On the other hand, the recognition that localities have a critical role to play in environmental innovation sits uneasily alongside the role of centralised administrative agencies in welfare states.

Ideas

The ideational background of welfare and environmental states has been crucially affected by their timing: welfare states flourished in the *trente glorieuses* of Keynesianism and social reformism. This period also spawned the early years of Green awareness, but environmental states have developed in the neo-liberal decades, which have denigrated and sought to unwind state capacities and regulation. This has also undermined and reversed some features of welfarism in different countries, but the embeddedness and path dependencies established earlier protected much of their legacy at least in this period. Together, these have enabled leading EU countries – and the EU itself – to advance an alternative strategy of accumulation, based on aggressive carbon constraints, Green technology, and Green growth, coupled with a weakly emerging social investment strategy. The presence or absence of polarising political discourse is relevant in both domains – 'anti-welfare' versus 'social investment'; climate denial versus Green growth – and explains persistent differences, notably between the USA and all other advanced economies.

International influences

International influences have had very different impacts on welfare states and environmental states. Globalisation and economic openness notably since 1980 have acted as a constraint on welfare states. In the environmental domain, it has worked both ways. On the one hand, it has accelerated economic development that is spreading environmental dislocation to new zones of the world. On the other hand, international linkages appear to facilitate the adoption of environmental and climate-change policies (including after a lag in these new zones). Climate-change policies too have been significantly driven by cross-national policy learning and diffusion, particularly evident within the EU over this period.

A broad-brush conclusion might be the following. Common drivers of changes in welfare states and environmental states include globalisation and internationalisation, the rising power of capital and business over other classes, and the continuing dominance of neo-liberal ideas. Neo-liberalism is a block to progress in both domains, but the other factors operate in different ways in the two domains. International economic and political linkages favour the environmental state but weaken the welfare state. Business power promotes inequality and weakens welfare and, in many countries, blocks climate-mitigation programmes; but its impact on the environmental state depends on the balance of carboniferous and Green business interests.

On the other hand, institutions and ideas continue to explain cross-national differences in both domains. Deep institutional differences persist across the advanced capitalist countries reflecting welfare regimes and varieties of capitalism. These, interacting with different power and ideational constellations, continue to drive different policy outputs in both spheres of state activity with contrasting social and environmental outcomes. Broadly speaking, these demarcate the Anglosphere from the EU.

The future of welfare and environmental states

This section uses the same framework to speculate on likely drivers of both domains of state activity in the near future. It then adumbrates two scenarios with different configurations of economic, environmental, and social policies: a business-as-usual scenario with weaker social and climate-change policies 'layered' on top of market-oriented economic strategy; and stronger climate mitigation efforts integrated with a social investment strategy. The future is radically uncertain, and this is no exercise in prediction but one of speculation about potential future relations between our two domains.

Future drivers of welfare and environmental interventions

The 2008 financial crisis

I begin with an overriding structural factor with implications for both welfare and environmental states – the impact of the 2008 financial crisis. As Marx and Schumpeter recognised, capitalism proceeds via sporadic but spectacular crises. The stock-market crash and great depression in the interwar period posed dramatic new challenges for social welfare, met in quite different ways in Roosevelt's USA, Hansson's Sweden, and Hitler's Germany. By any standards, the 2008 crisis and its ensuing waves of contagion constituted an epochal global economic crisis. Rapid state bailouts of banks and the financial sector avoided the worst-case scenario, but drove up public debt and triggered a major fiscal crisis, notably in the UK and Eurozone. This was followed immediately by a major and prolonged recession in much of the Western capitalist world. The crisis was essentially exogenous to both welfare states and environmental states, caused by the unleashing of unregulated global financial markets centred in London and New York, but its impacts on both have been significant.

Slower growth

One likely implication is that secular growth rates in Western countries will not return to pre-crisis levels, for several reasons. First, the enormous personal debt overhang across the OECD world will restrain consumer spending. Second, the shift to low-productivity services will continue though at a reduced rate. Third, in

all countries, ageing populations and falling fertility rates will *ceteris paribus* slow down or even decrease the labour force and require higher fiscal expenditures (Glennerster 2010). It would thus seem prudent to plan now for a future of growth rates slower than over the previous three decades, which in turn exhibited lower growth rates than the decades after the Second World War (Cecchetti *et al.* 2010, Demailly *et al.* 2013). At the same time, all recovery paths would seem to require an increase in the share of investment in GDP, which *ceteris paribus* further reduces the future growth rate of consumption. Sharing out this smaller total between private and public consumption becomes politically more fraught. On the other side, slower growth rates will slow down emissions, but this may undermine future-oriented mitigation efforts and thus the scope of environmental states.

This combination of crisis aftermath, continuing global expansion, and slowdown in the West will not apply equally across countries (Hay and Wincott 2012). Countries rich in resources and raw material, notably Australia, Canada, and the USA, may continue to benefit from some of these trends, while the EU may be a notable loser (Demailly *et al.* 2013). However, this would depend on the success or failure of the current campaign to keep unburnable oil, gas, and coal in the ground (Berners-Lee and Clark 2013, Ranger and Ward 2013). The success or otherwise of the campaign to disinvest from fossil fuels would have important implications for the division of interests within the OECD.

Ideas

The crisis of deregulated financial capitalism might have been expected to deal a fatal blow to the dominant economic paradigm of the previous three decades, and at the least to have brought about a critical realignment of producer groups (Gourevitch 1986). This has not (yet) happened; the reality is, in Crouch's (2011) words, 'the strange non-death of neo-liberalism'. The brief period of successful state activism to bail out the financial system brought about a surge in state debt and a fiscal crisis for public sectors in the West, for which the hegemonic prescription was 'austerity'. This partly reflects the absence of any alternative economic strategy, Keynesian or otherwise, to address fully the post-crisis state of the economy. The cross-national contagion of problems has led to a contagion of solutions!

Two major discourses relevant to this article continue to contest this hegemony. In social policy, the social-investment approach maintains a foothold in Europe, for example the EU Social Investment Package of 2013 (Esping-Andersen 2002, Hemerijck 2012). In environmental policy, the ecological modernisation discourse remains important, again in Europe (Wurzel 2012). The prospects that either may challenge neo-liberalism are discussed below.

Interests

Neo-liberalism serves the interests of powerful capitalist agents, and in turn strengthens their power. Crouch argues that it serves the interests of giant corporations, which are 'more potent than states or markets'. This power is based on both structure (their ability to engage in 'regime shopping' in a globalising world economy) and agency (their capacity and willingness to spend vast amounts on lobbying and political funding). For other scholars, it is the financial sector that drives neo-liberal policies and benefits most from them (Glyn 2006, Duménil and Dominique 2011). As industry declines and is outsourced from the West, most notably in the UK, capitalism becomes financialised with numerous consequences, including widening inequality. On either count, the end result is the 'capture' of governments by corporations, a process begun in the USA. Yet, the crisis perversely strengthens financial capital: state dependence on borrowing and debt management increases, hence its structural position became more critical to national economic survival (Woll 2014).

Institutions

Thus, governments, starting with the American and British, become more beholden to these private and sectional interests and ideas. Indeed, governments and capital become more entwined, and the ability of democracy to temper this is eroded as 'winner-takes-all' politics takes over (Streeck 2014). Within European states and the EU, the institutional configuration of finance and business ministries will play an important role in fostering or blocking alternative social/Green investment programmes.

Current policy responses

The legacy of the past three decades as well as the impact of the crisis means that welfare states are operating in contexts of macro-economic instability, fiscal restraint, and growing inequality. Moreover, the accumulation of policy legacies undermines the capacities of welfare states to address new issues (Streeck and Mertens 2011). In the Eurozone, banking and fiscal crises have forced incremental policymaking aside in favour of radical, fast, macro-economic decision-making (Kvist 2013).

In terms of policy outputs, one social policy option is now dominant – austerity. In order to get borrowing and debt down, government spending has been cut and taxes raised, though the ratio is heavily biased towards cuts (in the UK by 5:1). This has exacerbated the existing drop in real incomes and consumption spending to worsen the economic downturn and, in many countries, deficit levels and public debt. In the Eurozone, a new Fiscal Compact, incorporated into the 2013 Treaty on Stability, Coordination, and Governance, commits governments to a cap of 0.5% on the 'structural deficit' with enforcement by the European Court of Justice. Outside the Eurozone, the reaction of the UK government stands out. The Conservative-led coalition government chose to use the opportunity to impose large cutbacks in social spending which targeted to bring down the share of public spending to US levels by 2016. Here, the crisis

has been used to refashion the postwar welfare settlement and bring it closer to 'Team America' (Taylor-Gooby and Stoker 2011, Taylor-Gooby 2013).

Climate-change policy is relatively protected from such fiscal pressures, since the dominant form of interventions is regulatory and market-based. However, there is some evidence that the current recession is downgrading government commitments. Industries reliant on fossil fuels and high energy use, facing rising costs and slower growth as mitigation policies begin to bite, are fighting back. The success of such policies depends on the strength and mobilisation of Green business interests and associated trade unions and social movements – but also on the success of neo-liberal ideological currents opposed to a strengthened environmental state and even to the whole idea of global warming.

The future of welfare and environmental states: linkage or layering?

Looking further ahead, a variety of policy responses by nation states can be envisaged as the constraints of both rising commodity prices and climate-change impinge. There will be no single path, or one-size-fits-all policy response, leading to a lower-carbon world. The above analysis of slower growth suggests a more constrained world, against which the sole weapon is rapid, indeed revolutionary, technological change. The extent to which a 'fifth industrial revolution' (Stern 2015) can bring very rapid decarbonisation and a halt to the release of GHGs is much disputed, and is beyond the scope of this discussion. Instead, I consider two scenarios for the OECD world – business as usual (BAU) and radical decarbonisation – and their associated patterns of linkage between environmental and social policies.

The first, BAU scenario may suit countries shielded by external and internal resources from excessive climate challenges in the medium term, such as Australia and Canada (although this would be predicated on the failure of the 'stranded assets' campaign to devalue oil, gas, and coal reserves). In this benign scenario, policy pressures could continue to be developed incrementally in both the environmental and social domains. Given the earlier weight and preponderance of social policies, environmental policies would be 'layered' on top of these, a process whereby new policies are created without the elimination of old ones (cf. Feindt and Flynn 2009). Limited price mechanisms would be the favoured measure to direct energy development, but these will create losers, notably low-income families and people with low educational skills and weak labour market networks. If there is any pressure to rectify this, it will take the classic liberal form of compensating losers (Gough 2013a). This 'climate safety-net' approach entails a market liberal view of both climate mitigation and social policy.

An alternative scenario is one where stringent emissions reduction programmes are pursued and are more closely integrated with radical social policies. Recent modelling of such a scenario shows more immediate losses to growth rates over the next two decades, as carbon pricing drives up production costs and slows down increases in purchasing power, but subsequently leads to higher growth rates in the following decades due to the move to an energy pathway less constrained by peak oil (Demailly *et al.* 2013). Furthermore, lifestyles and behaviours gradually shift in a low-carbon direction due to complementary investment in transport and urban forms and accompanying regulatory standards. This is predicted to limit 'rebound effects' in private consumption more effectively, entailing a complementary role for social and environmental policy.

This scenario would entail 'redrawing the economic borders of the state' and placing sustainability at its heart. Just as the post–Second World War social settlement added distributive and social issues to the economic and security functions of the state, so now would sustainability functions be added and addressed. Such a 'new social settlement' would require radical change and would challenge two vital features of the current social settlement through the West: consumption and work.

An eco-social consumption policy would need to prioritise collective investment and consumption over private commodities; foster local, community-based consumption; identify high-carbon luxury consumption; improve diets to benefit both health and the environment; and move welfare interventions 'upstream' to prevent rather than ameliorate social problems. An ecosocial work policy would gradually reduce paid work time, foster alternative employment contracts, develop 'co-production' in service delivery, and encourage low-carbon leisure activities. Together, the now very unequal distribution of personal consumption would need to be addressed, via socialised consumption, taxation, public transfers, and 'pre-distribution' measures such as minimum wages, maximum rewards, and trade-union rights. These are radical shifts that would challenge dominant interests and ideas, for example 'consumer sovereignty' and unquestioned economic growth. They would need to be accomplished in the face of accumulated policy legacies of existing welfare and environmental states.⁵ A necessary precondition would be extensive consensual policymaking involving key constituencies of interest to set the frameworks for markets (Wurzel 2012).

These two models of the future relation of welfare states and environmental states cannot straightforwardly be identified with any country or cluster of countries in the OECD world. Yet, there is no doubt that these futures build on the existing models of varieties of capitalism and welfare regimes, and that the division between the Anglosphere and Europe is strongly represented here. Much may change. All one can say is that it remains most likely that more integrated eco-welfare states will be fostered in Europe. But against this is the narrative-changing effect of the 2008 crisis. If the Eurozone fails and the EU weakens dramatically, the best hope for an integrated eco-welfare state will disappear.

Conclusion

I have here set out a framework for understanding and comparing the emergence and trajectory of welfare states with the more recent development of 'environmental states', concentrating in the main on the single issue/challenge of climate change. Common drivers include globalisation and internationalisation, the rising power of capital and business over other classes, and the continuing dominance of neo-liberal ideas. International economic and political linkages favour the environmental state but weaken the welfare state. Business power promotes inequality and weakens welfare, and in many countries blocks climate mitigation programmes; but its impact on the environmental state depends on the balance of carboniferous and Green business interests. Yet, deep institutional differences also persist within the advanced capitalist world, reflecting welfare regimes and varieties of capitalism. These, interacting with different power and ideational constellations, continue to drive different policy outputs in both spheres of state activity with contrasting social and environmental outcomes. Broadly speaking, these clusters demarcate the Anglosphere from the EU, with the UK in a contradictory middle position.

In the final section, I apply the same framework to developments since 2008 and briefly speculate about longer-term linkages and de-linkages between states' welfare and environmental interventions. The aftermath of the financial and economic crisis is damaging both sets of state functions, but the welfare state more due to fiscal crisis pressures, whereas international drivers may sustain states' environmental and climate interventions. The goal of closer integration in an 'eco-welfare state' is challenging and would seem to require both more extensive and more consensual policymaking, which theory and history suggests is only realisable in more coordinated forms of capitalism. However, if the persistence of neo-liberalism and austerity beto-kens the end of 'varieties of capitalism', the scope for an 'eco-welfare state' is narrowed, at least in the West.

Finally, I hope to have demonstrated the benefits of cross-national analysis of state interventions in different domains and the need for more collaborative work between students of welfare and environmental policies. The accumulated scholarship on welfare states offers lessons for environmental researchers, but there are lessons to be learned in both directions. There is a need for less silo-bound and more integrated research into modern state policymaking.

Acknowledgements

I acknowledge the support provided by the UK ESRC (grant reference number RES-000-22-3683). For incisive and helpful comments on an earlier draft, I am grateful to Anna Coote, James Meadowcroft, and two anonymous referees, as well as the participants at the ECPR workshop 'Green Leviathan, Ecological Insurance Agency, or Capitalism's Agent? Revisiting the Ecological State in the Anthropocene', Mainz, Germany, March 2013.

Disclosure statement

No potential conflict of interest was reported by the author.

Notes

- In particular, it draws on: the editors' Introduction, 'Intellectual roots' by Pierson and Leimgruber; 'The emergence of the welfare state' by Kuhnle and Sander; 'Post-war welfare state development' by Nullmeier and Kaufmann; 'Social expenditure and revenues' by Obinger and Wagschal; 'The social rights of citizenship' by Stephens; 'Welfare retrenchment' by Levy; 'Models of the welfare state' by Arts and Gelissen; and 'The global future of welfare states' by Therborn and myself.
- 2. Though even in these fields much can be explained by the offshoring of industrial production under the guise of globalisation.
- 3. The extent that countries are net importers of manufactured goods and thus 'exporters' of emissions varies widely: the UK 'outsources' one quarter of its emissions, which provides an important leeway in meeting its Kyoto targets, whereas Germany and Japan are roughly in balance. This could contribute to the UK's 'leadership' role in climate mitigation (Gough 2013a).
- 4. Nation states of course also play important, unequal, and variable roles in shaping the global governance of both climate-change policy and social policy. This whole issue is left aside here, but is discussed and compared in Gough 2013c
- For some of these ideas, see Victor 2008, Jackson 2009, Gough and Meadowcroft 2011, Gough 2013a, Coote 2013, 2015.

References

- Baldwin, P., 1990. The politics of social solidarity: class bases of the european welfare state, 1875-1975. Cambridge: Cambridge University Press.
- Berners-Lee, M. and Clark, D., 2013. The burning question. London: Profile Books.
- Bernstein, S.F., 2001. *The compromise of liberal environmentalism*. New York: Columbia University Press.
- Cameron, D.R., 1978. The Expansion of the Public Economy: A Comparative Analysis. *The American Political Science Review*, 72 (4), 1243–1261. doi:10.2307/1954537
- Castles, F.G., 1998. Comparative public policy: patterns of post-war transformation. Northampton, MA: Edward Elgar.
- Castles, F.G., et al., eds, 2010. The oxford handbook of the welfare state. New York: Oxford University Press.
- Cecchetti, S., Mohanty, M., and Zampolli, F., 2010. The future of public debt: prospects and implications. BIS Working Paper. Bank for International Settlements. http://ideas. repec.org/p/bis/biswps/300.html
- Christoff, P. and Eckersley, R., 2011. Comparing state responses. In: J.S. Dryzek, R.B. Norgaard, and D. Schlosberg, eds. The oxford handbook of climate change and society. Oxford: Oxford University Press, 431–448.
- Coote, A., 2015. People, planet, power: towards a new social settlement [online]. Available from http://www.neweconomics.org/publications/entry/people-planetpower-towards-a-new-social-settlement

Crouch, C., 2011. The strange non-death of neoliberalism. Cambridge: Polity.

Demailly, D., et al., 2013. A post-growth society for the 21st century - does prosperity have to wait for the return of economic growth? Paris: Institut du développement

durable et des relations internationales. http://www.iddri.org/Publications/Collections/ Analyses/Study0813 DD%20et%20al. post-growth%20society.pdf

- Dryzek, J.S., et al., 2003. Green states and social movements: environmentalism in the United States, United Kingdom, Germany, & Norway. Oxford: Oxford University Press.
- Duit, A., 2008. the ecological state: cross-national patterns of environmental governance regimes. Berlin: Ecologic - Institute for International and European Environmental Policy.
- Duit, A., Feindt, P., and Meadowcroft, J., 2016. Greening Leviathan: the rise of the environmental state? *Environmental Politics*, 25 (1). doi:10.1080/09644016.2015. 1077619.
- Duit, A., 2014. State and environment: the comparative study of environmental governance. Cambridge, MA: MIT Press.
- Duménil, G. and Dominique, L., 2011. *The crisis of neoliberalism*. Cambridge, MA: Harvard University Press.
- Eckersley, R., 2004. *The green state: rethinking democracy and sovereignty*. Cambridge, MA: MIT Press.
- Esping-Andersen, G., 1990. *The three worlds of welfare capitalism*. Princeton NJ: Princeton University Press.
- Esping-Andersen, G., 2002. *Why we need a new welfare state*. New York: Oxford University Press.
- Falkner, R., 2008. Business power and conflict in international environmental politics. New York: Palgrave Macmillan.
- Fankhauser, F., et al., 2014. Domestic dynamics and international influence: what explains the passage of climate change legislation? | Grantham research institute on climate change and the environment. London: London School of Economics and Political Science: GRI. http://www.lse.ac.uk/GranthamInstitute/publication/domesticdynamics-and-international-influence-what-explains-the-passage-of-climate-changelegislation/ [Accessed December 15].
- Feindt, P.H. and Flynn, A., 2009. Policy stretching and institutional layering: british food policy between security, safety, quality, health and climate change. *British Politics*, 4 (3), 386–414. doi:10.1057/bp.2009.13
- Fiorino, D., November 2011. Explaining national environmental performance: approaches, evidence, and implications. *Policy Sciences*, 44 (4), 367–389. doi:10.1007/s11077-011-9140-8
- Flora, P., 1986. Growth to limits: the western european welfare states since world war II. Berlin: Walter de Gruyter.
- Glennerster, H., 2010. The sustainability of western welfare states. In: F.G. Castles, S. Leibfried, J. Lewis, H. Obinger, and C. Pierson, eds. The oxford handbook of the welfare state. Oxford: Oxford University Press.
- Glyn, A., 2006. Capitalism unleashed: finance, globalization and welfare. Oxford: Oxford University Press.
- Goodin, R.E., et al., 1999. The real worlds of welfare capitalism. Cambridge: Cambridge University Press.
- Gough, I., 2000. Global capital, human needs and social policies: selected essays, 1994-99. Basingstoke: Palgrave Macmillan.
- Gough, I., 2008. European welfare states: explanations and lessons for developing countries. *In*: A.A. Dani and A. De Haan, eds. *Inclusive states: social policy and structural inequalities*. Washington, DC: World Bank Publications, 39–72.
- Gough, I., 2013a. Carbon mitigation policies, distributional dilemmas and social policies. Journal of Social Policy, 42 (02), 191–213. doi:10.1017/S0047279412001018

- Gough, I., 2013b. Climate change and public policy futures. In: P. Taylor-Gooby, eds. New paradigms in public policy. Oxford: Oxford University Press. http://ukcatalogue. oup.com/
- Gough, I. and Therborn, G., 2010. The global future of welfare states. *In*: F.G. Castles, S. Leibfried, J. Lewis, and H. Obinger, eds. *The oxford handbook of the welfare state*. New York: Oxford University Press, 1:703–876.
- Gough, I., James, M., John, D., Jürgen, G., Holger, L., Anil, M., and Ramon, O., 1 November 2008. Climate change and social policy: a symposium. *Journal of European Social Policy* 18 (4), 325–44. doi:10.1177/0958928708094890
- Gough, I., and James, M. 2011. Decarbonizing the Welfare State. In: J.S. Dryzek, R.B. Norgaard and D. Schlosberg, eds. Oxford handbook of climate change and society. Oxford, UK: Oxford University Press, 490–503. Available from http://ukcatalogue. oup.com/
- Gough, I., 1 October 2013. Climate change, social policy, and global governance. Journal of international and comparative social policy, 29 (3), 185–203. doi:10.1080/ 21699763.2013.852128
- Gourevitch, P., 1986. *Politics in hard times: comparative responses to international economic crises*. Ithaca, NY: Cornell University Press.
- Hacker, J. and Pierson, P., 2010. Winner-take-all politics: how washington made the rich richer- and turned its back on the middle classes. New York: Simon & Schuster.
- Hay, C. and Wincott, D., 2012. *The political economy of european welfare capitalism*. Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan.
- Hemerijck, A., 2012. Changing welfare states. Oxford: Oxford University Press.
- Huber, E., Ragin, C., and Stephens, J.D., 1993. Social democracy, christian democracy, constitutional structure, and the welfare state. *American Journal of Sociology*, 99 (3), 711–749. doi:10.1086/230321
- Iversen, T. and Wren, A., 1998. Equality, employment, and budgetary restraint: the trilemma of the service economy. *World Politics*, 50 (4), 507–546. doi:10.1017/ S0043887100007358. [Accessed July 1].
- Jackson, T., 2009. Prosperity without growth: economics for a finite planet. London: Earthscan.
- Knill, C., Shikano, S., and Tosun, J., 2014. Explaining environmental policy adoption. In: D. Andreas, ed. State and environment: the comparative study of environmental governance. MIT Press. Available from http://www.abebooks.co.uk/State-Environment-Andreas-Duit-Press/13327347626/bd
- Korpi, W., 1983. The democratic class struggle. London: Routledge and Kegan Paul.
- Kvist, J., 2013. The post-crisis european social model: developing or dismantling social investments? *Journal of International and Comparative Social Policy*, 29 (1), 91–107. doi:10.1080/21699763.2013.809666.
- Lash, S. and Urry, J., 1987. The end of organized capitalism. Madison, WI: University of Wisconsin Press.
- Liefferink, D., Bas, A., Jelmer, K., and Jeroen, O. 1 August 2009. Leaders and laggards in environmental policy: a quantitative analysis of domestic policy outputs. *Journal of european public policy*, 16 (5), 677–700. doi:10.1080/13501760902983283
- Lindblom, C.E., 1977. *Politics and markets: the world's political economic systems*. New York: Basic Books.
- Lipschutz, and Corina, M., 2011. Social movements and global civil society. In: J.S. Dryzek, R.B. Norgaard, and D. Schlosberg, eds. The oxford handbook of climate change and society. Oxford: Oxford University Press, 369–383.
- Meadowcroft, J., 2005. From welfare state to ecostate. *In*: J. Barry and R. Eckersley, eds. *The state and the global ecological crisis*. Cambridge, MA: MIT Press.

- Meadowcroft, J., 2012. Greening the state? In: P.F. Steinberg and S.D. VanDeveer, eds. Comparative environmental politics: theory, practice, and prospects. Cambridge MA: MIT Press, 63–88.
- Obinger, H. and Wagschal, U., 2010. Social expenditure and revenues. *In*: F.G. Castles, et al., eds. *The oxford handbook of climate change and society*. Oxford: Oxford University Press.
- Painter, J. and Ashe, T., 2012. Cross-national comparison of the presence of climate scepticism in the print media in six countries, 2007–10. *Environmental Research Letters*, 7 (4), 044005. doi:10.1088/1748-9326/7/4/044005.

Pierson, P., 2001. The new politics of the welfare state. Oxford: Oxford University Press.

- Ranger, N., and Ward, B., Unburnable carbon 2013: wasted capital and stranded assets | grantham research institute on climate change and the environment [online]. http:// www.lse.ac.uk/GranthamInstitute/publication/unburnable-carbon-2013-wasted-capi tal-and-stranded-assets-2/ [Accessed December 15, 2014].
- Rockström, J., et al., 2009. A safe operating space for humanity. Nature, 461 (7263), 472– 475. doi:10.1038/461472a.
- Scharpf, F.W. and Schmidt, V.A., 2000a. Welfare and work in the open economy: volume I: from vulnerability to competitiveness in comparative perspective. Oxford: Oxford University Press.
- Scharpf, F.W. and Schmidt, V.A., 2000b. Welfare and work in the open economy: volume II: diverse responses to common challenges in twelve countries. Oxford: Oxford University Press.
- Scruggs, L., 2003. Sustaining abundance: environmental performance in industrial democracies. New York: Cambridge University Press.
- Stern, N., 2007. The economics of climate change: the stern review. Cambridge: Cambridge University Press.
- Stern, N., 2015. Why are we waiting?: The logic, urgency, and promise of tackling climate change. MIT Press.
- Streeck, W. and Mertens, D., 2011. Fiscal austerity and public investment: is the possible the enemy of the necessary? *MPIfG Discussion Paper*. Max Planck Institute for the Study of Societies. http://ideas.repec.org/p/zbw/mpifgd/1112.html
- Streeck, W., 2014. Buying time: the delayed crisis of democratic capitalism. Verso.
- Swank, D., 2002. Global capital, political institutions, and policy change in developed welfare states. New York: Cambridge University Press.
- Taylor-Gooby, P., 2013. *The double crisis of the welfare state and what we can do about it*. Basingstoke and New York: Palgrave Macmillan.
- Taylor-Gooby, P. and Stoker, G., 2011. The coalition programme: a new vision for Britain or politics as usual? *The Political Quarterly*, 82 (1) (January 1), 4–15. doi:10.1111/j.1467-923X.2011.02169.x.
- Tilly, C., 1984. *Big structures, large processes, huge comparisons*. New York: Russell Sage Foundation.
- Victor, Peter, A., 2008. Managing without growth: slower by design, not disaster. Cheltenham, UK: Edward Elgar.
- Woll, C., 2014. The power of inaction: bank bailouts in comparison. Cornell Studies in Political Economy. Ithaca, NY: Cornell University Press.
- Wurzel, R., 2012. The environmental challenge to nation states. *In*: J. Connelly and J. Hayward, eds. *The withering of the welfare state*. Basingstoke: Palgrave Macmillan. http://www.palgraveconnect.com/pc/doifinder/10.1057/9780230349230. 0016