

# Towards a Just and Sustainable Global Economy?

Discussion paper for 3 and 4 November conversations

## FOREWORD

- The starting point for this project is a paradox: the more we succeed on development, the more we fail on sustainability (just look at ‘developed’ economies, or China’s per capita emissions). So our overarching question is: what it would look like to move to an economy that was both just and sustainable?
- Ahead of the two conversations we plan to run in early November, this background note aims to set out some of our initial thinking as an aid to discussion – starting with some data and observations, and then setting out some propositions and assumptions that we’d like to test in discussion.
- At those conversations, we are especially interested in exploring three key questions in particular:
  1. What do participants think about the two options of (a) five shifts and (b) fair shares set out in the second part of this paper?
  2. What might be other examples of similarly transformative shifts towards a just and sustainable economy?
  3. If we imagine a future in which we successfully transition to a just and sustainable economy, what are the key drivers of change likely to have been?



## PART 1: THE GREAT PROBLEM

### Recent decades have seen unprecedented progress on development...

- **The world achieved MDG1, halving income poverty by 2015, around seven years early.** Between 1988 and 2008, the global poverty rate fell from 44% to 23%.<sup>1</sup> People lifted themselves out of poverty after 2000 at a faster rate than ever before.
- **This was primarily due to changes in emerging economies.** The biggest winners from globalisation, measured by changes in income over time, have been the ‘middle third’ of the world’s people. Between 1988 and 2008, people between the 50<sup>th</sup> and 60<sup>th</sup> centiles of global income – a bracket that includes 200m Chinese, 90m Indians, and 30m each from Indonesia and Brazil – saw their real terms incomes rise by 80%. But the bottom third of people also made significant gains, with their real terms incomes rising between 40% and 70% over the same period.<sup>2</sup>
- By contrast, people between the 75<sup>th</sup> and 85<sup>th</sup> centiles – **the ‘squeezed middle’ in developed countries**, plus much of Latin America and former Communist countries – saw their real terms incomes stagnate, or even decline, over these two decades.<sup>3</sup> Even so, on average their per capita incomes still remain *much* higher than those of people in developing countries: for all its growth, China’s per capita GDP is still only \$6,091 (and Ethiopia’s, just \$498), compared to \$38,514 in the UK and \$49,965 in the US.
- Overall, World Bank inequality guru Branko Milanovic calls these changes “**probably the profoundest reshuffle of people’s economic positions since the Industrial Revolution ...** for the first time in almost two hundred years – after a long period during which global inequality rose and then reached a very high plateau – it may be setting onto a downward path.”<sup>4</sup> So what’s the problem?

### ...but the more we succeed on development, the more we fail on sustainability...

- First and most fundamentally, the fact that the **economic successes of recent decades have hugely increased the speed with which the global economy is approaching (and in some cases overshooting) planetary boundaries.**<sup>5</sup> Among them:
  - **Climate.** Global emissions have risen by 46% over the two decades since the UN Climate Convention was signed.<sup>6</sup> Far from being on course for 2 degrees, we’re on track for a 3.6-5.3° C long term temperature rise.<sup>7</sup> Arctic sea ice loss reached a new record in 2012, and now covers only half the area of the late 1970s. Recent findings suggest we’re on course for the unstoppable and irreversible loss of the West Antarctic Ice Sheet, and we may well also lose the Greenland Ice Sheet. Methane hydrates are now being released from the sea bed. All of these are examples of ‘positive feedbacks’, whereby impacts of

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climate change become causes of more climate change – at worst, implying the potential for runaway chain reactions.

- **Biodiversity.** New figures from ZSL and WWF suggest we've lost 50% of Earth's wildlife over the past 40 years.<sup>8</sup> The current rate of species loss is estimated at between 50 and 500 times above the natural background level.<sup>9</sup> Earth is already experiencing its highest rate of extinction in 65 million years, faces the potential loss of 75% of species in the next 250-500 years, and is now undergoing the sixth mass extinction event in its history – but the first to be caused by a single species.<sup>10</sup>
- **Freshwater** withdrawals grew from 579 cubic metres in 1900 to 3,973km<sup>3</sup> in 2000, and are projected to reach 5,235km<sup>3</sup> by 2025.<sup>11</sup> The Colorado river now rarely reaches the Gulf of California. China's Yellow River often runs dry before making it to the Pacific. The Indus no longer flows into the ocean at the port of Karachi. Less than a fifth of the Rio Grande's historical flow now makes it to the Atlantic. The Aral Sea, once one of the four largest lakes in the world, no longer exists. 1.2 billion people live in basins where human water use exceeds sustainable limits; by 2025, this will rise to 1.8 billion, with up to two thirds of the world's people living in water stressed conditions.<sup>12</sup>
- **Land** is becoming a scarcer resource as population grows and demand rises for acreage to produce food, feed, fibre, and fuel, and for cities, carbon sequestration, and conservation. The global total of arable land per person has halved since 1960, from 0.39 to 0.21 hectares per capita<sup>13</sup>, even despite massive deforestation (which still stands at 5.2 million hectares a year).<sup>14</sup> Prices for farmland rose by up to 1,800% between 2000 and 2012.<sup>15</sup>
- **Oceans.** 85% of global fish stocks are either overexploited, depleted, fully exploited, or recovering, and by 2048 total global fish catch could be one tenth of its peak.<sup>16</sup> Nitrogen run-off has led to massive coastal 'dead zones'. Ocean acidification is accelerating rapidly due to CO<sub>2</sub> emissions, with a 30% increase in ocean acidity between 1751 and 1994.<sup>17</sup>
- **Oil depletion.** The International Energy Agency has suggested that global production of conventional oil peaked in 2006.<sup>18</sup> While new finds of unconventional oil (e.g. tar sands and oil shales) continue to come on stream, these fields are much harder to reach, and need much more energy to be expended on extracting fuels from them. As a result, ratios of energy returned on energy invested (EROEI) are dwindling. In the 1930s, oil discoveries often had EROEIs of 100:1; by the 1970s, this was down to about 30:1; today, new finds are only around 8:1.<sup>19</sup>
- **Falling energy surplus more broadly.** The trend of declining energy surplus is not limited to oil. Solar power has an EROEI of only around 7:1; natural gas from fracking, around 5:1; corn-based ethanol only just breaks even, at 1.3:1.<sup>20</sup> Most important is the EROEI of the economy as a whole, which some estimates suggest fell from 40:1 in 1990 to 20:1 by 2010, and could fall to 5:1 by 2020.<sup>21</sup> As energy costs increase across the board, so the

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consumer lifestyle enabled by easy energy will become less and less feasible without major breakthroughs on energy technology or hugely increased uptake of energy efficiency measures.

- o **Food.** One of the key areas (maybe *the* most important) where these trends will converge. With the yield gains of the Green Revolution running out of steam in recent years, food production has once again become reliant on increasing acreage to meet growing demand – at a point when competition for land is intensifying hugely. With agriculture accounting for 70% of human freshwater use, it is more exposed to water scarcity than any other sector. Ocean food chains are at serious risk from ocean acidification and warming. Climate change is already reducing crop yields in low latitudes. More expensive fossil fuels will mean more expensive food because of how much we rely on them for fertiliser, on-farm energy use from tractors to water pumps, processing and transporting food, and so on.
- The idea of planetary boundaries – quantifiable limits to the sustainable use of various key renewable and non-renewable resources – is one of the most important sustainable development concepts in 25 years, above all because it allows us to start defining the **safe operating space for the global economy**.<sup>22</sup>
- It also highlights one of the key points about 21<sup>st</sup> century environmental stresses – that far from implying gradual, linear shifts that we can gently adapt to over time, **the kinds of changes we're risking will be abrupt, irreversible, catastrophic shifts** as tipping points are passed.
- At the same time, while the concept of planetary boundaries is based on recognising and quantifying natural resource limits, **the concept avoids abstract arguments about 'limits to growth'** – which don't make economic sense anyway (e.g. there are no limits to knowledge capital). As Owen Barder and Alex Evans observed in a recent paper, increasing resource scarcity does *not* put us inevitably on course for some dire Malthusian dystopia.<sup>23</sup>  
**Technology could enable a post-scarcity age within a few decades.**
- **But that will only happen under radically different economic policies (above all making prices for goods and services tell the truth about environmental impacts) which most countries are currently avoiding.** Policymakers' underlying assumption here is that policies designed to make people consume less would be political suicide, as they assume (probably rightly, for the most part) that their publics regard consumption and wellbeing as one and the same.

**...which raises hugely difficult distributive questions about fair shares...**

- **The longer we postpone the shift to a sustainable global economy, the worse it will be for the people who rely most on natural resources and environmental commons: the world's poor.** They are most exposed to extreme weather, to food price spikes (two in just the last

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six years), to agricultural land grabs (an estimated 80m hectares since 2000<sup>24</sup>), and to dysfunctional or non-existent urban infrastructures; and they also have least capacity to adapt to the changes we will encounter in coming decades. So the sustainability (or otherwise) of global consumption patterns is very much a core development issue.

- At the same time, for all the talk about how quickly emerging economies are growing, **it's still consumers in developed countries who consume most per capita – by far.**
  - **CO<sub>2</sub>:** in 2013, the average American emitted 16.4 tonnes of carbon dioxide – more than twice as much as the average person from China (7.2 tonnes) or Europe (6.8 tonnes), over ten times the emissions of the average Indian (1.9 tonnes), and well over fifty times as much as the quarter tonne emitted by the average citizen of a least developed country.<sup>25</sup>
  - **Diet** (because diets rich in meat and dairy products are far more intensive in terms of land, grain, and water use, as well as climate impact given that 18% of global emissions are from livestock<sup>26</sup>): While it's true that diets are changing rapidly in emerging economies, Chinese per capita meat consumption is still less than half that of the US.<sup>27</sup> India, meanwhile, ranks 177<sup>th</sup> out of 177 countries for which data is available.
  - **Water:** China's per capita water use per year is 415m<sup>3</sup>, less than a third of the US's level of 1,550m<sup>3</sup>.<sup>28</sup> While this might be seen as a domestic rather than an international issue, international trade means that developed countries also import large amounts of 'embedded water' from abroad (it takes 1,300 litres to produce 1 kg of wheat, 4,100 litres to produce the 500 grams of cotton in a t-shirt, and 15,500 litres to produce 1 kg of beef).<sup>29</sup> This embedded water often comes from areas of high water stress: e.g. Saudi-owned farms in arid areas of Ethiopia are using groundwater to produce tomatoes, a massively thirsty crop, for export, with minimal benefits for local people.
  - In terms of overall '**ecological footprint**' – the land a country needs to grow its crops, graze the livestock to meet its demand for meat, supply its timber and fibre, carry its buildings and infrastructure, and soak up its greenhouse gas emissions – developed countries use 5.60 hectares per person; middle income countries (like China), 1.92 hectares; and low income countries use 1.14 hectares. The Earth's actual biocapacity is currently 1.78 hectares per person (and declining as population rises).<sup>30</sup>
- But there's also no escaping the fact that **as hundreds of millions of people in emerging economies become more affluent, the environmental impact is immense** – especially given how fast emerging economies are growing. If China's economy expands at 7% a year (the current rate is closer to 8%), that means its economy doubles in size every eleven years. So while the average Chinese person is responsible for less than half the emissions of the average American, there's also no way climate change can be solved without China.
- Meanwhile, around a billion people still live in absolute poverty, with their most basic needs unmet – enough food to eat, or clean water to drink and wash with, or electricity for cooking

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or lighting. **The world's poorest people and countries need to consume a significantly larger slice of the global resources pie than they do today.** So even as we're talking about reducing total global consumption of key resources to within sustainable levels, we need to keep aside enough space for their consumption to increase.

- While some people argue that the real problem is less about living standards in the developed world than high birth rates in developing countries, two points are worth noting. One: **contrary to popular perceptions of a 'population explosion', the rate of global population growth has slowed substantially in recent decades (it peaked in 1963).**<sup>31</sup> Far from growing faster and faster at ever more exponential rates, global population levels are actually on course to stabilize, at around 10 billion people. Two: *all* the evidence shows that the best way to stabilise population faster is through development – which can only happen if poor countries and people are able to raise their standard of living, and hence to developed countries' unsustainable per capita consumption levels.
- **So the question of fair shares of the world's 'environmental space' is unavoidable on all these fronts.** However, policymakers have to date been desperate to avoid discussing questions of environmental limits – from President Bush Sr's statement at Rio in 1992 that "the American way of life is not up for negotiation" through to the refusal of the US, China, India, Brazil, and South Africa to discuss targets and timetables at (and since) the 2009 Copenhagen summit – precisely because of the distributional issues lurking just behind. As a result, despite constant rhetorical battles over concepts like 'common but differentiated responsibilities', there is minimal debate about what this would actually mean in practice.

**... even as huge challenges still remain on poverty...**

- Finally, even if we didn't have the unsustainability of the global economy to deal with, **four other big challenges need to be addressed over the next decade in order to move to a fairer global economy.**
  1. First and most fundamentally, **1.2 billion people still live in absolute poverty on less than \$1.25 a day.** While policymakers look set to agree on a target of the total eradication of extreme poverty by 2030 as part of the new Sustainable Development Goals, getting rid of the second half of absolute poverty will be *much* harder than the first. The low hanging fruit has been picked.<sup>32</sup>

**Today's poor are much harder to reach than those lifted out of poverty in the MDG era,** and for the most part either geographically or politically marginalised. By 2030, they will be heavily concentrated in fragile states (or parts of states), usually without a working government, and at severe risk of violence or displacement. Our business as usual trajectory is a long way off course from 'getting to zero' on poverty by 2030.<sup>33</sup>

**...as well as on economic insecurity...**

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2. Second, **the escape from poverty of emerging economies' "breakout generation" remains acutely insecure.** For all the successes of the last decade and a half, this is a game of snakes and ladders, with the until-recently poor...

- ...highly vulnerable to a slowdown in emerging economy growth (which now appears to be happening);
- ...far more likely to be in insecure, informal, or low-paid jobs;
- ...heavily reliant on urban infrastructures that are creaking under the pace of demand growth;
- ...usually without access to social safety nets (only a fifth of the world enjoys access to social protection of any kind)<sup>34</sup>; and
- ...on the front line of growing resource scarcity and its effect on prices.

Meanwhile, their expectations continue to grow – in many cases, beyond what their governments can deliver. It's no coincidence that so many protest hotspots since 2011 – e.g. Turkey, Egypt, Brazil, Bulgaria, Thailand, Ukraine, Pakistan – are middle income countries.

3. Third, **economic insecurity has increased markedly in developed countries.** The trend of wage stagnation in developed countries over the past three decades is not a benign story of treading water in comfortable consumer lifestyles. While the effects of wage stagnation have been obscured by trends including the shift to two earner households, people working more than one job, increased consumer debt, and cheaper consumer goods due to emerging economy labour markets coming on stream, these have been only temporary buffers.

While the rise in insecurity is partly due to trade and offshoring, it is (according to MIT's David Autor<sup>35</sup>) even more due to automation of work; looking ahead, an Oxford University study recently suggested that 47% of today's jobs could be automated in the next two decades.<sup>36</sup> Opinion is divided about whether this would represent a temporary dislocation on the way to whole new kinds of work evolving (as with the Industrial Revolution), or whether 'this time is different' and automation of work is a new normal; in either case, there are strong arguments for addressing the economic insecurity that exists today, even if it is a transitional phenomenon.

Young people are getting the worst of the new insecurity: where the baby boomers had stable growth, jobs for life, cheap homes, final salary pensions, and well-funded state healthcare and education, the millennials and those following them face structural unemployment, student debt, far less generous pensions and benefits, unaffordable housing, and rising tax burdens and dependency ratios – as well as the debts of the financial crisis.

4. Fourth, **the ultra-rich are powering ahead.** The global top 1% - about 60m people, including the top 12% of Americans, 3% of British, Japanese, Germans, and French, and 1% of Brazilians, Russians, and South Africans – saw their incomes rise by 60% from 1988

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to 2008: not as fast as those of people on median global incomes, but a huge rise in absolute terms.<sup>37</sup>

This is also before we consider wealth inequality. 8.4% of the world's 5bn adults own 83.4% of wealth.<sup>38</sup> 32 million people, less than 1% of adults, own 41% of it.<sup>39</sup> On the other hand, the bottom 80% of people own just 6% of the world's wealth.<sup>40</sup> The richest 300 people on earth own the same as the poorest 3 billion.<sup>41</sup>

The financial crisis has had the effect of exacerbating these inequalities in what might be described as a 'reverse Jubilee': poor people were hit by the downturn and by austerity policies at the same time as asset owners benefited strongly from quantitative easing policies (40% of the gains from QE went to the richest 5% of households, according to Bank of England figures).<sup>42</sup>

- The underlying trend in most countries, both developing and developed, is an increasingly **winner-takes-all economy**. The Aspen Institute's David Bollier: "Wealth and income distribution no longer resemble a familiar 'bell curve' in which the bulk of the wealth accrues to a large middle class. Instead, the networked economy seems to be producing a 'power-curve' distribution ... A relative few players tend to excel and reap disproportionate benefits while the great mass of the population scrambles for lower-paid, lower-skilled jobs, if they can be found at all. Economic and social insecurity is widespread."<sup>43</sup>

### ...creating a serious risk of self-reinforcing zero sum dynamics.

- **Economic globalisation already appears to be entering a period of increased stress.** While the world avoided a lapse into 1930s-style tariffs after the financial crisis, G20 countries have introduced 1,500 'stealth protectionist' measures since promising not to do so in 2008, with competition through currency valuation especially important.<sup>44</sup> Trade has expanded slower than global GDP for the past 3 years – ending a thirty year trend that played a crucial role in driving growth and raising incomes in emerging economies.<sup>45</sup> Global infrastructure investment remains 20% below its pre-crisis level. Support for globalisation is waning in rich countries amid stagnant wages, high unemployment, and the 'squeezed middle'. China and Germany call for their debtors to be more responsible, but overlook their own role in creating the problem through being structural trade surplus countries.
- **Globalisation has collapsed before.** During the early Twentieth Century, the world saw another period during which money, people, and ideas were able to flow freely across borders – a situation that appeared, as Keynes noted later, "normal, certain, and permanent, except in the direction of further improvement".<sup>46</sup> Only when the First World War broke out, following the build-up of major new stresses resulting from demographic change, inequality, global economic imbalances, and technological change, did it become clear how fragile the 'first globalisation' had really been.



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- And this is before we take unsustainability and scarcity into account. **Perceptions of scarcity – that ‘there isn’t enough to go round’ – are among the most fertile breeding grounds that exist for zero sum behaviours.** Think of what happens during a run on a bank or in a panicked rush for the exits in a darkened cinema starting to fill with smoke. Resource scarcity can trigger similar dynamics between countries – as for instance with the 2008 and 2011 food spikes (when many producers imposed export bans, leading import-dependent countries to start panic buying on global markets) or, in slower motion, the trend towards land grabs that has seen 80m hectares of land tied up in such deals since 2000, or towards intensifying competition for oil and minerals in the South China Sea.
- **Climate change will massively multiply the risk of scarcity leading to zero sum dynamics – as the backdrop to Syria’s civil war shows.** From 2006 to 2011, the country was convulsed by an extreme drought. Rainfall collapsed to less than 20cm a year (the absolute minimum to sustain un-irrigated farming). Groundwater bridged the gap until water tables fell below levels that pumps could reach. In some areas, all agriculture ceased; in others, crop failures reached 75%; up to 85% of livestock died of thirst or hunger. Hundreds of thousands of farmers abandoned their land and fled to the cities. Up to 3m of Syria’s 10m rural people fell into extreme poverty. Domestic refugees had to compete with each other (and with around 350,000 refugee Palestinians and Iraqis) for food, water, and jobs. Tensions rose. Not long afterwards, the civil war began.<sup>47</sup>
- **There is a real risk that injustice, economic insecurity, and the effects of global unsustainability could combine into a vicious circle that makes it progressively harder to address their root causes** – with policymakers focusing on fire-fighting short term crises and on narrow national or sectional interests, while economic, social, or environmental shocks act as the stimulus for kneejerk reactions, scapegoating, and panic measures.
- **So what would it take to move instead to a positive sum future – one based on a just and sustainable economy?**

## PART 2: A JUST AND SUSTAINABLE ECONOMY

### What would a just and sustainable economy look like?

- Against the backdrop of the Great Problem set out in the previous part of the paper, **a just and sustainable economy might have three core features**, as follows:
  - First, it would **ensure that all people's basic needs were met** including adequate income for essentials (whether from employment or from non-labour income); healthcare and education; infrastructure such as clean water and access to energy; and a safety net for when things go wrong. (Given that economic insecurity affects people in developed, emerging, and least developed countries, this basic floor could potentially apply to *all* people, with adjustments made for national purchasing power parity.)
  - Second, it would **keep within safe planetary boundaries** – above all by making prices for goods and services *tell the truth about environmental costs*, by means of internalising environmental externalities, but also through wider changes in values and behaviour.
  - Third, it could potentially also seek to **keep inequality within defined limits**. This would be much more contentious than the two features just discussed, and would also entail big questions about both what *kind[s]* of inequality to focus on (e.g. opportunity, income, wealth, exposure to risk); at what *level* (i.e. whether global inequality or just national); and how to *measure* it (e.g. Gini coefficient vs. Palma ratio).
- So **what would it take to move to a future like this?** Any answer to this question needs to cover three bases:
  - First, the **what**: what does the solution look like? What are the most important value changes, policy shifts, behaviour changes, and other breakthroughs that need to be made at global, national, and individual level to make a just and sustainable economy real? Which policies have to be global, and which can be implemented in different ways in different countries (in line with the principle of subsidiarity)?
  - Second, the **how**: what is our 'theory of influence' about how this a shift to a just and sustainable economy would happen in practice, what is the political context within which these changes need to happen, and who would drive the change? And how can policymaking systems learn faster so as to deal with uncertainty and complexity?
  - Third, and relatedly, the **why**: given how little progress has been made on sustainability in particular over recent decades, what are the stories and framings that can animate large-scale changes in values, behaviour, and policy?

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- The remainder of this paper focuses primarily on the first of these, but we are interested in all three and intend to address all of them in the course of the project. In the sections below, we look at two alternative kinds of transition that might help to take us to a just and sustainable economy.
  - The first aims to pursue each of the three core features of a just and sustainable economy (meets basic needs, keeps within planetary boundaries, inequality within defined limits) separately – through mobilising around a small number of transformative systemic shifts, in both the policy context and in lifestyles, values, and behaviour.
  - The second, by contrast, looks for ways of pursuing all three features *synergistically* through policies that are coherent and mutually reinforcing on all three fronts. As an example of this kind of approach, the paper explores the idea of fair shares of environmental assets and other forms of unearned wealth, an idea set out as early as 1797 by Tom Paine.
- While we see these two approaches as qualitatively different from one another, we don't necessarily see them as mutually exclusive – and we would very much welcome participants' thoughts on their respective effectiveness, their resonance in communication terms and as campaigning objectives, and their political feasibility.

### ***Option 1: Movement Building around 5 Systemic Shifts***

- One way of moving towards a just and sustainable economy would be to consider each of the three core features of such an economy in turn, and identify systemic shifts that can occur at both policy and lifestyle level in order to deliver the change required.

### **Ensuring that all people's basic needs are met...**

- **As we have already seen, the world is doing some things right in the fight against poverty.** Over the past two centuries we have moved from a world where virtually all were poor, with bad health, little education, working off the land in rural communities to one where growing numbers have emerged from extreme poverty, live longer, healthier, better educated, and more urban lives.
- **It therefore follows that fighting poverty is to some extent about identifying what is working, and doing these things faster and more universally.** At a headline level, the two things that have worked most effectively appear to be:

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- a) **creating the right enabling environment for human ingenuity and private enterprise to flourish** - allowing businesses to start and grow, and a strong domestic economy to develop; and
  - b) **taxing a proportion of the wealth generated and using it to ensure that all share in this prosperity, by funding a safety net for the poorest and provision of essential services like healthcare and education.**
- The caveat to this line of argument is that **it is also important to consider whether there is an adverse selection problem: are the characteristics of those still remaining in poverty the same as those who have just escaped, such that they can be reached through 'more of the same'**. For example, does the fact that many live in fragile states or marginalised communities demand a fresh approach?
  - **Similarly, we need to consider whether recent changes in the way the global economy works have affected development opportunities for the poorest states.** For example, has the IT and automation revolution of the last ten years rendered the export-led industrialisation strategy pursued by China and others less viable for other countries?
  - **In principle however, it would appear that neither of these two objections necessarily nullifies the need for good enabling environments or safety nets, *although they could potentially alter the way in which these two aims should be achieved.*** The emphasis could therefore be finding innovative ways of, for example, shaping and harnessing globalisation, managing the financial sector, and structuring institutions (in Douglass North's sense of being "the rules of the game in a society, or more formally, the humanly devised constraints that shape human interaction"<sup>48</sup>) to deliver on these two objectives.

## **Keeping within safe planetary boundaries...**

- Dealing with the 'what' for planetary boundaries potentially requires a more transformative approach, because - unlike poverty - **we are currently moving in the wrong direction. It is worth pausing to reflect on why this is.** Arguably, it can be traced to a combined problem of ignorance and injustice:
  - **At first humanity didn't realise there were problems, and by the time we did, many of us had a lot to lose in addressing them.** The process of industrialisation and development began approximately 200 years ago, but only in the last thirty or forty years have we become truly aware of the environmental catastrophe we are creating for ourselves. By this point, the massive disruption and inconvenience to nations, communities and individuals who had come to expect a 'modern lifestyle' had become hard to contemplate.
  - **The majority of human beings appear to make decisions based on their own short-term perceived self-interest.** The private sector won't act at scale because it will

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undermine next quarter's profits. Governments won't act at scale because it will risk their chances of re-election at the next election, or trigger popular discontent they don't need in more autocratic contexts. Finally the public won't act if doing the right thing is expensive or inconvenient. In this sense, the disappointing record of climate negotiations and other environmental legislation may be less an indication that governance structures are broken than an indication of those structures working perfectly well to deliver what's being asked of them (or at least, by those with most voice): little change.

- **This analysis speaks to the 'how' part of the solution, as well as the 'what', by implying that a grassroots movement is required to build momentum for change.**
  - To be sure, individuals pursuing alternative lifestyles and companies pursuing alternative business models have the potential to show that there are viable alternatives to the status quo. But **the 'survival of the fittest' dynamic of global markets, together with the fact that environmental costs are not currently reflected in price signals, means that legislation is ultimately required to bring widespread changes to business practice.** Otherwise businesses which choose voluntarily to embrace more stringent environmental constraints will not survive in the long-run. And this legislative change will only happen when a large enough proportion of the population back the systemic shifts required.
  - **This dynamic starts with a change in values.** Demands for protection for individual freedoms, ending the slave trade, greater democracy, freedom of the press, prohibiting the sending of children 'down the mines', equal pay for women, ending racial discrimination and so on all progressed in a similar way. Over time the public mood and concept of what was fair and right shifted to the extent that these demands became unstoppable and governments responded by legislating. Where these changes had far-reaching effects on the economy, private sector actors in turn responded by adapting and innovating to find new equally or often more profitable solutions under the new legislation.
- So if we want to help grow a long-term movement as well as provide more immediate policy options, then our description of the **'what'** needs to:
  - speak to values and lifestyles as well as policy;
  - offer a positive, compelling, concise vision of an alternative future that people can be inspired to vote and advocate 'for';
  - recognise that generational change is required - we can't get there with quick fixes; and
  - be relevant in the Global South as well as the North.

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- Two shifts stand out as especially significant in encapsulating the environmental changes we need:
  - a) **changing the way we generate and use energy:** the era of plentiful, cheap energy is drawing to a close, even before climate change is taken into account, and all the more so once it's factored in to the equation. So we need a revolution in the way that we think about, use and generate energy, centred above all on using less and generating power through renewables.
  - b) **changing the way we extract and use natural resources:** the era of ever-cheaper natural resources ended around the year 2000, and this has shone the spotlight on our linear economic model. We make a product - a mobile phone, say; we use it; and when it breaks or there's a newer/better model available, we throw it away. This means that all of the materials used to make that phone are lost to landfill, and the next phone is made from new materials, with more greenhouse gases released in the process as a result. **A circular economy** would address these issues, with products designed for continued use, easy repair, and ready reusability of materials. This is how nature itself works: there is no waste, instead when an organism reaches the end of its life, it provides food for another part of the system.
- **How might these shifts be operationalised?** This is partly about getting price signals right, but it is also about what we regard as morally legitimate behaviours. Most previous activity in these areas has focused on establishing allowable levels of pollution or resource use. This may make sense from a particular economic perspective. However, it potentially makes less sense from a scientific, moral, campaigning and even political perspective.
- **Previously successful campaigns have focused on banning harmful practices or activities.** This is a simple moral message: "this activity hurts and even kills people, and therefore shouldn't be allowed." This concept is much easier to rally around than the more complex message "a certain amount of this negative activity is acceptable, but not too much, and we aren't very certain exactly how much". A campaign for better conditions on slave ships might well have been more immediately politically appealing, but would have been less morally clear and harder to mobilise around than simply banning the slave trade. Furthermore even on environmental issues we have seen wins in similar terms - such as banning the use of certain CFCs or prohibiting harmful activity in certain geographical areas.
- **The implication is that we should be looking at legislation that prohibits activity** (even if this is over a long time horizon). This could lead to certain activities becoming socially unacceptable more quickly, and is a different starting point to an approach based instead on targets and timetables for GHG emissions, green taxes, costing in externalities, cap and trade and so on. These more immediately politically feasible options could still be used as intermediate steps in the right direction, but it needs to be clear what the ultimate, morally unambiguous destination is.

## Keeping inequality within defined limits...

- The third ‘feature’ of a just and sustainable economy is the most contentious. However, there is a strong and growing body of evidence which shows that **inequality of outcomes is irrevocably linked to future inequality of opportunity** (the power enjoyed by the rich allows them to tilt the playing field in their own and their children’s favour). This means that **helping those who remain in poverty means addressing the power imbalances caused by inequalities in income and wealth**. Indeed, evidence shows that high levels of inequality reduce both economic growth and poverty reduction.
- **Furthermore, high levels of inequality have been linked with other forms of social breakdown.** The OECD reports that income inequality threatens political stability and erodes social cohesion, as well as curbing economic growth<sup>49</sup>. Wilkinson and Pickett argue that there are high costs of inequality to society including deteriorating social relations, higher risk of mental illness, and higher teenage birth rates<sup>50</sup>.
- Finally, the analysis provided by Piketty and others shows that **inequality is not subject to ‘mean reversion’: unless checked, it is likely to spiral out of control.**
- The perils of high levels of inequality have arguably entered the public consciousness even more recently than the need to live within planetary boundaries. This means that addressing this area is also as much about changing social norms and values - for example, ideas about opportunity, whether and when wealth is ‘deserved’, and so on - as it is about changing policy.

## A package of shifts to address the ‘Great Problem’

- In sum, one approach towards the shift to a just and sustainable global economy could centre on a package of changes in values, policies, and lifestyles, which is at once simple, comprehensive, attractive, and applicable to both the Global North and South. It might look something like this:

Shift [ <i>and values change</i> ]	Illustrative policy asks	Illustrative lifestyle changes
<p><b>1. Energy:</b> Using less and generating it through renewables</p> <p><i>[Value changes: fossil fuels morally unacceptable; energy is no longer seen as virtually cost-free, but as a valuable, expensive resource]</i></p>	<ul style="list-style-type: none"> <li>• Ultimate aim: prohibit the use of fossil fuels in mainstream energy production or transport (unless GHG free).</li> <li>• Intermediate aims: ban the most egregious practices such as coal-power, the most polluting vehicles, and the most energy hungry products (e.g. the recent ban on incandescent light bulbs);</li> <li>• Establish an ‘efficiency standards ratchet’, which repeatedly takes the highest efficiency standard currently exhibited by any product in the market, and after an agreed time lag, makes that the new minimum standard.</li> </ul>	<ul style="list-style-type: none"> <li>• Only use electricity from green energy sources at home (and long-term - in transport);</li> <li>• Divest pension from fossil fuels;</li> <li>• Drastically improve energy efficiency in the home</li> </ul>
<p><b>2. Circular economy</b></p> <p><i>[Waste = resource]</i></p>	<ul style="list-style-type: none"> <li>• Ultimate aim: curtail extraction of non-renewables from ecosphere; eliminate waste; manage renewable resources on circular principles.</li> <li>• Intermediate aims: support development of circular supply chains via changes to tariffs and other taxes; support product designs that facilitate remanufacture and full recycling; ban most egregious polluting activities;</li> <li>• Prohibit expansion of certain activities (e.g. deforestation, fishing) in certain areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce waste from your home, aim for 100% recycling.</li> <li>• Only buy products that are from sustainable sources.</li> <li>• Engage with the sharing economy.</li> <li>• Reduce the resource footprint of your consumption, for example by switching from ‘stuff’ to experiences/ services/knowledge.</li> </ul>



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<p><b>3. Creating enabling environments for ingenuity to flourish</b></p> <p><i>[Poverty and insecurity in other parts of the world are a shared, global problem].</i></p>	<ul style="list-style-type: none"> <li>● Stability and the rule of law (inc. property rights);</li> <li>● create markets; reduce bureaucracy; support start-ups; build infrastructure; ensure access to financial services;</li> <li>● <i>Key Q: how to approach issues around marginalisation and fragile states?</i></li> </ul>	<ul style="list-style-type: none"> <li>● Pay no bribes;</li> <li>● Purchase goods from pro-poor businesses</li> </ul>
<p><b>4. Safety nets for poorest</b></p> <p><i>[Society has a responsibility to the poor and vulnerable]</i></p>	<ul style="list-style-type: none"> <li>● Government provided healthcare and education; cash transfers; etc.</li> <li>● <i>Key Q: How to raise revenue in a globalised world? Land taxes, consumption taxes, financial sector taxes?</i></li> </ul>	<ul style="list-style-type: none"> <li>● Pay taxes (no avoidance or evasion);</li> <li>● care/advocate for vulnerable in your community/family;</li> <li>● advocate for raising aid spending as means of providing safety nets for the poorest globally</li> </ul>
<p><b>5. A more equal society:</b></p> <p><i>[Extreme inequality is not consistent with a 'fair' society]</i></p>	<ul style="list-style-type: none"> <li>● Greater employee ownership; greater wealth and income taxation; set target relationship between minimum and maximum wages in all institutions; etc.</li> </ul>	<ul style="list-style-type: none"> <li>● Generosity: give away all the money you don't need/above a certain level, or donate at least 10% of income to charity</li> <li>● Social entrepreneurship and philanthropy investment.</li> </ul>

- Shifts one and two safeguard the environmental upper limit. Shifts three and four provide the poverty alleviation which guarantees the inner social floor. Shift five ensures a fairer distribution of wealth within the outer and inner limits. Shifts three and four go further and faster on the principles we know have been the underlying drivers for reducing poverty in the past. Shifts one and two adjusts those processes to become environmentally sustainable.

## ***Option 2: A cross-cutting approach based on pursuing all three objectives synergistically***

- **An alternative (or perhaps complementary) approach might be to look for ways of approaching at least the first two features of a just and sustainable economy, i.e. meeting basic needs and keeping within planetary boundaries (as well as the third on keeping inequality within limits, if possible) synergistically** through policies that were coherent and mutually reinforcing.
- In this final section of the paper, we look at one example of what this kind of synergistic approach might look like – which starts from **regarding natural resources and environmental assets were regarded as a different kind of wealth from other forms of capital.**
  - This was in fact the case before the neoclassical revolution in economics. In classical economics, there were three factors of production: capital, labour, and land (which was a proxy for the totality of natural resources). Around a century ago, though, during the shift from classical to neoclassical, economists expurgated land as a separate factor of production.
  - With this shift was lost a distinction between earned and unearned wealth. Tom Paine wrote in 1797 that, **“There are two kinds of property. First, natural property, or that which comes to us from the Creator of the universe – such as the earth, air and water. Secondly, artificial or acquired property – the invention of men.”**<sup>51</sup> More recently, Martin Wolf observed that, “there would be no economy — indeed no humanity — without a constant inflow of natural resources into the system: what lies above our heads (the sun and the atmosphere), what lies close to us (the soil, the seas and location itself) and what lies beneath us (fossil fuels, metals and minerals and heat). **Humanity does not make these things; it exploits them. Some of these resources are also appropriable and so a source of unearned personal wealth.**”<sup>52</sup>
- Income from the ownership and use rights of natural resources falls into Adam Smith’s category of *rent* (as distinct from his other two categories of revenue, profit and wage). The defining feature of rent is to increase the recipient’s share of wealth without new wealth being created in the process. John Kay: **“When the appropriation of the wealth of others is illegal, it is called theft or fraud. When it is legal, economists call it rent-seeking.”**<sup>53</sup>
- **While these ideas are not new, what is new in recent years is how much environmental and natural resource limits have come back on to the economic agenda.** Martin Wolf again: “Resource scarcity is an increasingly pressing issue ... The idea that diminishing returns will become a more significant factor in the next century than in the past two seems to me to be compelling, now that modern economic growth has spread across the globe. So we need to return to economic models that incorporate resources, as a matter of course.”<sup>54</sup>

- **This is first and foremost about values.** Should natural, unearned capital be treated differently to man-made capital?

## 5 principles for fair shares of common wealth

- How might these ideas be operationalised in the 21<sup>st</sup> century as a means of helping create a just and sustainable economy? **These 5 principles might be a starting point:**

1. **Natural resources and environmental assets are common wealth: an unearned, shared inheritance that belongs to everyone, equally.** This is equally true of:

- Renewable natural resources (e.g. water, fisheries, rainforests, and waste sinks including the atmosphere and the oceans);
- Non-renewable natural resources (e.g. oil, minerals, land); and
- Other forms of commons where rents can be appropriated (e.g. rights to the electromagnetic spectrum for phone networks).

2. **The size of ‘everyone’ will vary depending on the resource in question.** Some resources (e.g. the atmosphere) belong to all 7 billion of the world’s inhabitants; others to citizens of a given country (e.g. land); others again to the inhabitants of a specific region (e.g. oil and mineral rights are for the most part apportioned to states in the US, with some exceptions).

3. **This does not preclude individuals or companies being able to acquire use rights to the resource in question** (e.g. tradable carbon permits, rights to extract oil or water, leases on land, 3G network licenses), **because such use rights can still be:**

- **Initially allocated on the basis of equal shares for all**, with recipients of these rights then able to sell them on to others (e.g. tradable fishing quotas in Iceland, or tradable permits within a global emissions budget initially shared out on an equal per capita basis).
- **Sold or taxed, with the proceeds accruing to society as a whole** (e.g. the proceeds of auctions of emissions trading permits, or the revenues from oil production rights, can accrue to society in the form of revenue to the government, or to a trust such as Norway’s two sovereign wealth funds, or to individuals in the form of dividend payments as with the Alaska Permanent Fund).

4. **In the case of renewable natural resources** – like fresh water, old growth forests, fisheries, and sinks for waste (e.g. landfill for solid waste, the atmosphere for emissions – **the total amount of use rights allocated, or the level of any tax levied, should be consistent with sustainable use levels.**

5. The logic of fair shares to common wealth also applies in reverse: **everyone who enjoys the environmental benefits of a commons has a responsibility to finance its protection, e.g. through payments for ecosystem services.** Again, the size of 'everyone' will vary: in the case of tropical rainforests, all 7 billion of the world's people benefit from the ecosystem services; in the case of a watercourse (e.g. if downstream users benefit from upstream users' decision to improve water collection through tree planting), the number will be smaller.

## 5 real and potential examples of fair shares of common wealth

- **The Alaska Permanent Fund** was set up in 1976 (by a Republican governor) to pay every citizen an equal dividend of the state's oil royalties every year. The Fund is now worth over \$44 billion, and pays dividends of over \$1,000 per person per year, peaking at over \$3,500 in 2008.<sup>55</sup> Sarah Palin (emphasis added): "What we're doing up there is returning a share of resource development dollars back to **the people who own the resources.** Our constitution mandates that as you develop resources, it's to be for the maximum benefit of the people, **not the corporations, not the government, but the people of Alaska.**"<sup>56</sup>
- **Taxes on land and mineral rights.** Martin Wolf: "...in a globalised economy, taxing labour and capital will become increasingly difficult. That leaves land. The Australian government is right to want to extract the full rental value of its mineral resources for the benefit of the Australian people. Similarly, the people of the UK should wish to extract the rental value of London for their own use."<sup>57</sup>
- **Environmental tax reform** designed to internalise environmental costs into the prices paid by consumers for goods and services. Existing examples just in Europe alone include road tolls and congestion charges; air passenger duties; vehicle taxation differentiated by emissions per km; taxes on carbon, energy use, or air pollution; landfill and waste taxes; water consumption or abstraction fees, or charges for sewage discharge; taxes on fertiliser or pesticide use; taxes on fisheries; and charges for mining and quarrying.<sup>58</sup> These taxes can be made revenue neutral, through equivalent reductions in other taxes (e.g. on income).
- **Equitable shares of a global emissions budget.** Stabilising airborne concentrations of greenhouse gases at a safe level – the key aim of the UN Climate Convention – logically entails the definition and allocation of a global carbon budget consistent with keeping beneath it. Sharing these allocations out equitably – e.g. on the basis of convergence to equal per capita shares, or alternatively the 'Greenhouse Development Rights' proposal<sup>59</sup> – would create a major new source of finance for development (with the lowest emitters, i.e. least developed countries, as the biggest beneficiaries), while still dramatically reducing compliance costs for high-emitting countries.
- **Fair shares of new currency.** Almost all money in the economy is created by private banks rather than the government, through fractional reserve banking (I deposit £1; the bank lends up to £10, depending on reserve requirements; £9 has been created from thin air, and is

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now owed to the bank – a massively valuable rent for the bank, that could be appropriated instead by governments). The Positive Money campaign argues that governments should renationalise the right to issue currency, and in the process create money free of debt.<sup>60</sup> Martin Wolf has also argued a version of this, by supporting the 1930s ‘Chicago Plan’ that would only allow banks to lend out as much as they have in reserves.<sup>61</sup>

### Distributive implications of fair shares of common wealth

- What might some of the key political implications be of an approach based on the five principles just outlined? First, it has the **potential to create major new sources of ‘innovative financial flows’ at international level** – e.g. through an aviation fuel tax, which the IMF has estimated could generate \$9.5 billion a year if implemented globally at \$0.20 a gallon. This would provide a valuable new source of finance – especially for
  - Global public goods like vaccine production, agricultural R&D, peacekeeping, rainforest conservation, and climate mitigation, total funding for which came to less than \$12 billion in 2009 (with three quarters of that for UN peacekeeping alone)<sup>62</sup>; and
  - Starting to shift development assistance on to a more predictable, non-discretionary basis, especially for least developed countries – which are far more reliant on aid than middle income countries. (Aid accounts for 9.7% of the average low income country’s GDP, but only 0.3% for the average middle income country; yet LDCs currently receive less than a third of global aid flows.)
- **Equitable shares of the atmosphere would be an *especially* powerful source of finance for development for the poorest countries.** In 2010, the global carbon market was worth \$142 billion<sup>63</sup>, or \$13 billion more than total aid spending in the same year, at a point when emissions trading markets were still in their infancy compared to the size of a market if shares existed to a global emissions trading budget. A hugely valuable new asset class has already been created, but poor countries have to date not been given any of these property rights, despite their per capita emissions being a fraction of everyone else’s.
- **At national level, too, much more could be done to appropriate income from use rights of natural assets for society as a whole.** For many developing countries, this is about capacity building, e.g. to make sure they are able to negotiate a fair price from foreign investors for land or mineral leases – in the process allowing them to improve their ability to mobilise domestic resources. At the same time, as many OPEC countries show, state appropriation of resource rents by no means always leads to progressive outcomes – which makes the next point all the more important.
- **Some of the most interesting applications of fair shares of common wealth could emerge from direct dividend payments to individual citizens.** As the example of Alaska shows, dividends from common wealth have the potential to provide what amounts to a universal basic income. This idea has often appealed to conservatives (including Milton Friedman) given its potential to replace means-tested benefits that they argue create poverty traps by

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creating incentives not to work, as well as to progressives (like JK Galbraith and Martin Luther King) given its potential to alleviate poverty.

- This could also potentially help to unlock the vision sketched out by John Maynard Keynes in *Economic Possibilities for Our Grandchildren* (1930): “I feel sure that with a little more experience we shall use the new-found bounty of nature quite differently from the way in which the rich use it today, and will map out for ourselves a plan of life quite otherwise than theirs ... What work there still remains to be done will be as widely shared as possible – three hour shifts, or a fifteen hour week ... there will be ever larger and larger classes of people from whom problems of economic necessity have been practically removed.”
- **In developing countries, such dividend payments could in effect create a massive scale-up of social protection coverage.** At present, only a fifth of the world’s population enjoys access to social protection of any kind. But the evidence from existing cash transfer programs is that they can be a *very* effective form of assistance – and that far from creating poverty traps, families in receipt of them tend to use payments as investments (like micro-finance, but as grants rather than loans) and ways of mitigating risk in the future.
  - The potential for this kind of approach is also increasing as the impact of the ‘data revolution’ on development gathers pace. David Steven: “We will soon live in a world where it is possible to know the names, mobile phone number, and GIS coordinates of every poor family.”
  - The principle of fair shares to oil and mineral wealth would also have crucial implications for developing countries affected by the ‘resource curse’ – going beyond schemes such as the Extractives Industry Transparency Initiative and towards, ultimately, an Equatorial Guinea or Angola Permanent Fund paying out equal shares for every citizen.
- **In developed countries, dividends from common wealth could address the economic insecurity faced by the ‘squeezed middle’,** e.g. stagnant or declining real wages, high unemployment, and potentially structural loss of jobs to automation – leading to family wage earners having to work multiple jobs, use debt to meet basic needs, or under-invest in long term savings (three quarters of Americans nearing retirement have less than \$30,000 in retirement savings, leading to a rising number of people in their 70s and even 80s who cannot afford to stop working). Peter Barnes argues that these kinds of dividends are:
  - **Preferable to progressive taxation** in that “two things limit [its] effectiveness as a middle class prop: the power of the rich to evade taxes and the fact that, while progressive taxes may slightly reduce the wealth of the rich, they don’t automatically lift the middle or the bottom”.
  - **Less vulnerable to abolition or reduction than tax credits** (which Alaska also tried as a means of distributing income from oil and gas – the governor responsible for both

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initiatives, Jay Hammond, later observed that “almost no-one remembered the tax credits. At that point I decided that if another dividend program was established, I wanted to put a check in everyone’s hand. I thought that by doing so people would better appreciate the dividend and demand that the state maximize returns from its resource wealth”). Barnes adds: “the Permanent Fund remains one of the most popular government initiatives ever ... the chances for repeal, or even reduction, are essentially nil. One attempt in 1999 to transfer money from the Permanent Fund to the state treasury was trounced in a referendum by 83 per cent of voters”.

- (On the other hand, dividend funds based on non-renewable resources, like Alaska’s fund, are vulnerable to fluctuations in natural resource prices – and global declines in oil prices, and their impact on dividend cheques from the Permanent Fund, have contributed to a sense of economic insecurity among Alaskans.)<sup>64</sup>
- **Fair shares of common wealth would lead to a more egalitarian distribution of wealth – but in a way that sidesteps some of the polarisation of existing debates.**
  - **While progressives value equality as a good in its own right, many conservatives oppose redistribution of wealth as they feel that they deserve to be rich** (self-made billionaire Leon Cooperman: “As a group, we employ many millions of taxpaying people, pay their salaries, provide them with health care coverage, start new companies, found new industries, create new products, fill store shelves at Christmas, and keep the wheels of commerce and progress (and indeed of government, by generating the income whose taxation funds it) moving.”<sup>65</sup>
  - **But even many ultra-conservatives can still recognise the distinction between wealth earned through hard work or putting capital at risk, versus unearned wealth.** As noted earlier, Sarah Palin was a strong supporter of the Alaska Permanent Fund as state governor, arguing that it is “the people who own the resources”. Similarly, Fox News commentator Bill O’Reilly has said: “It’s my contention that we the people own the gas and oil discovered in America. It’s our land and the government administers it in our name ... Land and water are the domain of we the people.”<sup>66</sup>
  - Fair shares of common wealth hence has the potential to lead to a more egalitarian distribution of wealth – not through redistribution but by means of what Barnes calls “a way to allocate income fairly in the first place so that there’s less need to redistribute later ... [these are not] government transfers or private charity. Rather, they’re legitimate property income.”<sup>67</sup> He continues, “**the principle would be everyone-gets-a-share rather than winner-takes-all ... equal distribution of a new sort of property income would offset the distorted distribution of the currently dominant sort. The result would be a market economy with a large and secure middle class, even as labour income declines.**”

## References

- <sup>1</sup> <http://heymancenter.org/files/events/milanovic.pdf>
- <sup>2</sup> <http://heymancenter.org/files/events/milanovic.pdf>
- <sup>3</sup> <http://heymancenter.org/files/events/milanovic.pdf>
- <sup>4</sup> <http://heymancenter.org/files/events/milanovic.pdf>
- <sup>5</sup> <http://www.nature.com/nature/journal/v461/n7263/full/461472a.html>
- <sup>6</sup> UN Global Sustainability Panel (2012)
- <sup>7</sup> [http://www.iea.org/media/freepublications/executivesummary/WEO2013\\_Climate\\_Excerpt\\_ES\\_WEB.pdf](http://www.iea.org/media/freepublications/executivesummary/WEO2013_Climate_Excerpt_ES_WEB.pdf)
- <sup>8</sup> [http://www.wwf.org.uk/about\\_wwf/other\\_publications/living\\_planet\\_report\\_2014/](http://www.wwf.org.uk/about_wwf/other_publications/living_planet_report_2014/)
- <sup>9</sup> <http://www.millenniumassessment.org/documents/document.356.aspx.pdf>
- <sup>10</sup> WWF Living Planet report 2010
- <sup>11</sup> Clarke, R. and King, J. (2004). *The Atlas of Water*. London: Earthscan Books.
- <sup>12</sup> Comprehensive Assessment of Water Management in Agriculture (2007). *Water for Food, Water for Life: A Comprehensive Assessment of Water Management in Agriculture*. London: Earthscan, and Colombo: International Water Management Institute.
- <sup>13</sup> [http://data.worldbank.org/indicator/AG.LND.ARBL.HA.PC/countries/1W?order=wbapi\\_data\\_value\\_2007%20wbapi\\_data\\_value\\_2007wbapi\\_data\\_value-last&sort=asc&display=default](http://data.worldbank.org/indicator/AG.LND.ARBL.HA.PC/countries/1W?order=wbapi_data_value_2007%20wbapi_data_value_2007wbapi_data_value-last&sort=asc&display=default)
- <sup>14</sup> <http://www.fao.org/news/story/en/item/40893/icode/>
- <sup>15</sup> [http://www.savills.co.uk/research\\_articles/141280/141663-0](http://www.savills.co.uk/research_articles/141280/141663-0)
- <sup>16</sup> State of World Fisheries and Aquaculture 2010
- <sup>17</sup> <http://www.pmel.noaa.gov/co2/story/What+is+Ocean+Acidification%3F>
- <sup>18</sup> [http://www.worldenergyoutlook.org/media/weoweb/2010/WEO2010\\_es\\_english.pdf](http://www.worldenergyoutlook.org/media/weoweb/2010/WEO2010_es_english.pdf)
- <sup>19</sup> <http://ftalphaville.ft.com/files/2013/01/Perfect-Storm-LR.pdf>
- <sup>20</sup> <http://ftalphaville.ft.com/files/2013/01/Perfect-Storm-LR.pdf>
- <sup>21</sup> <http://ftalphaville.ft.com/files/2013/01/Perfect-Storm-LR.pdf>
- <sup>22</sup> <http://www.nature.com/nature/journal/v461/n7263/full/461472a.html>
- <sup>23</sup> <http://www.globaldashboard.org/wp-content/uploads/IDC-Beyond-Aid.pdf>
- <sup>24</sup> <http://www.economist.com/node/18648855>
- <sup>25</sup> <http://www.globalcarbonproject.org/carbonbudget/>
- <sup>26</sup> <ftp://ftp.fao.org/docrep/fao/010/A0701E/A0701E00.pdf>
- <sup>27</sup> <http://chartsbin.com/view/12730>
- <sup>28</sup> <http://chartsbin.com/view/1455>
- <sup>29</sup> <http://www.waterfootprint.org/?page=files/home>
- <sup>30</sup> WWF Living Planet Report 2012
- <sup>31</sup> UN DESA (2006). *World Population Prospects: the 2006 Revision*. New York: United Nations.
- <sup>32</sup> [http://www.post2015hlp.org/wp-content/uploads/2013/05/Evans-Steven\\_The-Future-is-Not-Good-Enough-Business-As-Usual-After-2015.pdf](http://www.post2015hlp.org/wp-content/uploads/2013/05/Evans-Steven_The-Future-is-Not-Good-Enough-Business-As-Usual-After-2015.pdf)
- <sup>33</sup> [http://www.post2015hlp.org/wp-content/uploads/2013/05/Evans-Steven\\_The-Future-is-Not-Good-Enough-Business-As-Usual-After-2015.pdf](http://www.post2015hlp.org/wp-content/uploads/2013/05/Evans-Steven_The-Future-is-Not-Good-Enough-Business-As-Usual-After-2015.pdf)
- <sup>34</sup> UN High Level Task Force on the Global Food Crisis (2008).
- <sup>35</sup> [http://www.americanprogress.org/issues/2010/04/pdf/job\\_polarization\\_execsumm.pdf](http://www.americanprogress.org/issues/2010/04/pdf/job_polarization_execsumm.pdf)
- <sup>36</sup> [http://www.oxfordmartin.ox.ac.uk/downloads/academic/The\\_Future\\_of\\_Employment.pdf](http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf)
- <sup>37</sup> <http://heymancenter.org/files/events/milanovic.pdf>
- <sup>38</sup> <http://thenextrecession.files.wordpress.com/2013/10/global-wealth-report.pdf>
- <sup>39</sup> <http://thenextrecession.files.wordpress.com/2013/10/global-wealth-report.pdf>
- <sup>40</sup> <http://www.youtube.com/watch?v=uWSxzjyMNpU>
- <sup>41</sup> <http://www.youtube.com/watch?v=uWSxzjyMNpU>
- <sup>42</sup> <http://www.theguardian.com/business/2014/oct/14/richest-1percent-half-global-wealth-credit-suisse-report>
- <sup>43</sup> <http://www.aspeninstitute.org/policy-work/communications-society/power-curve-society-future-innovation-opportunity-social-equity>
- <sup>44</sup> <http://www.ft.com/cms/s/0/4dc2ab0e-3805-11e3-8668-00144feab7de.html>
- <sup>45</sup> <http://www.ft.com/cms/s/0/4dc2ab0e-3805-11e3-8668-00144feab7de.html>
- <sup>46</sup> <http://www.econlib.org/library/YPDBooks/Keynes/kynsCP2.html>



## Think piece for discussion - not a formal Tearfund position - not for citation

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- <sup>47</sup> <http://www.theatlantic.com/international/archive/2013/09/your-labor-day-syria-reader-part-2-william-polk/279255/>
- <sup>48</sup> Douglass North, *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, USA, 1990: p. 3
- <sup>49</sup> OECD. 2011, *Perspectives on Global Development 2012: Social Cohesion in a Shifting World*. OECD Publishing.
- <sup>50</sup> Wilkinson, R and Pickett, K. 2010. Op. cit. pp.51, 67, 122-123.
- <sup>51</sup> Quoted in Peter Barnes, *With Liberty and Dividends For All*, 2014
- <sup>52</sup> <http://blogs.ft.com/martin-wolf-exchange/2010/07/12/why-were-resources-expunged-from-neo-classical-economics/>
- <sup>53</sup> <http://www.ft.com/intl/cms/s/0/113092ee-ce2f-11de-a1ea-00144feabdc0.html#axzz3GIAC17CR>
- <sup>54</sup> <http://www.ft.com/intl/cms/s/0/113092ee-ce2f-11de-a1ea-00144feabdc0.html#axzz3GIAC17CR>
- <sup>55</sup> Peter Barnes, op. cit.
- <sup>56</sup> <http://www.foxnews.com/story/0,2933,424346,00.html>
- <sup>57</sup> <http://blogs.ft.com/martin-wolf-exchange/2010/07/12/why-were-resources-expunged-from-neo-classical-economics/>
- <sup>58</sup> [http://www.ieep.eu/assets/1399/ETR\\_in\\_Europe\\_-\\_Annex\\_1\\_-\\_Overview\\_inventory.xlsx](http://www.ieep.eu/assets/1399/ETR_in_Europe_-_Annex_1_-_Overview_inventory.xlsx)
- <sup>59</sup> <http://qdrights.org/>
- <sup>60</sup> <http://www.positivemoney.org/our-proposals/>
- <sup>61</sup> <http://www.ft.com/cms/s/0/7f000b18-ca44-11e3-bb92-00144feabdc0.html#axzz2zv7sOKM8>
- <sup>62</sup> [http://www.cgdev.org/sites/default/files/1424979\\_file\\_Birdsall\\_Leo\\_Find\\_Me\\_the\\_Money\\_FINAL.pdf](http://www.cgdev.org/sites/default/files/1424979_file_Birdsall_Leo_Find_Me_the_Money_FINAL.pdf) The climate mitigation figure of \$1.16bn is mainly comprised of money through the World Bank climate investment funds, with the remainder through the Global Environmental Facility and the UN Adaptation Fund.
- <sup>63</sup>
- <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:22928671~pagePK:34370~piPK:34424~theSitePK:4607,00.html>
- <sup>64</sup> <http://www.nytimes.com/2014/10/09/us/as-energy-boom-ends-a-political-identity-crisis.html?smid=nytcore-ipad-share&smprod=nytcore-ipad>
- <sup>65</sup> Quoted in Chrystia Freeland, *Plutocrats* (2012)
- <sup>66</sup> [http://www.foxnews.com/on-air/oreilly/index.html#/v/1472237953001/government-intervention-in-the-american-oil-industry/?playlist\\_id=86923](http://www.foxnews.com/on-air/oreilly/index.html#/v/1472237953001/government-intervention-in-the-american-oil-industry/?playlist_id=86923)
- <sup>67</sup> Peter Barnes, op. cit.