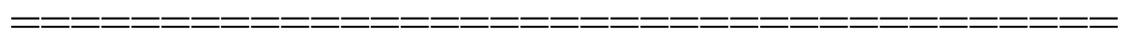


## *Beyond Frugality and Productivity: what next after the market and capitalism?*

My aim today is really, just, to ask the following question "Can we do better in our allocation system?" - Or - In the ways in which we reward production and consumption.

I'll raise a few problems with the existing system. In which the financial metrics / the economy really only reward "being productive" and "being frugal" - although this has served us well and much improved living - thus far. So I talk also, about the limits, or global constraints.

And consider, briefly, a couple of ideas that have been suggested, or tried in practice. Namely the Biblical Sabbath year, Zakaat in Islam, and basic income (or citizen endowment), as well as communism (or the ethic: "to each according to need, and from each according to ability"). Which I discuss towards the end of my talk.



Businesses, I contend, make more money by stimulating over-consumption, (consumption to excess) and waste. And this is, perhaps, the worst of the "perverse incentives" in market economies - and has dire consequences in un-costed externalities.

Which, being the things that markets do not take into account, are a big problem. And are seen in things like the probable extinction of 20% of plant species<sup>1</sup>, and 1 in 3 EU freshwater fish threatened<sup>2</sup>, with mercury<sup>3</sup> levels in seafood projected to increase by a further 50%, and sufficient plastic waste to cover all land on the planet in cling film<sup>4</sup>. As well as having raised the planetary temperature by 1.35° degrees Celsius, in a generation<sup>5</sup> [SLIDE].

And there is huge incentive for companies to game preferences so as to maximise revenue. We see this in ...

1, sales of fattening/addictive (overweight / obese adults are 62% in UK. + tobacco & alcohol)

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<sup>1</sup> [@guardianeco: One in five of world's plant species at risk of extinction \(quoting RBGK\)](https://stateoftheworldsplants.com)

<sup>2</sup> <http://www.iucn.org/content/sink-or-swim-over-one-three-freshwater-fish-species-europe-threatened-extinction> [viewed 2016-06-22]

<sup>3</sup> Sunderland, E. M., & Selin, N. E. (2013). Future trends in environmental mercury concentrations: implications for prevention strategies. *Environmental Health*. 12, 2. <http://doi.org/10.1186/1476-069X-12-2>

<sup>4</sup> Eriksen M, Lebreton LCM, Carson HS, Thiel M, Moore CJ, Borerro JC, et al. (2014). Plastic Pollution in the World's Oceans: More than 5 Trillion Plastic Pieces Weighing over 250,000 Tons Afloat at Sea. *PLoS ONE* 9(12): e111913. doi:10.1371/journal.pone.0111913

<sup>5</sup> <http://earthobservatory.nasa.gov/IOTD/view.php?id=87691> [viewed 2016-06-22]

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2, in my own work in fertilizers efficiencies (where we see that farmers maximise yields/ instead of applying variable inputs until the marginal profit is zero/ which show up as losses of 70-90 pence in the last GBP<sup>6</sup> | and leads to greater than >73% of nutrients wasted/not reaching the consumer and lost, to the atmosphere or ground and surface waters)  
3, in cars (there are over 30 major manufacturers / 100's of different models - which really only last 10years - and don't even have interchangeable parts. + size/weight/capabilities & mayhem)

So, while some of the most significant nations consume 17 kilograms of oil equivalent (from fossil fuels) per person per day, world fossil energy production on amounts to only 4.3 kg oil equivalent/person/day<sup>7</sup>. And Sri Lanka (that has admirable longevity statistics) consumes only 1.4 kg/person/day<sup>8</sup>. [Scheduled Flights Graphic]

Facing limits, like those I've mentioned, growth in use of resources cannot continue. And there is crying need also for social goods.

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<sup>6</sup> Reader, M.A., Revoredo Giha, C., Lawrence, R.J., Lang, B.G.A. & Hodge, I.D. (2015). Loss-Making Marginal Spending on Crop Variable Inputs. 89th Annual Conference of the Agricultural Economics Society, 13-15th April 2015, University of Warwick, UK.

<sup>7</sup> BP Statistical Review of World Energy 2015 [viewed 2016-03]

<sup>8</sup> World Bank. (2014). The Little Green Data Book 2014. Washington, DC: World Bank. doi:10.1596/978-1-4648-0175-4

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Which are a domain where the market performs relatively ineffectively. Although these are partly provided through state assistance and charity - to the needy or unproductive (those who through lack of resources or lack of capability cannot be productive) - through deficit financing, that depends on growth.

A further problem is that, as virtually any economic modeler will tell you, unconstrained markets tend to run to one producer : one consumer distributions of income and wealth. Which we see in the game Monopoly. But, of course this is stretching things a bit as lifespans are relatively short. For which in the bible there is listed, as an obligation, Sabbath years - when debts are forgiven and land redistributed (mentioned in Deuteronomy, Nehemiah, Leviticus, Maccabees). But this erodes the incentive to save for bad times - and so will reduce wealth creation.

And in Islam there is Zakaat - the duty to give 3 percent of WEALTH to the needy each year (mentioned in numerous places in the Qur'an, for example Sura's 2:83 and 21:73). Which may leave grinding poverty, among the masses, as was formerly seen in the economies of ?for example, Indonesia? As well as Buddhist monasticism.

To talk on the other major alternative system that has been tried: namely the Christian Base Communities, Kibbutzim, and Communist Collectives that all had, I believe, problems of incentives and supervision. (The faking of targets

and what one might describe as "sloping off for tea"). So there were better performing systems - using family rights and ties (or incentives) - in other words "social trust".

Corporation's get around these family ties and biases - very successfully, - through high salaries and status - which depend on the existence of significant inequality, and elites.

The market, though, provides a clear measure of consumption and production - although by definition no measure at all of waste and externalities - with its cruel limit on spending (only the money you have) and rights to income earned. Think of the rich 1% with 23% of UK wealth, and the 3.5% of global GDP sitting in cash with corporations.

Thus the market gets around the problem the problem of incentives and motivation. Until growth (with serious externalities) consumes the ecosystem, and the consumption levels and iniquities become too extreme.

However, in the rich countries of the economic North, a very large part of the economy is devoted to exploiting our instincts or rationalisations (which economists term "preferences") - at huge cost - and for little benefit [Tim Jackson. Happ/GDP. SLIDE].

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Thus, manufacturers rely on sex and status to sell alcohol (from which, incidentally, retailers extract a large portion of their profits), and cars that weigh tonnes. For example a Fiat 500 weighs 850 kg, and a Dodge RAM [SLIDE] over 2.5 tonnes - to transport humans weighing perhaps 75 kilograms - at speeds at which they can barely control the vehicle. The "plumage" in other species [picture of an Attenborough bird. SLIDE].

So vices and armaments consistently return more profit - than meeting human needs - look at the size of the drink stop in any supermarket. Or at least, this has been the experience, of that part of my pension that is invested in "ethical funds".

Hence we see the 1.3 million killed (WHO) and 50 million seriously injured (IntlFed d'Autom) in traffic every year - the leading cause of death globally for 15-29 (WHO/CDC).

The result of these imperfections, from market allocation, as greens correctly identify, is staggering waste. Thus the UK-WRAP document 20% of food wasted after reaching the home / the gross leaking of nutrients / and in energy the huge consumption in many countries, for no apparent benefit - and the millions of tiny vehicles. And pollution - with consequent climate change

[GlobalWarmingPotential\_SLIDE]<sup>9</sup>. As well as gross inequality, with widespread deprivation.

So - while annual world steel production is over 217 kilograms per person - 1.1 billion lack electricity. And 2.9 billion cook on wood or dung (in the way that is unchanged since the time of Christ).

But, we have moved on from the world of Von Thünen and the Edwardian mercantilists - still having frontiers/unexplored lands - to today's world of limits - everybody known and listed, and omni-data - with human impacts on ecosystems - the finite element world.

So I feel we should ask - if there is not some way to reward virtue - "being good", however you define it? Instead of just the limited perspective of the market - which really rewards only "being productive" and "being frugal"? There are other virtues [list of virtues Figure 1]<sup>10</sup> - beyond productivity/frugality - for example responsibility and stewardship - which are part of what the Christian Ethic nurtures and delivers. Also caring, nurturing, conserving. AND teaching, communicating and leading - doing active good - as participating citizens.

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<http://www.metoffice.gov.uk/hadobs/hadcrut3/diagnostics/comparison.html>

<sup>10</sup> [https://www.cwu.edu/~warren/Unit1/aristotles\\_virtues\\_and\\_vices.htm](https://www.cwu.edu/~warren/Unit1/aristotles_virtues_and_vices.htm)

Figure 1.

## List of virtues

<b>Cardinal Virtues</b>	<b>Aristotelian Virtues</b>	<b>Catholic Catechism</b>
Prudence	Courage	Prudence
Justice	Friendliness	Justice
Temperance	Liberality	Temperance
Courage	Magnanimity	Courage
	Magnificence	
<b>Theological Virtues (Paul of</b>	Modesty	
Faith	Patience/Good temper	Faith
Hope	Proper ambition/pride	Hope
Charity (ie Love)	Righteous indignation	Charity (ie Love)
	Temperance	
	Truthfulness	
	Wittiness	

And there is crying need for also social enterprise & what we economists term "public goods" (that, without intervention, markets will not deliver).

But supplying public goods or meeting social needs is almost never significantly rewarded, except through positive action by the state, or charity (which can be important<sup>11</sup>). Corporations work for profit and, by definition, there is no profit in public goods - without intervention and planning - and little in meeting social needs.

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<sup>11</sup> if charity in rich countries were equivalent to the UK - and efficient - it might double the income of the 800 million (IFAD) hungry people (£183/capita/year (CAF-&-UN))

Also we can't pay for things that don't happen (the NULL's) - eg not taking a narcotic, or an avoided car crash, or not pouring the waste pesticide into a river. The goods, that we can pay for, have to be some positive (non-null) thing. Although, to some extent, we get around this through provision, to the enlightened, of for example a positive good or service, like a fine education, or an extra safety feature. But humans are, as is well documented by Tversky, Kahneman, Lowenstein and earlier workers, myopic, with biased preferences<sup>12</sup>.

So retirement savings by the young are almost negligible (I think). And, the aging society can only consume current and recent production (I am certain) - you cannot eat tomorrows harvest today. Hence, around the world, most pensions are, it is my impression, paid through current contributions. And, even if savings were adequate, what happens if there is structural change and yields fall indefinitely? Or if there is real de-leveraging?

Citizen Endowments (or the grant of a huge lump sum at majority (voting age)) and Basic Income (where instead of welfare everyone receives the same monthly payment). However these do not increase the size of the pie (ie don't create extra wealth); and have serious tax implications if the safety net and redistribution is to be adequate; so

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<sup>12</sup> Kahneman, D. and Tversky, A. (2000). Choices, Values, and Frames. Cambridge University Press

our current redistribution is seen as fairer; and also who would say it is sensible to grant cash to the likes of Bill Gates and Warren Buffet. But, it is worth noting that, in farming production continues, although farmers get the CAP, and they could in theory choose slipper-farming instead (not producing anything)?

Degrowth<sup>13,14</sup> - or the cessation of the deficit/growth financing model, for the state - has also been suggested. However it is likely to lead to de-leveraging and a depression<sup>15</sup> (crash). And it is also, like the growth model, highly unstable.

- Democracy/Perceptions are another real problem - especially with the UK exit from the European Union this week. For example ONS+reality often conflict with perceptions. Thus according to (Market and Opinion Research International) MORI the British think migrants are 25% of the population, but actually they are half that portion, being 13%<sup>16</sup>. And may perceive that the country is "going to the dogs" when actually it's never been

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<sup>13</sup> Kallis, G., Kerschner, C., Martinez-Alier, J. (2012). The Economics of Degrowth. *Ecological Economics*. 84(1):172-80

<sup>14</sup> Jackson, T. (2011). *Prosperity without Growth: Economics for a Finite Planet*. Routledge

<sup>15</sup> Tokic, D. (2012). The Economic and Financial Dimensions of Degrowth. *Ecological Economics*. 84(1):49-56

<sup>16</sup> [www.ipsos-mori.com/researchpublications/researcharchive/3664/Perils-of-Perception-2015.aspx](http://www.ipsos-mori.com/researchpublications/researcharchive/3664/Perils-of-Perception-2015.aspx)

better - as we see in the Genuine Progress Indicator  
(Tim Jackson GenuineProgressIndicator [SLIDE]<sup>17</sup>)

Also we face "Evil agents" and "Chaotic systems"

So "Is it not time for us to find a better way to  
allocate - the resources and the money?". Surely,  
we can do better.

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NOTES

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I suppose that I try to say:

- some reasons why we might need a better allocation system
  - a few thoughts on what people have suggested might be possible
  - and finally some reflections on the world (in which we might hope to grow a better allocation/incentive system)
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<sup>17</sup> Kubiszewski, I., Costanza, R., Franco, C., Lawn, P., Talberth, J., Jackson, T., Aylmer, C. (2013). Beyond GDP: Measuring and achieving global genuine progress. *Ecological Economics*. 93:57-68, <http://dx.doi.org/10.1016/j.ecolecon.2013.04.019>.