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1 Book Review

2 **Prosperity without Growth: Economics for a Finite Planet, Tim**
3 **Jackson, Earthscan, London, (2009)**

4 Usually, I find myself disagreeing with advocates of zero economic
5 growth (defined as non-increasing GDP). First, a large part of the
6 world's population remains poor by any objective standard and
7 second, I think they have the wrong end of the stick. If the reason that
8 we are concerned about growth is its impacts on the environment we
9 should control resource use and then let the economy determine the
10 optimal level of output within the constraints that are set. And
11 controlling resource use, hard as that has proven to be, is still likely to
12 be both politically and practically an easier goal than somehow
13 directly controlling growth. So, I was a little surprised to find myself
14 agreeing with quite a lot of what Tim Jackson writes in *Prosperity*
15 *without Growth*. Jackson is Economics Commissioner for the UK's
16 Sustainable Development Commission and Professor of Sustainable
17 Development at the University of Surrey.

18 Jackson draws parallels between the global financial crisis and the
19 looming ecological crisis. Anglophone (and some continental Euro-
20 pean) economies artificially boosted consumption in recent years by
21 promoting very lax credit standards and low interest rates. Borrowing
22 from the future to fund today's fun. This irresponsibility, which met its
23 denouement in the credit crunch is matched by the irresponsibility of
24 borrowing resources and assimilative capacity from the future to fund
25 today's economic growth. In the case of mineral resources and even
26 fossil fuels we could argue that we are developing the technology with
27 which to "pay back" our borrowings but no such argument can be
28 made on biodiversity and habitat loss and the buildup of carbon in the
29 atmosphere.

30 Jackson then reviews the lack of impact of income on national
31 happiness after subsistence needs are met and asks whether growth is
32 still necessary in order to maintain prosperity. Would a zero growth
33 economy have rising unemployment as technology continues to
34 advance (assuming technology does still advance and as implicitly
35 assumed by Jackson in the main text that GDP is produced by a Cobb-
36 Douglas function of capital and labor)? Such an economy will require
37 less and less labor if wages rise. Either wages have to be constant or
38 average hours worked would have to decline. Such an economy could
39 be a utopia or a dystopia depending on which of these dominates and
40 how the reduction in work hours is distributed. Following the lead of
41 Peter Victor (2008), Jackson advocates some regulation of working
42 hours. But, if we restrict the use of natural resources and resources are
43 not good substitutes for capital and labor, as Jackson himself proposes
44 in the Appendix, labor-augmenting technical change (on its own) in
45 fact becomes rather futile (Jackson assumes technological change
46 augments all inputs equally). This is because adding more effective
47 labor to fixed resources has limited results when labor isn't a
48 substitute for resources. There is then no increasing labor productivity
49 problem to solve. And if resources are good substitutes for labor then
50 there really isn't a problem with growth *per se*. Controlling the use of
51 resources would have limited impact on growth and limiting growth
52 would be the wrong focus.

53 Jackson also highlights the "myth of decoupling". Though there
54 have been improvements in the energy and resource intensity of GDP
55 in many economies over time, in very few economies have these gains
56 been more rapid than economic growth. Therefore, global energy and
57 resource use and carbon emissions have continued to rise. Decoupling
58 or environmental Kuznets curve effects are the exception rather than
59 the rule. The rebound effect means that a focus on improving
60 environmental efficiency will reduce impacts by less than one would
61 naively think. Neither is there salvation in the service sector – most
62 services are still fairly energy intensive in both their production and
63 consumption. But, in order to achieve the ambitious goal of stabilizing
64 atmospheric concentrations of carbon dioxide at 450 ppm by 2050,
65 global carbon intensity will have to decline by an unprecedented 7%
66 per annum from now till then if population and income grow as
67 expected under business as usual scenarios. Put another way, carbon
68 intensity will have to improve 21 fold in the next 40 years. Jackson
69 believes that that is more than can reasonably be achieved and,
70 therefore, growth must come to an end.

71 Unfortunately, Jackson misinterprets the estimates of the cost of
72 climate policy generated by computable general equilibrium (CGE)
73 models, writing: "The Stern Review famously argued that "the annual
74 costs of achieving stabilization... are around 1 per cent of global GDP."
75 After mentioning some other estimates he writes: "Though all these
76 numbers look rather small, there's something very confusing about
77 cost estimates like these: they are already about the same order of
78 magnitude as the difference between a growing economy and a non-
79 growing economy. So if these costs really represent an annual hit of
80 around 2–3 per cent of GDP they would essentially already wipe out
81 growth" (83–84). It is hard to believe, but CGE models actually state
82 that climate policies would cause GDP to be lower by 2–3% in 2050
83 than it would otherwise be rather than grow at 2–3% less each year.
84 An economy that grows at 2% less each year has GDP that is 54% lower
85 after 40 years.

86 This is actually a central point. *Prosperity without Growth* argues
87 that decarbonization with growth is too hard. Therefore, growth must
88 halt. But leading mainstream economic policy models state that the
89 costs of climate policy are very low and, therefore, there is no
90 incompatibility between growth and decarbonization. I suspect that
91 the truth is somewhere in the middle. Moderate cuts in emissions
92 (20–30%) are likely to be very cheap. But once efficiency and fuel-
93 switching options are exhausted the switch to solar and nuclear
94 energies may have much higher costs. Reviewing the parameter
95 values in CGE models, I think that they may overestimate the ease
96 with which consumers can substitute away from fossil-fuel intensive
97 goods and services.

98 On the other hand, as Jackson points out, growth as we know it
99 looks set to continue the trend to higher resource prices that we saw
100 leading up to the record oil prices of mid-2008. Can business as usual
101 growth continue anyway in the face of rising resource scarcity?

102 The book is an easy read and despite my disagreements on some
103 points has plenty of substance. There is also much more in this book –
104 discussions of consumerism and governance for example – than I can

cover in this review. Jackson rounds off the book with a set of specific policy proposals and a vision of the transition to sustainability. The policy proposals (presumably directed at developed economies such as the United Kingdom) are:

Establishing the limits: caps on emissions and resource use and targets for reduction; green tax reform; and support for ecological transition in developing economies.

I wholeheartedly agree with all these suggestions.

Fixing the economic model: Here Jackson proposes a mix of changes to the practice of economics – green accounting and developing an “ecological macro-economics” – and practical measures like investment in green infrastructure and new financial regulation such as the Tobin tax and increasing bank reserve ratios.

Of course, I think ecological macro-economics should be encouraged but I am less enthusiastic about green accounting – more data on the state of the environment is of course valuable but aggregating that data into the national accounts using monetary valuation can give us false indications about sustainability (see Stern, 1997). 100% reserve banking appears to be favored by some ecological economists but is a complete non-starter as it literally means that banks cannot make loans. These are then money warehouses rather than financial intermediaries. Outlawing short-selling and imposing the Tobin tax are likely to make financial systems less efficient. But we should look at limiting the size of financial institutions and regulating credit more tightly again.

Changing the social logic: Policies on working time, inequality, “measuring capabilities”, strengthening social capital, and dismantling consumerism.

If reduced growth in a resource-constrained economy does lead to reduced labor demand we may need new policies to address

increasing inequality. Not all societies and individuals will prefer the approaches advocated by Jackson. Limiting employment hours along French lines would drive the more entrepreneurial into self-employment perhaps increasing inequality further. On the other hand, competition for status probably really does result in “positional externalities”. But incentives are more appropriate than blunt one-size fits all regulation.

In conclusion, I think that we should not treat this book as a necessarily correct diagnosis of our predicament and prescription for our future. But it does provide a very thought-provoking research and policy agenda for ecological economists who understand the size of the challenges we face.

References

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