The Future is Not Good Enough: Business As Usual After 2015

BACKGROUND RESEARCH PAPER

Alex Evans and David Steven

Submitted to the High Level Panel on the Post-2015 Development Agenda

This paper reflects the views of the author and does not represent the views of the Panel.

It is provided as background research for the HLP Report, one of many inputs to the process.
The Future is Not Good Enough

Business As Usual After 2015

*Technical paper for the High-level Panel on the Post-2015 Development Agenda*

Alex Evans and David Steven

May 2013
“This is – first and last – about people; the lives they are able to lead, the education they can benefit from, the families they can raise, the health they can enjoy and the prospects they can enjoy and the prospects they can look forward to as they live their lives and look into the future.

Our vision and responsibility is to end extreme poverty in all its forms in the context of sustainable development and to have in place the building blocks of sustained prosperity for all.”

*High-level Panel Communiqué, Monrovia, Liberia, 1 February 2013*

“Life can only be understood backwards; but it must be lived forwards.”

*Søren Kierkegaard*
Summary

This paper aims to explore the ‘business-as-usual’ (BAU) trajectory on international development from now to 2030 – identifying future trajectories in some of the areas that are likely to be key priorities for the post-2015 agenda, and distinguishing between known drivers and critical uncertainties.

The paper focuses on two core poverty measures (income and hunger), two measures of human development (the Human Development Index and education), and two areas that are critical to any attempt to sustain prosperity (energy and climate change).

For each of these areas, it asks what baseline can be set for 2015; whether it is possible to set a business-as-usual trajectory; what drivers influence this trajectory; and what conclusions the High-level Panel should draw from this evidence. A concluding section asks how international action could ‘bend the curve’ and accelerate progress above and beyond this business-as-usual trajectory.

Among the paper’s key findings and conclusions are the following:

- **The quality of data is a major problem.** At present, there is not even sufficient data to set an accurate baseline for 2005, let alone define a business-as-usual trajectory to 2030. Data from Africa, in particular – including both national accounts and household surveys – are especially problematic. We should not underestimate the size, or importance, of the task of setting a robust BAU path for the post-2015 framework.

- **The world is not on course to ‘get to zero’ on eliminating absolute poverty.** Despite weak data, it is clear that absolute poverty will not be eradicated by 2030 without far-reaching action to ‘bend the curve.’ While income poverty is still falling, progress is not currently fast enough to get close to zero by 2030 on most BAU projections. The trajectory on hunger appears to be even less positive than that for
poverty. The education MDG has demonstrated how tough ‘getting to zero’ goals are, while post-2015 targets for educational quality are likely to be an order of magnitude harder again.

- **Absolute poverty seems certain to remain a problem for fragile states and marginalized populations within stable states.** Well performing middle and low income countries face a tough task to end poverty, but the extent of their challenge pales in significance compared to the difficulty of making progress in fragile states, and stable states with pockets of fragility and marginalization. Across a range of scenarios, currently fragile states are slow to reduce poverty. The development system is unsure how best to work in these environments and, if it is serious about ending poverty, will need to achieve a dramatic improvement in its performance. Conflict prevention will be a critical part of this challenge – including in countries that are currently peaceful.

- **The performance of emerging economies is a key uncertainty.** Optimistic versions of the BAU trajectory accelerate the transition towards a poverty-fragility nexus, as high-growth states mop up their remaining ‘tails’ of absolute poverty. Normative pressure from an effective post-2015 framework could help to catalyze the pro-poor policies needed to make this happen. On the other hand, pessimistic BAU scenarios see poor people in middle income countries do less well than expected – partly because of anaemic growth, and partly because of the *distribution* of that growth (which again depends on political economy factors within countries).

- **On all trajectories, poverty will increasingly become an African problem.** Despite encouraging recent progress, across a range of scenarios, the proportion of the absolute poor living in sub-Saharan Africa increases. While BAU will fail Africa, many countries have potential to accelerate poverty reduction, if ‘good demography’
(large numbers of workers entering the workforce, in the process driving down dependency ratios) meets a positive policy environment (better education, improved availability of jobs, effective use of spare agricultural land, good enough governance, and so on).

- **Hunger may be the key indicator of sustainable poverty reduction.** The shortcomings of existing data makes it extremely difficult to establish a BAU trajectory on hunger. On one hand, higher food prices could seed a ‘21st Century Green Revolution’ that marries rural development, resource efficiency and a new relationship between urban and rural. On the other hand, the world could see stagnant levels of investment, crop yields, rural incomes, and new land coming into production. Which of these scenarios is delivered is a key indicator of whether progress on poverty reduction will be sustained.

- **A whole new approach on education is needed.** The universal primary education MDG has shown both the difficulties and the importance of ‘getting to zero’ goals. On present course, we will not meet the existing education MDG any time this century, with a number of countries, or parts of countries, making little progress towards educating all children. If a post-2015 goal on education incorporates an outcome-based target on literacy and numeracy (rather than, as now, only covering enrolment levels), then success will become far harder – requiring a transformation in strategies for building quality education systems.

- **BAU for energy, climate and planetary boundaries substantially increases the risks facing modern civilization.** BAU for energy will soon put beyond reach the target to limit global warming to $2^\circ$C. Energy poverty also persists to 2030 and beyond on a BAU outlook. Expected impacts include worsening water availability, falling crop yields, and more and more frequent and severe extreme weather impacts.
in many developing countries to 2030, coupled with steadily increasing risks of passing tipping points. Some of this risk is already ‘locked in’, irrespective of future mitigation action. On other planetary boundaries, humanity is already in danger of passing key risk thresholds on species loss and the global nitrogen cycle.

Those designing the post-2015 development framework need to be open about the gap between the targets they are proposing and BAU trajectories. A core principle should be that no target is included without a clear plan for how it will be delivered, and progress monitored. This will encourage an early focus on implementation and the development of robust plans to ‘bend the curve’ in priority areas. It also underlines the importance of major improvements in the quality and availability of data. At present, data are confined to silos, with every organization using its own way of analyzing and presenting information. The problem is replicated in the field, with too many very small scale household surveys that give only a few answers. As a result, currently there is insufficient data to set a baseline in 2015 and monitor progress to 2030.

Overcoming these problems requires all parts of the international system – including the World Bank, International Monetary Fund, International Energy Agency, Food and Agriculture Organization, UN Environment Programme, World Health Organization and UN Development Programme – to focus at an early stage on delivering the new framework. As a first step, they should undertake a comprehensive, joint benchmarking exercise; an assessment of what data will be needed beyond 2015; and an attempt to identify how to make systems compatible to collect and present these data in the best and most efficient way possible.

Accordingly, the paper recommends that in 2015, instead of a World Development Report, a World Energy Outlook, a State of Food Insecurity report, a Human
Development Report and so on, all of the agencies referred to above should publish a joint analysis that addresses the following questions:

- If the world wants to end poverty by 2030, then what does BAU look like after 2015, and how big are the gaps?

- What are the key drivers that could bend the curve? What data and information are needed to tell policymakers whether or not they are succeeding in doing so?

- What resources, partnerships, and strategies are needed to drive the change?

- What are the major risks to global poverty eradication goals, and how can they be mitigated?

- What are the key environmental risk thresholds that the world faces, and how close will projected global growth trajectories take us to them?

This integrated exercise – which fulfils the Rio 2012 Conference’s decision to institute a new Global Sustainable Development Report – would build normative pressure, while having a substantial impact on the international system's interoperability, informing a broader conversation about how international goals can lead to concrete outcomes for the world’s people.
SECTION 1: Introduction

While the Millennium Development Goals were not finalized until 2002, their roots stretch back much further, to 1990. In that year’s World Development Report, the World Bank proposed a goal to halve poverty by the turn of the century, arguing that the 1980s had been a ‘lost decade’ for many of the poor.

At the World Summit for Children in the same year, meanwhile, a set of ‘major goals for child survival, development and protection’ was proposed, along with ‘supporting goals’ in areas such as women’s health, basic education, nutrition, and water.

These initiatives both formed part of a growing consensus that global goals could ‘bend the curve’ towards more rapid reductions in poverty, by:

- increasing the coherence of both international and national policy in a way that supports poverty reduction;
- building more effective partnerships for development; and
- directing additional finance towards the poor.

By 2010, however, the MDGs were widely assumed to be in deep trouble. UN Secretary-General Kofi Annan warned that “we have been moving too slowly to meet our goals,” with the global economic crisis likely to “throw us [further] off course in a number of key areas, particularly in developing countries.”1 Leading aid sceptic, William Easterly was more succinct: “Let’s face it: it’s over … the MDGs will not be met.”2 Development campaigners had wasted their time on a set of arbitrary and poorly designed goals, he claimed, and now needed to admit the error of their ways and accept the need for a new approach.

In fact, though, the poverty MDG had already been met by 2008, many years ahead of schedule, and poverty was in decline in all developing regions, in both proportional and
absolute terms. Soon afterwards, unexpectedly, the Great Recession proved largely to have spared the developing world; new data showed that, far from slowing down, the rate of decline in poverty had accelerated, with even Sub-Saharan Africa now seeing significant gains. Even hunger appears not to have grown as explosively as many expected it to after the 2008 food crisis. While the world remains off track for some MDGs, it is now likely to hit some of the most iconic objectives that policymakers agreed in 2002.

So why were many observers surprised by the extent and speed of global poverty reduction? Five possible reasons stand out for the better than expected performance.

- **The right data was not available.** Poverty figures are now based on hundreds more household surveys than they were in 1990, and the absolute poverty line was recalibrated in 2009. As a result, poverty estimates have changed dramatically over the MDG era – with the baseline estimate of poverty in 1990 shifting over time from 28.7% to 41.6% of people below the absolute poverty line. There are also long lags before global poverty estimates become available. As discussed below, data for other MDG targets is weaker than that for income poverty. As a result, policymakers have been presented with a fragmented, delayed, and often confusing picture of MDG progress.

- **Everyone had an interest in selling bad news.** NGOs, the media, and governments in both north and south had a vested interested in downplaying success, whether because doing so made for a more compelling narrative, or because it would help support the need for additional resources, or both. Although World Bank statistics consistently forecast that income poverty would be halved by 2015, its public-facing rhetoric often obscured these considerable grounds for optimism. In 2004, for example, it said that most MDGs would not be met by most countries, and a year later, progress was slower than originally envisaged. In 2009, it declared a ‘development emergency.’
The global environment for poverty reduction had improved. In the 1990s, rising prosperity in China led to the most rapid poverty reduction in history, while in 2007-2009, growth in the world’s 80 poorest countries was double those of the previous 15 years, with GDP per capita growing 5.8% per year in real terms. Until the Great Recession, many developing countries were able to access capital cheaply on international financial markets. Many poor countries also benefited from the shift from a long term commodity slump to a world of higher resource prices.

Some countries adopted policies that accelerated poverty reduction. Brazil was one of the most unequal countries in the world in the 1990s, but has dramatically increased social spending in recent years. These policies are estimated to have taken an additional 17.5 million people out of poverty, although they would almost certainly have been implemented whether or not the MDGs had been agreed. There is also evidence to suggest that China’s rate of poverty reduction is faster than just its growth rate alone would suggest.

What remains less clear, however, is the precise role that the MDGs played in bending the curve on poverty reduction. While many advocates and analysts are now trumpeting their success, the reality is that the jury is still out. While development practitioners working on the ground often recognize the Goals’ utility in exerting normative pressure in aid-dependent environments, and can see MDG focus areas reflected in domestic policy, many economists are more sceptical, with regression analyses struggling to identify clearly attributable impacts. Clarity about the precise impact of the MDGs is further hindered by the fact that many countries that have only put strategies in place to achieve the MDGs relatively recently, and are likely to experience a time lag before results become clear.
What is clear, though, is that:

- The MDGs were never underpinned by a clear theory of change. Instead, they captured a consensus between a relatively small number of policymakers at a specific moment in time – which then proved to have far more resonance and durability than many expected.

- Data was not available to set a BAU trajectory at the start of the MDG era – so attempts to assess progress today suffer from the lack of a counterfactual against which to compare.

- There has been a growing focus on impact evaluation – but this is usually undertaken at a project or program level, on a donor-by-donor basis, and rarely scales up to country level. We have seldom (ever?) attempted to make a comprehensive assessment of the extent to which the MDGs have improved the lives of the poor in a particular country.

This leaves the architects of the post-2015 development agenda with a number of problems. A better sense of what has already been achieved is needed in order to build a post-2015 framework on more robust foundations – not least in order to make a convincing case that a new framework is needed. We also need to set proper baselines and BAU trajectories this time – and ensure that we have both the data, and the commitment, to assess our success in bending the curve.

In addition, we also already know that the post-2015 development framework will pose greater challenges than the MDGs.

- The remaining poor people will be harder to reach. Without denigrating the real achievements of the MDG period, the first half of the challenge of eliminating absolute poverty was the easy part. Now that the ‘low hanging fruit’ has been picked,
policymakers will find that the world’s remaining poor people are increasingly concentrated in fragile states (or parts of states) and stubborn poverty ‘tails’ in Middle Income Countries (MICs).

- **These are the environments that development organizations are least comfortable with.** Aid donors and international agencies are unsure of how much external actors can achieve and, conversely, how much change has to be endogenously driven; they are unsure of their toolkits, although they know that success involves much more than just financial flows; and they are unsure of how to identify and develop the skills that they will depend on in the future.

- **Past achievements may be unsustainable.** More people have been lifted out of poverty than ever before. But the mass escape from poverty of this ‘breakout generation’ is acutely insecure – shaped by an uncertain jobs environment, intensifying resource scarcity, declining trust in institutions, accelerating climate change, and other challenges. Will the breakout generation prove to be the bridgehead for the global eradication of poverty, or will it instead find itself hitting a glass ceiling – or worse, sliding back into poverty – in the years ahead?

- **The task of building sustainable prosperity for all is immensely complex.** The world is currently on an unsustainable trajectory – using resources in inefficient ways, transgressing planetary boundaries, and creating dangerous social stresses within society. Today’s leaders, institutions and societies heavily discount the interests of future generations and of poorer citizens who have little power in the contemporary world. It is far from clear what levers the post-2015 framework will have to tackle these tasks, especially given that recent multilateral experience shows all too clearly that consensus about future direction is either absent, or paper thin.
This paper therefore explores what is and is not known about future trajectories in some of the areas that are likely to be priorities for the post-2015 development agenda. It focuses on two core poverty measures (income and hunger), two measures of human development (the Human Development Index and education), and two areas that are critical to any attempt to sustain prosperity (energy and climate change). For each area, it asks what baseline can be set for 2015; whether it is possible to set a BAU trajectory; what drivers influence this trajectory; and what conclusions the High-level Panel should draw from this evidence. A concluding section asks how international action can ‘bend the curve’ and accelerate progress over business as usual.
SECTION 2: Understanding Business As Usual: What does the future hold?

I. Absolute Poverty

In this section, we focus on two core indicators of absolute poverty:

- Income at the minimum threshold of $1.25 a day.
- The ability to obtain sufficient food to sustain a healthy and productive life.

Income Poverty

Baseline

Setting a definitive 2015 baseline for income poverty is not yet possible, given that the latest published World Bank data is for 2008 (with some preliminary estimates for 2010); no-one knows how many people were poor at the end of 2012, or who can be expected to be poor in 2015.

A range of projections is available, however, including the following:

- A 2010 World Bank estimate that 14.1-18.5% of the world’s population (865m – 1.1bn people) would be below the $1.25 per day line in 2015, based on scenarios that projected various responses to the economic crisis.\(^6\)
- Research by Edward and Sumner that projects 665-982m people below the same line.\(^7\)
- A projection from the DFID Chief Economist’s Office that assumes a 2015 baseline of 960.9-1,002.8bn people.\(^8\)
- Research by Chandy and Gertz that suggests that “looking ahead to 2015, extreme poverty could fall to under 600 million people… By 2015, we will not only have halved the global poverty rate, as per MDG1a, but will have halved it again.”
Poverty estimates vary for a number of reasons, but the key methodological difference is between those that rely on household surveys and those that use national accounts. Households tend to underestimate consumption and national accounts to overestimate it. World Bank poverty data are now based on surveys that cover 90% of the population of developing countries and the Bank makes a convincing case that the quality of its data have improved markedly over time.

However, such improvements are starting from a low base. Household surveys tend to show variation in quality and methodology (India collects information on income, for example, and China on consumption), and are conducted only infrequently in many countries. And in 2005, African poverty statistics relied on surveys from just 39 countries, with only 11 of these countries having data for the same year and others relying on household surveys that were up to 15 years old.

<table>
<thead>
<tr>
<th></th>
<th>Chandy &amp; Gertz</th>
<th>World Bank (Postcrisis scenario)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asia</td>
<td>2.7%</td>
<td>5.9%</td>
</tr>
<tr>
<td>China</td>
<td>0.3%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Europe &amp; Central Asia</td>
<td>0.9%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>4.5%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>1.9%</td>
<td>1.8%</td>
</tr>
<tr>
<td>South Asia</td>
<td>8.7%</td>
<td>22.8%</td>
</tr>
<tr>
<td>India</td>
<td>7.0%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>39.3%</td>
<td>38.0%</td>
</tr>
<tr>
<td>World (developing only)</td>
<td>9.9%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

Table 1 - Percentage of the population living under $1.25 a day in 2015

Conversely, though, national income accounts also vary in quality. Only 35% of Africans live in countries that use standard UN measures for GDP. When Ghana revised its national accounts in 2010, its GDP jumped by 60%. Zambia’s national accounts, meanwhile, are
prepared by a single individual. According to Jerven, “The arbitrariness of the quantification process has taken on a dangerously misleading air of accuracy, and the resulting numbers are used to make critical decisions that allocate scarce resources.”

**Projections**

Crude projections of poverty in 2030 can be made based on the speed of poverty reduction in the MDG era. Under the core World Bank scenarios, 581-632m people (6.9-7.6% of the global population) would be living on less than $1.25 a day in 2030. Chandy and Gertz’s more optimistic starting point gives a figure of 353m in 2030, while a prolonged continuation of the Bank’s low growth scenario provides a higher figure of 856m.

![World $1.25 a day poverty, 1981-2030](image)

A variety of projections have also been made using more sophisticated models (see Figure 1). The HLP secretariat finds that $1.25 poverty declines to below 5% of the world’s people by 2030, based on a continuation of current patterns of consumption growth. Alternative scenarios variously assume faster or slower growth, and changes in the inclusiveness of that growth.
Edward and Sumner have recently published projections using a model that allows comparison of results drawn from both household surveys (‘S’ in Table 2) and national accounts (‘NA’ in Table 2). They use two scenarios: one optimistic (GDP PPP growth for each country in line with the World Economic Outlook average for 2010-2017, equating to a 4.4% annual rise in GDP) and the other pessimistic (only half this rate). According to their model, and assuming that inequality remains static, absolute poverty ranges from 348m-793m in 2030 using the survey method, and from 477m-827m using national accounts. This equates to 5.0-11.8% of the population of developing countries.

<table>
<thead>
<tr>
<th>2030 $1.25 a day Static inequality</th>
<th>Headcounts (millions)</th>
<th>Percentages of global total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pessimistic</td>
<td>Optimistic</td>
</tr>
<tr>
<td>Current LICs</td>
<td>428</td>
<td>574</td>
</tr>
<tr>
<td>Least Developed Countries</td>
<td>496</td>
<td>640</td>
</tr>
<tr>
<td>All Fragile States</td>
<td>477</td>
<td>582</td>
</tr>
<tr>
<td>LIC Fragile States</td>
<td>281</td>
<td>404</td>
</tr>
<tr>
<td>LIC and non-converging</td>
<td>256</td>
<td>320</td>
</tr>
<tr>
<td>Conflict/Post-Conflict Countries</td>
<td>257</td>
<td>317</td>
</tr>
<tr>
<td>MIC and non-converging</td>
<td>133</td>
<td>104</td>
</tr>
<tr>
<td>MIC Fragile States</td>
<td>196</td>
<td>178</td>
</tr>
<tr>
<td>LIC and converging</td>
<td>163</td>
<td>230</td>
</tr>
<tr>
<td>Current LMICs</td>
<td>330</td>
<td>225</td>
</tr>
<tr>
<td>Current UMICs</td>
<td>35</td>
<td>28</td>
</tr>
<tr>
<td>All current MICs</td>
<td>365</td>
<td>253</td>
</tr>
<tr>
<td>All non-Fragile MICs</td>
<td>168</td>
<td>75</td>
</tr>
<tr>
<td>MIC and converging</td>
<td>232</td>
<td>148</td>
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<tr>
<td>IMF Emerging Market Economies</td>
<td>172</td>
<td>35</td>
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<tr>
<td>LICs in 2030</td>
<td>438</td>
<td>584</td>
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<tr>
<td>MICs in 2030</td>
<td>343</td>
<td>229</td>
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<tr>
<td>No of LICs in 2030</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>No of MICs in 2030</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td><strong>Global total</strong></td>
<td><strong>793</strong></td>
<td><strong>827</strong></td>
</tr>
</tbody>
</table>

Table 2 - Edward and Sumner, Poverty with static inequality, $1.25, 2030
Edward and Sumner, however, also provide projections that allow for a continued growth in inequality, with the poor capturing a shrinking proportion of a given rate of growth. This significantly increases the number of poor people in 2030, to as high as 1.3bn using survey methods and assuming a pessimistic rate of growth (Table 3).

<table>
<thead>
<tr>
<th>2030 $1.25 a day</th>
<th>Extrapolated current inequality trends</th>
<th>Headcounts (millions)</th>
<th>Percentages of global total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>S</td>
<td>NA</td>
</tr>
<tr>
<td>Current LICs</td>
<td></td>
<td>453</td>
<td>584</td>
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<tr>
<td>Least Developed Countries</td>
<td></td>
<td>512</td>
<td>654</td>
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<tr>
<td>All Fragile States</td>
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<td>473</td>
<td>596</td>
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<tr>
<td>LIC Fragile States</td>
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<td>298</td>
<td>405</td>
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<td>LIC and non-converging</td>
<td></td>
<td>266</td>
<td>316</td>
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<td>Conflict/Post-Conflict Countries</td>
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<td>323</td>
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<tr>
<td>MIC and non-converging</td>
<td></td>
<td>83</td>
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<tr>
<td>MIC Fragile States</td>
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<tr>
<td>LIC and converging</td>
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<td>236</td>
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<tr>
<td>Current LMICs</td>
<td></td>
<td>579</td>
<td>243</td>
</tr>
<tr>
<td>Current UMICs</td>
<td></td>
<td>277</td>
<td>308</td>
</tr>
<tr>
<td>All current MICs</td>
<td></td>
<td>856</td>
<td>550</td>
</tr>
<tr>
<td>All non-Fragile MICs</td>
<td></td>
<td>681</td>
<td>359</td>
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<tr>
<td>MIC and converging</td>
<td></td>
<td>772</td>
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<td>650</td>
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<tr>
<td>LICs in 2030</td>
<td></td>
<td>448</td>
<td>591</td>
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<tr>
<td>MICs in 2030</td>
<td></td>
<td>849</td>
<td>532</td>
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<tr>
<td>No of LICs in 2030</td>
<td></td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>No of MICs in 2030</td>
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<td>97</td>
<td>97</td>
</tr>
<tr>
<td>Global total</td>
<td></td>
<td><strong>1309</strong></td>
<td><strong>1134</strong></td>
</tr>
</tbody>
</table>

Table 3 - Edward and Sumner, Poverty with current inequality trends, $1.25, 2030
DFID’s research on this area makes projections based on 2000-2016 IMF growth projections, and projects 752m people in poverty in 2030, or 1,045m people in poverty in 2030 if the growth rates of the 1990s are assumed instead. (The latter is the most pessimistic scenario for 2030 of those presented in this paper.)

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
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<tr>
<td>LIC</td>
<td>324.4</td>
<td>324.1</td>
<td>276.5</td>
<td>215.1</td>
<td>221.2</td>
</tr>
<tr>
<td>MIC</td>
<td>715.1</td>
<td>634.9</td>
<td>623.8</td>
<td>613.0</td>
<td>525.1</td>
</tr>
<tr>
<td>HIC</td>
<td>0.2</td>
<td>1.9</td>
<td>1.8</td>
<td>1.9</td>
<td>5.9</td>
</tr>
<tr>
<td>Total</td>
<td>1039.7</td>
<td>960.9</td>
<td>902.1</td>
<td>830.0</td>
<td>752.1</td>
</tr>
</tbody>
</table>

Table 4 - DFID scenario 1: 2000-2016 growth rates

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIC</td>
<td>324.4</td>
<td>338.9</td>
<td>364.8</td>
<td>335.8</td>
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<tr>
<td>MIC</td>
<td>715.1</td>
<td>663.7</td>
<td>650.4</td>
<td>690.1</td>
<td>686.3</td>
</tr>
<tr>
<td>HIC</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
<td>2.2</td>
<td>3.8</td>
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<tr>
<td>Total</td>
<td>1039.7</td>
<td>1002.8</td>
<td>1015.5</td>
<td>1028.2</td>
<td>1045.2</td>
</tr>
</tbody>
</table>

Table 5 - DFID scenario 2: 1990s growth rates

The US National Intelligence Council’s *Global Trends 2030* report sees a fall of 50% in global poverty between 2010 and 2030, although this decline would be halved “if a long recession occurred.” The Carnegie Endowment for International Peace forecasts $1.25 poverty rates at below 5% in 2030 for China, India, and Indonesia, with Sub-Saharan Africa at 16.9%.

*Distribution*

Four key themes emerge on the question of where poor people will be located in 2030, as follows:
First, there is likely to be greater concentration of poverty in Africa, with the four Edward / Sumner scenarios projecting that 69-89% of poor people will be in Africa by 2030, assuming static inequality.\textsuperscript{23} If inequality continues to grow at current rates, Asian countries, in particular, will be less successful at reducing or eradicating $1.25/day poverty, but the proportion of the poor living in African will still increase.

Second, there is likely to be greater concentration of poverty in fragile states. Kharas and Rogerson project that by 2025, “the locus of global poverty will overwhelmingly be in fragile, mainly low-income and African, states, contrary to current policy preoccupations with the transitory phenomenon of poverty concentration in middle income countries.” The Edward and Sumner scenarios show 60-70% of the poor in 45 currently-fragile states, up from 32-46% today.\textsuperscript{*} Again, if inequality continues to rise, stable states will be less effective in reducing poverty, with currently fragile states accounting for around half the poor if growth is strong, and slightly more than a third of the poor if it is weak.

Third, fragile areas within otherwise stable countries also become more important. Nearly half of India’s poor currently live in Naxalite-affected districts, for example, while three quarters of its poor live in two of the most conflicted-affected states.\textsuperscript{24} Under scenarios where growth is robust but the poor capture a shrinking share of the benefits, it is possible, of course, that this will increase the fragility of currently stable states, either generally or in deprived regions.

Fourth and finally, there will be more countries to worry about. During the MDG era, the world was able to make extraordinary progress in reducing poverty in relatively few countries. However, Chandy and Gertz argue that as poverty in China and India declines,

success will be needed in a greater number of countries if progress is to be maintained in the post-MDG era.

Drivers

Finally, there is the question of what are likely to be the key factors that determine the extent and distribution of poverty in 2030. Five key factors stand out.

First and most important is the speed of global growth and distribution of that growth between countries (in particular, the share captured by countries with low labor costs). The DFID Chief Economist’s Office estimates that a 1% increase in GDP per capita is associated with poverty falling by 0.22 percentage points, but that China has been twice as effective at turning growth into poverty reduction as India.

A second key factor is the distribution of growth within countries (and especially the share captured by the poor). Under Edward and Sumner’s scenarios, inequality continues to grow at current rates, and they find that this makes poverty considerably worse in 2030 than it would otherwise have been (87-516m additional poor people using the survey method; 113-307m more using national accounts).

Third, the composition of the economy is also highly significant. Kharas and Rogerson argue that “Skills premia, urban bias, falling labor share in GDP, labor-saving technology and scale economies can create growth but along with increased inequality, while small-holder agriculture, construction and labor-intensive manufacturing tends to create growth with more impact on poverty.”

Fourth, redistribution from rich to poor matters too. Countries with private consumption expenditure of over $2,000 per year can afford to lift all people out of absolute poverty through modest taxation levied only on those considered ‘not poor’ by Western standards.
Social protection programs, in particular, have considerable potential to reduce income poverty and hunger.

Finally, political will (to raise taxes, provide income support to the poorest, target highly marginalized populations, and to provide international finance and other support where required) is a key requirement across the board.

**Hunger**

**Baseline**

While data on income poverty are of higher quality than most other development data (with the possible exception of some health statistics), the weakness of data on hunger was brought to wider attention by the recent food crisis.

The UN Food and Agriculture Organization (FAO) has been measuring progress against hunger since 1999, in response to a target set at the 1996 World Hunger Summit. After the 2008 price shock, the FAO claimed that the number of hungry people had increased from 837m to over a 1bn. However, it was subsequently forced to suspend publication of data on hunger due to methodological problems.

New figures were prepared for the *State of Food Insecurity 2012* report, and showed that rather than increasing hunger, the food crisis had caused progress to stall, with 852m people in developing countries chronically undernourished in 2010-2012. Hunger fell by 7.9m per year in the 1990s and 4.9m per year in the 2000s. As a result, the relationship between hunger and global food prices remains unclear (see Figure 2, which also shows World Food Summit data also).

The FAO describes its new figures as preliminary, stating that “further revisions are expected in the near future, as more reliable data on food waste and more surveys to assess the distribution of food access will be available.” Their indicator is not able to “capture the
impact of short-term price and other economic shocks” and does not take into account the greater need for food of people engaged in manual labor.\(^{31}\)

FAO’s travails are perhaps understandable given the significant methodological difficulties involved in measuring hunger. As with poverty, neither ‘top down’ nor ‘bottom up’ methods provide a full picture. Rather than asking people what they eat, FAO uses national food accounts to calculate aggregate food supply, and then employs a model to assess the distribution of that food.\(^{32}\)

Household surveys, on the other hand, *do* ask people about how much food they have, but they are better at measuring food acquisition than consumption, do not capture distribution of food within households, and are vulnerable to misreporting.\(^{33}\)

An alternative approach is to use anthropometric measurements, which reveal the consequences of malnutrition, with widely-used indicators for the growth of children (wasting, underweight, stunting, and so on).\(^ {34}\) Wasting (low weight for height) tends to show acute hunger, while stunting (low height for age) indicates chronic hunger, with both
indicators also influenced by factors such as the health of children and the education of their mothers.

The *State of the World’s Children 2012* presents data for infants with low birth weight and for those are underweight, stunted, or wasted at age 5 (see Figure 3). In the period 2006-2010, 16% of under 5s were underweight, 27% were stunted, and 10% wasted. This compares to 30% underweight, 37% stunted, and 11% wasted in 1990-1998.

**Figure 3**

Data on height and weight are cheap to collect, but are not universally available. For stunting, data are available for only 41.9% of countries for 2006-2010. For wasting, data are available for 40.9% countries and for underweight 41.4% countries (see Figure 4).

A final approach is to measure perceptions of food insecurity. The *Gallup World Poll* asks respondents in 150 countries whether or not, in the past 12 months, they have had enough money to buy food for themselves and their families (food insecurity), and whether they or their families have gone hungry over the past 12 months (hunger) (see Figure 5). These data actually show a modest decline in food insecurity during the early years of the food crisis.
However, Gallup surveys are not conducted on a regular basis. Families of different income levels are also likely to have different perceptions of what constitutes sufficient and affordable
food, limiting the validity of comparisons between countries. However, this does offer an insight into perceptions of hunger in richer countries, where 11% of households report food insecurity and 3.4% say they have gone hungry.

**Projections**

It is hard to determine a plausible trajectory for hunger after 2015. A crude projection of the FAO data on undernourishment would suggest that chronic hunger will be a problem until the end of the century, even at the somewhat faster rates of progress seen in the 1990s. Progress on this indicator seems to have stalled.

More specifically, the FAO projected in 2006 that average daily per capita caloric availability of food would increase by 9% between 1999/2001 and 2030, with the greatest improvements in South Asia. It also provided projections for hunger in 2030, but these are based on its old methodology for chronic undernourishment and outdated UN population projections. A crude adjustment of these projections suggests that roughly 500m people will be hungry in 2030, or 16.6% of the world’s population, with 44% of the hungry in South Asia and 37% in Sub-Saharan Africa. These figures should be treated with great caution, however.

Anthropometric trends appear contradictory, with the number of underweight children likely to halve in the MDG era, stunting rates falling by around a third, and wasting showing no improvement. This might suggest that there has been greater success in combating acute rather than chronic hunger, but that is a very tentative conclusion.

The DFID Chief Economist’s Office has presented projections on stunting, and has argued that higher rates of growth are needed to reduce stunting than poverty, given that low growth leads to the persistence of stunting for very long periods of time (“it takes over 70 years before countries where 50% of the poor currently live to bring child malnutrition down to China-like levels”).
Data on self-reported food insecurity have not been collected for long enough to establish a trend, although they do suggest that the populations of many countries were shielded from recent food crisis. This is consistent with evidence of low transmission of global prices to domestic markets in China and India and relatively strong economic growth in most non-OECD countries. It also underlines the complexity of predicting a trajectory for hunger based on global trends (price, income levels, etc.), given the critical role by the national policy environment.

**Drivers**

Some of the key factors likely to shape the hunger outlook to 2030 will be the following.

First, the extent of *growth in demand* for food. The FAO projects that demand for agricultural commodities to grow 1.5% per year to 2030 (a 25% increase between 2015 and 2030), as more people eat richer diets, while the World Bank’s 2008 *World Development Report* projected that demand for food would rise by 50% by 2030 (and for meat by 85%).

A second key variable is likely to be the *availability of land*. The amount of cropland available per capita has halved since 1960, and is especially low in Asia. One estimate suggests that just 3% of the earth’s ice free land area is unused productive land. Projections for land demand suggest that the ‘land balance’ could be negative by 2030 without substantial deforestation (see Figure 6).

A related question is *how rapidly new land is bought into production*. 45% of unused productive land is in sub-Saharan Africa; 40% is more than 6 hours from the nearest market. While it is critical that available land is brought into production with minimal deforestation, it is far from clear that the necessary investment, regulatory frameworks, or incentives are in place to make this happen.
Agricultural productivity will be another key issue. Concerns about global food security during the twentieth century precipitated the Green Revolution and allowed global food production to keep pace with a period of rapid population growth. Over time, however, investment fell sharply, with an estimated annual deficit of $65 billion in developing countries and a halving of the rate of yield improvements.\textsuperscript{45} Recent high prices could potentially reverse this trend, both as a result of market response, and as governments increase their focus on food security.

The impact of prices is likely to be another key factor. Food prices fell almost by half in real terms between 1960 and 2000, with the FAO warning that chronic over-supply of food was harming the prospects of the ‘vast majority of the world’s poor and hungry people.’\textsuperscript{46} Depressed food prices also accelerated a dietary transition to richer foods. In China, the income correlated with a diet that derived 20\% of its energy from fat fell from $1,475 in 1962 to $750 in 1990.\textsuperscript{47} While high prices should in theory benefit farmers (in the process, impacting rural poverty, especially in Africa), they are likely to be less advantageous to
rapidly growing cities, as well as to the many small farmers who remain net food buyers. In practice, much will depend on whether small farmers benefit from future investment, and on the integration of rural and urban economies.

Finally, energy, water, climate and other environmental threats have the potential to be major game-changers on the global hunger outlook. Global food prices are heavily influenced by energy prices, through linkages including fertilizers, on-farm energy use, food processing and transportation, and more recently the effect of biofuels on food prices. Agriculture currently accounts for an estimated 70% of global water withdrawals and uses much of it very inefficiently; competition for water between sectors, regions, and countries is growing. Rising temperatures, changes in rainfall patterns, and extreme weather events are already having an impact on agriculture. All of these impacts will grow to 2030, although the timing of many of the worst threats remains uncertain.

Key findings

While poverty is expected to continue to fall (absent a significant increase in conflict or a substantial deterioration in the global economy), there are likely to be significant numbers of people living under $1.25 a day in 2030 under a BAU trajectory. These projections are heavily sensitive to assumptions about rates and distribution of growth, both between and within countries.

Optimistic estimates for 2030 are in the range of 4-5% of the population of developing countries (HLP Secretariat; Edward and Sumner using survey method), through to a pessimistic 14.9-16.1% (DFID with low growth; Edward and Sumner with low growth and rising inequality, again using the survey method).

Both optimistic and pessimistic projections could be described as ‘business as usual.’ Optimists see a continuation of current (impressive) rates of growth, but assume static
inequality. Pessimists believe inequality will grow at current rates, but consider that current growth rates are abnormally high and will not be sustained.

The geography of absolute poverty shifts further if poverty falls faster. Between 2015 and 2030, the poor will increasingly be concentrated in Africa and in fragile states, but this trend will be still more pronounced if stable middle income countries continue to make rapid strides to end $1.25 poverty.

The poor will also tend to live in (i) fragile regions of otherwise stable states; (ii) countries where growth fails to benefit the poorest or where political will to redistribute income to poor people is absent; (iii) marginalized groups who are excluded from their countries’ successes.

All this is consistent with the observation that the mission to end poverty becomes progressively harder over time. In a pessimistic scenario, it hits headwinds in middle income countries. Even in an optimistic scenario, it must still confront the deep-seated problems of the marginalized groups in the most troubled countries: while poverty could be reduced rapidly or slowly in stable states, there is a broad consensus that there are no quick fixes for fragile states.

While the measurement of poverty has improved significantly over the past decades, there are still clear weaknesses, especially in Africa (where poverty will increasingly be concentrated). We will not have a good estimate of poverty rates in 2015 until well after that date.

Hunger is a distinct problem from income poverty, and data in this area are even worse than those for poverty; it is highly unlikely a benchmark can be set for 2015, let alone a baseline to 2030.

The relationship between increased income and better diets requires further examination, but it is clear that countries can potentially stay hungry as they get richer. Despite growing
wealth, nutrition standards in India, for example, remain among the worst in the world, with half of its children stunted (see Figure 7).  

As yet, there is little real understanding of the dynamics of hunger reduction at a global level. High food prices would seem likely to benefit the rural poor, but only if they are net producers of food or they capture the benefits from a more buoyant rural economy. In contrast, high prices may threaten fast-growing cities, including urban middle classes. In practice, though, food markets are heavily constrained by government policy, limiting the impact of price movements (with positive and negative consequences).

As a result, we have a poor understanding of whether business as usual is likely to see more land brought into production and yields increase (in reaction to recent high prices and possibly with a significant lag), or whether food markets have entered a period of profound crisis. Food, in other words, is probably more sensitive to the sustainability of the global development trajectory than to income poverty.
II. Human Development

It is not possible to review trajectories for all human development indicators given the number and complexity of indicators under consideration for the post-2015 framework. This section therefore focuses on:

- *The Human Development Index*, as this gives some idea of overall business as usual trends for human development (although it also includes an income component).

- *Education*, which provides insights into two issues at the heart of the post-2015 debate: the challenges posed by ‘getting to zero’ goals and the implications of a greater emphasis on quality and on outcomes.

**Human Development Index**

**Baseline**

The Human Development Index includes life expectancy at birth, education (calculated according to an ‘Education Index’ based on both mean and expected years of schooling), and standard of living calculated on the basis of an ‘Income Index’ derived from PPP-adjusted GNI per capita. The basis for calculating the Index was changed in 2011, although the three basic themes measured by the Index were still similar to those now used.

The HDI score of the world as a whole increased by 14.7% between 1990 and 2011, with the HDI only falling in five of the countries for which data were available in that period. Low and medium HDI countries saw similar levels of improvement (with the former performing more strongly after 2000), and made modest gains on high income countries.

While the HDI is only as good as its underlying data, a baseline for 2015 can be set for most of the world’s countries.
Projections

Asher and Daponte have created projections for HDI scores in 2030, assigning countries into groups based on their development status, geographical location (and by implication, their connection to global markets), their vulnerability to malaria and other infectious diseases, and whether or not they have least developed status.

They find that countries in the most disadvantaged group tend to show fluctuations in HDI growth, but that volatility falls significantly once HDI reaches a key threshold and takes off; after this point, only conflict is then likely to derail improved human development. Natural disasters do not have significant effect beyond this threshold.

Drivers

The two key drivers of human development progress from 2015 to 2030 therefore appear to be countries’ development status and the role of conflict. While it is hard to escape the trap of low human development, many countries appear to make steady – if slow progress – once they have passed a certain threshold. Conflict, meanwhile, is the factor most able to derail HDI improvements, with implications for health and education systems, and for income poverty.

Education

Baseline

MDG2 is a zero-based goal that aims to ensure that children “will be able to complete a full course of primary schooling” by 2015. It is measured, however, using net enrolment rates (the proportion of children of primary school age), rather than by the proportion of children that actually complete primary school.

Data are available from 1999 and are of variable quality. For total enrolment figures in 2010, complete data are available for 69% of countries; for 21% of countries, data are available
from previous years; 8% of countries have no data; and the remaining 2% of countries’ data are estimates. Data for children being educated in the burgeoning low cost private sector are especially weak for most countries.

Overall, primary school enrolment grew from 82% in 1999 to 88% in 2004, and then to 90% by 2010. Over the same period, the number of out-of-school children fell by 3.3 million per year. By 2012, however, the Education For All (EFA) Global Monitoring Report was warning that “there are now worrying signs that progress has stalled altogether.” In addition, the proportion of children dropping out of primary school nearly trebled between 2004 and 2010, to 26%.

Twelve countries account for almost half of out-of-school children of primary age; two of them – Nigeria and Pakistan – account for a quarter. (There are no data, however, for many countries, including Bangladesh, Brazil, and China, and for many conflict-affected countries.) Neither Nigeria nor Pakistan have sufficient data available for EFA to provide an accurate assessment of primary completion rates, a worrying finding given their centrality to achieving the education MDG.

Neither country has any chance of achieving universal enrolment by 2015. According to EFA, the Government of Pakistan (GoP) has provided an estimated enrolment rate of 74% in 2010. However, the GoP Planning Commission provides a figure of 54.6% for 2008-09, which appears to call the 2010 estimate into question. According to the Planning Commission, “the MDG target of achieving 100 percent net enrolment ratio by 2015 requires an increase of 43 percentage points in the next five years compared to the 16 percentage points achieved in the last ten years.”

Nigerian national data also has significant discrepancies, with EFA making its own estimates which show that the net enrolment rate decreased between 1999 and 2010 and is now only
58%. The Nigerian government, however, claims that nearly 90% of its children are in school, as a result of its Universal Basic Education Programme, and the role of private schooling. As discrepancies like this show, the lack of reliable data is a consistent problem in evaluating countries’ performance on education (and it is worth emphasizing that Pakistan has not completed a census since 1998, while only some data from the 2006 Nigerian census has been published - making it hard for either country to state with any certainty how many children it needs to educate).

Consistent data on learning outcomes at primary level are not available, although 70 countries, including some middle income ones, participate in the Programme for International Student Assessment (PISA), which tests students at the age of 15 years. A comprehensive baseline for literacy and numeracy of school age children will not be available by 2015. Education For All also presents data on youth and adult literacy that are collected by the UNESCO Institute for Statistics. These are mostly drawn from national censuses conducted during a ‘census decade’ (currently 2005-2014), limiting their usefulness as a baseline for 2015. These data show that 88% of 15-24 year olds are literate in developing countries, and project a literacy rate of 89% in 2015. This seems implausibly high given that it matches current enrolment rates in primary education in developing countries. Census data is self-reported, tend to overstate literacy, and do not provide information on how well an individual can read.

Another source of data comes from household surveys in 63 countries that test reading ability and are based on an estimate using a model. Data from these surveys confirm that large numbers of young people are illiterate or semi-literate despite completing primary school, with 52% of young Nigerian women illiterate in 2008, for example, despite having received six years of education. In Pakistan, a household survey shows that 20% of urban children
and 27% of rural children cannot read a story despite being in their seventh year of education.\textsuperscript{57}

\textbf{Projections}

While a crude projection based on rates of progress between 2004 and 2010 would suggest that all children are likely to enroll in primary school before 2030, this would be an optimistic business as usual scenario given that improvements in enrolment may have already stalled.

Out-of-school children are concentrated in a few large countries, some of which are making very slow progress towards universal education. Even within those countries that educate most of their children, there are often regions or groups that have high levels of educational deprivation. Furthermore, a lack of data from conflict-affected countries means the problem is both greater, and more intractable, than official statistics currently suggest.

As the situation is even worse (and the data even more fragmented) for primary completion, there is no prospect that, in the foreseeable future, all children will complete a course of primary education.

Data on learning outcomes are also poor, and no projection can be made for business as usual on literacy or numeracy, especially given that current outcomes are probably significantly poorer than suggested by UN figures, due to problems with self-reporting.

The table below shows an example of rates of progress in rural India, which has generally been slow. The standard is to read a grade 2 text for children who have completed grade six.\textsuperscript{58}

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|c|c|c|}
\hline
\hline
Children who can read a story (after 6 years education) & 66.6\% & 71.7\% & 69.6\% & 66.3\% & 68.1\% & 62.8\% & 59.2\% \\
\hline
\end{tabular}
\caption{Literacy progress in India}
\end{table}
Rapid improvements in learning outcomes are possible. In the Brazilian state of Minas Gerais, for example, fewer than half of 8-year olds were reading at the recommended level of proficiency in 2006. An intensive drive to improve standards, which included focused support for teachers, outcomes tracking for each student, and incentivized targets, saw literacy levels among 8 year-olds improve to 86% by 2010.

There are a small number of similar case studies, for example in Punjab in Pakistan, where the Chief Minister has led a ‘roadmap’ that initially focused on access, teacher attendance (using the latter as a key proxy for quality), and prescriptive lesson plans. Early results demonstrate a significant acceleration in quality in just a year.

**Drivers**

Eight factors stand out as especially significant in shaping the global outlook on education to 2030.

First and foremost, political will and capacity to drive change. Given the disparities in performance of education systems in countries with comparable levels of education, the willingness and ability of governments to agree and implement reforms is almost certainly the most important determinant of improved quality.

Second, age structure. The global population of children of primary school age peaked in the mid 1990s. As a result, it should in theory become easier to deliver primary education – although demand for secondary and tertiary education will continue to run far ahead of supply.

Third, availability of finance. The finance gap to ensure basic learning outcomes in forty six low income countries is estimated to be around US$16bn, or 1.5% of their GDP. These countries are thought to have the capacity to double the share of GDP they spend on
education, leaving a need for external finance of US$9bn. Many middle income countries are spending far less than they should on education if they wish to have an educated population.

On a related note, the use of finance is also highly important. Education budgets are generally poorly managed and deployed, with high levels of corruption and waste. They also tend to be spent in ways that discriminates against the poorest.

Motivation and skill levels of teachers are also often problems. Teachers account for an overwhelming majority of the teaching budget in developing countries and are the most important determinant of learning outcomes. In most countries, teachers are also a formidable political force, while levels of absenteeism are often high. Low levels of teacher attendance also have a direct impact on parents’ willingness to enroll their children in school, while the rise of the low-cost private sector has generally been fuelled by the ability of these schools to get better results from teachers on lower salaries.

This links to another factor, the role of the private sector. The explosive growth of the low-cost private sector is the biggest recent game-change in education in developing countries. According to ASER, which conducts regular household surveys on education in India and Pakistan, “The trend is unmistakable. Private school enrollment in rural India is increasing at about 10% every year or about 3 percentage points per year. In the election year of 2014, about 41% of all of India's primary age children will be in private schools, and by the time 2019 elections come around, private sector will be the clear major formal education provider in India.”

61
<table>
<thead>
<tr>
<th>Age group</th>
<th>Govt</th>
<th>Pvt</th>
<th>Other</th>
<th>Not in school</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-14 All</td>
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<td>28.3</td>
<td>1.2</td>
<td>3.5</td>
<td>100</td>
</tr>
<tr>
<td>7-16 All</td>
<td>64.8</td>
<td>28.2</td>
<td>1.1</td>
<td>5.9</td>
<td>100</td>
</tr>
<tr>
<td>7-10 All</td>
<td>68.1</td>
<td>28.5</td>
<td>1.3</td>
<td>2.2</td>
<td>100</td>
</tr>
<tr>
<td>7-10 Boys</td>
<td>65.2</td>
<td>31.7</td>
<td>1.2</td>
<td>1.9</td>
<td>100</td>
</tr>
<tr>
<td>7-10 Girls</td>
<td>71.0</td>
<td>25.3</td>
<td>1.3</td>
<td>2.4</td>
<td>100</td>
</tr>
<tr>
<td>11-14 All</td>
<td>65.6</td>
<td>28.0</td>
<td>1.0</td>
<td>5.4</td>
<td>100</td>
</tr>
<tr>
<td>11-14 Boys</td>
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<td>31.3</td>
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<td>4.8</td>
<td>100</td>
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<tr>
<td>11-14 Girls</td>
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<td>1.1</td>
<td>6.0</td>
<td>100</td>
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<tr>
<td>15-16 All</td>
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<td>28.1</td>
<td>0.8</td>
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</tr>
<tr>
<td>15-16 Boys</td>
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<td>29.6</td>
<td>0.7</td>
<td>16.2</td>
<td>100</td>
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<tr>
<td>15-16 Girls</td>
<td>54.7</td>
<td>26.5</td>
<td>1.0</td>
<td>17.9</td>
<td>100</td>
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</tbody>
</table>

Table 7 - India rural enrolment

Note: ‘Other’ includes children going to madarsa [sic] and EGS.
‘Not in school’ = dropped out + never enrolled

<table>
<thead>
<tr>
<th>% Children in different types of schools</th>
<th>% Out-of-school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age group</td>
<td>Govt</td>
</tr>
<tr>
<td>---------------</td>
<td>------</td>
</tr>
<tr>
<td>6-10</td>
<td>58.7</td>
</tr>
<tr>
<td>11-13</td>
<td>58.4</td>
</tr>
<tr>
<td>14-16</td>
<td>51.6</td>
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<td>6-16</td>
<td>57.2</td>
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<tr>
<td>Total</td>
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<td>By type</td>
<td>74.1</td>
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Table 8 - Pakistan rural enrolment
### Table 9 - Pakistan urban enrolment

<table>
<thead>
<tr>
<th>Age group</th>
<th>Govt</th>
<th>Non-state providers</th>
<th>Never enrolled</th>
<th>Drop-out</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td>Pvt.</td>
<td>Madrasah</td>
<td>Others</td>
<td></td>
</tr>
<tr>
<td>6-10</td>
<td>33.5</td>
<td>58.7</td>
<td>2.0</td>
<td>0.2</td>
<td>4.7</td>
</tr>
<tr>
<td>11-13</td>
<td>38.8</td>
<td>52.6</td>
<td>2.3</td>
<td>0.3</td>
<td>3.3</td>
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<tr>
<td>14-16</td>
<td>46.7</td>
<td>40.7</td>
<td>1.0</td>
<td>0.1</td>
<td>5.2</td>
</tr>
<tr>
<td>6-16</td>
<td>38.0</td>
<td>52.8</td>
<td>1.8</td>
<td>0.2</td>
<td>4.5</td>
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<tr>
<td>Total</td>
<td></td>
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<td>By type</td>
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<td>56.8</td>
<td>2.0</td>
<td>0.2</td>
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</table>

The nature of parental demand is also a critically important factor. In some cases, there is a lack of parental demand for education (especially for girls in some countries), and while most parents do want an education for their children, many are reluctant to keep children in poorly functioning schools. This has led to an increased willingness to pay for private education even among poorer (though not the poorest) parents, on the one hand, and increased drop-out rates on the other. The ability of parents to demand quality education is a critical determinant of future trajectories.

Finally, as with other drivers discussed in this report, the role of data is crucial. Data on student learning outcomes are a critical tool for building political will, for allowing comparison of the performance of education systems across and within countries, for managing those systems effectively, and for allowing parents to demand quality. Data has played a transformative role in the improvement of weak education systems.

### Key findings

HDI projections provide at least some evidence to support the contention that a group of low HDI countries with high levels of instability and conflict will find it hard to improve their
human development in the post-2015 period, but that those who escape a ‘low HDI’ trap are likely to make steady, if slow, progress.

The education MDG, meanwhile, shows both the difficulty, and the importance, of zero-based goals. On one hand, every success makes further progress harder to achieve. On the other, though, this is after all precisely the point of these goals: to focus resources and normative pressure on children who are least likely to receive a decent education given the continuation of business as usual policies.

The shift from inputs to outcomes – from access to quality – dramatically increases the scale of the task that must be undertaken after 2015. In the MDG era, the world has struggled to improve, and monitor the improvement of, primary completion – itself a weak measure of attainment – and has instead defaulted to enrolment. With some exceptions, the developing world has made little progress in driving up educational standards.

There are some models that demonstrate that rapid improvements in learning outcomes are possible, but they require radically different approaches by governments and, where relevant, international development organizations.

The private sector is fast becoming the default provider of (somewhat) better quality education in the post-2015 era, even in countries where a free education is a constitutional right. This raises the question of what role there is for private educational providers (many of which are micro-providers) in a post-2015 framework, or for partnerships that deliver publicly financed education through the private sector.

Human development poses challenges that are quite distinct to the task of tackling income poverty – not least given that education and health systems represent a dominant share of the global public sector workforce, and that reforms hence pose huge political economy challenges.
Any country that can ensure that all of its children reach school sufficiently fit and well fed to learn, and are then taught sufficient skills to gain productive employment, is likely to have fulfilled almost all the other criteria needed to deliver development: sufficient taxation and sound public finance management; improved institutional capacity at all levels of society; and a commitment to the most vulnerable of its citizens.
III. Sustainability challenges: energy, climate, and other planetary boundaries

Part of the High-level Panel’s vision is “to have in place the building blocks of sustained prosperity for all”, while the Rio+20 conference – which set in train the process towards agreement of global Sustainable Development Goals – focused on the need for an economically, socially, and environmentally sustainable future for our planet and future generations and also had a heavy focus on green growth.

The breadth and complexity of these areas makes it impossible to cover them comprehensively in this paper. This section therefore focuses on two key elements as proxies for the larger sustainability agenda:

- Energy – which is vital for poor people, essential for economic development, and the most important determinant of whether growth is green or not.
- Climate change – the most urgent of our ‘planetary boundaries’ and the one that has been most intensively studied.

Energy

Baseline

The International Energy Agency (IEA) projects that global energy consumption will grow by 60% between 1990 and 2015, with total energy consumption in 2015 of 13,989 million tonnes of oil equivalent (Mtoe) (see Figure 8). Fossil fuels dominate the energy mix, with oil, coal and gas the most important energy sources (and in that order). Since 1990, oil has become relatively less important, while coal and gas have become more so (see Figure 9).
**Population, energy demand and GDP projections**

Source: UN, IEA, EIA

![Population, energy demand and GDP projections](image)

**Global energy mix in 2015 & 2030**

Source: IEA 2012

![Global energy mix in 2015 & 2030](image)
At the same time, the global distribution of energy consumption is also shifting rapidly. In 2015, half of all energy consumption will be accounted for by China (22% of the total), the United States (16%) and the European Union (12%). India is projected to consume 6% and Africa 5% of the world’s energy in 2015 (see Figure 10). In 2015, the average American will still consume more than 3.5 times as much energy as the global average, while China will have exceeded the global average. Africa and India will each consume less than a third of the global average. All parts of the world will see increased per capita energy use between 1990 and 2015.

Figure 10

Regional energy demand (mtoe), IEA projections

Source: IEA 2012
Energy efficiency has steadily improved, in the sense that a higher level of GDP can be produced with the same amount of energy. However, this rate of improvement has slowed over the past decade (0.8% per year in the 1970s, then 1.2% in the 1980s and 1990s, but only 0.5% in the 2000s). Three groups can currently be identified from least to most energy efficient: (i) China, Eastern Europe/Eurasia, Middle East and Africa; (ii) United States and Latin America; and (iii) Europe and Japan.

The share of global energy needs accounted for by renewable sources has increased strongly in recent years, with renewables accounting for an estimated 16% of global final energy consumption by 2010, and for around 50% of total power generating capacity brought on line in the same year. In the electricity sector specifically, renewable power provides around 20% of current global demand. Progress has been uneven across countries, with some achieving notable successes: renewables account for 26% of power generation capacity in China, and over 80% in Brazil.

Energy poverty remains a significant problem, with 24% of the population of developing countries lacking access to electricity in 2010, and 49% using traditional biomass for cooking (see Figure 11). The problem is especially significant in Africa, which is home to 46% of the people without electricity and 27% of those without access to modern cooking fuels. India is the country with the greatest number of people living in energy poverty (23% of those living without access to electricity, and 30% of those using biomass).

The main source for energy data is the International Energy Agency (IEA). The US Energy Information Administration (EIA) provides alternative data, as do some oil companies. The task of monitoring energy markets has become more complex over time, especially as more companies have become involved, with most wishing to keep some or all of their data confidential. Only 28 countries are members of the IEA and are subject to its rules on data
collection. The IEA says it has a “close cooperative working relationship” with other major energy consumers and producers.

Overall, data quality appears to be weakest for poorer, smaller countries. In recent years, the IEA has led a major push to improve data on energy poverty, providing the evidence base for the energy for all initiative. Data for cooking fuel have been published since 2002 and are “built up using survey and census data, World Health Organization (WHO) data and direct correspondence with national administrations.”

**Projections**

The IEA notes that “In the near to medium term, economic factors are the main source of uncertainty surrounding energy prospects. There is also enormous uncertainty about the outlook for energy prices, the size of energy resources and their cost, and prospects for new energy-related technology, especially in the longer term. But government policies are arguably the biggest source of uncertainty to 2035.”
The IEA’s forecasts to date have a reasonably good track record. In 1994, its reference case underestimated energy use for 2010, but its High Growth scenario forecast proved to be only 1.5% below actual levels. The High Growth scenario was based on annual GDP growth that is close to that seen between 1991 and 2010. Over a 16-year time horizon, the IEA’s assumption about the link between growth and energy supply has proved sound.77

The US Energy Information Agency also provides a series of projections. At global level, its scenarios with similar assumptions about GDP growth are broadly compatible with those of the IEA, although there are marked differences in the composition of this total (the EIA assumes higher US and lower Chinese energy use, for instance).78

The IEA’s reference scenario, entitled New Policies, assumes that existing energy policies are implemented, and that recent commitments (such as phasing out fossil fuel subsidies) are ‘cautiously’ implemented. Its Current Policies scenario, by contrast, does not include implementation of any newer commitments. Either of these could be considered a business as usual scenario.79 Under the New Policies scenario, global energy consumption grows by 25.5% between 2015 and 2030; under the Current Policies scenario, it grows by 29.2% over the same period.80

Under New Policies, use of fossil fuels increases to 2030 and they continue to dominate the fuel mix (more than 75% of all energy), but coal and gas use grows only slowly. Coal, and to a lesser extent oil, see much faster growth in consumption under Current Policies.

Greater energy efficiency accounts for 70% of the difference in energy consumption between the New Policies and the Current Policies scenarios, with the rate of improvement in energy intensity more than trebling over the trend seen in the 2000s. The IEA also sets out an Efficient World Scenario where “policies are put in place to allow the market to realise the
potential of all known energy efficiency measures which are economically viable.” This has the effect of halving the rate at which energy use increases.

Energy poverty is projected to remain a significant problem in 2030, with 15% of the population lacking access to electricity and 39% lacking access to clean cooking fuels, representing significant – but still modest – declines from 2015. India and Africa are projected to continue to have very significant residual problems with energy poverty.

**Climate and other Planetary Boundaries**

**Baseline**

The Stockholm Resilience Centre has begun the work of systematically identifying and, where possible, quantifying the most important environmental risk thresholds by proposing a framework of ‘planetary boundaries’ that define a “safe operating space for humanity,” and beyond which there is the risk of tipping points and of “irreversible and abrupt environmental change.”

A total of nine boundaries have been identified, in the areas of climate change, species loss, biogeochemical flows (nitrogen and phosphorus), stratospheric ozone depletion, ocean acidification, global freshwater use, land use change, atmospheric aerosols, and chemical pollution. The researchers estimated that human activity is already beyond safe levels in the areas of climate change, biodiversity loss, and changes to the global nitrogen cycle.

Of these boundaries, climate change is arguably the most important to focus on, not only because humanity is already in the danger zone, but also because it is the hardest to address, given the extent to which current energy use patterns are intertwined with global growth strategies. The problem of climate change is still being created substantially faster than it is being solved. Global average atmospheric concentrations of CO₂ have increased from a pre-
industrial level of 280 parts per million (ppm) to around 379ppm in 2005 and 399ppm at present, and are rising at around 2ppm per year.

Global CO₂ emissions are also increasing rapidly. From 1990 to 1999, the growth rate in CO₂ emissions from fossil fuel combustion and industrial processes grew by an average of 1.1% a year; from 2000 to 2009, this rate increased to an average of 3% a year, exceeding the growth projected in 35 of the IPCC’s 40 SRES emission scenarios. Overall, annual global CO₂ emissions from fossil fuel combustion grew by 38% between 1990 and 2009. UNEP’s 2010 Emissions Gap Report concluded that the currently forecast 2020 emissions levels were consistent with pathways that would lead to a likely temperature increase of between 2.5 and 5.0 degrees Celsius by the end of the 21st century.⁸²

While it is difficult to attribute specific current impacts to climate change, the frequency and severity of extreme weather events such as hurricanes, droughts and floods has increased significantly in recent years (see Figure 12),⁸³ and scientists are increasingly able to separate the causation of extreme weather from the background ‘noise’ of natural climate variability. Models of the impact of climate change on global food production also suggest that crop yields are already falling as a result of climate change in low latitudes, where most developing countries are located.

However, climate change data remains often uncertain and/or hard to access, with data on national and global emissions often especially poor, hard to access and unavailable in a timely manner despite the extensive investment to date in improving understanding of the science of climate change.
Projections

The reference scenario set out in the International Energy Agency’s 2012 World Energy Outlook suggests that global CO₂ emissions will rise from 33,185 million tonnes in 2015 to 35,403 million tonnes in 2030, an increase of 6.7%. OECD countries’ emissions are projected to fall by 10.9% over this period, while non-OECD countries’ emissions are forecast to rise by 20.8%.

However, while non-OECD states, and emerging economies in particular, see their total emissions rise significantly over the period to 2030, US Energy Information Administration projections of the arguably more important indicator of per capita emissions tell a somewhat different story. While US, Japanese and EU CO₂ emissions per capita all show projected declines between 2007 and 2030, and the per capita emissions of China, Brazil and India all rise, all three of the US, Japan and EU still have higher per capita emissions than any of the emerging economies in 2030. China’s projected per capita emissions remain at just over half those of the US in 2030, with those of Brazil and India lower still (see Figure 13).\textsuperscript{84}
In terms of the impact side of the climate ledger, the most important will stem from reduced water availability, with hundreds of millions of people additionally exposed to increased water stress over the century ahead. The IPCC estimates that the other key impacts on development will be in three areas:

- **Crop yields**, which are already decreasing at low latitudes (where most developing countries are located), and are projected to do so in all latitudes once global average warming exceeds \(2^\circ C\), placing tens of millions more people at risk of hunger;\(^{85}\)

- **Densely populated coastal megadeltas**, especially in Africa and Asia, where tens of millions more people will be additionally at risk;\(^{86}\) and

- **Health effects**, which will be generally negative, especially on poor, elderly, young, and marginalized people.\(^{87}\)

Finally, there is the political and economic imponderable of what would happen if the climate – or any other planetary boundary – were to pass an abrupt tipping point between now and
Important though the Stockholm Resilience Centre’s attempts to quantify risk thresholds are, the fact that environmental tipping points represent uncharted territory means that critical risk levels would only be known for sure after passing them. The potential for passing irreversible tipping points hence represents a non-linear ‘tail risk’ that is hard to take account of in conventional approaches to risk management.

Drivers

There is significant overlap between the drivers shaping the outlook to 2030 for both energy and climate change, which are therefore considered together in this section. Six factors are especially important.

First, rates of economic growth. This remains the key determinant of demand for energy, and hence (given current carbon intensity levels in the world’s energy systems) of emissions.

A second key variable is what happens to energy prices over the next decade and a half. Energy prices are clearly affected by a range of factors, but perhaps the most important uncertainty at present is the extent to which higher prices will bring new sources of supply to market, and what the carbon intensity of those new sources of supply would be.

Oil is becoming more expensive, complex, and risky to extract, but investment in exploration and production is believed to have doubled between 2006 and 2011, with much of the investment directed towards unconventional and deep water oil and gas.\(^\text{88}\) The United States has experienced a natural gas boom, driving down both its energy prices and its carbon intensity (although there is an unresolved debate about the extent to which the latter is also making future emissions reductions harder to achieve by making renewable energy less competitive against gas). At present, the price at which sufficient supply can be brought to market to meet energy demand remains highly unpredictable.
The diffusion of technologies is a related driver, with the IEA identifying carbon capture and storage, solar power, advanced biofuels, advanced vehicle technologies and nuclear power as ‘key uncertainties’ in its scenarios. The speed of diffusion of technologies for extracting unconventional gas and oil is also an even more important uncertainty.

A fourth uncertainty centers on future regulatory frameworks, with climate policy (at both national and global level) the most important factor here, along with policies that aim to increase energy security (which will sometimes tend to increase emissions and sometimes reduce them).

The IEA sets out a 450ppm scenario which is consistent with levels of energy use needed to give a 50% chance of avoiding warming of more than 2°C. It requires energy use in 2030 to be barely higher than it is in 2020 (13-17% lower than business as usual for 2030). While this is not currently a plausible trajectory, it shows the extent of action required from governments on climate. Regulation is also the biggest driver for energy efficiency, which could deliver potentially significant economic benefits (0.4% increase in global GDP in 2035), but has significant up-front costs and faces considerable opposition from interest groups.

On a related note, finance and political will are the major drivers of both decreased energy poverty and reduced emissions, with the IEA estimating that an additional $49bn each year (most of which is needed for Africa) could end energy poverty by 2030 (see Figure 14).

Finally, geopolitical factors remain a dominant driver of both energy and climate policy, as well as influence on energy markets. Oil remains the most powerful mechanism for translating geopolitical into economic risk (and vice versa), as Figure 15 shows.
Average annual investment in modern energy access, 2011-2030

Latin America

China

Other developing Asia

India

Sub-Saharan Africa

$0 $5bn $10bn $15bn $20bn $25bn

New Policies scenario
Addional for electricity in the Energy for All case
Addional for clean cooking facilities in the Energy for All case

Source: IEA 2012

Figure 14

Imported Crude Oil Price, Real Term (US$ per barrel)


US spare capacity exhausted
Iran-Iraq War
1973 oil crisis

1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012

$0 $20 $40 $60 $80 $100 $120

Saudis abandon swing producer role
First Gulf War
Venezuelan unrest & Second Gulf War

Global financial collapse
Low spare capacity

OPEC cuts targets 4.2 mmbpd
9-11 attacks

Sources: NBER, EIA Short-Term Energy Outlook & J. Hamilton (2010)

Figure 15

Some countries are extremely vulnerable to high energy prices (India and Pakistan, for example). Many energy producers, meanwhile, are reliant on prices remaining high as they increase public spending to quell political unrest. All major countries will actively protect
their energy interests, and some will continue to be prepared to use force, while non-democratic states with rich energy endowments also have a high propensity to engage in conflict overseas.

Key findings

There are good data for setting a baseline for 2015 for energy, both for the broader energy sector and for energy poverty, as well as reasonably robust data on BAU projections to 2030 for both (with projections on energy poverty driven in part by the need for benchmarking for the Sustainable Energy For All goals). Data on climate change, on the other hand, suffers from a range of shortcomings, complicating the challenge for policymakers and impeding the development of a common set of assumptions and reference points that could help to catalyze global consensus.

The BAU trajectory on energy would see the world off-track for a range of critical objectives. Energy consumption patterns would be environmentally unsustainable, with a significant divergence from the trajectory needed to limit average global warming to 2°C. Potential energy efficiency gains would go untapped, with only minimal improvements in energy intensity; energy poverty would persist to 2030 and beyond. Climate impacts associated with the BAU trajectory would include worsening crop yields and extreme weather impacts in developing countries to 2030, coupled with steadily increasing risks of passing abrupt and potentially irreversible tipping points. On other planetary boundaries, humanity is already in danger of passing key risk thresholds on species loss and the global nitrogen cycle, and could move into more danger zones in the period from now to 2030.

There is therefore a clear need to bend the curve on energy and climate change towards a hugely far-reaching systemic transformation that will lead to massive upgrades in both the sustainability of energy systems, and access to energy. At present, we are far off course from
the trajectory that we need to be on. On the other hand, we are becoming progressively better informed about what action would be needed to achieve both sets of goals, including a detailed scenario of what is required on energy efficiency and a clear analysis of the investment needed to ‘get to zero’ on energy poverty.
SECTION 3: Bending the curve: Potential disruptors (for good and ill)

In section two, we established that:

- For poverty indicators – poverty, hunger, education – it is highly unlikely that ambitious post-2015 goals will be met without significant improvements on business as usual trends (although we underline caveats about the weakness of data for establishing these trends).
- For core sustainability issues – energy and climate – the world is not even heading in the right direction. Significant efforts to ‘bend the curve’ will be needed even to begin to push the world onto a better trajectory.

The central finding of this paper, then, is that business as usual is not good enough.

A meaningful post-2015 agenda will require substantial additional progress, which should make the means of implementation of this agenda a central part of the post-2015 debate. Even a partial switch in focus from the current, purely normative conversation – to one that discusses questions of both strategy and delivery – has the potential to force actors to contend with real world challenges, rather than simply lobby to get ‘their issue’ included in the post-2015 agreement.

A core principle for the post-2015 framework could therefore be that no target should be included unless there is a clear plan for how it will be delivered, and how progress will be monitored.

In this concluding section, we briefly review eight potential disruptors that might bend the curve (for good and ill) – and how the international development system needs to position itself in order to manage the risks while maximizing potential upsides.
1. The need for better data

Data is crucial for development. It matters for evaluating what works and what doesn’t, and for setting the right priorities and resourcing them properly. At the same time, it can provide civil society with crucial ammunition for driving change, and by bringing data from different sectors together, it can help to drive policy coherence.

At present, a data revolution is underway in development. Initiatives like the Open Data Initiative, AidData.org, the International Aid Transparency Initiative and the Open Aid Partnership are all using new technologies to make crucial data sets available for development – in the process generating huge excitement about the new progress that this could unlock.

However, the revolution is still in its infancy. Many developing countries have acutely weak statistical capacity, and lack accurate and up to date data on economics and poverty. Data is often complex, hard to understand, and not packaged in an accessible enough way. Even where new initiatives are in place, it is unclear whether they are yet exerting a significant influence on development strategy.

There is also too often a lack of ambition on data collection at country level, with national statistical agencies chronically underfunded in many developing countries. International data collection efforts, meanwhile, are highly fragmented – with each organization generating its own data that only gives partial answers to core development questions.

The international system needs to:

- **Think holistically about the data needs of the post-2015 framework.** Data requirements need to be identified early, and a coherent strategy developed for collecting the required data.

- **Take data out of its silos, increasing interoperability and ruthlessly eliminating overlap.** Many organizations have become much more effective at collecting,
analyzing and presenting ‘their’ data – but a new ‘data compact’ is needed at international level if these efforts are to become greater than the sum of their parts.

- **Focus on building up data ‘ecosystems’** – especially by lowering barriers in the way of open data initiatives and changing disclosure policies.

- **Reinforce consistent data standards at national level** – all priority countries should have robust National Statistical Development Strategies, with donors making sure all their data initiatives are compatible with and support these strategies.

- **Invest in better household surveys.** There are too many household surveys, conducted at irregular intervals and with differing methodologies. A single standard is needed, together with a commitment to conducting comprehensive surveys at a regular interval.

- **Recognize that data on perceptions matters.** Perceptions data is neglected by the international system, but is cheap to collect and provides a valuable perspective on some issues. It does not provide all the answers and results need to be interpreted with care, but will still help to provide a fuller picture of what people think about development and why.

- **Find better ways to use data to exert policy pressure.** Data is seldom presented in ways that maximize its ability to exert pressure on policymakers. Improving this aspect of how statistics are presented should in turn improve the incentives for policymakers to use data to make better decisions.

In practice, we recommend that by 2015, instead of a World Development Report, a World Energy Outlook, a State of Food Insecurity report, a Human Development Report and so on, the world’s key international agencies should be working together on a single analysis that devotes proper resources to the questions addressed in this paper:
- If the world wants to end poverty by 2030, then what does BAU look like after 2015, and how big are the gaps?
- What are the key drivers that could bend the curve? What data and information are needed to tell policymakers whether or not they are succeeding in doing so?
- What resources, partnerships, and strategies are needed to drive the change?
- What are the major risks to global poverty eradication goals, and how can they be mitigated?
- What are the key environmental risk thresholds that the world faces, and how close will projected global growth trajectories take us to them?

This integrated exercise – which could pick up from the Rio 2012 Conference’s decision to institute a new Global Sustainable Development Report – would both build normative pressure through a sense of how urgent it is to bend the curve across a range of issues, and could have a substantial impact on the international system's interoperability.

It is very difficult to see how a post-2015 sustainable development agenda will achieve the step change needed in policy coherence and integrated delivery without this kind of joined-up analysis forming a basic foundation.

2. New technologies

During the period of the first MDGs, there was widespread concern about the ‘digital divide’ and poor people’s lack of access to 21st century communications. Now, by contrast, more people have access to cell phones than to clean sanitation (see Figure 16).
As 3G and 4G telecoms are rolled out globally, cell phones and internet access are becoming one and the same thing. This is already starting to have a revolutionary effect on access to markets, financial services and other needs, as cases like M-PESA show. New technologies are also making social protection programs more cost effective, while improving targeting.

The biggest question of all, however, is how the change will impact governance, accountability, participation and citizenship, as hundreds of millions more people discover new ways to organize and make their voices heard.

Development actors need to:

- **Examine technology’s impact on targeting.** It is increasingly possible to have a cell phone number and GIS coordinates for every poor family. This has the potential to change almost everything we know about development.

- **Make sure they understand the problem before they turn to the technology.**

  Technology needs to be understood as a means, not as an end in itself. Development
actors hence need to ensure that they remember to put the user first, build tools rather than solutions, learn from failures, and avoid reinventing the wheel.

- **Bring ICT for development into the mainstream.** At present, ICT is too often a separate ‘tribe’ from the agriculture, health or education ‘tribe’ in development, engaged in its own separate conversations and policy agendas – which in turn leads to important opportunities for synergies being missed or overlooked.

- **Focus on building up data ‘ecosystems’** – especially by lowering barriers in the way of open data initiatives and changing disclosure policies.

- **Explore technology futures.** Technology develops quickly, but diffuses slightly less so. It is therefore already possible to explore what technology is likely to mean to development in a decade’s time – deep into the post-2015 era.

### 3. New sources of finance

In the period since 1990, aid has already become much less important than either foreign direct investment to developing countries, or remittances home from economic migrants.

Meanwhile, new donors – from non-OECD states to philanthropic donors – are becoming key players, while private sector actors, from social impact investors to multinational firms, are also driving new financial flows. Climate finance is becoming crucial too, despite a slow start – in 2010, the total amount of climate finance in the world exceeded aid from OECD donors for the first time.

However, it is far from clear what impact official development assistance has had on development in the MDG era, and how changes in the nature of official flows (with a greater proportion directed towards the social sectors) have altered this impact.
It is time for donors to:

- **Conduct a fundamental review of official development assistance.** How much do we need? And where? What kind of spending makes the most impact? How does money influence broader institutional transformation? How can official aid flows leverage other sources of funding?

- **Use this review to improve coordination** between different sources of finance for development – perhaps most urgently in evaluating how climate finance relates to ODA.

- **Develop costed plans for each proposed post-2015 goal** – using the model established by Sustainable Energy For All, and based on establishing a clear BAU trajectory.
4. Aid effectiveness

By 2030, the global poverty map will look very different. Poor people will increasingly be in either stubborn poverty ‘tails’ in middle income countries, or in low income fragile states. Good performing low income countries, meanwhile, could have largely ceased to exist as they graduate to middle income status.

International development could yet see an ‘aid renaissance.’ The last few years have already seen the beginnings of a quiet revolution in aid targeting, which may result during the lifetime of the post-2015 framework in a situation in which development actors more or less know the name and address of every poor person.

Now, global development actors need to:

- **Develop a new theory of influence for aid**, with less emphasis on its resource transfer aspect and much more on aid as a platform for collaboration and pro-poor social change – especially in fragile states and middle income countries.

- **Keep up the momentum on developing new aid instruments** that take advantage of the incipient revolution in aid targeting – allowing ‘cash on delivery’, social protection, education and other forms of assistance to be targeted more accurately and specifically than ever before.
5. Conflict risk

Conflict remains a critical obstacle to development wherever it exists. One and a half billion people live in areas affected by fragility, conflict, or large-scale, organized criminal violence; no low income fragile or conflict-affected country has yet to achieve a single MDG, although some are on track to meet some of them. Without peace, development has no chance.

‘Traditional’ civil wars are in decline. The spate of civil wars that followed the end of the Cold War has declined markedly – in no small part because of the effectiveness of international peacekeeping mechanisms. Battle deaths have declined too as a result.

But some countries are stuck in repeated cycles of violence, while new conflict threats are also increasing. The latter include organised crime and trafficking, terrorism, civil unrest arising from global economic shocks, and sub-national and regional insurgencies. All of these forms of conflict can exert a devastating impact on development.
Increased conflict is probably the only driver that could lead to a sudden and marked deterioration in development status in a country (or, in the worst case, a region). A decreased risk of conflict, and a lowered risk of localized violence, would by contrast create new potential for poverty reduction in the fragile environments where a growing proportion of the poor will live.

Four key tasks that the international system will need to address in order to maximize the post-2015 agenda’s chances of success are to:

- **Upgrade the peacekeeping system.** Peacekeeping interventions are one of multilateralism’s key success stories in the post-Cold War era. However, the system is currently badly overstretched, struggles to manage especially dangerous or demanding missions, and faces on-going uncertainty about financing from donors.

- **Ensure the broader international system supports the post-2015 agenda.** The Security Council, Peacebuilding Commission, etc. all have vital roles to play if ambitious ‘getting to zero’ targets are to be delivered. This is also an opportunity to underline how vital UN support for peace has been in making development possible in the MDG era.

- **Improve management of transitions from crisis to development** – for instance by building on the early successes of the Peacebuilding and Statebuilding Goals (PSGs).

- **Get better at acting on policy coherence** – such as addressing the ripple effects on West Africa or Mexico of developed countries’ drug prohibition policies.

**6. The challenge of effective states**

Effective states – states that are institutionally capable, accountable to their citizens, and responsive to their needs and demands – are essential for development. Wherever governments meet this triple challenge, development usually follows.
In particular, however, effective states are critical during countries’ windows of demographic opportunity. When countries move into the ‘fulcrum moment’ of youth bulges entering the workforce, in the process reducing the national dependency ratio, good governance is one of the key tests of whether this shift is more likely to spell opportunity or disaster.

However, development agencies have made limited progress on this agenda during 2000-2015. Increasingly, they will need to:

- **Look beyond institutional capacity building** – and take a more politically sophisticated approach to influencing key policymakers and working with endogenous drivers of change as ways of achieving pro-poor development.

- **Focus on helping governments cope with complexity.** The need for governments to think in whole system terms and overcome the perennial problem of silos and stove-pipes is becoming ever more important as the world continues to go through a period of massive change. This poses a particular challenge for those governments with the most limited capacity, despite the fact that the risks that come with complexity are sharpest in these contexts.

7. **Managing risk**

Development is increasingly taking place in an age of uncertainty and risk. Among the many sources of risk to households, communities and countries are climate change, violent conflict, resource scarcity, poor governance, insecure employment, resource price spikes, lack of secure access to infrastructure, unsustainable population growth, and many others besides.

Poor people and countries are disproportionately exposed. Notwithstanding that the financial crisis and global downturn was less catastrophic than feared for the world’s poor, they still have the highest vulnerability to risks of all kinds and lowest capacity to adapt.
Some of the most innovative and dynamic areas of development practice are about resilience – including climate adaptation, social protection, disaster risk reduction, household asset-building, livelihoods and peace-building. The key challenges for the international system now are to:

- **Connect the dots between different areas of resilience** – exploring the potential for synergies between the areas mentioned above, and exploring whether in some cases they look essentially the same in practice.

- **Build strategic risk management capacity in governments** – including the ability to work inter-operably both across government departments and agencies, and internationally with other governments, to manage risks that sprawl across boundaries.

- **Look for ways to work with innovations emerging from the bottom up.** Most poor people cope with risks through informal mechanisms and social capital, and the aid system needs to work with the grain of this tendency rather than ignoring it.

**8. Policy coherence for development**

Until relatively recently, many development analysts assumed that the post-2015 agenda would be in large part a ‘beyond aid’ agenda – an agenda that refers not to downgrading the importance of ODA, but instead to placing much more emphasis on areas like trade, climate change, intellectual property and tax havens.

Multilateral action on these areas has made little headway over the last decade, and OECD governments have a long way to go on ‘connecting the dots’ across ministries on development – raising the question of whether there is real appetite for a genuine partnership agenda.

Yet if greater political commitment on these issues were to materialize – primarily among OECD governments but increasingly among emerging economies too – then real progress on
these areas could be a massive fillip to development, and could emerge to be indispensable for a ‘getting to zero’ agenda.

Governments should:

- **Commit to evaluating and reporting on the development impact of domestic policies** – especially in areas that have particularly high impacts on poor countries.

Some of the most important areas are: controlling GHG emissions, trade preferences and barriers, migration, food export bans, arms sales, tax havens, drugs policy, contributions to peacekeeping, investment, intellectual property regimes, and innovation and technology policy.
**Conclusion**

This paper has examined the BAU trajectory on a range of the most important trends for international development, over the period from the Millennium Development Goals’ deadline in 2015, forward to 2030.

The paper’s key finding is that business as usual is not enough if the world is serious about ‘getting to zero’ on poverty by 2030, never mind the even more challenging objective of moving the global economy on to a genuinely sustainable trajectory.

With this in mind, the post-2015 agenda – both the objectives it agrees, and the degree of political commitment shown to pursuing and securing them – has the potential to be a crucially important framework for ‘bending the curve’ on future development trends, and ensuring that the world shifts decisively towards a fairer and more sustainable form of globalization.

At the same time, the paper has also emphasized throughout the shortcomings in the data available – even on the most fundamental indicators, such as income poverty or hunger. The fact that the data are so often weak presents a major problem for policymakers as they attempt to gauge the effectiveness of existing policy and to weigh up the pros and cons of committing to more demanding goals in the future.

The world’s governments and citizens therefore face a threefold challenge as they move to define and embark upon the post-2015 development agenda: commit to tougher objectives, show immense seriousness of purpose in delivering them, and achieve huge improvements in how they measure success and failure. None of these challenges will be easy – together, they are likely to prove decisive for the prospects of all of the world’s people, and especially the poorest and most vulnerable among us.
2 Ibid
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10 Ibid. The rich tend to have poor response rates to household surveys, while the poor underestimate consumption. National accounts include various estimates (e.g. for rent for homeowners, gifts, food grown at home, etc.)
14 Ibid
16 Jerven, Morten, Poor Numbers: How we are misled by African development statistics and what to do about it, Cornell University Press, New York, 2013
17 Ibid
18 Authors’ calculations
23 See Table A2, Edward and Sumner, 2013, op cit
25 Palma, J.G., Homogeneous middles vs. heterogeneous tails, and the end of the ‘Inverted-U’: The share of the rich is what it’s all about, Cambridge Working Papers in Economics 1111, Cambridge: University of Cambridge Department of Economics (later published in Development and Change, 42, 1, 87-153), 2011. Palma argues half of GNI is usually captured by the middle deciles (5-9) with the rest shared out (highly heterogeneously) between the richest 10% and the poorest 40%.
29 Ibid
33 Ibid
34 Masset, Edoardo, A review of hunger indices and methods to monitor country commitment to fighting hunger, Food Policy, 2010
35 UNICEF, The State of World’s Children 2012; Table 2 nutrition, UNICEF, New York
36 Ibid
38 Ibid. Figure based on table 6.1 – population weighted mean, with two lines for both 57 and 70 countries.
43 ‘Unused productive land’ indicates land that is currently non-cultivated, non-forested, suitable for growing at least one of five major crops (wheat, maize, soybean, sugarcane, palm oil), and has a population of <25 individuals per km².
50 Ibid. Annex, Table 5, EFA 2012
55 Ibid


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IEA World Energy Outlook 2012, op. cit., figure 9.1


Ibid


Emphasis added


Both of the IEA’s scenarios use the following assumptions (i) 4.0% real annual GDP growth 2010-2020 and 3.5% thereafter; (ii) higher energy prices (real oil price 15% higher in 2030 than 2011 for New Policies and 35% higher for Current Policies); (iii) a growing impact from carbon pricing, including in China, based on commitments in its Five-Year Plan; (iv) no significant technological breakthrough, but greater use of existing technologies; (v) population growth

For simplicity, we use the New Policies figures for 2015 as a baseline when calculating trajectories under Current Policies for 2015-2030. In reality, the two scenarios diverge before 2015, but the differences are small.


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World Resources Institute, Chart: Per Capita CO2 Emissions for Select Major Emitters, 2007 and 2030 Projected), WRI, Washington DC


Ibid

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