We need to end growth dependency, but how?

Monetary reform would make at best a minor contribution to the task[1].

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Summary

There is increasing recognition that endless economic "growth" is neither possible on a finite planet nor a desirable policy aim in social and economic terms. The British NGO, Positive Money, has recently added its voice to this critique, with its report "Ending Growth Dependency". Positive Money (PM) campaigns for reform of the monetary system, arguing that banks, other than the central bank, should not be allowed to create money. They suggest that this will help end what governments' dependence on "growth".

This article assesses their proposal in three ways. First it asks whether it characterises the motor of growth in capitalist economies adequately. Secondly it asks whether their proposals are needed in order to control the irresponsible growth of credit and debt. Finally it considers whether it would help prevent and reduce ecological damage. It is concluded that because PM are very selective in both their characterisation of the springs of capitalist accumulation and in their analysis of the impact of economic activity on the ecosystem, they end up proposing a scheme that at best will have little positive impact and could actually make matters worse. Finally, an alternative set of policy innovations, relevant to the growth problematic, is suggested.

Introduction: escaping growth-dependency

It has long been understood that the standard economic prescription of economic "growth", to fix multiple economic, social and environmental ills, is highly implausible[3]. This stems from the elementary observation that you cannot expand the material throughput of the economy (the materials and energy it consumes) without coming up against the limits imposed by the biophysical systems of the earth that we all rely on. There are other dimensions to the critique of "growth", 1) the destabilising economic impacts of the reducing return on investment as materials and energy sources become scarcer, 2) the failure of economic growth to benefit those who are economically and socially disadvantaged, and 3) to deliver increases in well-being for the population as a whole (once a certain overall standard of living has been reached), which supports the idea that we need a different kind of

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3 e.g. Boulding, K. E. The Economics of the Coming Spaceship Earth in *Environmental Quality Issues in a Growing Economy* (ed. Daly, H. E.) (Johns Hopkins University Press, 1966); Georgescu-Roegen, N. (1971). *The entropy law and the economic process*. Cambridge, Mass: Harvard University Press.; Daly, H. E. (1973). *Toward a steady-state economy*. San Francisco: Freeman.

civilisation ethic, one based on sufficiency rather than excess[4]. Against the implausible wager on “growth”, I and colleagues in Steady State Manchester have argued for a Viable Economy,

> *“... an economy that is resilient and dynamic, providing enough for all, while supporting social well-being. And it must be ecologically viable, not causing further damage to the earth's fragile systems without which life is not possible.”*[5]

The understanding that you cannot grow the material economy for ever was given a clear focus by the work of Donella Meadows and colleagues in the 1970s with their Limits to Growth report[6]. That report was criticised, largely on spurious grounds, leading to its eclipse and the dominance of the fudge of “sustainable development”, that you can continue to grow while producing environmental and social benefit. The bankruptcy of that idea is ever more clear as the earth's ecological and biophysical systems lurch into a series of danger zones of which climate change, biodiversity loss and pressures on freshwater systems are just the most obvious ones.[7]

Not surprisingly, there is now increasing interest in the Limits to Growth thesis. One new entry to the debate is the British NGO, “Positive Money”, which has just published a report “*Escaping Growth Dependency*[8]” (EGD from here on), with the subtitle “*Why reforming money will reduce the need to pursue economic growth at any cost to the environment*”. It is encouraging to see other campaigning organisations embracing a rejection of “growth” on environmental grounds, but does this intervention really help? I will argue that it makes a number of fundamental errors before briefly outlining what a more adequate approach might look like.

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4 Burton, M., & Steady State Manchester. (2012). *In Place of Growth: Practical steps to a Manchester where people thrive without harming the planet.* Manchester: Steady State Manchester. https://steadystatemanchester.files.wordpress.com/2012/11/inplaceofgrowth_ipog_-content_final.pdf

5 Burton, M., Irvine, B., & Emanuel, J. (2014). *The Viable Economy*. Manchester: Steady State Manchester. https://steadystatemanchester.files.wordpress.com/2014/11/the-viable-economy-master-document-v4-final.pdf

6 Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. (1974). The Limits to growth : a report for the Club of Rome’s project on the predicament of mankind. London: Pan Books. Retrieved from http://www.donellameadows.org/wp-content/userfiles/Limits-to-Growth-digital-scan-version.pdf; Meadows, D. H., Randers, J., & Meadows, D. L. (2005). Limits to Growth : the 30-Year Update. London: Earthscan; see also Jackson, T., & Webster, R. (2016). *Limits Revisited: A review of the limits to growth debate* (p. 24). London: All-Party Parliamentary Group on Limits to Growth. http://limits2growth.org.uk/revisited

7 Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S., Lambin, E. F., … Foley, J. A. (2009). A safe operating space for humanity. *Nature*, 461(7263), 472–475. https://doi.org/10.1038/461472a Steffen, W., Richardson, K., Rockstrom, J., Cornell, S. E., Fetzer, I., Bennett, E. M., … Sorlin, S. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347(6223), 1259855–1259855. https://doi.org/10.1126/science.1259855

8 Positive Money. (2018). *Escaping Growth Dependency: Positive Money’s latest research paper*. London: Positive Money. Retrieved from http://positivemoney.org/publications/escaping-growth-dependency/

What does Positive Money say?

Positive Money (PM) structures its argument like this (EGD: pp. 5-6):

> 1) "*In Chapter 1 we take a comprehensive look at the problems with endless economic growth, and develop a framework to help understand the challenge. We will distinguish 'economic growth' as an abstract statistical measure of the size of the economy from the real tangible resource usage and pollution that this economic growth creates. We look at the reasons why technological progress alone will not enable us to pursue continual economic growth whilst living within the constraints of ecosystems. We then outline the model of a 'steady state economy' developed by ecological economists, as this serves as a useful description of the hard constraints that the economy must operate within, and provides a vision of a sustainable economy."*

This section is a good exposition of the impossibility of continuing economic "growth", including the failure of absolute decoupling of GDP growth from material throughputs (something we have emphasised[9]) and the basics of the "steady state economy" as proposed by ecological economists like Herman Daly.

> *2) "In Chapter 2 we explore the political, social and economic sources of our current dependency on growth. We do not attempt to identify which source of growth dependency is strongest or most influential, but each of these sources needs a solution that does not depend on growth."*

This section struck me as rather odd. Rather than describing the sources, or driving forces of growth dependency, the chapter does two things. Firstly it identifies the ideological rationalisations for "growth", that is the functions that the "growth mantra" has in legitimating the present system with its great inequalities. Secondly it identifies the economic argument that growth reduces the impacts of both inflation and (public and private) debt: a simple arithmetic effect. The style of argument though is "teleological", seeking a cause in terms of its effects. To be fair they acknowledge this, *"There are multiple forces that 'drive' or produce growth in GDP, ...* [the] *drivers are not the focus of this paper. Instead, we are interested in the reasons that drive governments to make continual economic growth an essential policy objective"*[10]. But we do need to identify those drivers, the real causes of the present system's tendency for continual quantitative growth. Get that identification wrong and the prescriptions are also likely to be wrong.

Now comes the crux of PM's argument:

> 3) "*In Chapter 3, we focus on the sources of growth dependency generated by the design of the current monetary system. We explain how the design of the current monetary system, in which banks create the majority of new*

9 https://steadystatemanchester.net/2016/04/15/new-evidence-on-decoupling-carbon-emissions-from-gdp-growth-what-does-it-mean/

10 EGD: p.17

money when they lend, tends to generate high levels of private debt (debt of households and businesses) and high levels of public debt too. We consider why these high levels of debt are a problem."

As I will explain, this section, while identifying some key elements of the current capitalist system, over-extends these elements, neglecting others.

> 4) *"In Chapter 4 we examine how private and public debt can be reduced and conclude that economic growth is seen as the easiest – and potentially only – solution when operating under the current monetary system."*

This section is a useful exploration of the limited options under the current system to reduce debt where an economy is not growing. It sets the scene for PM's radical proposal in the next section.

> 5) "*In Chapter 5 we examine how changes to the current monetary system can reduce the level of private and public debt without relying on economic growth. We focus on proposals to transform the nature of money creation, and consider the implications of a 'sovereign money system'. In a sovereign money system, only the state, via the central bank, is able to create money. Because this money is created without a corresponding private sector debt, it can lead to lower debt levels across the economy, and therefore start to reduce one of our sources of growth dependency."*

This, in summary, is PM's "solution". It is distinctive but in its key dimensions it is shared by many commentators and campaigners that focus on the ecology-economy relationship[11].

A critique can be made from three angles.

1) Why do capitalist economies grow.

2) How best to manage the provision of credit and control excessive debt?

3) What would be the ecological consequences of PM's proposals?

1) Why do capitalist economies grow?

This is the big question and it needs answering in some detail before returning to the PM proposition[12].

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11 It is not quite the same as, but is related to, the 100% or Full, Reserve Banking (FRB) proposals that date back to the Chicago Plan of the 1930s and was popularised by Milton Friedman. FRB is also supported by some ecological economists, including Herman Daly, and by the England and Wales Green Party. Martin Wolf, the senior Financial Times correspondent, also supports the idea. There is debate as to how different the Sovereign Money idea is from FRB, see Dittmer, K. (2015). 100 percent reserve banking: A critical review of green perspectives. *Ecological Economics*, *109*, 9–16. https://doi.org/10.1016/j.ecolecon.2014.11.006.

12 For a consideration of capitalism's incompatibility with a steady state economy: Blauwhof, F. B. (2012). Overcoming accumulation: Is a capitalist steady-state economy possible? *Ecological Economics*, *84*, 254–261. https://doi.org/10.1016/j.ecolecon.2012.03.012

We can use a simple model to understand the heart of the system[13]. Money capital gets invested (by a capitalist, or an entity acting in the same way as a capitalist) in production. The money pays for materials and for the tools (and machines) that are used by workers to transform them into products that enter the market as commodities. The money also pays the wages of the workers. The commodities are then sold, and here is the first clue to growth: they are sold for more money than that money invested (profit). How can that happen? Karl Marx gave us the answer (in what is rather confusingly known as the "Law of Value"), building on the work of David Ricardo and other classical economists. The second clue to the growth riddle is that workers are paid less than the value of their labour power. The difference is "surplus value", expropriated by the capitalist. When monetised in the sale of commodities, that surplus value is manifested as profit.

That relation is commonly expressed as,

$$M - C – M' \qquad \textit{(A1}$$

Where M = money capital and C = commodity. The ' represents the increase in capital over that in the first stage M.

The formula can be expanded:

$$M - C...P...C' – M' \qquad \textit{(A2}$$

Where C are the commodities bought for transformation (i.e. production P) into the commodities C' to be sold.

And expanding P gives us the means of production MP and Labour Power LP.

$$M - C(L+MP)...P...C' – M' \qquad \textit{(A3}$$

And the process continues "Returning with a profit after every circuit, capital 'ignites itself anew' like a driving fire that never goes out"[14] so we have (in summary form:

$$M - C...P...C' - M' \rightarrow M' - C'...P...C'' - M'' \rightarrow M'' - C''...P...C''' – M''' \qquad \textit{(A4}$$

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13 In addition to the sources cited in relation to specific points, the following discussion draws on a a variety of works, including: Wallerstein, I. (1996). *Historical Capitalism, with Capitalist Civilization*. London: Verso; Burkett, P. (2009). *Marxism and ecological economics : toward a red and green political economy*. Haymarket Books; Lapavitsas, C. (2013). *Profiting without producing: how finance exploits us all*. London ; New York: Verso; Norfield, T. (2017). *The City: London and the global power of finance*. London: Verso; Bellamy Foster, J., Clark, B., & York, R. (2011). *The Ecological Rift: Capitalism's War on the Earth*. New York: New York University Press / Monthly Review Press; Harvey, D. (2010). *The enigma of capital : and the crises of capitalism*. Oxford [England]; New York: Oxford University Press; Kallis, G., & Swyngedouw, E. (2017). Do Bees Produce Value? A Conversation Between an Ecological Economist and a Marxist Geographer. *Capitalism Nature Socialism*, 1–15. https://doi.org/10.1080/10455752.2017.1315830; Dussel, E. (2001). The Four Drafts of Capital: Toward a New Interpretation of the Dialectical Thought of Marx. *Rethinking Marxism: A Journal of Economics, Culture & Society*, *13*(1), 10–26; Dussel, E. (2014). *16 tesis de economía política: interpretación filosófica.* Mexico City: Siglo XXI; and of course Marx, especially Marx, K. (1963). *Theories of surplus-value volume IV of capital*. Moscow: Progress Publishers e-version available at http://www.bard.edu/library/arendt/pdfs/Marx-Surplus.pdf.

14 Malm, A. (2016). *Fossil capital: the rise of steam-power and the roots of global warming*. London ; New York: Verso.

What was added to this formula in the industrial capitalist revolution was the "energy subsidy" of fossil fuels. In the capitalist economy of production ever since, notwithstanding the growth of renewable energy, the formula is

$$M\text{-}C(L+MP\ (F))...P...C'\text{-}M' \qquad (A5$$

where F stands for fossil fuels as a portion of the means of production[15].

As Jason Moore points out, capitalism's endless search is for cheap inputs to this system: labour, food, energy and raw materials[16]. But the core of it all is the creation of value by labour acting on the material inputs via the means of production fired by concentrated energy: the capitalist extracts surplus value by paying the workers less than the exchange value of the product they make.

But there are two problems, and this takes us back to the concerns of PM. 1) Where does that initial money come from? and 2) Where does the increase in money come from to pay for the new commodities, in other words to monetise the increased value after the production cycle?

1) For the investment into the production process, Capitalists invest some of their own money (sic): they do not spend all the profit they make but plough some back into the business. But that is not enough for the expansion we observe. There is another source: credit. PM identify one source of this, lending by banks. This is not the only source: the savings of workers is used too (for example where pension funds and savings schemes make investments in capitalist production, directly or indirectly). And companies raise capital themselves through share offers and bonds.

In all these cases, there is the expectation of profit. Credit is made available as an advance on the expected realisation of profit, in other words on the basis of surplus value to be extracted.

2) That does not answer the question of where the extra money comes from to monetise the profits and pay the interest[17]. Where does the money for the expansion of commodity purchases across the economy come from? This comes from several sources. When precious metals underpinned currency, in the early days of capitalism, it was the exploitation of the Americas, particularly the silver mines of Potosí and Zacatecas that provided a boost to this extra source of payment (and investment too)[18]. The inflow of money from other economies continues to fund expenditure on commodities. But in

15 From Malm (2016) work cited.

16 Moore, J. W. (2015). *Capitalism in the web of life: ecology and the accumulation of capital* (1st Edition). New York: Verso.
See also https://jasonwmoore.wordpress.com/tag/four-cheaps/

17 This is known as the "profits puzzle", something that has defeated many economists. For an interesting discussion, see Tomasson, G., & Bezemer, D. J. (2010). What is the Source of Profit and Interest? A Classical Conundrum Reconsidered. Munich Personal RePEc Archive. Retrieved from https://mpra.ub.uni-muenchen.de/id/eprint/20371

18 Dussel (2014) work cited: p. 11.

modern days (and indeed going back to the origins of modern banking when voyages of colonisation and exploitation were financed by credit[19]) it is the further extension of credit that provides much of the extra money.

PM give almost exclusive attention to bank lending and make the correct observation that, contrary to conventional understanding, most money in circulation is created by private banks through the (now electronic) provision of credit. They are right to see the uncontrolled expansion of credit as a problem and explore a number of dimensions to this. But their analysis gets two things wrong at this stage:

Firstly, PM focuses on the creation of money as credit as a central cause of economic growth when from the above (broadly Marxist) analysis, it is instead a secondary phenomenon, a limiting factor rather than the generative process. The core of capitalist expansion is the productive process with its expropriation and surplus value reinvestment of part of the resulting profits. The operations of the credit system are secondary. As Lapavistas says, drawing on the work of the Japanese Uno school of Marxism,

> *"... finance comprises an integral whole of relations ordered in interconnected layers emerging spontaneously out of real accumulation …. a pyramid of credit relations. The pyramid rises from the elemental relations of trade credit, to the still more complex relations of money market credit, to the still more complex relations of monetary (banking) credit, and finally to relations of central bank credit. The capital (stock) market, on the other hand, exists alongside the pyramid of the credit system, but is connected to the latter through value flows and price determination."*[20]

There is a paradox here: credit grows out of the system of capitalist accumulation, supporting it, but it also takes on a life of its own, not least under present conditions of financialised capitalism, where the chains of credit, of promises to pay, become ever more convoluted and recursive, and when stretched, cause great instability. Ultimately, if the expansion of money values is not grounded in the expansion of commodity production, then there is always a reckoning, a readjustment:

> *"A debt crisis is not really a crisis of debt but a sign that a country's production of value can no longer support the previous illusion of wealth".*[21]

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19 Gelderblom, O. (2013). *Cities of commerce: the institutional foundations of international trade in the Low Countries, 1250-1650*. Princeton NJ: Princeton University Press.

20 Lapavitsas, C. (2013). *Profiting without producing: how finance exploits us all*. London ; New York: Verso. p. 122-123. For a diagramatic depiction of some parts of this system (in Spanish) see Dussel, E. (2014). *16 tesis de economía política: interpretación filosófica.* Mexico City: Siglo XXI. p. 116. Dussel notes: *"The fetishisation [of financial credit] is progressive; that is to say, living labour is made progressively more invisible"* p. 128.

21 Norfield, T. (2017). *The City: London and the global power of finance*. London: Verso. p. 151

The first error of PM then, is to see the provision of credit as primary, as driving capitalist accumulation, rather than something that emerges from it, more or less keeping pace with it, but far from driving it.

The second error is to focus on only one kind of credit within this Ponzi system, that offered by the banks. Jo Michell makes this point in a critique of PM's proposals:

> *"... by narrowing the focus to the deposit-issuing banks, PM excludes the rest of the financial system – investment banks, hedge funds, insurance companies, money market funds and many others – from consideration"*[22]*.*

A further problem is with the empirical claims made by PM: does the creation of credit inevitably lead to a growth imperative? Since we do not have a real comparative case, we have to rely on modelling studies. Inevitably these are simplifications of the real economic and monetary system. In perhaps the most developed of these, Jackson and Victor[23] used

> *" a stock-flow consistent (SFC) system dynamics model (FALSTAFF) of a hypothetical closed economy with private ownership and interest-bearing debt. Behavioural aspects of the model included the propensity to consume out of both income and wealth, a simple accelerator model of firms' investment, and positive requirements on banks for capital adequacy and central bank reserves. Contrary to claims in the literature, we found no evidence of a growth imperative arising from the existence of a debt-based money system per se.*
>
> *"In fact, we presented a variety of scenarios which exemplified quasi-stationary states of various kinds, and which offered resilience from instability in the face of random fluctuations, demand shocks, and exaggerated 'animal spirits'. We also simulated a transition from a growth-based economy towards such a state. None of the scenarios were sensitive to modest changes in the values for interest rates, capital adequacy requirements or reserve ratios. …..*
>
> *"Specifically, the results in this paper suggest that it is not necessary to eliminate interest-bearing debt per se, if the goal is to achieve a resilient, stationary or quasi-stationary state of the economy. It is also worth reiterating that, aside from the question of interest-bearing money, there exists anumber of other incentives towards growth within the architecture of the capitalist economy. …... They must be taken to include, for instance: profit maximisation (and in particular the pursuit of*

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22 Michell, J. (2017, January 18). Full Reserve Banking: The Wrong Cure for the Wrong Disease. Retrieved February 14, 2018, from https://criticalfinance.org/2017/01/18/full-reserve-banking-the-wrong-cure-for-the-wrong-disease/. See also Norfield, T. (2017). *The City: London and the global power of finance*. London: Verso for an accessible exploration of the financial system, contextualised within actually existing imperialism.
There is an echo of the pioneer of Marxist studies of finance, Rudoph Hilferding, in PM's approach. Hilferding also over-emphasised the role of private banks in the financing of capitalism see Norfield, (2017) work cited pp. 92-95.

23 Jackson, T., & Victor, P. A. (2015). *Credit creation and the 'growth imperative' - a quasi- stationary economy with debt-based money.* (PASSAGE Working Paper). Guildford: University of Surrey. Retrieved from http://www.prosperitas.org.uk/publications.html A version also published as Jackson, T., & Victor, P. A. (2015). Does credit create a 'growth imperative'? A quasi-stationary economy with interest-bearing debt. *Ecological Economics*, *120*, 32–48. https://doi.org/10.1016/j.ecolecon.2015.09.009

labour productivity growth) by firms, asset price speculation and consumer aspirations for increased income and wealth. Some of these mechanisms also lead to potential instabilities in the capitalist economy. Many of them are reliant on the existence of credit-based money systems. …. But this logic does not entail that interest-bearing money, in and of itself, creates a growth imperative.”

Jackson and Victor are not hostile to monetary reform proposals and they acknowledge that in this simulation they have not explored some critical elements, such as housing investment and house price inflation[24]. But they make the important procedural point that studies such as theirs are needed in order to identify where effort should be placed in transforming the economy to escape growth dependency.

There are further problems with PM's characterisation of the creation of money and the making of profit by the banks and these have been widely aired (they mostly come from a Post-Keynesian perspective) but I will not go into them here[25]. Suffice it to say that those economists who accept the PM starting point (creation of money by banks) find fault with their other premises and with steps of their argument.

2) How best to manage the provision of credit and control excessive debt?

To summarise the previous section, the capitalist economy has at its heart the motor of continual growth, the reinvestment of profit that has its origin in the production process where the production of value rests on the expropriation of surplus value. Money is created through the extension of credit and this allows the monetisation of surplus value as profit. It also provides some of the seed capital (indeed at times most of it) for the investment in new production. The production of credit is therefore both a facilitating and limiting factor on capitalist accumulation and therefore on what is commonly called economic growth. It is not, however, its root cause.

But PM are on to something: even though the creation of credit, and hence money, by private banks is not the root cause of “growth”, it facilitates it. It also allows, through the expansion of household credit, the purchase of commodities from beyond the UK economy and its international extensions, helping to finance the globally overshooting production frenzy. It contributes

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24 The reader can make some explorations using the online simulation programme.

25 Michell, J. (2017, January 18). Full Reserve Banking: The Wrong Cure for the Wrong Disease. Retrieved February 14, 2018, from https://criticalfinance.org/2017/01/18/full-reserve-banking-the-wrong-cure-for-the-wrong-disease/
Pettifor, A. (2017). *The production of money: how to break the power of bankers*. London: Verso. Chapter 6.
Schlichter, D. (n.d.). Incredible confusions Part 1: ‘Positive Money’ and the fallacy of the need for a state money producer. Retrieved February 14, 2018, from http://www.cobdencentre.org/2013/02/incredible-confusions-part-1-positive-money/
Fontana, G., & Sawyer, M. (2016). Full Reserve Banking: More ‘Cranks’ Than ‘Brave Heretics.’ *Cambridge Journal of Economics*, *40*(5), 1333–1350. https://doi.org/10.1093/cje/bew016

to things like the inflation of house prices[26], and the conversion of housing equity into money is another driver of household consumption beyond what the productive economy can fund[27]. All this consumption is reflected in the country's national accounts as GDP and indeed house prices, through their representation in “imputed rent”, inflate it too.

Leaving to one side the need to control other sources of credit expansion, what should be done about the irresponsible creation of credit by the banks? PM's solution is drastic. They want to nationalise, not the banks, but the creation of money. And they want to de-link the use of money as payment from money as a source of credit. The Bank of England (our Central Bank) would have the sole right to create money. Banks would act as its agents. The Bank of England would create money in the government's account, which then would be spent into the economy. This money entering the economy would therefore be “debt free”.

It is debatable whether this would have the intended consequences. PM set out a variety of benefits, with a particular emphasis on levels of both public and private debt. Yet their appetite for system change is strictly limited. At no point do they make a criticism of the system of capitalist accumulation. Their treatment seems to fall between wanting to improve its operation (for example ensuring credit for the “real economy”, preventing debt from causing recession) yet at the same time they want to fetter a key element in its financing. Nowhere is a moral case made about the appropriation of surplus value, neither in our low wage economy nor in the global South with its super-exploitation along the supply chains that nourish the British economy[28]. Instead we are offered a reformist package that harnesses the kind of monetarist thinking[29] discredited in the first phase of neoliberalism to what looks like a social democratic project of mitigated capitalism.

How best to manage the provision of credit and control excessive debt depends on what the objectives are. “Debt-free money” is PM's rallying cry, yet can such a thing exist? With banks as agents of a central bank, they would still be lending money, it would just be from a payment account held in their own name: the debt would be to the central bank. This is the inescapable reality of lending.

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26 Again it is only part of the picture: http://uk.businessinsider.com/britains-housing-market-is-not-being-driven-by-a-supply-and-demand-imbalance-2017-4

27 Folkman, P., Froud, J., Johal, S., Tomaney, J., & Williams, K. (2016). Manchester Transformed: Why we need a reset of city region policy (CRESC Public Interest Report) (p. 61). Manchester: Centre for Research on Socio-Cultural Change (CRESC), University of Manchester. (p. 18) http://hummedia.manchester.ac.uk/institutes/cresc/research/ManchesterTransformed.pdf

28 Smith, J. (2012). The GDP Illusion: Value Added versus Value Capture. *Monthly Review*, 64(3), 86–102; Smith, J. (2016). *Imperialism in the twenty-first century: globalization, super-exploitation, and capitalism’s final crisis*. New York: Monthly Review Press.

29 PM denies that their plan is monetarist.

Consider this alternative scenario: a community-based bank is set up. It is financed by local people's savings, local business deposits, and some seed funding from anchor institutions. It offers loans to local businesses, with strict environmental and social criteria. But the money it lends out is not (directly) restricted by the money deposited with it. Instead it can lend more than it has in its own account. But it is not going to do that to the extent that it is over-stretched. This is due to a) the terms of its banking licence which require sufficient reserves, and b) its own constitution and governance safeguards. The result is that the local economy has a sound source of ethical credit. The risks of over-extension are managed by the application of sound criteria and access to reserves to manage fluctuations in demand for repayment of deposits. Neither the money nor the bank is nationalised but nor is either private.

Now consider that model extended across the country. These banks are linked together to pool risks but they work in their communities, using local knowledge to make loans that those local economies and communities need.

Rules are established to regulate the setting of interest rates and to ensure the banks do not over-stretch themselves. These are made locally but there is national legislation that sets the overall parameters. Credit is quite cheap but not given out willy-nilly (there are no shareholders who have to be paid on the basis of the "spread" between deposits and loans).

Bundling up of liabilities is prohibited and so is speculative lending on housing.

These banks look like a cross between mutual building societies and savings banks. They make a profit but this is returned to the community after necessary investment in the bank's operations (e.g. opening a new branch, upgrading IT systems).

The government centrally takes part in the financing of appropriate economic activity by issuing a series of bonds. These are a safe haven for savings and appear as public debt in the national accounts. They (and similar vehicles) are also used by the local community banks to deposit money that they cannot immediately invest locally.

Not all features are described here but these are the elements of a sound, responsible and safe banking system. These banks do create money when they lend. But they lend responsibly. Their operations are governed properly. They do not speculate and create financial bubbles. Debt and credit are parts of the system. Elements of this system already exist, and in other countries, such as Germany, something not dissimilar is a third part of the overall banking system[30].

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30 C. Choulet. (2016). *German Sparkassen: a model to follow?* BNP Paribas http://economic-research.bnpparibas.com/Views/DisplayPublication.aspx?type=document&IdPdf=28761 (not necessarily a disinterested source, but the information on the workings of the system is valuable).

The point is that such a system could be created without adopting the proposals for “Sovereign Money” from PM. Their proposals would not necessarily produce these benefits. In their system[31], decisions on the creation of credit would either be taken by the private banks, operating as agents of government/central bank, or by some kind of committee at national level – probably a combination of both. In the alternative system I have sketched, these decisions would be taken by local bankers, working to a social and environmental mission, knowledgeable of the local economy and its needs and governed by an appropriate local board which could be elected.

This alternative system could be established under actually existing British capitalism, but would also be compatible with and indeed supportive of the erosion of that system of capital accumulation based on exploitation. It could also be pro-ecological by design, for example by favouring production that is consistent with Daly's principles for a steady state economy[32].

On the basis of this short thought excursion, I conclude that PM's proposals are largely irrelevant to the creation of an ecologically, socially and economically responsible banking system: a viable money economy. Moreover, by proposing a simplistic “magic bullet” they distract from the kind of monetary reform that is needed.

The above banking model does not, of course deal directly with the capitalist motor of expansion. This requires detailed separate treatment but the key lies in the ownership of the means of production[33]. Surplus would have to be democratically applied to social priorities and excessive value neutralised, destroyed, or spent[34], for example by a levy on profits to fund cultural activities that are, for capitalist accumulation, “unproductive”, or (less imaginatively) by a tax whose proceeds are then written off, or by currency devaluation. Not all private business is actually capitalist in the (dynamic) sense of ever-expanding capital. Many, perhaps most family run firms and social enterprises, for example, do not continually expand their operations but are content with a reasonably constant level of profit.

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31 PM do acknowledge the need for wider system change, with similar elements to those described here, but they choose to focus on the the chimera of “debt-free money” instead.

32 Explained in EGD pp 11-13. Original source, Daly, H. E., & Farley, J. (2011). *Ecological economics : principles and applications*. Washington, D.C: Island Press.

33 Labour's new thinking on alternative forms of ownership is relevant to this question: The Labour Party. (2017). *Alternative Models of Ownership: Report to the Shadow Chancellor of the Exchequer and Shadow Secretary of State for Business, Energy and Industrial Strategy*. London.https://labour.org.uk/wp-content/uploads/2017/10/Alternative-Models-of-Ownership.pdf

34 For a discussion of this idea, termed “dépense” in the degrowth movement: D’Alisa, G., Kallis, G., & Demaria, F. (2014). From austerity to dépense. In G. D’Alisa, F. Demaria, & G. Kallis (Eds.), *Degrowth: a vocabulary for a new era* (pp. 215–220). Abingdon, Oxon ; New York, NY: Routledge.

3) What would be the ecological consequences of PM's proposals?

Monetary reform (typically 100 percent reserve banking, sovereign money, or similar) is a common denominator of many “green” policy proposals. But there has been little in the way of critical examination[35]. Indeed, our group, Steady State Manchester caused some surprise when we made it clear in our Viable Economy pamphlet that we were, at best, agnostic on the matter[36]. PM do not consider the ecological consequences of their proposal directly. However, their argument can be reconstructed and depicted like this:

E1)	Sovereign money	→	Less private and public debt	→	Less government requirement for economic “growth”	→	Less damage to the ecosystem

We might add:

E2)	Sovereign money	→	Less availability of credit	→	Less non-necessary consumption[37]	→	Less damage to the ecosystem

but although high levels of consumer credit undoubtedly do drive consumption (which shows in the GDP statistic), PM do not make this second argument in their paper.

35 Dittmer's (2015) article is an exception. He reviewed the related proposal of 100 percent reserve banking (100RB). This is not exactly the same as PM's “sovereign money”. However it is of note that Herman Daly, who promoted 100RB is also credited with advising on PM's Escaping Debt Dependency paper, under review here. Martin Wolf (2013, cited by Dittmer) concluded that the difference was “not at all important” and indeed there is a lot of overlap: both aim to, in Daly's words, Nationalise money, not banks”. Dittmer identified significant gaps in both argument and evidence in relation to three groups of “green arguments” in favour 100RB, two of which (better prioritisation of environment in allocation/investment decisions, and reduction of overall debt levels) relate to the politics of the capitalist State, which I have explored here. The other argument, that investments could be reduced by the squeeze on credit (limited by deposits), could go either way – depending on interest rates: interest rates are likely to be highly volatile under a 100RB system. I am unclear whether that would be the case for PM's model. Dittmer, K. (2015). 100 percent reserve banking: A critical review of green perspectives. *Ecological Economics*, 109, 9–16. https://doi.org/10.1016/j.ecolecon.2014.11.006

36 Burton, M., Irvine, B., & Emanuel, J. (2014). *The Viable Economy* (1st ed.). Manchester: Steady State Manchester. https://steadystatemanchester.files.wordpress.com/2014/11/the-viable-economy-master-document-v4-final.pdf

37 This is something of a simplification – there are other circuits involved. For example, there is also a significant transmission through credit to inflated unproductive housing asset prices leading to an increased requirement for income to maintain living standards, via earnings but also via further expansion of consumer credit This is true for both working class home owners and for renters (~40% of households in the UK). This has also been a large value transfer to the asset owning class, facilitating their luxury consumption and growing the amount of money capital (invested wealth) which seeks re-valorization.

To approach the question “What would be the ecological consequences of PM's proposals?”, I will first consider the plausibility of a significant reduction in damage if PM's logic in sequence E1 is followed. Then I will consider briefly the impact according to sequence E2. Finally, true to ecological thinking, I will consider the likely unintended consequences of the sovereign money scheme.

The total amount of new private debt, as credit, would be capped at the level of total current savings, so other things being equal, private debt levels should not rise further, and as existing debts are paid off, they would fall (the recession had the same effect at first– people began to pay off their debts and to save more). PM also suggest a second way in which debt levels would be reduced (“Conversion Liability”). On repayment of debt to banks, the money would appear on the books of the Central Bank and not be destroyed *“... in effect, the central bank has taken on banks’ liabilities to their customers”*[38]*.* So, they argue:

“The effect of this is that, over around 20 years, repayments equivalent to around half of private sector debt – around £50 billion per year …..– would be recycled back into the economy as additional spending, through the government, which comes with no additional private sector debt. Part of this additional spending can be used to pay down existing household debt, enabling a significant level of debt reduction overall.[39]*”*

Assuming the second and third “causality arrows” in sequences E1 and E2 are operative, then some ecological damage will be mitigated. How much remains a moot point.

This is not a rapid solution, and time-scales like 20 years have to be evaluated against the absolute urgency of addressing the disastrous material flows through the economy that leading planetary ecosystems to the point of collapse. Yet PM indicate that this “Conversion Liability” feature is the greater part of the debt reduction that is to be expected from their proposed reform. There are other ways of reducing household debt, in particular. Some of these are mentioned by PM and dismissed as requiring economic “growth”. But debt forgiveness and mortgage default relief could be ways of soaking up the excess capital accumulation that the capitalist mode of production is generating, and which otherwise go into property and financial speculation[40]. Alternatively it might be done through a mechanism like PM's Sovereign Money Creation (or the various alternative Quantitative Easing models that have been floated by others), although there are problems with all of these[41].

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38 EGD p. 55.

39 EGD p. 56.

40 Harvey, D. (2001). Globalization and the spatial fix”’. *Geographische Revue*, *3*(2), 23–30.
Harvey, D. (2010). *The enigma of capital : and the crises of capitalism*. Oxford [England]; New York: Oxford University Press.

For the reasons outlined above, it is an ecological priority to cap consumer credit, in order to limit unnecessary consumption and hence help reign in the overshooting material flows of the global economy. But the first step of the sequence (establishing a sovereign money system) is not a necessary condition. Instead, it would be simpler to do things like limiting the amount of consumer credit that banks can extend, requiring, for example, stringent assessments in relation to ability to repay and a variety of support services (funded by the banks) to help consumers to manage and reduce their debts. Similarly, policies such as establishing a land value tax, mandating a greater supply of social housing and controlling speculation in housing, would all help control house price inflation and hence household indebtedness, as well as the use of equity release to fund excessive consumption (the impact of aviation and cruise ships comes to mind as asset rich older people monetise their homes). Furthermore, following the argument that “growth” means redressing inequality is forever postponed, then why not tackle inequality head on, through pre- and re-distribution, rather than via a monetary device of uncertain impact? Capping high incomes will have a disproportionate impact on material and energy hungry consumption[42].

As for unintended consequences, by substituting bank credit with government/central bank “sovereign money”, the problem of economic growth remains, even were that sovereign money to be largely directed at green, pro-social investments[43]. How plausible is this, given the penetration and capture of State institutions by capitalist interests? That doesn't mean we shouldn't campaign for State investment in all the desirable things needed for an ecologically and socially viable economy, but we shouldn't have illusions about the likelihood of success. And under the PM proposals this creation of money will be steered by an independent committee, accountable to parliament (and presumably open to “capture” by corporate interests at both levels). Allocation (prioritisation etc.) will be by the government: we can imagine the consequences of that under circumstances like the present with climate change denialists and fracking enthusiasts in positions of power.

But even if there were a good match between allocation of investment and the ecological priorities for investment, there could still be problems with injecting large amounts of money into the economy. This is the paradox of all Green Keynesianism[44]: government spending causes investment in the “real economy” which might be targeted on good things like environmental

41 Pettifor, A. (2017). *The production of money: how to break the power of bankers*. London: Verso. pp. 117-129.

42 http://www.shapingtomorrowsworld.org/hauptInequality.html; https://www.umweltbundesamt.de/en/press/pressinformation/higher-income-earners-usually-have-higher-climate

43 Such money in any case, in subsequent iterations of the cycles of production and exchange, goes into the pockets of consumers in the form of increased wages. This undermines the argument that reflation of the economy need not have environmental consequences so long as the money goes on pro-environmental investments.

protection, clean energy, health, housing and education, but due to the multiplier effect, the money gets spent and re-spent, and as incomes increase due to the economy taking off, more and more of that expenditure will be on high energy, high extraction, high waste consumption. Moreover, improving energy and material efficiency, in the absence of caps on energy and other resource inputs, leads to the rebound effect of expanded consumption of those inputs (the "Jevons paradox") due to the release of money previously tied up in energy and material purchase (to which it returns as more inputs are demanded).

PM do note that their proposals are not sufficient in themselves to deal with growth dependency. *"Weaning governments off their fixation on growth will not be easy as it is so ingrained in the current system – nor are they sufficient to deal with the ecological crisis."* They argue that their monetary reform proposals *"can provide governments with tools to tackle all other sources of growth dependency, so there is then no excuse about getting to the root of some of these causes."*[45] Yet this leaves unsaid what the root of the problem is. If the alternative analysis of this article is correct, that the priority is to tackle the motor of value creation, production, especially wasteful and unneeded production which drives destructive extraction[46] and pollution. Monetary reform can only be a supplementary tool for doing that.

Conclusions.

Because PM are so selective in both their characterisation of the springs of capitalist accumulation and in their analysis of the impact of economic activity on the ecosystem, they end up proposing a scheme that at best will have little positive impact and could actually make matters worse.

An adequate approach would have to do at least the following[47]:

1. Design and implement effective resource input caps.
2. Selectively curb highly polluting industries.
3. Strengthen local economies, shortening supply chains, reducing vulnerability, while fostering an ethic of sufficiency or enough.

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44 Cato, M. S. (2014). The paradox of Green Keynesianism. In J. Blewitt & R. Cunningham (Eds.), "*The Post-Growth Project: How the End of Economic Growth Could Bring a Fairer and Happier Society.*" London: London Publishing Partnership. Retrieved from http://www.greenhousethinktank.org/files/gree.nhouse/home/Green_Keynesianism.pdf

45 EGD, p. 59.

46 Acosta, A. (2016, March). Post-Growth and Post-Extractivism Two sides of the same cultural transformation. Retrieved May 3, 2016, from http://www.alternautas.net/blog/2016/4/6/post-growth-and-post-extractivism-two-sides-of-the-same-cultural-transformation

47 Most of which we have previously advocated in our publications, especially ***The Viable Economy*** and ***Policies for the City Region*** https://steadystatemanchester.net/our-reports/
For additional national level policy proposals see https://steadystatemanchester.net/2018/02/03/is-the-uk-labour-party-facing-up-to-a-post-growth-future/

4. Change the structures of ownership so investment decisions are not based on returns to shareholders.
5. Focus surplus on social need, destroying unneeded surplus.
6. Bring most banking into public ownership, generally with State ownership of central institutions and mutual and co--operative ownership at the local and regional level.
7. Regulate banking and the rest of the financial industry, preventing speculation (as opposed to making sound investment decisions based on returns from pro-social and pro-environmental production).
8. Reform housing policy with expansion of the proportion of affordable rented accommodation and taxation of land value.

Would this be compatible with capitalism? It probably would not be in the longer term, although it could be compatible with those forms of private enterprise and markets that do not demand or entail endless (capital) expansion.