

Analysis

The Threat of Rent Extraction in a Resource-constrained Future

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ABSTRACT

Ecological economists aim to transform our economic institutions so that society can flourish within planetary boundaries. The central message of this article is that private rent extraction forms a key barrier to the realisation of that goal.

I define rent as an economic reward which is sustained through control of assets that cannot be quickly and widely replicated, and which exceeds proportionate compensation for the labour of the recipient. I argue that unless we close opportunities for rent extraction, and socialise unavoidable rents, our governments will be compelled to pursue output growth, regardless of its environmental consequences, in order to prevent spiralling inequality and unemployment.

The positive proposition in this article is that the concept of rent can help us to identify, and build democratic support for, the institutional transformations necessary to prepare for a resource-constrained future. Measures to reduce and redistribute rentier power could be emancipatory for the poorest in society, whilst making more feasible many proposals that have been advocated already in this journal, including reduced working hours and resource caps.

By contrast, if environmental protections are introduced before opportunities for private rent extraction are closed, we could see intensified rent-seeking, asset price bubbles, poverty and economic insecurity.

1. Introduction

Over recent decades, analysts of diverse political persuasions have noted a shift in investment patterns away from productive investment, where returns are achieved through innovation and output growth, toward non-productive investment, where returns are achieved by extracting economic rent. The rise of 'rentier capitalism' has been held responsible for increasing inequality and financial instability (Mazzucato, 2018; Standing, 2016; UNCTAD, 2017).

Despite an explicit concern for just distribution, there has been relatively little discussion of rising rent extraction among ecological economists (Hardt and O'Neill, 2017; Rezai and Stagl, 2016), perhaps because the redirection of capital from rent-seeking to productive investment is likely, in the absence of tough environmental protections, to result in higher rates of resource consumption.

This article is partly an appeal for ecological economists to take seriously the threat posed by continued rent extraction and rent-seeking to our aspiration for 'a good life for all within planetary boundaries' (O'Neill et al., 2018). I argue that if we try to impose environmental protections without first closing down opportunities for rent extraction, we are likely to experience increasing inequality and financial instability. Further, I argue that concentrations of rentier power, and

certain forms of rent-seeking, create a 'political growth imperative' (Richters and Siemoneit, 2019) whereby governments are compelled to pursue output growth, regardless of its environmental consequences, in order to prevent debt, poverty and unemployment from becoming politically destabilising.

The positive proposition in this article is that the concept of rent can be used to identify and build democratic support for the economic transformations necessary to prepare for a resource-constrained future. The concept of rent allows us to challenge the social efficacy and moral legitimacy of payments delivered through market exchange, without necessarily rejecting any role for markets (Frayssé, 2015, p. 176). Measures to reduce and redistribute rents could be emancipatory for millions of people, and make more feasible key proposals that have been advocated in this journal, including reduced working hours (Zwickl et al., 2016) and resource caps (Alcott, 2010; Boyce, 2018).

The structure of the article is as follows. In Section 2, I offer an introduction to 'rent theory Lockeanism', which informs my definitions of rent, rent-seeking and rentier power. In Section 3, I discuss the way that environmental protections could directly and indirectly influence the mobilisation of rentier power, and outline some likely consequences for society. In Section 4, I propose that there is a paradox in the relationship between rent and growth. On the one hand, widespread

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opportunities for rent extraction can dampen prospects for economic growth. On the other hand, rent-seeking and rent extraction create a systemic growth dependency. In Section 5, I draw out the implications of the analysis in the preceding sections for ecological macroeconomics and the task of redesigning our economy for a finite planet. In Section 6, I reflect on the potential strategic advantages of delegitimising and diffusing rentier power, compared to relying on minimum and maximum incomes, and wealth caps, to limit inequality. Section 7 concludes.

2. The concept of economic rents

2.1. Rent theory Lockeanism

I follow those writers from classical, institutional, post-Keynesian and socialist traditions who have used the term ‘rent’ to denote economic rewards which are *analogous* to the land rents or ground rents captured by hereditary landowners. Such ground rents patently bear no relation to labour or sacrifice on the part of the landlord and thus lack any rights-based Lockean justification, as Smith (1843 [1776], bk. 1, ch XI, part 1), Ricardo (1817, chap. 2) and Mill (1885, pp. 629–630) all acknowledged.

For most of the 19th Century, land rents were considered an exception to the general rule that, in competitive markets, prices would coincide with the costs of production. Thus popular campaigns for land reform attacked land rents on the basis that they were unearned and inefficient, but typically left unchallenged the wider distributive results of free market capitalism (e.g. George, 1935). But as Wickstead, Wicksell, John Bates Clark and others recognised toward the end of the nineteenth century, Ricardian land rents were just a special case of a general principle (Blaug, 1997, p. 133): surplus payments accrue to the more productive units of any factor that is not perfectly elastic in supply.

These insights threw into question the moral legitimacy of capitalist distribution. In response, John Bates Clark offered a new controversial but influential defence for laissez-faire capitalism: ‘free competition tends to give to labour what labour creates, to capitalists what capital creates, and to entrepreneurs what the coordinating function creates’ (Clark, 1908 [1899], p. 3). As legal theorist Robert Hale remarked, “the basis of distribution on this theory has shifted from the earlier basis of ‘sacrifice’ to that of ‘imputed productivity’, a basis which Clark expressly approves as ‘ethical’, but without any discussion of the ground” (Hale, 1924, cited in Fried, 1998, p. 133).

Hale was part of a movement of social theorists and economists who mobilised around a ‘rent theory Lockeanism’ (Fried, 1998, p. 75) to challenge Clark’s normative claims and press for redistribution and economic reform in the late 19th and early 20th Century. Locke’s famous declaration that ‘Labour being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to’ (Locke, 1823 [1669], p. 116) has been interpreted by many conservatives to justify a strong, laissez-faire, property rights regime. But for Hale and his allies, rather than justifying entitlement to whatever payment the market might deliver, Lockean theory suggested that people are entitled only to that portion of revenue that compensates them for their *labour and sacrifice* in the provision of goods and services.

The rent theory Lockeanism (including American institutionalists, British Fabian socialists and New Liberals) were spurred on by the predictions of marginalist economics: that prices would tend to reflect the costs of production only where supply was perfectly elastic, and in all other cases, those in control of superior capabilities and assets would receive a reward in excess of both expenditure and effort – variously called ‘economic rent’, ‘unproductive surplus’, or ‘unearned increment’ (Fried, 1998, p. 25).

2.2. Defining rent, rent-seeking and rentier power

Building on this rent theory Lockeanism, I define rent as an economic reward which is analogous to ground rent in the following two ways: (1) it is sustained through control of assets that cannot be quickly and widely replicated, and (2) it exceeds proportionate¹ compensation for the labour of the recipient.

Like many contemporary rent theorists, I use the term asset broadly to include, for instance, brand recognition, bargaining powers, economies of scale, tacit knowledge, affective relations, art, protected information, techniques and processes (Andreucci et al., 2017; Birch, 2017; Bowman and Toms, 2010; Mihályi and Szelényi, 2016; Sørensen, 2000).

Rentier power is the power to extract rent, and rent-seeking is the investment of time and resources in the pursuit of rents. Typically, rent-seeking involves acquiring existing assets like land, patents or financial assets (Hudson and Bezemer, 2012; Korinek, 2012; Ryan-Collins et al., 2017), establishing private ownership titles over socio-ecological commons (Andreucci et al., 2017), or constructing ‘isolating mechanisms’ to prevent the imitation of the valuable capabilities and resources (Hoopes et al., 2003, p. 891).

Rentier power can be wielded by individuals, by whole social classes² (Keynes 2000 [1923]; Sørensen, 2000), and also by firms (on behalf of individuals). However, profits accruing to firms cannot accurately be categorised as rents or non-rents, because the definition requires us to consider the labour of the individual. Only when (and if) the profit translates into a reward for an individual, can we judge whether or not it is a rent.

Rent will typically account for a large proportion of interest, dividends, capital gains, ground rents and so on. But wages can also include rents, where workers’ remuneration is disproportionate to their labour and is sustained by their own, or their firms’, control over assets. Rents extracted through the financial system, for instance, are often paid out in the form of wages or bonuses (Lindley and McIntosh, 2017).

An unearned income — that is, a reward exceeding proportionate compensation for one’s labour — can avoid the label ‘rent’ if it arises because of an innovation or productivity improvement that can be *quickly and easily replicated or imitated by others*. This replicability should ensure that the surplus is relatively short-lived and the benefits of the improvement are relatively³ widely shared.

As theorists from the field of management strategy recognise, firms achieve sustained competitive advantage precisely by *preventing* such replication: by building up resources and capabilities that are both valuable and isolated from imitation or substitution (Hoopes et al., 2003). According to the understanding of rent which I am advancing in this article, a temporary innovation-induced surplus is transformed into a rent *to the extent that* such barriers to replication exist.

¹ The question of what reward is proportionate to labour can only be answered through social deliberation, and comparison with rates of compensation across society for work requiring a similar time commitment and degree of toil. We cannot hope to answer the question with perfect accuracy and objectivity, and attempting to do so would create an overbearing bureaucratic burden (Wright, 2016). But where certain groups and professions enjoy remuneration levels widely recognised as disproportionate to the time and effort expended, this premium can serve as a prompt for civil society and government to investigate whether rentier power is involved.

² Keynes (1923) defined rentiers as the ‘Investing Class’, as against the ‘Business Class’ and the ‘Earning Class’, noting that, ‘interest today rewards no genuine sacrifice, any more than does the rent of land’ (Keynes 1936: 376, cited in Seccareccia and Lavoie, 2016, p. 207). The concept of rentier in this paper is therefore consistent with, but broader than, Keynes’ own use of the terms.

³ The distribution of such temporary non-rents is still likely to systematically under-reward workers whose bargaining power is weakened by their lack of access to land, or other assets that could offer a route to subsistence or allow them to raise finance for self-employment. See Section 4.2.1.

2.3. Synergies and contrasts with other understandings of rent

The concept of a temporary innovation-induced surplus just discussed has similarities with the ‘rents’ that Schumpeter credited with driving the capitalist process of technological progress (Schumpeter, 2017 [1911]), and with Marshall’s concept of ‘quasi rents’ (Marshall, 1920). However, the nature of these surplus incomes is ambiguous in both Schumpeter and Marshall’s writing: Are they purely based on replicable innovations, and thus genuinely transitory, or might they sometimes be sustained by the presence of intellectual property, tacit knowledge, privileged access to finance, or other sources of rentier power? To avoid ambiguity I prefer to reserve the term rent for surplus incomes that are protected from erosion through control over assets that are inherently scarce or difficult to replicate.

The understanding of rent I deploy in this article builds implicitly on Marx, who developed Ricardo’s theory of rent in several important ways (Harvey, 2018, chap. 11). Marx established, for instance, that variations in natural fertility were not the only source of ground rent. Rather, investments in the productive capacity of the land (a strategy for accumulation by expansion) could, under certain circumstances, become the basis for a more or less permanent surplus, that could be appropriated by the landlord as rent (Marx, 1993 [1894], chaps. 40–44).

The understanding of rent I adopt in this paper is not consistent with the neoclassical concept of rent. Most neoclassical textbook definitions make no reference to control over scarce assets or to the unearned nature of rents, but rather define a rent as an ‘income in excess of opportunity cost’ (McEachern, 2013, p. 244). According to this definition most payments made to landowners for the use of land would not be classed as rents. Significantly, the neoclassical understanding of rent (and rent-seeking in particular) has been deployed to advocate for less government intervention in the economy (e.g. Krueger, 1974). By contrast, the early rent theorists that I draw upon in this article developed the concept of rent to challenge the logic of laissez faire economics.

3. Why the concept of rent is important for ecological economics

3.1. Environmental protections and scarcity rents

Many ecological economists have made the case for hard limits on resource use and waste emissions (Alcott, 2010; Kallis and Martinez-Alier, 2010). This self-imposed scarcity could help mitigate ecological collapse and prevent even greater, possibly irreversible, scarcity in the future. Nevertheless, an increased scarcity of goods allocated by the market could, *ceteris paribus*, mean higher prices and a greater opportunity for rent capture.⁴ It is incumbent upon ecological economists to consider who will be in a position to capture those rents, and on whom the burden will fall (Boyce, 2016, 2018; Farley et al., 2015; Felli, 2014; Fuss et al., 2016; Kornek et al., 2017; Segal, 2012). In the early rounds of the EU’s Emissions Trading Scheme, for example, permits to emit carbon dioxide were gifted to companies on the basis of their historical emissions, meaning that the scarcity rents arising from the (weak) emissions cap were captured by many of the largest corporate polluters, whilst costs were passed onto citizens, with the poorest shouldering the largest burden (Cornerhouse, 2013; Keppler and Cruciani, 2010; Spash, 2010). By contrast, designing our system of caps and environmental protections so that unearned scarcity rents are redistributed — either as a dividend or as free entitlements to energy, transport and other basic services — could be emancipatory for the poor, and help build popular support for the gradual tightening of those caps.

⁴ In some cases substitution effects could reduce the scope for private rent capture over the longer term. For example, carbon caps could encourage the emergence of new electricity generation technologies that are less easily subject to monopoly control.

3.2. Could resource caps lead to intensified rent-seeking?

The link between resource scarcity and rent extraction has been widely discussed. But there is a more subtle and pervasive way in which environmental protections could trigger a mobilisation of rentier power.

The argument I make in this section builds on the substantial volume of literature in ecological economics that suggests that limits on resource throughput will constrain consumption and production (D’Alisa et al., 2014; Daly, 1996; Dietz and O’Neill, 2013; Jackson, 2009; Kallis, 2011; Meadows et al., 1972; Victor, 2008). Although it may be possible for the state to shape the direction of the economy, such that growth in particular sectors can be ‘decoupled’ from environmental impact for limited periods of time (e.g. Mazzucato and Perez, 2014), the balance of evidence suggests that the rates of growth we are accustomed to for the economy *as a whole* cannot be sustained whilst also respecting planetary boundaries (Hickel and Kallis, 2019; Parrique et al., 2019). As such, it is essential for society to anticipate the possible macroeconomic and distributional impacts of low, zero and negative growth rates.

Of particular concern here is the fact that the closer we get to zero growth in production and consumption, the closer we get to a zero sum game where consumption gains for one person require consumption losses for another, in absolute and not just relative terms. In an economy that is flatlining in GDP terms, if incomes rise for one group in society, this expansion must be mirrored by a contraction of incomes elsewhere in the economy.

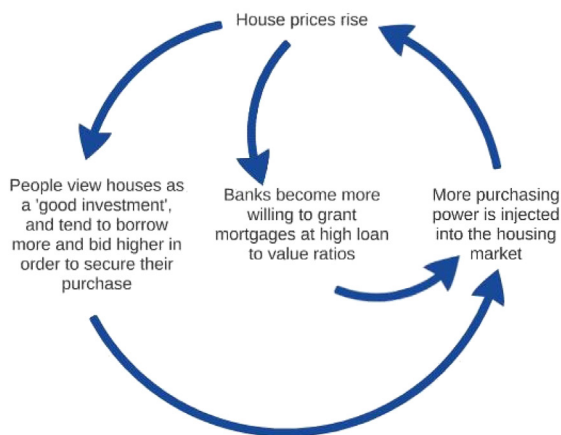
Broadly speaking there are two ways of increasing one’s income. The first is to expand one’s output, either by working harder, or by improving productivity. The second is to make a more powerful claim over the existing output of the economy. If opportunities for expanding production become more limited due to environmental protections, those seeking to increase their income and wealth may be tempted to pursue the second approach: to make more powerful claims over the spoils from existing production. For those in positions of power this is likely to mean extending and exploiting control over scarce and irreplicable assets. In other words, if resource constraints hamper accumulation through expanded production we may see a trend toward land and resource grabbing, intensified exploitation of workers, financial speculation, aggressive use of intellectual property and monopoly powers to block competition, and pressure to privatize public infrastructures and commons. Such a shift in investment would represent an intensification of a pattern that has been underway for decades, and which many Marxists consider a response to capitalist crises of over-accumulation and under-consumption (e.g. Bellamy Foster and Magdoff, 2014; Harvey, 1985; Streeck, 2016). In short, if ecological limits (self-imposed or exogenously imposed) make it difficult to grow output, rent-seeking is likely to intensify, unless deliberate steps are taken to close rent-extractive opportunities.

How concerned should ecological economists be about a continuation, or intensification, of rent-seeking in a resource-constrained future? Below I highlight three relatively straightforward ways that opportunities for rent extraction pose a threat to ecological economists’ aspiration to ‘live well within limits’ (O’Neill et al., 2018; Raworth, 2017). Section 4 will then build on this analysis to consider the more complex and paradoxical relationship between rent extraction and growth.

3.3. Rent extraction further impoverishes the poorest

Where rent-seeking is successful, the rewards for rentiers inevitably come at the expense of those with less power (Sørensen, 2000) – be they workers, suppliers, debtors, customers, tenants or citizens. For instance, rent-seeking through privatised public infrastructures has frequently resulted in rising prices for services like water (Bayliss and Hall, 2017; Chong et al., 2006), transport (Blanc-Brude et al., 2006) and telecommunications (Stryzowska, 2012). Rent extraction through the

(a) Feedbacks pushing house prices up



(b) Feedbacks pushing house prices down

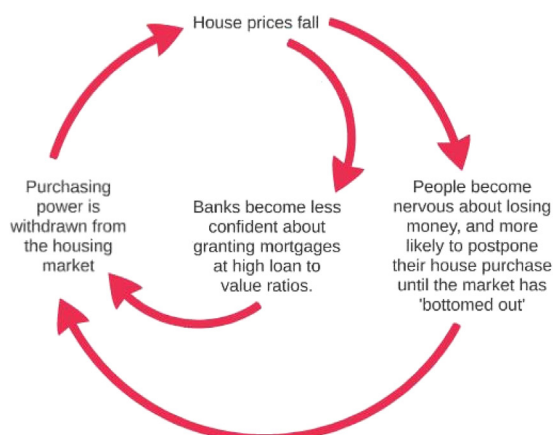


Fig. 1. Feedbacks pushing house prices up (a) and down (b).

housing market comes directly at the expense of those who do not inherit housing wealth (Clarke et al., 2016; D'Arcy and Gardiner, 2017; Stephens et al., 2014). Rising costs for essentials like housing, energy, transport and communication costs hit the poorest hardest, eating up a larger share of their income (Gough et al., 2011).

3.4. Debt-fuelled rent-seeking can lead to financial crisis

The interaction of rent-seeking with our debt-based monetary system and the Too-Big-To-Fail limited liability model of banking poses a second threat to ecological economists' goal of going 'slower by design, not disaster' (Victor, 2008). When a bank creates a loan it creates new money, adding to aggregate purchasing power (McLeay et al., 2014). When this expanded purchasing power fuels a bidding war for existing assets, such as houses, the result tends to be asset price inflation (Ryan-Collins et al., 2017). Without effective taxation and regulation, this asset price inflation can activate a feedback loop between the behaviour of banks and the rent-seeking of borrowers and investors, seeking to make capital gains (Fig. 1a).

In the UK, for instance, the treatment of homes and land as a source of unearned income/wealth (via both capital gains and rental income), and the availability of cheap mortgage debt to support this rent-seeking, has been a major driver of house price inflation (Green and Bentley, 2014; Ryan-Collins et al., 2017; Saunders, 2016; Seabrooke and Schwartz, 2009).

Such debt- and rentier-fuelled feedback loops can easily slip into reverse if anything occurs to shake the confidence of banks and investors (Fig. 1b). Asset prices can thus collapse suddenly, pushing businesses and banks toward insolvency and households toward negative equity. These reversible feedback loops explain the strong empirical link between rapid credit creation (particularly for real estate) and the onset of financial crisis (Alessi and Detken, 2011; Borio, 2014; Scatigna et al., 2014). Such macroeconomic consequences are incompatible with the goal of delivering wellbeing within ecological limits since the periods of economic insecurity and contraction which tend to follow financial crises are associated with significant losses in well-being (Easterlin et al., 2010; Fanning and O'Neill, 2019).

3.5. Rent-seeking is an inefficient use of time and resources

An efficient economy, from an ecological perspective, is one that meets human needs, and supports human flourishing, with the lowest ecological cost (O'Neill et al., 2018). In addition to social changes, achieving this kind of efficiency is likely to require significant investment in both resource-efficiency and labour-saving innovation. A

discerning approach to such innovation is warranted, given their historical association with expansions in consumption (Alcott, 2005; Sorrell et al., 2007), deteriorations in the quality of goods and services and – certainly in the case of many labour saving innovations – losses in job satisfaction. However, when deployed in the context of tough resource caps and diffuse rentier power, labour-saving technologies have the potential to liberate us to spend time in democratic dialogue, caring for one another, repairing our damaged ecosystems, and simply enjoying ourselves. And without investment in both labour saving and resource efficient innovations, caps on fossil fuels and other resources could make us more reliant on human labour to meet basic human needs than we have been for decades (Sorman and Giampietro, 2011).

Rent-seeking obstructs investment for such socially useful purposes. It channels resources and time into costly legal battles over intellectual property that can actually *slow* the emergence and spread of innovation (Bessen and Meurer, 2008; UNCTAD, 2017). It leads companies to spend more on share buybacks than they do on research and development (Lazonick et al., 2013). It inspires tunnelling through the Pennsylvanian mountains to lay fibre optic cables that will give three milliseconds of advantage to high frequency traders (Krugman, 2017). It is hard to think of more profoundly wasteful uses of human time and planetary resources.

4. The paradoxical relationship between rent and growth

One possible explanation for ecological economists' neglect of the phenomena of rents may be that reducing rent-seeking and rent extraction is often framed as a strategy for achieving higher or more consistent economic growth (Baumol, 1996; Ricardo, 1817, 2001; van der Ploeg, 2011), which, as noted already, many ecological economists consider incompatible with ecological sustainability. In Section 4.1, I highlight three key ways in which closing opportunities for rent extraction could indeed boost production and consumption, before turning to explain (in Section 4.2) why I believe, paradoxically, closing opportunities for rent extraction is an *essential precondition for ending our systemic dependency on growth*.

4.1. Opportunities for rent extraction hamper growth

First, rent extraction can dampen growth by squeezing consumption demand. As noted in Section 3.3, the burden of rent extraction tends to fall on the poorest, who have the highest propensity to consume out of their income (Hartwig, 2014; Onaran and Galanis, 2012). Of course, rentiers are also consumers, so rewards for rentiers do recirculate eventually. But rentiers have a greater propensity to leave their income

sitting idly in a bank account or to move it into the FIRE sector (finance, insurance and real estate), thus contributing to deficient demand in the rest of the economy. A gap thus opens up between the wages put into circulation, and the money values to be realised in the market through higher prices (Klitgaard and Krall, 2012). Closing the most flagrant opportunities for rent extraction could therefore help demand to keep pace with productive capacity.

Second, if the surplus that is currently channelled into socially useless rent-seeking were redirected into productivity improvements, the likely result would be growth, unless resource caps were in place to prevent such an outcome. As many ecological economists have observed, labour saving and resource efficient innovations often lead to economic savings and lower prices, and thus act as an overall stimulus to consumption (Alcott, 2005; Ayres and Warr, 2005, 2009; Sorrell et al., 2007).

Third, as noted in Section 3.4, where rent-seeking interacts with our poorly regulated debt-based monetary system, it can result in violent asset price booms and busts, which create the conditions for a balance sheet recession (Koo, 2003). Closing opportunities for rent extraction through our financial and housing systems would reduce or eliminate such recessions.

4.2. Should we thank rentiers as unlikely environmental saviours?

If rent-seeking and rent extraction tend to suppress production and consumption in the ways outlined above should we thank rentiers as unlikely environmental saviours? I believe that ecological economists must be vehement in their rejection of this logic, for two reasons.

First, ecological economists often point out that those who celebrate anything that promotes growth, regardless of its social consequences, are confusing means with ends (Daly, 1973; Daly and Farley, 2011, chap. 3). It follows that to celebrate anything that curtails growth, is to be guilty of the same fallacy. The challenge that we face is not just reducing aggregate material consumption to a level that is within planetary boundaries, but doing so in a way that creates opportunities for all to flourish (Jackson, 2009; O'Neill et al., 2018; Raworth, 2017). The mechanisms by which rent-seeking and rent extraction dampen resource consumption are unhelpful, and sometimes extremely damaging, from the point of view of this goal.

Second, the relationship between rent and resource throughput is far more complex than immediately meets the eye. In fact, I propose that the distributional and macroeconomic consequences of concentrated rentier power and rent-seeking constitute a 'political growth imperative' (Richters and Siemoneit, 2019). In other words, concentrations of rentier power and rent-seeking create the conditions under which politicians feel compelled to pursue growth-oriented policies, regardless of their environmental consequences. I highlight here three mechanisms at play within this *rentier growth imperative*.

4.2.1. Concentrated rentier power makes growth necessary to maintain employment

The first form of growth dependency emerges out of the interaction of labour productivity improvements with the unequal distribution of land and other rent-bearing assets. Automation, mechanisation, economies of scale and so on reduce the need for labour in the production process. In a growing economy, surplus labour can be quickly reabsorbed to produce more units of output. But in the absence of growth, labour saving innovations threaten to cause rising unemployment. The solution embraced by many ecological economists is to use labour productivity improvements to reduce and redistribute working hours (Victor, 2008; Coote et al. 2010).

But this strategy is unlikely to succeed unless the benefits of productivity improvements are shared with ordinary workers, rather than captured wholly or largely by managers, shareholders, landowners and so on. In this latter case, the hourly pay of ordinary workers is likely to stagnate, even as productivity rises, such that a reduction in working

hours implies a pay cut. One of the things that gives shareholders and senior managers the power to suppress wages, as Marx recognised, is the unequal control over land and other rent-bearing assets: people dispossessed of land and other scarce assets that would offer a route to subsistence or self-employment are effectively dependent for a livelihood upon the sale of labour-power for a wage, and thus in a weak bargaining position (Dobb, 1973, p. 151; Harvey, 2018, p. 359).

Even in contexts where firm managers and shareholders do not exploit their workers — in worker-owned firms, for instance — many workers are not inclined to choose part-time work because of the financial and cultural pressures they themselves are under from rentiers elsewhere in the economy. There is evidence, for instance, from Canada (Fortin, 1995), Italy (Del Boca and Lusardi, 2003) and the UK (Bottazzi et al., 2007), that the pressure to keep up with mortgage payments is compelling households to devote more hours to paid work than they might otherwise choose.

In short, the unequal distribution of rentier power stands in the way of work-sharing, and therefore lies at the heart of the problem of so-called 'technological unemployment'. The hopeful flipside of this analysis is that diffusing rentier power could facilitate the reduction and redistribution of working hours (Section 6.3).

4.2.2. Rent extraction drives poverty

A second and related form of growth dependency arises out of the tendency for rent extraction to happen at the expense of the poorest. If governments wish to address relative and/or absolute poverty, but are unwilling or unable to challenge rentier power, growth promises a less politically conflictual route than redistribution. Expansions of output can function to mask the exploitation arising from rent extraction, or at least to cushion non-rentiers from its full force. To use the classic pie metaphor, if some individuals at the table use their accumulating rentier power to demand a larger slice of the pie at every meal, the slices of pie available to the rest will shrink to crumbs, *unless* the pie itself grows. Growth in economic output does not address the underlying injustice of rent extraction, but it can alleviate distributional conflict, and prevent absolute declines in material living standards.⁵

The promise that growth will reduce relative and/or absolute poverty is most likely to be delivered if the rate of growth is higher than the rate of rent extraction. This point is similar to Piketty's observation that if the rate of return on wealth⁶ (r) is higher than the rate of growth of average incomes (g), inequality will tend to increase (Piketty, 2014). Although aspects of Piketty's theoretical work have come under justified criticism (e.g. Galbraith, 2014; Moseley, 2015; Seccareccia and Lavoie, 2016; Varoufakis, 2014), this core claim is difficult to refute (see Appendix 1). Piketty's thesis thus raises a challenging question for ecological economists, which has not been satisfactorily answered to date: how are we to ensure that r remains below g , if we anticipate resource caps forcing g toward zero?

The only studies in ecological economics to directly address Piketty's thesis are two articles by Jackson and Victor (2016, 2018) which use stock-flow-consistent models to explore how rewards from the productive process might be divided between capital and labour as growth slows. The models suggest that the propensity for r to exceed g will be greater in contexts where workers can be easily replaced with built machines. This is a prescient point given trends toward automation (Brynjolfsson and McAfee, 2014; Frey and Osborne, 2017). It is also

⁵ It is worth noting that for many aspects of well-being it is relative, not absolute poverty that matters.

⁶ Piketty uses 'the words capital and wealth interchangeably, as if they were perfectly synonymous' (Piketty, 2014:47) even though they have distinct meanings in most schools of economic thought. Piketty's returns to wealth are not perfectly synonymous with rents, due not least to the presence of rents in wages. Nevertheless a large proportion of rents do take the form of dividends, interest, rental income, and so on measured by Piketty.

a finding which fits neatly with the thesis presented in the present article, since in reality the power of capital to dispense with workers, and/or exclude them from sharing in the benefits of technological improvements, is itself shaped by the distribution of rent-bearing assets. However, the models do not allow for an explicit manipulation of rentier power, or of rent-seeking through financial speculation, real estate investment, monopoly power or control of finite natural resources. The authors call for further analysis of structural features which might enable agents to extort more than their 'fair' share of the output from production (Jackson and Victor, 2016, p. 209), and this is something I intend to offer in a forthcoming article.

4.2.3. Post-bubble debt build-ups cannot be paid down without growth

A third form of growth dependency emerges out of the dynamics discussed in Section 3.4 — that is, the tendency for debt-fuelled rent-seeking to lead to asset price booms and busts, which leave in their wake very high debt-to-GDP ratios.

A high debt-to-GDP ratio creates a political growth imperative because reducing the debt-to-GDP ratio (whether public or private debt) is extremely challenging in the absence of GDP growth, and without recourse to unorthodox and controversial interventions such as debt cancellation and/or extensive monetary financing by the central bank (Keen, 2017; Turner, 2015). Efforts by the private sector (households and businesses) to repay debts without taking on new loans can cause the economy to shrink and thereby worsen the debt ratio (Boait and Hodgson, 2018, p. 47; Koo, 2003). Further problems are attached to the use of fiscal austerity to pay down public debt. When governments cut back on spending in an effort to run a budget surplus, the result tends not only to be contraction of private domestic demand and GDP, which can result in a worsening debt-to-GDP ratio (Guajardo et al., 2011), but also rising inequality and poverty (Ball et al., 2013). Inflation can help to reduce the burden of both public and private debt, but — in the absence of growth — there are limits to the efficacy of this strategy, as buyers of government debt will demand ever-higher nominal interest rates to compensate for the additional inflation they expect (Boait and Hodgson, 2018, p. 44).

By far the most effective and least controversial way to improve the debt-to-GDP ratio is a government stimulus aimed at boosting economic output. Thus, debt- and rentier-fuelled asset price bubbles, by increasing the debt-to-GDP ratio, tend to necessitate political interventions to support productive investment and/or prop up consumption demand.

5. Implications for designing our socio-ecological transition

I have proposed three interrelated forms of 'rentier growth imperative' which mean that, when environmental protections come into conflict with growth, policy makers are likely to feel compelled to prioritise growth, in order to manage levels of debt, unemployment and poverty. To end this growth-at-any-cost mentality, we must diffuse rentier power, discourage rent-seeking and redistribute rents.

I have also shown that it is important that measures to close opportunities for rent extraction go hand in hand with tough resource caps and environmental protections. This is because closing down opportunities for rent extraction could, at least in the short term, stimulate productive investment and boost demand, leading to higher levels of resource consumption and waste emissions (Section 4.1). If tough resource caps and environmental protections are in place, however, then a reallocation of funding from rent-seeking to productivity improvements need not be a threat to the ecosystem. It is the combination of pre-emptive environmental protections alongside checks on rentier power that will allow our economy to 'go slower by design, not disaster' (Victor, 2008).

Fig. 2 summarises this thesis, mapping different economic systems — historical, contemporary and potential — onto two axes: the degree to which rentier power is kept in check, and the degree to which

resource use is constrained.

The option of staying in the non-resource-constrained space (above the horizontal axis in Fig. 2) is no longer open to us, at least not in the long run. Growth in resource throughput can only be enjoyed temporarily, by appropriating ecological space that people elsewhere in the world and/or future generations need to meet their basic needs. By focussing on the case for environmental protections but neglecting to formulate proposals for reining in rentier power, the environmental movement risks setting us onto a trajectory toward the bottom left quadrant, for the reasons discussed in Sections 3 and 4, and summarised in Fig. 3.

Implementing fossil fuel caps/taxes and other environmental protections could lead to higher prices and lower demand in many industries in the real economy. If profits become difficult to make by *expanding production*, profit seeking strategies could shift toward *claiming an increasing share of the rewards from existing production* (Fig. 3, a–h) unless deliberate steps are taken to prevent this outcome. As noted in Section 3.2, this shift is likely to manifest itself in more speculation in finance and real estate, more aggressive use of intellectual property and monopoly powers to block competition, greater exploitation of workers and/or offshoring of production, and more pressure to privatize public infrastructures and commons.

A continuation or intensification of such rent-seeking strategies is likely to inflate prices for housing, energy and other essentials, cause wages to lose their purchasing power, fuel asset price booms and busts, and slow the emergence and spread of innovations that could help us to adapt to resource constraints (Fig. 3, i–n). Unless society can identify the real culprit for the resultant inequality and economic insecurity, it is likely that the finger will be pointed at environmental protections, and pressure will build for their abandonment (Fig. 3, o–p).

Ensuring that caps on resource use go explicitly hand in hand with measures to redistribute rents and rentier power is thus not only a moral responsibility for environmentalists, but a question of political realism. If we are to have any hope of mobilizing a 'comprehensive coalition of social forces' (Buch-Hansen, 2018) in support of environmental protections, the protections must come as part of a package of reforms that are more attractive and emancipatory for ordinary asset-poor citizens than the (illusory) promise of growth, full employment and cheaper consumer goods (Barca, 2017; Pineault, 2018). I turn now to consider what that package of reforms might consist of and how it might best be framed and justified.

6. Redistribution versus structural change

The solutions most commonly offered by ecological economists to the threat of rising inequality in a post-growth economy are the proposals for minimum and maximum incomes, and a wealth cap (Alexander, 2014; Buch-Hansen and Koch, 2019; Cosme et al., 2017; Daly, 1977). At first glance, these proposals would seem to have the attraction of simplicity on their side, requiring only a handful of policy changes rather than scores of separate policies to transform the many different institutions from which rentier power flows.

The standard proposal is that the caps on income and wealth would be operationalised through 100% tax rates on the highest marginal tax band (Daly, 1977, p. 56): any income or wealth exceeding a certain level would be entirely taxed away. Daly's proposal for a minimum income is similar to the proposal for a Universal Basic Income which is often presented as a solution to automation-induced unemployment (e.g. Srnicek and Williams, 2015). Daly has argued that such policies would be perfectly compatible with a 'free market' approach to economic policy, allowing us to do away with 'blundering interference with the price system' such as rent controls, minimum wages, and labour unions (Daly, 1977, pp. 54–6). This is a stance that we see echoed by contemporary libertarian supporters of the basic income (Clarke, 2018; Young, 2017), and which I propose is misguided.

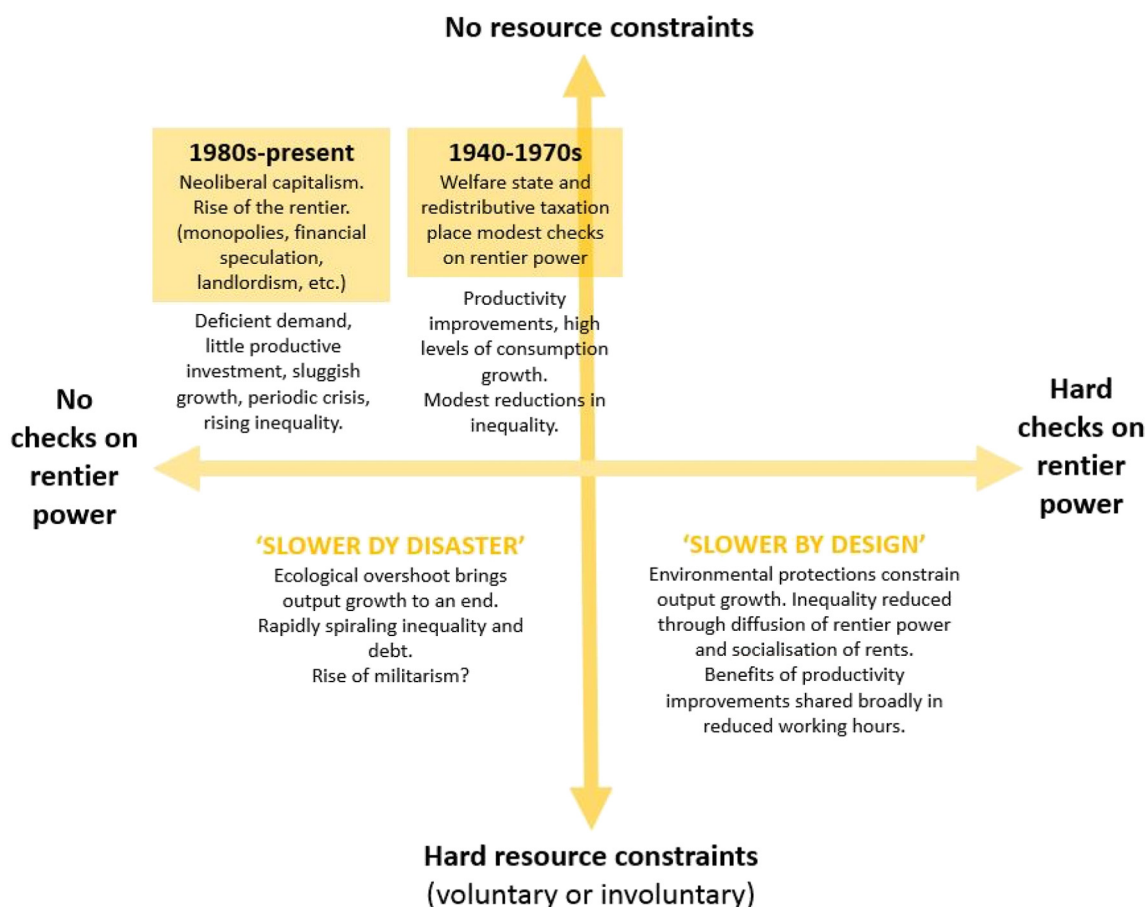


Fig. 2. Four different economy ‘types’ mapped onto two intersecting axes: degree of resource constraints and concentration of rentier power.

6.1. Minimum and maximum incomes: potential limitations

A key problem with relying on a basic income to address inequality is that putting more purchasing power in the pockets of ordinary people, without challenging wider imbalances of power in the economy, is likely to empower rentiers to raise prices and lower wages. Such an effect is visible in the UK housing market, where payments of housing benefit — although beneficial for tenants — have also enabled landlords to raise rents above the level that people would otherwise be able to afford (Gibbons and Manning, 2006).

Similarly, caps on individual income and wealth leave unchecked the rentier power of corporate entities. One of the widely acknowledged features of capitalist market exchange is that the winners in ‘round one’ are at an advantage in subsequent rounds (Lawn, 2011, p. 8), benefitting from economies of scale, network effects, brand recognition, bargaining powers vis-à-vis tax authorities, retailers and suppliers, and many other assets that cannot be easily replicated by smaller players and new entrants. The result is steady consolidation of corporate power – a trend that has been documented over the past two decades at both national (EIG, 2017; Foster et al., 2011; Grullon et al., 2017) and international levels (UNCTAD, 2017, pp. 126–7). Such accumulating corporate power is a threat to democracy and a particular threat to enactment of tough environmental protections and high marginal tax rates (Chomsky, 2017; Klein, 2015; Moe, 2010; Monbiot, 2001).

Further, in any society where political leaders can be voted out of power, a policy of minimum and maximum incomes will only be robust if it has popular legitimacy, and that requires a set of supportive institutions and cultural narratives very different to those that pertain today. It is tempting to see caps on income and wealth as a silver bullet for limiting inequality, just as caps on resource use are sometimes

imagined to be a silver bullet for dealing with ecological challenges. But a cap on fossil fuel use will be vulnerable to opposition if it raises prices to the point where significant sections of the population cannot afford transportation to get to work or energy to heat their homes. Likewise, a cap on wealth and income will be vulnerable to opposition if the market systematically delivers pre-tax incomes in excess of the cap to significant sections of the population, and if these incomes are portrayed in popular discourse as being aligned with and justified by the ‘productivity’ of the recipient.

In short, if the wider system remains as it is, straining in the opposite direction, then wealth and income caps, and/or a basic income, may be ineffective and short-lived, if enacted at all.

6.2. The concept of rent in democratic persuasion

The constructive message of this article is that the concept of rent could be a useful discursive frame to help build popular support for overhauling our economic institutions, so that there is far less work for redistributive taxes to do. A campaign against the *injustice* and *inefficiency* of specific kinds of rent extraction could, I propose, be more effective than a simple appeal for limits on inequality. As Varoufakis (2002, p. 459) argues, it is a typical weakness of discourse on the political left to discuss inequality as if it were ‘uniform in quality and variable only in quantity’, and that there is some ‘optimum’ quantity to aim for. Herman Daly, for example, writes:

‘The goal of total equality can become a pathological quest for a jealous homogeneity at the lowest common denominator... To avoid the absurdities of too much equality as well as too much inequality, we should think in terms of limits to inequality; of a range within which inequality is *necessary, efficient, and just*, and beyond which it

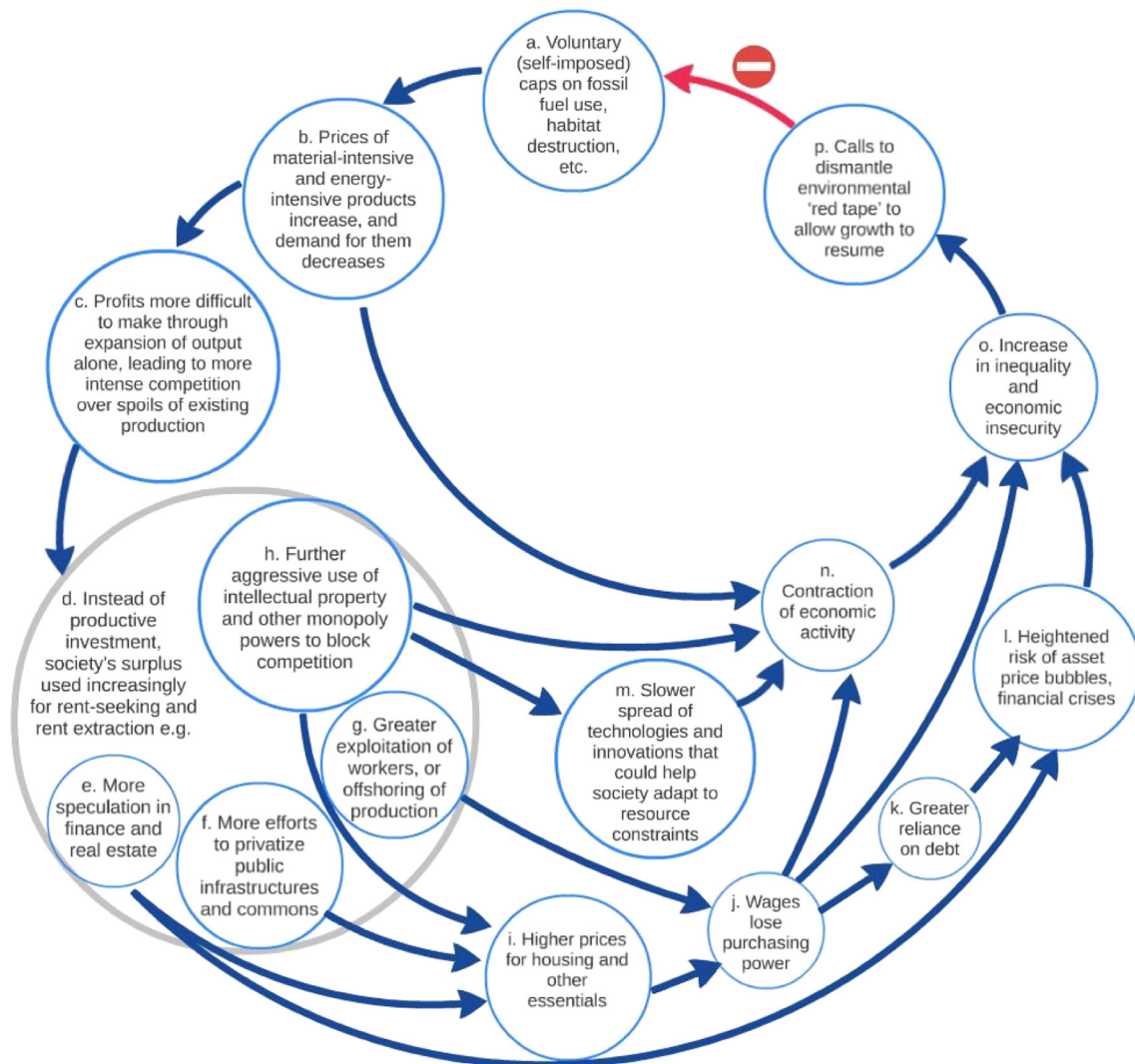


Fig. 3. Feedbacks under conditions of resource constraints and concentrated rentier power.

is unnecessary, inefficient and unjust.' (Daly, 1977, p. 81, my italics)

Surely any judgement about whether inequality is 'necessary, efficient and just' requires an examination of the *process* by which it has come about (Varoufakis, 2002). The concept of rent can be a helpful guide as we make that examination, helping to undermine two typical defences for unearned income.

The first defence, articulated by Nozick (1974), is that the rich are entitled to their wealth as long as the contracts and transactions underlying that wealth are voluntary. But as Macpherson (1973) and Sen (2001) have eloquently argued, freedom of choice is only meaningful if one has a sufficient breadth of feasible alternative options. If your next best opportunity is seriously unattractive, then you do not have a meaningful free choice. The power to extract rent is inextricably tied to imbalances in 'opportunity cost', which is really about a relative *lack* of freedom for some people. MacPherson in particular recasts freedom as freedom from the systematic extractive power of others, and freedom to develop one's capacities (Varoufakis, 2002, p. 468). When we think of freedom in this way, it is quite clear that a rentier 'monopoly of productive resources by one social class makes freedom impossible for the many' (ibid, p. 471).

The second justification for unearned income, articulated by John Bates Clark (1908 [1899]), is the notion that the market will tend to reward factors of production according to their contribution to productivity or value creation. This assumption is still implicit in the

mainstream approach to calculating the *productivity* of, or *value added* by, a firm or a workforce – an approach that ignores the role of relative scarcity in determining prices. The concept of rent, by contrast, encourages us to distinguish those individuals and firms making a genuine contribution through *replicable* innovations, whose benefits can be broadly shared, from those benefiting from monopolistic control over assets, and 'barriers to imitation', which *prevent* the spread of productivity enhancing innovation.

The concept of rent allows for a campaign narrative aligned with, rather than working in opposition to, the deeply held cultural belief that people should contribute to society, if they can, rather than depending on the labour of others. Currently this powerful belief system is harnessed by right-wing politicians and commentators to demonise the most marginalised in society, those dependent on welfare payments to survive (e.g. Mason, 2013). The concepts of rent and rentier power offer us the opportunity to highlight the real 'free riders'.

6.3. The policy development challenge

Moving from delegitimising rentier power to diffusing it will not necessarily be easy. To date my own research has focussed on rent extraction through the British land and housing system, and particularly the challenge of reducing and socialising land rents without triggering a crash in house prices, which would bring its own social,

political and macroeconomic problems (Stratford and McCann, 2019). My proposed solutions to this conundrum are set out in a co-authored report on land reform for the UK Labour Party (Monbiot et al., 2019).

Knowing the complexities involved in this one policy area makes me reticent to offer quick prescriptions for financial rents, monopoly rents, resource rents, advertising rents, managerial rents and so on, which will each raise their own peculiar questions. For instance, if we reduce the rent-extractive power provided by the intellectual property regime, and rely on public institutions to play a greater role in funding and de-risking innovations (Mazzucato, 2013), how ought the power to direct such public support be diffused and democratised? How can we break the monopolistic power of the digital giants like Facebook and Google, whose surveillance-and-manipulation business model is undermining democracy itself (Hind, 2019)? Should the rents arising from our common resources be redistributed through equal per capita dividends as some propose (Boyce, 2016; Chamberlin et al., 2015), or in the form of free entitlements to transport, housing, energy, healthcare, education and food (Coote et al., 2019)? How can we protect our economy against the risks of capital flight and the offshoring of jobs as we reduce the extractive power of financiers and empower workers (Berry and Guinan, 2019)?

It will not be possible to entirely eliminate rents. But structural changes that reduce opportunities for rent extraction and redistribute unavoidable rents could radically reduce the strain to be taken by redistributive taxation, lower the risk of asset price bubbles, and – critically – facilitate a key plank in the socio-ecological transition: the reduction of working hours. If our anti-monopoly policies are successful, then no single firm would have the power to extract rents through control of technology or data. If firms were mutually owned and democratically managed, workers' hourly remuneration would be more likely to rise in line with productivity improvements. And with a 'Common Wealth Dividend' and/or Universal Basic Services (Coote et al., 2019) people would have a route to subsistence and security without selling their labour. Such structural shifts would make workers both more inclined and more empowered to negotiate reduced working hours.

7. Conclusion

The purpose of this article has been to highlight three interconnected blindspots in ecological economics: the threat of intensified rent-seeking in a resource-constrained future, the roles that rent-seeking and concentrated rentier power play in our growth dependency, and the opportunities that may flow from mobilizing around the concept of rent.

The paradox in the relationship between rent and growth that I have highlighted has important implications for the success or failure of different strategies for socio-ecological transition. I have argued that reining in rentier power is a pre-condition for imposing tough limits on resource use without social damage, and tough limits on resource use and waste emissions are a precondition for reining in rent extraction without environmental damage. If the checks on rentier power and resource caps go together, there need be no trade-off between meeting the needs of all today, and ensuring the planet is in a fit state to support the needs of tomorrow.

The final hopeful message of this article is that the concepts of rent and rent-seeking may offer a powerful discursive frame for delegitimizing incomes which are neither earned, in the sense of being proportionate to labour, nor socially useful, in the sense of stimulating innovations whose benefits are broadly shared. Thus, these concepts may help to build the popular and political support that is needed to transform our economic institutions so that they can support a good life for all within planetary boundaries.

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Appendix 1

Piketty famously observed that if the rate of return on wealth (r) is higher than the rate of growth of average incomes (g), inequality will tend to increase (Piketty, 2014). In this Appendix 1 show why this observation is difficult to refute.

One way of measuring income inequality is to look at the income of a rich subset (the top 1%, or 10% or 20%) and express it as a multiple of the average income. If the income of some rich subset is growing at a faster rate than the average person's income, then income inequality will clearly be increasing. Formally, if $\frac{\% \Delta \text{ income of rich}}{\% \Delta \text{ average income}} > 1$, then inequality will increase.

Let us imagine, for simplicity, that the richest percentiles of society live entirely on passive returns on their wealth, and do not receive any income from labour whatsoever. In that case, their income is given simply by rW , and the rate of increase of their income is simply rs , where s is the proportion of their income which is saved/reinvested. The rate of increase in the average person's income is g . Thus $\frac{\% \Delta \text{ income of rich}}{\% \Delta \text{ average income}} = \frac{rs}{g}$. It is clear from this equation that if $r > g$ and if there are rich sections of society that have a savings rate s greater than $\frac{g}{r}$, then $\frac{rs}{g} > 1$, and we can expect inequality to grow over the long term.⁷

We know both that marginal propensities to save increase as incomes increase (Brown, 2004; Hartwig, 2014; Onaran and Galanis, 2012) and that returns to wealth tend to be higher the more wealth you have to invest (Piketty, 2014, pp. 447–52). Thus, if r is higher than g it is very likely that r^R (the rate of return on wealth for the richest sections of the population) will be significantly higher than g and that there will be members of the richest income percentiles who do have a savings rate s higher than $\frac{g}{r^R}$, meaning that inequality will increase.

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⁷ Another way of looking at these relationships is that the ratio of r to g tells the wealthy what proportion of their capital income they can consume (i.e. not reinvest/save) whilst maintaining their future income flow relative to the rest of society.

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