

Chairman's Essay:

Inclusive green growth: the pathway to sustainable development

A review of the World Bank policy paper by Simon Maxwell, Executive Chairman, CDKN

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I have some points of difference with the new [World Bank policy paper on green growth](#) – but let me begin by saying that it represents a real achievement by Marianne Fay, Stephane Hallegatte and their many collaborators. The 196-page paper is wide-ranging, analytical, rich in examples, and practical. To my mind, there are few people working in environment or development who would not benefit from a careful reading of this text. Indeed, I would recommend setting up a reading group and taking it one chapter at a time.

A summary of the argument

The 'paper' consists of a 30-page overview and seven chapters, listed in Box 1. The overall message is optimistic. Green growth, we are told, is (a) necessary, (b) efficient and (c) affordable, for poor countries as well as rich. It offers many opportunities for more inclusive development, meaning more jobs and better, healthier and more secure livelihoods for women and men. And the benefits can be achieved reasonably quickly, with a combination of standard growth-oriented policies, and additional measures to nudge, incentivise or regulate people, firms and government authorities to act in more environmentally sustainable ways.

Box 1

Chapter headings of

'Inclusive green growth; the pathway to sustainable development

1. An analytical framework for inclusive green growth
2. Influencing firms, consumers and policy makers through market and nonmarket mechanisms
3. Green Innovation and industrial policies
4. Human capital: implications of green growth policies for labour markets and job creation
5. Natural capital: managing resources for sustainable growth
6. Physical capital: the role of infrastructure in green growth strategies
7. Crafting a green growth strategy

The immediate priority is to focus on measures which (a) are urgent and (b) provide local and immediate benefits: for example, avoiding long-term lock-in by making the wrong decisions about urban development, energy supply, transport systems or the management

of natural resources. In the longer term, green policies contribute to growth by increasing the availability of production factors (natural and human capital) and making sure they are used more efficiently and equitably. Prices play a key role, but so do rules, regulation and public subsidies, embedded in national innovation and industrial policies. Of course, there are losers as well as winners, and implementation is beset by inconsistent attitudes, rent-seeking, regulatory capture, and political vacillation. That is why careful attention must be paid to framing the case (Chapter 2) and managing the policy process (Chapter 7).

Arguments to note

There are many aspects of this argument that deserve attention. For example,

- A staunch defence of the need for growth in the incomes of poor countries, and certainly poor people (Overview) – and a reminder (Ch 6) that excess consumption by the rich poses much more of a planetary threat than modest additional consumption by the poor. For example, the entire additional emissions produced by providing electricity using standard technologies to the 1.3 billion people who currently lack service could be offset by a switch of the U.S. vehicle fleet to European standards (Pg 141).
- A strong case (in Ch 1) against the idea of ‘grow now and clean up later’: partly, because this underplays the short-term impact of environmental deterioration, for example of air quality, especially on the poor; and partly, because it underestimates the cost of reversing environmental damage, and often (think runaway climate change) the irreversibility of change.
- The observation (for example in Ch 3) that the case for green growth is rooted in environmentalism, but also in market opportunities, which countries like China (solar energy), Germany (wind), Brazil (ethanol) or Korea (biotechnology) have spotted and begun to seize.
- Acknowledgement that green growth is not ‘inherently inclusive’ and that job creation is handicapped by sluggish labour markets and factor immobility, but also that jobs will be created (economy-wide) if there is investment in skills, labour market reform and support to SMEs. Green policies need not destroy jobs (pgs 96 ff).
- Repeated emphasis that market failures inhibit progress on green growth, because natural capital is often not priced at all, but also (for example) because of knowledge externalities, capital market imperfections, or coordination failures (ch 3).
- Recognition that price adjustments are necessary, for example to value natural resources and reverse subsidies that reward their over-use. The paper estimates that subsidies to fuel, water, fisheries and agriculture cost \$US 1 - 1.2 tn annually (Pg 9).

- On the other hand, analysis which shows that prices alone cannot eliminate problems of market failure. Thus, regulation has a role to play. The report argues, for example, that ‘the efficiency of market-based instruments is compromised by the existence of market failures that cannot be fixed’ (Pg 60).
- Recognition, too, that norms and behaviours shape policy, and that ‘it may be more efficient to change the values related to the emotional part of decisions than to count on prices and other policies to counteract emotion-based decisions’ (Pg 56). Nudges are useful, but the evidence suggests that it is not sensible to base green policies on fear-mongering: fear is apparently only briefly effective, and people only have a limited ability to worry.
- A cautious endorsement of industrial policy and innovation policy: endorsement because of the need to overcome market failure; caution because of the need to learn from mistakes of the past, like trying to pick winners.
- The need to manage the politics of green growth policies, for example to avoid regulatory slippage. The paper talks approvingly of the need to shape a national consensus, for example by mechanisms like the Brazilian Forum on Climate Change (Ch7). It also approves of quasi-independent climate change commissions, modelled on independent central banks (Ch 7).

Practical pointers

At a more technical level, there are useful practical pointers. Thus, it is useful to be reminded, or in some cases informed, that

- ‘Rules and regulations are generally considered second-best solutions . . . but in the real world, where (markets) are imperfect, they can be a useful complement’ (Pg 60).
- On the other hand, transparency of information, as found for example in Performance Evaluation and Ratings Programmes, may be especially useful in developing countries, where ‘weak formal institutions make traditional enforcement of environmental regulations difficult’ (Pg 56).
- Permits create certainty regarding quantity but uncertainty regarding price, whereas taxes work in the opposite way – which is why Governments often resort to hybrid arrangements;
- Regulations work well when price changes have high political costs, but must be designed so as not to create barriers to entry (Ch2).

- The reduction of harmful subsidies (e.g. on fossil fuels) needs to be managed so that everyone understands the reason why, and also so that the poor are compensated (Pg 18).
- Developing countries are more likely to benefit from ‘catch-up innovation’ rather than ‘frontier innovation’, with much new technology embodied in trade, but also with scope for support to innovation through patent pools, feed-in tariffs, or green procurement (Ch 3).
- Natural resources can be managed for sustainable growth, but different resources need different policies. For example, extractable but renewable resources are best tackled by defining property rights, whereas cultivated renewables need innovation and efficiency gains.
- The constraint on leveraging private finance has less to do with availability, and more with preparing projects for bankability, offsetting risk, procuring the right time profile, securing cost recovery, and assuring regulatory certainty: what the report calls smart financing.
- Economic calculations alone do not permit robust decision-making, and that alternative multi-criteria approaches are both necessary and available.

Points of difference

Given this paean of praise, it may be surprising to learn that there are points of difference. In fact, there are four.

My own starting point in reading the reports was earlier thinking on climate change and growth, and later work on framing climate change. It is also relevant to learn from the recent report of the [UN Secretary General’s High Level Panel on Global Sustainability](#), more radical on growth than the World Bank in some respects (for example, the role of multinationals), but also less systematic in its analysis – see my review [here](#).

With respect to climate change and growth, I ended up, back in April 2011, with ten ‘propositions’. These are summarised in Box 2 and were subsequently debated in an [e-discussion on the CDKN website](#).

As to framing climate change, I proposed a six-point programme in October 2011, summarised in Box 3 - with the full [background and presentation](#) on the CDKN website.

Box 2

Ten propositions on climate change and growth

1. Growth does matter for poor countries – even though most poverty is not in the poorest countries
2. Low carbon growth appears feasible
3. But low carbon growth has to be set in context
4. A global perspective is needed
5. In planning for growth, a climate compatible strategy needs to be at the heart of the response
6. Get overall policy right: the need for a flexible and competitive economy
7. Link climate policies to growth
8. The priority for funding is to leverage private flows
9. Invest in the politics of climate compatible development
10. Grow - and be happy!

Source: <http://www.simonmaxwell.eu/blog/ten-propositions-on-climate-change-and-growth.html>

Box 3

A six point programme for climate compatible development

1. Find the 'win-wins' between economic development and climate action, such as energy efficiency.
2. Look for co-benefits to climate action, such as reduced pollution, energy security, congestion.
3. Frame climate mitigation and adaptation actions as risk management, such as dealing with threats to exports, climatic disasters.
4. Emphasise the opportunities of taking adaptation and mitigation action, such as job creation from renewables development.
5. Build on and use the energies of civil society, 'reverse lobbying'.
6. Above all – lead.

Source: <http://cdkn.org/resource/a-six-step-programme-for-climate-compatible-development/>

It is not difficult to see why I like the World Bank paper. We agree that: growth is necessary; climate compatible development or green growth policies are a sub-set of overall growth

policies; the politics matter; and the win-wins and co-benefits are important. On all these topics, Fay and Hallegatte have provided better analysis and more examples than I was able to attempt. I especially like their engagement with the detail of policy formulation. In the 'ten propositions', I offered a list of policy instruments and argued that 'the challenge of decision-making is to choose an efficient, effective and mutually compatible set of policies from the list . . . Methods which combine quantitative and qualitative analysis are likely to result in the use of multi-criteria tables, with criteria including: scale, speed, cost-effectiveness, administrative feasibility, political feasibility, and consistency with other policies.'

There are, however, four points where I would extend or amend Fay and Hallegatte's approach. The first two of these relate in different ways to the global scale of disruptive innovation or creative destruction that will be associated with the move to a green economy. The third relates to resilience. The last to planning.

The first two points arise from the fact that Fay and Hallegatte take what amounts to a closed economy view of the green growth problem. It is not that they do not mention global growth or export prospects at all. They do, mainly in the context of unexploited potential for green exports and of using imports to enable catch-up innovation (both in Ch 3). However, there is, for example, no mention in the text that I can find of the Kyoto Protocol, and very little discussion of issues like global carbon pricing. This treatment of the world economy is insufficient.

Global consumption

The first reason is that Fay and Hallegatte dodge, as I did, the question of what will happen to overall consumption at a global level, and the repercussions this will have for developing countries, especially for exports. In the ['ten propositions'](#), I summarised the problem as follows:

'Global growth does present a very large challenge. As the [Global Footprint Network](#) has shown, based on a range of biocapacity indicators, and not just carbon-related, it currently takes the earth 1.5 years to regenerate what is used in one year. By 2030, it will take two earths to sustain consumption. Rapid change is therefore necessary, starting with the countries that currently consume most.

If developing countries are excluded from the charge of biophysical excess, then the growth they need to achieve minimum standards of human development - and 'happiness' - is certainly 'permitted'. The problem is with convergence, and the level of income at which it will take place.

To take a simple example, the average GNI per capita of low income countries in 2008 was \$US 1407 in PPP adjusted terms, and the average GNI of high income countries was \$US 37141. If the growth of per capita income in the poorer group were 4% p.a., and in the richer group 2% p.a., they would eventually converge – in 2180, by which time the per capita income in both groups would be approx \$US 1.2m (in 2008 prices). Clearly, continued consumption growth at compound rates leads to very high numbers indeed, with implied unsustainable impacts on the demand for resources.

There is a conundrum here which needs to be solved, principally by developed countries, but with unavoidable impacts for developing countries. The question is whether developing countries need to act immediately on some or other set of assumptions about the stabilisation and reduction of over-consumption in the richer countries. It is probably dereliction of analytical duty to paraphrase St Augustine, and say 'yes, but not yet', but the position has the virtue of being pragmatic. For the time being, poor countries should both grow and be happy.'

I did not think at the time that this was satisfactory, and my unease has been reinforced by the recent publication by the UK Royal Society of a report entitled '[People and the Planet](#)'. This gives a very high profile to the demographic aspects of pressure on natural resources, but also argues that 'we have a consumption momentum from which escape is difficult'. The report goes on to argue that

'in the most developed and the emerging economies unsustainable consumption must be urgently reduced. This will entail scaling back or radical transformation of damaging material consumption and emissions and the adoption of sustainable technologies, and is critical to ensuring a sustainable future for all. . . . Decoupling economic activity from material and environmental throughputs is needed urgently for example by reusing equipment and recycling materials, reducing waste, obtaining energy from renewable sources, and by consumers paying for the wider costs of their consumption.'

I do not think Fay and Hallegatte would disagree with this assessment by the Royal Society panel. And if they do agree, then it would have been helpful to say so and think through the implications. It may be that reduced consumption in developed countries can be achieved with no impact on the prospects of developing countries, including many small, open economies. However, I would be very surprised. Green growth planning needs to make assumptions about external markets. In my experience, many national plans start with entirely unrealistic expectations in this regard.

Creative destruction and disruptive innovation

The second point is related, in that environmental stresses and desired transformations will both, in various ways, impact on the production possibilities, price relativities, and market opportunities in the global economy. The ideas of Joseph Schumpeter and Clayton Cristensen ought to loom large in any discussion of green growth. Neither is mentioned in the World Bank paper. It is certainly relevant to note, as the authors do, that industrial policy needs to support innovation, and to make the point that the adoption of new technology can be cost-effective. It would be even more useful, however, to note that firms and sectors which do not innovate, and quickly, are likely to lose their competitive advantage on the world stage. Developing countries need to adopt green growth policies as a matter of urgency if they are to remain competitive.

At the same time, some countries will benefit from changes in the world economy. The World Bank paper cites the solar industry in China as an example of a new market opportunity. Another example is lithium in Bolivia. Bolivia has an estimated 50% of the world's reserve of lithium, needed for a new generation of low carbon batteries for electric vehicles, found in brine deposits below the Uyuni salt flats. The Government has valued these at \$US 1.8 tn, and has plans to use the resource as the basis for development of battery and other downstream manufacturing.

In the climate world, interdependencies of this kind mean that countries need to think about national climate compatible development from a global perspective. Karen Ellis and colleagues at the Overseas Development Institute have looked systematically at the [effects of mitigation policies in developed countries on developing countries](#). They cover such topics as carbon taxes, border tax adjustments, emissions trading schemes, carbon labelling, and financial flows associated with the Clean Development Mechanism. An analysis of likely impacts on trade, capital flows, development finance, technology and growth shows that there are complex inter-linkages and variegated patterns of winners and losers. There is no reference to this work in the World Bank paper.

Resilience

The third point relates to resilience, a topic which receives many references throughout the World Bank paper, but which deserves more systematic analysis. It would have been interesting, for example, to devote a chapter to the subject.

Resilience is mentioned in the single box in Chapter 1 to which high-level growth theory is mostly confined, with the observations that 'environmental policies can affect utility directly . . . , with effects that are not mediated by aggregate consumption or the state of the environment such as distributional impacts or increased resilience' and that 'everything else equal, many people favour stable consumption patterns . . .'. Thereafter, most references

are to the benefits of avoiding natural disasters, with some references also to avoiding price spikes and other economic shocks. Typically, investments in reducing soil erosion or improving tree cover are presented as delivering ‘triple wins’, improved resilience alongside improved productivity and reduced carbon emissions, as on the Loess Plateau in China, or in the highlands of Ethiopia.

The idea of a triple win is convenient, but perhaps too easy – especially for a report which in other contexts focuses so sharply on policy trade-offs. Sometimes, it is true, efforts to build resilience can have positive pay-offs, and land improvements through public works provide good examples. It is also true that investment in disaster prevention often has a high benefit:cost ratio – up to 7:1, as the EU Commissioner for humanitarian affairs, Kristalina Georgieva, often argues. Sometimes, however, countries must accept a cost to avoid shocks, which may reduce growth. For example, there will come a time when the Thames Barrage, which protects London from storm surges, will need to be replaced, at a cost of many billions (the original cost over £1 bn in 2001 prices). There might be some growth benefit to public investment on this scale, but equally the opportunity cost of a replacement barrage might be investment which boosts growth more, for example new infrastructure, or investment in technological innovation.

There will be many such cases. As pointed out in the recent IPCC Report on [Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation](#), the frequency size and economic cost of climate-related natural disasters is likely to increase. The economic cost of natural disasters (including earthquakes) already ranges up to \$US 200 bn a year. Many donors, including the UK’s DFID, have made [resilience a central plank of policy](#), with integrated approaches to building adaptive capacity. The growth effects are worth considering. For example, social protection becomes an essential element of public spending – a priority which receives mention only in passing in the World Bank paper, and that mostly in the context of a discussion about how to manage a reduction in subsidies to fossil fuels, As [ODI social protection research](#), originally by John Farrington, has shown, there are strong potential [links between growth and social protection](#).

It is also worth noting that natural disasters – and the flip-side of the coin, resilience – have become major drivers of climate action around the world. In Pakistan, for example, the [2010 floods](#) are estimated to have cost \$US 10 bn, or 8% of GDP, stimulating a high level of political interest in strengthening infrastructure and in flood prevention. In El Salvador, similarly, increasing storm frequency is the single most powerful driver of [action on climate change](#).

Green growth or climate compatible development planning

The fourth point of difference has to do with green growth planning. The World Bank paper makes a strong case for green growth planning, and even sets out a somewhat mechanistic five-step programme for ‘crafting a green growth strategy’, ranging from ‘identify economic and social objectives’ to ‘conduct a systematic analysis of the policies and projects included in the green growth strategy’. Many countries will follow this advice. Indeed, many are already doing so, with a multitude of green growth strategies being prepared around the world. Ethiopia is a current example.

Leave aside the old-fashioned ‘blueprint’ bias of the planning approach, which appears not to have picked up on [thirty years’ worth of experience with ‘process’ approaches](#) – in poverty, food security and even environmental planning. A bigger issue is the risk of proliferation of strategies and plans at country level. Having lived through the era of Poverty Reduction Strategy Papers, it seems that developing countries are now beset with green growth strategies, environmental strategies, climate mitigation and adaptation strategies, and probably, post Rio, a new generation of sustainable development strategies.

This is administratively infeasible, and also intellectually incoherent. As I have [observed elsewhere](#), ‘developing countries do not want to be producing six different plans to satisfy six different funding agencies or international processes’. Furthermore, as the World Bank paper illustrates, there are fuzzy boundaries between growth, environment, resilience, social protection and many other facets of ‘development’.

In CDKN, we have concluded that the answer is climate compatible development planning, which is to say climate compatibility mainstreamed into national planning. That approach is reflected, for example, in the [Rwanda National Strategy for Climate Change and Low Carbon Development](#), which is firmly rooted in the country’s own [Vision 2020](#). It may be that this approach will prevail. Alternatively, maybe Rio will encourage a new wave of sustainable development plans – but this time owned by Ministries of Finance and not Ministries of the Environment: it is important, as I have argued, that [second-wave environmentalism](#) avoid this error of the first wave.

Conclusion

The four points of difference are not trivial, but they should not obscure the value of the World Bank paper. It is especially valuable to have an optimistic take on the potential for green growth, aimed perhaps at sceptical World Bank economists and country offices, as well as policy-makers in national governments. [Environmentalists are sometimes criticised for rolling out Martin Luther King](#) in support of positive messaging (as in ‘I have a dream’, not ‘I have a nightmare’), but careful optimism is surely warranted.