2020 development futures

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Introduction and Summary

Background

This paper was commissioned by ActionAid International as an input to its 5 year external review and international strategy for 2012 to 2016, with the intention to

"summarise the most important trends that ActionAid International must respond to and exploit in its next strategy, in order to achieve its mission and vision."

The paper – which is a report to ActionAid, not a statement of ActionAid policy – is based on a review of a range of futures studies, scenario planning exercises and Outlook reports (see Appendix 1 for the full list of sources consulted), and therefore reflects those papers' perspectives and focuses. It also means that certain areas that are high priority areas for ActionAid, but that were not well covered by the futures studies, also figure relatively lightly in this report: among these areas are the future of social movements, women's rights analysis and the future of the care economy, and the role of the State and consequent future potential of a human rights-based approach.

The core of the paper is a discussion of eight critical uncertainties that will fundamentally shape the context for international development over the next decade. In each case, the paper aims to assess what is known and what remains uncertain, and to identify themes that will be especially important for ActionAid. The paper concludes with ten recommendations (these have been lightly edited from the original version of this paper in order to maximise relevance for civil society organisations and other development actors).

Eight critical uncertainties for development in 2020

The eight variables that form the core of the paper are as follows:

- 1. What is the global balance of power in 2020? The futures studies examined for this report generally concur that US power will decline in relative terms from now to 2020, as part of a broader shift to a multipolar world that will see more influence flowing to emerging economies. But they differ on important nuances in particular, which emerging economies are poised to benefit from the shift.
- 2. Will job creation keep pace with demographic change to 2020? Numerous developing countries are about to experience a surge in their working age populations. These demographic conditions could provide a springboard for sharply rising incomes, or an entry point to instability and state fragility. Key questions include social protection provision in 2020, whether the world's cities can cope with

the strains of rapid expansion, and whether developing economies start to experience the 'job polarisation' already seen in some developed economies.

- 3. Is there serious global monetary reform by 2020? The financial crisis is not over, in particular given the ongoing risks of weak bank regulation, potential sovereign debt defaults in developed countries, and the possibility of a disorderly unwinding of global trade and currency imbalances. Two key questions for the future are whether the dollar loses its status as global reserve currency (and if so, what replaces it), and whether a 'limits to growth' agenda finds practical application in monetary and financial policy.
- **4. Who will benefit from the projected 'avalanche of technology' by 2020?** The next 10 years will see major innovations in biotechnology and genetics, energy and resource efficiency, computer science and IT, and human augmentation, as well as unpredictable synergies between them. These changes will raise three key questions for poor men and women: how they could benefit; where they will miss out (with potential exacerbation of inequality); and how emerging technologies could create new risks for them.
- 5. Will the world face up to the equity questions that come with a world of limits by 2020? The world's middle class is expanding rapidly, and so is demand for energy, 'western diets' and other resources but limits to supply growth, especially of land, water, food, oil and 'carbon space' for emissions, create the risk of an age of growing scarcity. This raises the question both of how poor men and women can become more resilient to the impacts of a world of scarcity, and a broader agenda of 'fair shares' to land, water, food, oil and the atmosphere.
- 6. Is global trade in decline by 2020? International trade faces major risks from now to 2020, including protectionism (not only tariffs and quotas, but also 'currency wars' and carbon tariffs); security of supply problems (e.g. food export restrictions); and the effects on trade volumes of sharply rising oil prices. These potential shifts could impact poor people disproportionately, and lead to a world of more regional (or even local) markets, or endogenous growth strategies.
- 7. How has the nature of political influence changed by 2020? Many futures studies agree that a more multipolar world will see a bigger role for "nonstate actors", but are vague about who is included in this category. This section of the paper looks briefly at the potential influence of young people, women and 'supranational tribes'; the evolving role of social networking technologies and the kinds of political activity they can enable; the changing relationship between citizens and states; and emerging shifts in values and worldview, including religious observance and the potential for a large-scale transformational shift in values.
- **8.** What will the major global shocks be between now and 2020? Finally, the paper emphasises that shocks, rather than gradual stresses, are likely to be the key

drivers of global change during a turbulent decade ahead, and sets out a range of potential sources of such shocks.

The paper concludes with a brief synthesis discussion that draws the eight uncertainties together – setting out the idea of a 'long crisis' of globalisation that could lead to a process of fragmentation which would put poor people at particular risk, or alternatively that could lead towards a more just, sustainable and resilient form of globalisation – before setting out ten recommendations that arise from the analysis. These are as follows:

Ten recommendations for the next ten years

- 1. Be ready (because shocks will be the key drivers of change) With a decade of turbulence ahead, advocates of global justice need to be ready with concrete ideas to take advantage of shocks that open windows of political opportunity, suddenly and only briefly. Civil society organisations should put aside a proportion of their policy and advocacy resource to develop 'massive asks', together with blitzkrieg campaigning strategies to roll them out rapidly when ten times as much political space opens up overnight, for three weeks only.
- 2. Talk about resilience (because the poor are in the firing line) The decade ahead will be characterised primarily by risks, with poor people usually the most vulnerable. Civil society organisations need to gear up for a massive push on areas like social protection, climate adaptation, peacebuilding, disaster risk reduction and humanitarian assistance both in their own programme work, and above all through hard-edged advocacy in countries and internationally.
- 3. Put your members in charge (because they can bypass you) Most NGOs provide limited opportunities for member engagement, such as participation in postal or internet-based campaigns or simply donating money. Civil society organisations should embrace a change that is coming anyway, and put its members in charge of the organisation using technology platforms to ask them regularly what to campaign on, where, how to do it, and how they want to be involved.
- 4. Talk about fair shares (because limits change everything) For 200 years, left and right have disagreed on everything except the indefinite sustainability of rising growth. Resource scarcity and climate change will change the game utterly, putting inequality into a radically new context. ActionAid is potentially incredibly well placed to be a leader on this agenda, given its roots and experience on issues like land reform. But it will face tough communication challenges as it starts to unpack the global agenda of fair shares over the next decade, and developing advocacy asks centred on changes to global consumption patterns.

- 5. Specialise in coalitions (and not just of civil society organisations) Success in global justice advocacy will in future depend on building coalitions of both states and non-state actors, that can act as shared platforms for pursuing shared asks. For civil society organisations to flourish in this environment, the key challenge will be interoperability: the capacity to communicate and work with radically diverse sets of partners, from UN agency staff to multinational companies, and from grassroots activists to government officials. Civil society organisations should ensure that as many of their staff as possible have extensive experience outside the civil society sector, in as many different kinds of organisational context as possible.
- 6. Take on the emerging economies (including from within) Emerging economy interests are increasingly diverging from those of low income countries on key issue areas like climate change and trade, but NGOs still tend reflexively to see G77 states, including emerging economies, as the 'good guys', and OECD economies as the 'bad guys'. Civil society organisations should develop a cross-cutting goal of advocating for emerging economies to play a responsible role in global multilateralism, as well as continuing to focus on domestic issues of social exclusion and poverty within them.
- 7. Brings news from elsewhere (because innovation will come from the edges) Even as it emphasises themes of vulnerability and injustice, part of what makes ActionAid interesting is that it also talks more than most NGOs about poor people as powerful (in particular through its human rights based approach). ActionAid should build on this by acting as a counterpoint to development narratives of victimhood talking about the ways in which poor people are developing some of the most dynamic, innovative and resourceful responses to a volatile world, as a way of delivering on program, advocacy and fundraising objectives.
- 8. Expect failure (and look for the silver lining) As well as watching for failures in the external environment and being ready for them (see item # 1 above), civil society organisations should expect to find their own operations (advocacy, programmes, fundraising and management) under substantially heightened stress in the decade ahead. They should prepare for this by modelling themselves on 'high-reliability organisations' the subjects of intensive research into why certain organisations manage to succeed in avoiding catastrophes in environments in which normal accidents can be expected due to risk factors and complexity.
- 9. Work for poor people, not poor countries (as most of the former are outside the latter) Civil society organisations need to start getting ready for a major shift, towards operations in new countries, and advocacy messages that prepare for and then support this. Public opinion in key donor and fundraising countries will frequently tend towards the sceptical ("why should be helping India when it has a space programme?"), so civil society organisations need to start developing the

- arguments now as to why poor people in these countries still need help, and what form that help will take.
- 10. **Be a storyteller** (*because stories create worldviews*) civil society organisations should start to position themselves as storytellers about the future. This would involve radically changing how they communicate, and to some extent letting go of being pure development NGOs in favour of larger stories about global transition in which development is but one (essential) part.

1\ What's the global balance of power in 2020?

Futures studies disagree about the outlook for the balance of power between major states from now to 2020. While many analysts foresee a diminution of US power, coupled with a shift to a more multipolar world, they differ on the rate of change — and on *which* emerging economies are best placed to improve their standing.

Many commentaries on the **United States** suggest that the US is entering a period of decline, focusing on themes such as economic weakness, political sclerosis (a recent FT opinion piece observed of the Cancun climate talks that "whatever Mr Obama might promise, his word, until further notice, is worthless") and reduced capacity to get its way internationally, in particular following the experience of Iraq and Afghanistan.

Most of the studies examined are also relatively downbeat about prospects for the **European Union**, citing factors including weak growth, cultural divisions over immigration and an apparent inability to act in concern in foreign policy. (Interestingly, though, a number of more recent commentaries have suggested that the current Euro crisis could potentially lead to a substantially more coherent Europe with more pooling of sovereignty, after a lengthy period of instability in which the Euro could fail — a scenario that could see Europe's global influence waxing again.)

At the same time, many of the studies consulted for this report underscore the robust growth – political and diplomatic as well as economic – of many **emerging economies**. Projections from Goldman Sachs envisage the BRIC economies, as an aggregate, to overtake the US by 2018 and to account for one third of the global economy (in PPP terms) by 2020, contributing just under 50% of global growth.

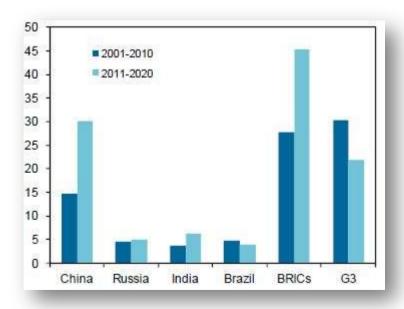


Figure 1: BRICs' projected contribution to global growth (source: Goldman Sachs)

These data lead many futures studies to argue that the age of the sole 'hyperpower' will give way to a world of multipolarity to 2020 and beyond – even if the US will continue to be the single most powerful state during this period. The US National Intelligence Council, for example, argues that "By 2025 the international community will be composed of many actors in addition to nation-states and will lack an overarching approach to global governance. The 'system' will be multipolar with many clusters of both state and nonstate actors."

These views have been given added weight by the **financial crisis** – which not only saw emerging economies performing robustly, but also saw low income countries among the most resilient economies. (Only 71 countries managed an increase in per capita incomes during 2009 – **but among them were three quarters of the world's low income** countries.)¹

However, while there is broad consensus over this basic outlook among the studies assessed for this report, there are also substantial differences of nuance. One of these concerns the precise rate at which US power may decline in relative terms, which in turn depends in particular on the US's economic outlook. On one hand, some analysts argue that while current US performance is clearly weak (unemployment at 9%, growth at 0.4%), this must be seen in the context of underlying fundamentals such as its skills base, R&D spending, capital markets and labour productivity. Other analysts, conversely, worry that the US's national debt is an Achilles heel, potentially leading to progressive erosion of the dollar's purchasing power (and, *in extremis*, an end to the dollar's role as de facto global reserve currency), price inflation and stagnant growth.

More fundamentally, there is **little consensus over which emerging economies are poised to see their relative power increase most.** While the 'BRIC' grouping has emerged as a shorthand for emerging economies generally, many analysts are unsure of whether the four countries really have much in common — or, more fundamentally, whether they are really the emerging economies best placed to prosper in future.

China, for example, faces challenges including inequality and weak social protection, serious banking sector problems, heavy reliance on imported resources, endemic corruption and weak regulation, heavy environmental degradation, the demographic consequences of the one child policy, and the potential for several of these to combine into a 'perfect storm'. Russia, too, faces massive challenges such as internal governance problems, massively declining population, poor infrastructure and over-reliance on oil and gas.

Prospects for **Brazil** and **India** seem to be less dramatically called into question, but even here a more mixed picture emerges than the rosy one set out in headline 2050 GDP projections for the BRICs. In India, key challenges include infrastructure, skilled labour and energy production; **while Brazil's growing international presence may be** unlikely to extend much beyond Latin America except in the energy and trade domains.

On the other hand, other emerging economies may be closer to becoming emerging powers than the ubiquitous 'BRIC' acronym might suggest. Four of the most consistently cited in this regard are Turkey, Poland, Indonesia and Iran, all of which are potentially well placed to play substantially larger international roles by 2020. Goldman Sachs has also defined an 'NII' (next eleven) grouping, that includes all of the above except Poland, plus South Korea, Mexico, the Philippines, Egypt, Pakistan, Vietnam, Nigeria and Bangladesh.

A related variable in the decade ahead is **how the role of the G20 unfolds**. While the days of the G8 as the key global coordination body appear over, views about prospects for the G20 are mixed. One view sees the G20 as a flash in the pan that worked during the financial crisis, but will struggle from now on with divergent member interests (unless there is another crisis). A second view is that April 2009 marked a Bretton Woods moment, in which countries discovered interdependent self-interests, and that the G20 has become the de facto key global coordinating body. A third view is that the G20 marks a major breakthrough in marking the first crack in ossified North-South antipathy of the kind seen in the UN and international financial institutions.

Overall, the question of the relative power balance in 2020 between emerging powers matters for development in at least four key ways:

- First, because many of these countries are likely to become increasingly **powerful in multilateral forums** (most obviously the G20, but also in issue-specific contexts including trade, energy, climate change and international financial architecture).
- Second, because of their disproportionate influence within their own regions, which will be felt in spheres such as regional security and conflict response frameworks, trade, migration, humanitarian assistance and more.
- Third, because emerging economies may be seen to offer development models that can be copied elsewhere. At present, many emerging economies are seen as following a 'state capitalist' approach: whether this endures to 2020 or gives way to a more pluralistic approach is a key question for development.
- Fourth, because emerging powers will all have different approaches to
 international engagement and donorship. As emerging economies increase the
 scale and sophistication of their international outreach, distinctive approaches to
 development of the sort that now exist between, say, the US and the Utstein
 donors may become increasingly evident.

2\ Has job creation kept pace with demographic change in 2020?

Many developing countries are about to hit a demographic tipping point that will see their working age populations grow and their dependency ratios fall. This could provide a springboard for their incomes to rise dramatically, or create a recipe for instability and fragility — depending on employment prospects for their new workforce members, especially in the world's growing cities.

Global population growth peaked in 1963 at 2.19% a year. Today, the rate is 1.15%, and projected to fall below 1% by 2020. This puts global population on course to stabilise at around 10 billion in 2200 – although a big push on women's empowerment, girls' education, and access to reproductive health services could enable earlier stabilisation at around 8 billion.



Figure 2: Current population growth rates by country (source: CIA / Index Mundi)

Between now and 2025, the **'next billion'** will arrive, mainly in Africa or Asia. By 2015, the world will fall into three broad demographic categories:

• Countries with stable or shrinking populations, where half the population over 40 by 2015. This category, dominated by the developed world, includes Europe, Japan and Russia (but excludes the US and Canada, thanks to immigration).

- Countries in which the population peak is in sight, where half the population will be under 30 in 2015. This category contains some of the key emerging economies, including China and India.
- Countries in which population growth is still rapid, with slow or stalled transitions to smaller families, in which half the population will be under 20 in 2015. This category includes much of Africa and many of the world's fragile states.

For countries in the latter two categories, the influx of so many new workers into the labour force, and concurrent fall in dependency ratios, offers the **potential for rapid economic take-off**; emerging economies like South Korea saw their incomes triple in 20 years in similar conditions. Countries with strong education systems and good investment environments, like Turkey, Lebanon, Iran, Colombia, Costa Rica, Chile, Vietnam, Indonesia and Malaysia could be especially well placed. But for **countries where the necessary investment in education has not taken place and the jobs needed are not there**, the demographic tipping point could prove disastrous. The US **National Intelligence Council warns that "unless employment conditions change** dramatically in parlous youth-bulge countries such as Afghanistan, Nigeria, Pakistan and Yemen, these countries will remain ripe for continued instability and state failure".

The most fundamental variable in all this concerns the **overall global employment outlook for 2020**. In some developed economies (and especially the US), research suggests that job opportunities are increasingly being polarised into high and low skill **jobs, while middle class jobs are disappearing due to "automation of routine work and,** to a smaller extent, the international integration of labour markets through trade and, more **recently, offshoring"**. Meanwhile, data also show that while more women are **entering the global labour force, the 'gender gap' on income and quality of work is** widening between women and men. These trends raise a number of critical uncertainties for employment and development to 2020.

If automation of routine work genuinely is a more significant factor in developed economy job polarization than international trade or offshoring, then the implication is that **developing economies may increasingly also fall prey to job polarisation** as new technologies emerge and become competitive with human labour between now and 2020. Chinese manufacturing and Indian service industry jobs could increasingly be replaced by technology, for example, and find their existing rates of inequality exacerbated still further.

If, on the other hand, wage differentials are in fact more important than automation of routine work, then two different scenarios arise. One is that **emerging economies could continue to dominate in middle bracket employment**, continuing the trend of recent years. The other, though, is that if low income countries manage to create more attractive investment environments (tackling skills, infrastructure and rule of law), then **emerging economies could find themselves the latest victims of offshoring**, as jobs head to cheaper wage environments – just as Mexico lost many of its 1990s maquiladora

jobs to China. Based on past data, this would expose women in the economies losing jobs to particular risks, for example with women finding it harder to gain new employment after factories have closed down.

A *fourth* scenario, meanwhile, is that the big game-changer on the global employment outlook over the next decade is neither wage differentials nor automation of work, but something else again: **resource constraints**, **above all oil prices**. During the 2008 oil spike, some multinationals began to reconfigure their supply chains towards regional rather than global models (for instance, bringing manufacturing for the US market back to Mexico from China). If this trend returned and accelerated between now and 2020, the world could see a shift towards more regional trade models – creating new opportunities for many developing countries, but also massive challenges for countries that have grown via global export strategies, above all China.

Within this broad picture, two other critical uncertainties for development stand out. One is whether, by 2020, **social protection systems** have been scaled up enough to provide safety nets to unemployed people – potentially also acting as a defence mechanism against radicalisation, or armed conflict as a *de facto* livelihood strategy. Today, over 80% of people lack access to social protection of any kind (food safety nets, cash transfers, guaranteed employment schemes, school feeding programs, old age pensions etc.) – with women especially badly covered since even where social protection systems do exist, they are often rendered ineligible due to their disproportionate representation in the informal economy or due to lack of recognition of their additional responsibilities in the home.

Tackling the global social protection gap would require capacity upgrades in many states, predictable long-term financing, sophisticated targeting mechanisms that can take account of gender and other disparities, and a major advocacy push. (It is worth noting, though, that scaling up social protection systems could come at a cost if overall aid spending does not increase – for example by reducing how much is available for basic services like health and education.)

The other is what the global employment outlook to 2020 will mean for urbanisation. More than half the world's population is now urban, and the general assumption is that 99% of the 'next billion' will be urban too. But if many global of the world's megacities struggle to create enough jobs (or, alternatively, suffer crippling shortfalls in infrastructure investment), then two 'wild card' scenarios could come into play.

One is the possibility of a rash of 'feral cities' – not necessarily in low income countries or fragile states. Mexican cities like Juarez and Tijuana provide the obvious example of what this might look like: while Mexico as a whole is stable, and a member of both the G20 and the OECD, endemic social exclusion and unemployment in the north of the country have led to armed conflict claiming 27,000 lives over the last five years.

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Another 'wild card' is whether the world could see a high water mark for urbanisation, with a gradually increasing wave of migration back out to rural areas. While poor prospects in cities could act as a 'push' factor for this, a 'pull' factor could be exerted if the world sees a rural renaissance in which rising demand for food is met through massive agricultural investment that focuses strongly on smallholder farmers (a model that Vietnam has already shown can work). Some governments may also actively seek to limit or reverse migration to cities, reasoning that potential unrest from unemployment or price inflation will be more diffuse and hence more containable in rural areas; China already limits migration to urban areas through the *hukou* system, for example. However, such a trend could also intensify emerging conflicts over land and water rights in some places (discussed later).

3\ Is there significant global financial and monetary reform by 2020?

The global financial conflagration of 2008 is not over yet, and could continue to smoulder for much of the period from now to 2020, with the still unresolved issue of global economic imbalances especially important. In the background are the questions of whether the dollar will still be the global reserve currency in 2020, and whether 'limits to growth' will materialise — both with massive implications for development.

Since the first stirrings of the subprime crisis, policymakers and experts have consistently underestimated the duration and severity of the financial crisis. Banking crises take on average four or five years to unravel in developed economies, and "the first truly global financial crisis of the modern world", in Gordon Brown's words, could take as long as a decade to unravel.

Policymakers have been widely criticised for failing to tackle the root causes of unsustainable financial sector lending practices, with **bank regulation** since 2008 largely **seen as inadequate to deal with the 'too big to fail' problem. Meanwhile, aggressive** private sector lending to low and middle income countries risks creating new problems of **unsustainable developing world debt burdens**, just as many of these countries are beginning to recover from past Paris Club debt problems.

At the same time, developed country policymakers have overseen a massive transfer of risk from the private to the public sector, effectively converting bad debts in the banking sector into sovereign debt. As current events in the Eurozone show, this has forced some OECD economies to seek IMF assistance and has even raised the possibility of sovereign defaults by OECD member states. One real risk in the future is that of a sovereign default that proves "too big to bail"; some analysts have argued that exactly this risk applies to Spain.

What does all this mean for development to 2020? Three immediate implications stand out. First, the risk of defaults by OECD member states introduces a significant additional dimension to the powershift from developed to emerging economies between now and 2020, with emerging economies potentially coming to be seen as safer investments than some developed ones. (Even today, credit default swaps price insurance against the risk of a sovereign default in China at exactly the same as the risk of a UK default, while insuring Italian debt is more expensive than doing so for Mexico, Brazil, Chile, Russia or Indonesia.)

Second, an ongoing slow motion financial crisis in OECD economies can be expected to lead to lower OECD commitment to development, both in financial terms (as austerity packages lead to falling public support for ODA spending and protectionist

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pressures), and in terms of the multilateral 'bandwidth' available for development issues (a problem that can arguably be seen starting to take shape in the G20).

Third, the still unresolved issue of global economic imbalances between surplus and debtor nations remains a key source of risk for many developing countries. China's dollar holdings currently amount to \$2.65 trillion, with scant sign of agreement between surplus and debtor nations on a managed approach to resolving the issue (involving greater net exports by the US and some other developed countries, and greater domestic demand in China and other emerging economies, as well as Germany). This creates the risk of a disorderly unwinding of these imbalances before 2020, a scenario that would create widespread currency instability, place many poor countries' foreign exchange reserves at risk, and create massive disruption to the global economy overall.

The issue of global economic imbalances has already catalysed **debate about the dollar's role as global reserve currency**. Chinese central bank governor Zhou Xiaochuan has argued for a new, more multilateral reserve currency based on a reformed version of Special Drawing Rights; Bob Zoellick has mooted the possibility of a return to the gold standard; and within expert circles, debate is reviving about John Maynard Keynes's proposal at Bretton Woods for an International Clearing Union designed to prevent global trade imbalances from building up. These proposals would be hugely significant for international financial institution reform and 'voice' for developing countries, far more so than current debates about seats on the IMF board.

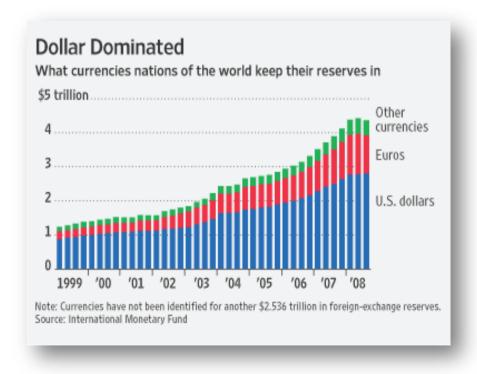


Figure 3: Global foreign exchange reserves by currency (source: Wall Street Journal)

For the dollar to lose its status as **global reserve currency** would be a major defeat for the US, which currently enjoys the luxury of being free to print the currency in which

all key global commodities are denominated. For emerging and low income economies, the key questions would be not only how new arrangements would affect the global power balance, but also whether a shift from the dollar would reduce the need for them to keep large foreign exchange reserves as a hedge against currency volatility, which could otherwise be invested in development (see Figure 3 above).

The other major potential game-changer on the financial and monetary front from now to 2020 is whether the issue of "limits to growth" moves from the abstract to the practical, and what this would mean for money. Today, the 'limits to growth' agenda first developed by the Club of Rome in the 1970s is mainly being explored in an agenda of 'wellbeing' that emphasis alternative indicators of progress — an interesting exercise, but with unclear capacity to drive concrete political change.

If an agenda of limits to growth really *were* operationalised, on the other hand, then the issue is less about indicators than about **how money itself works**. Economic growth and debt are two sides of the same coin: as soon as money is lent at interest, the interest rate in effect fixes the rate of growth that is needed to keep the economy in the same place. If growth stops, then lending at interest has to stop too – implying the end of the fractional reserve banking system on which modern finance is built (and which was so central to the build up of risk that led to the financial crisis).

While this scenario remains politically unthinkable for now, change drivers do exist that might make it more imaginable between now and 2020, such as:

- An early peak of global oil production, followed by rapid decline in output;
- A more general resource crunch, driven by the collision of a world of finite resources with the inexorable logic of exponential mathematics (with a growth rate of 10% a year, China's economy doubles in size every seven years); or
- A systemic financial crisis that led to debt itself being seen as an unacceptable risk (Bank of England Governor Mervyn King recently made a speech in which he discussed "the elimination of fractional reserve banking" to reduce risk).

If these fundamental questions about debt and finance did indeed become unavoidable by 2020, then for developing countries a key question would be **sources of development finance**, given the extent to which private sector credit has become a key source of development finance, particularly for the emerging economies but increasingly also for 'frontier' economies in Africa and elsewhere. Most fundamentally, an agenda of limits to the world economy would create hugely politicised questions about equity and fair shares within finite development 'space' (discussed later).

4\ Who will benefit from the projected

"avalanche of technology" by 2020?

Over the next decade, a range of game-changing innovations will emerge into society, with far-reaching implications for development. While some of the innovations over this period will come as major surprises, most research and development (R&D) will build on existing areas of work, meaning that most of the developments that can be expected to 2020 are already discernible.

Among the key areas to watch will be the following:

Biotechnology and genetics. Scientific capacity to analyse and manipulate biological material is reaching an inflection point. The first human genome sequencing took 13 years and cost \$3 billion; today, sequencing a human genome costs \$10,000 and takes about a week. The field of synthetic biology is also developing rapidly, with the goal of engineering biological systems that "process information, manipulate chemicals, fabricate materials and structures, produce energy, provide food, and maintain and enhance human health and our environment".ⁱⁱⁱ

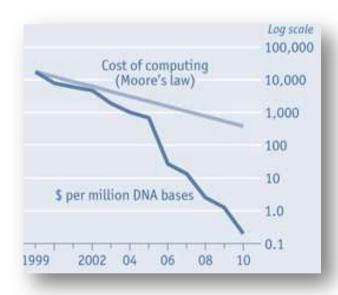


Figure 4: Cost of genome sequencing versus Moore's Law for computers (source: Economist / Broad Institute)

Energy and resource efficiency. A range of low carbon and environmental technologies could make significant inroads over the next decade, depending on whether a supportive policy environment is in place. Especially important areas will be energy efficiency (including technologies such as smart grids and intelligent buildings, as well as much more efficient vehicles), energy storage (important for both renewable power generation and electrical vehicles); and clean water (such as less costly and

environmentally damaging desalination technologies, which could confer major geopolitical advantages on early adopters).

Computer science and IT. Computers will continue to get smaller, cheaper, more universal, more connected and above all more powerful to 2020. Computing will also become ubiquitous as tiny, ultra-cheap chips are embedded into everyday objects, so that "even the smallest disposable item will share a small thin sliver of our collective mind", creating streamlined supply chains and the potential for major efficiencies. Other IT prospects to 2020 include much cheaper and more widespread robotics, which could potentially make inroads into the service sector (e.g. in domestic carer roles).

Human augmentation. Finally, a range of technologies could offer 'upgrades' for humans, physiologically and cognitively. Human strength augmentation, for example using exoskeletons, is developing rapidly, and could drive massive increases in labour productivity, while 'biogerontechnology' advances could range from health monitoring to anti-ageing. On the cognitive side, meanwhile, drugs, implants or wearable devices could powerfully augment human cognition.

Importantly, the next ten years will also see convergences between different areas of innovation. This has often happened in the past: the convergence of steel frame construction techniques and electrical powered elevators enabled skyscrapers, while the combination of new seed varieties, improved fertilisers and flood-and-furrow irrigation drove the 20th century Green Revolution. One area of convergence already being watched closely is 'NBIC', or nano-bio-info-cogno, discussed at length in a 2002 US National Science Foundation report on 'improving human performance'.

From a development perspective, this projected wave of innovation raises three broad questions. First and most obviously, how poor men and women could benefit from new technologies. For example, innovations in clean energy could potentially catalyse massive improvements in access to energy (at present 1.4 billion people lack access to electricity; twice that number still rely on biomass for cooking), replicating the 'leapfrog' gains already seen in cellular telecoms technology. Similarly, scientific innovations could dramatically increase small farmers' agricultural productivity, boosting yields from the half a tonne per hectare typical of many developing country small farms today to the 4 or 5 t/ha typical of US or European farms. Emerging technologies could also make major contributions to health and education goals.

However, actualising the potential development gains from innovation will require strong focus on enabling requirements. In the agricultural context, for instance, many countries saw their extension services largely dismantled under structural adjustment. Improving access to credit will also be essential. It is also important to be clear that the innovations that may have largest impact on poverty to 2020 will not necessarily be the highest-tech — improving the (appalling) uptake rates for drip irrigation, for

example, could generate much higher returns than capital-intensive desalination schemes in some countries.

The second key question for development in the area of innovation, conversely, is where poor men and women risk missing out on the 'avalanche of technology', in many cases with the implication that innovation exacerbates rather than reduces existing inequalities. Evidence from past experience shows that women tend to have particularly low access to and control of new technologies, and that men have as a result tended to benefit from new technologies more than women. Looking ahead, a report by FutureLab on social networking technologies observes that in the near future, "the capacity to connect to a network, and be constantly connected to knowledge, resources, people and tools will be taken for granted in most countries with a robust technology infrastructure" (emphasis added).

Poor people (especially women) and poor countries may risk finding themselves excluded from systems that are empowering everyone else, in other words — whether because they lack the necessary enabling infrastructure, or because intellectual property regimes effectively exclude them from access, or simply for reasons of affordability. (The Green Revolution, to take a historical illustration, mainly benefited large landowners at first, since they were able to afford the high capital costs involved — so while the long term impact was to bring food prices down, at first small producers found themselves massively disadvantaged.)

A related issue is whether global research and development spending is targeted at areas of concern to poor people or not. For example, R&D spending in the medical field is often argued to be disproportionately focused on 'diseases of affluence' rather than those that impact poor people most; similarly, GM crop technology has to date been concentrated on crops for which large world markets exist (corn, soya, rice) rather than on subsistence crops grown by poor people. At a larger level, disparities in total global R&D spending are striking: of the \$1,130 billion spent on R&D in 2007, according to UNESCO, 34.7% was spent in North America, 32.7% in Asia and 27.3% in Europe, as compared to 2.9% in Latin America and the Caribbean and 0.9% in Africa.

Third and finally, there is the question of what risks emerging technologies could pose to poor men and women. Like any change in human societies, scientific innovation always comes with a political economy impact, creating new winners and losers. In some instances, innovations will create job losses, and as discussed in the earlier section on employment, women are likely to take the brunt of this impact, whether they are working or depending on others' wages. More subtly, innovations may alter systems of power and control: GM crop technologies, for example, could have the effect of taking power out of the hands of farmers and concentrating it in the hands of life sciences companies.

5\ Is an equitable approach to resource limits taken by 2020?

As the world's middle class grows, so demand for natural resources grows too. But many resources, above all land, water, food, energy and 'airspace' for greenhouse gas emissions, are showing signs of limits to supply growth — raising fundamental questions about how the context for issues of equity and fairness changes in a world with limits.

While the number of people classified as 'middle class' in OECD economies is more or less static, the number of them in emerging economies has exploded – in the four BRICs alone, from around 300 million in 2000 to 800 million today, and a projected 1.6 billion by 2020 (see Figure 5 below).

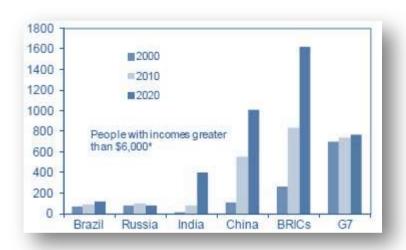


Figure 5: The global middle class: total incomes over \$6,000 (*source: Goldman Sachs*)

Even as demand is rising, however, limits to supply growth are becoming apparent, especially in the areas of:

- Food. Demand for food is set to rise 50% by 2030, but global productivity gains have fallen from 2.0% between 1970 and 2000 to 1.1% today, and are still declining. The world has consumed food more than it has produced in 7 of the last 8 years.
- Water. Global fresh water withdrawals have risen from 579m³ in 1900 to 3,973m³ in 2000, with demand projected to rise to 5,235m³ by 2025. But existing ground water extraction is often unsustainable, even before climate change is considered.
- Land. Demand for land is rising from food, feed for livestock, biofuel, fibre, carbon sequestration and a range of other uses. At the same time, the global total of arable land per capita has fallen from 0.39ha in 1960 to 0.21ha today.

- Energy. Demand for energy is projected to rise 45% by 2030, but current investment is wholly inadequate to meet these levels, creating the risk of another oil supply crunch within the next few years. In the background is the larger question of when global oil production will peak (some estimates say before 2020).
- Carbon space. Limiting global warming to 2 degrees C would entail a 50-85% fall in global emissions by 2050 and hence a need to agree how to share out a rapidly declining global emissions budget between 192 countries.

This basic outlook, of exponentially rising demand for resources coupled with increasingly clear limits to supply, has political implications in three broad areas between now and 2020.

First, governments and markets will attempt to increase supply of key resources, but will in many cases be hampered by the growing fungibility between scarcity issues. For example, while desalination, a frequently very energy-intensive process, can turn a water problem into an energy and climate issue; trying to increase food yields by replicating the Green Revolution in Africa risks replicating the water scarcity problems already widespread in South Asia as a result of inefficient irrigation; and while future oil demand could be met largely by unconventional oil, the amount of energy expenditure needed to extract and process tar sands and oil shales has high climate change impacts. These risks of displacing problems from one aspect of scarcity to another will frequently place poor people at particular risk, as the case of biofuels – seen by many analysts as the principal driver of the 2008 food price spike – demonstrates: a technology intended to help meet energy security concerns had the effect of seriously impacting global food security.

Second, the direct impacts of resource scarcity will disproportionately impact poor men and women and poor countries, because of their higher vulnerability to shocks and stresses of all kinds, because climate impacts will be severest in low latitudes, because poor people and poor countries spend much higher proportions of their incomes on basic commodities like food and oil, and so on. Women will be particularly impacted since they have less access to land, often work more marginal land or rely on common land that may be under greater threat of expropriation than private property, or because research and development tends to prioritise crops that men rather than women grow.

Third and most fundamentally, the question of resource limits will change the context for global discussions of equity and fairness, both within countries, and at international level.

Within countries, the two key fault lines are likely to be land and water, which will move to the very heart of the governance agenda. In the land context, political disputes are likely to centre heavily on issues of property rights, tenure and land reform, with landless labourers, small farmers who lack formal title to their land and women who

rely on common resources particularly vulnerable to intensifying international competition for land (there is already some evidence that so-called 'land grabs' are heavily concentrated on community land in Africa, for example). Water will also figure in many land disputes, but will catalyse intense political disagreements of its own in the context of property rights and/or water pricing – likely to be needed to manage water use in sustainable limits, but with acute equity issues involved. Both kinds of scarcity may drive increased violent conflict (usually less for direct control of the resources themselves, than because scarcity of them has rendered livelihoods untenable.

At international level, three key fault lines stand out: diet, access to oil reserves, and sharing out the world's remaining carbon space. On diet, first, it is already clear that not all of the world's people can enjoy a 'western diet' rich in meat, dairy products and processed food — and correspondingly far more resource intensive in grain, water and energy use. The prospect of tight supply / demand balances introduces for poor people the risk of both the long-term stress of rising food prices, and short-term shocks such as food export restrictions. While a move away from western diets would create additional 'space' for poor consumers, the fact that no OECD government has managed to make any headway against rising rates of overweight, obesity and type 2 diabetes illustrates the difficulties in the way of this.

On oil, meanwhile, intensifying international competition for reserves can be seen in contexts from Africa and the Arctic to the Caspian and the South China Sea. From a development perspective, oil importing countries are highly vulnerable to rising oil prices: a 2007 IEA study found 13 African countries who had paid more for oil imports from 2004 to 2007 than they had received in aid and debt relief over the same period. If oil prices spike again before 2020, they will likely face problems including balance of payments difficulties, inflation, higher interest rates, declining GDP growth, fiscal problems, falling currencies and widening credit spreads.

Meanwhile, oil exporters will find themselves ever more assiduously courted by major economies, offering major opportunities for securing infrastructure investment, but with potentially less positive implications for governance and macroeconomic stability.

On the **carbon space** front, finally, the key question is when policymakers will finally agree the size and distribution of a safe global emissions budget designed to stabilise the climate beneath a defined level of greenhouse gas concentrations. If an equitable formula were used to share this budget out – such as convergence to equal per capita entitlements for all countries by an agreed future date – then global emissions trading could yield a massive new source of finance for development for poor countries.

However, given that the carbon budget that will lie at the heart of any future global deal on climate change is being used up a little more each day, the implication is that **the** longer policymakers wait to discuss how to share it out, the smaller will be the **'cake' that they have to divide** and the worse the deal for developing countries will be.

6\ Is global trade in decline by 2020?

Globalisation of trade has reached unprecedented levels. But from now to 2020, a range of emerging threats — including new forms of protectionism such as competitive currency devaluations and carbon tariffs, intensifying security of supply concerns over access to natural resources, and increasing oil scarcity and the risk of new oil price spikes — present a range of potentially serious challenges to open markets and global trade. This would raise tough questions about the development strategies of poor countries who depend heavily on exports, or on imports of food and other key resources.

While the immediate aftermath of the financial crisis saw widespread **fears about a slide into tit-for-tat protectionism reminiscent of the 1930s**, this risk has so far not materialised – at least, not in the traditional sense of countries introducing tariffs or quotas on imports.

However, two **new forms of protectionism** are arguably making more of an impact, and have the potential to become much more serious between now and 2020. The first of these centres on **currency valuations**, where some analysts (and Brazil's finance minister) argue that a 'currency war' began in November 2010.

Countries including China, Japan and Switzerland have been accused of seeking to devalue their exchange rates directly, while quantitative easing programmes in the US and UK have exerted indirect downward pressure on the dollar and pound. While other analysts think that talk of a 'currency war' is overblown, there is a risk that the problem could accelerate (as it did during the 1930s, albeit through different mechanisms) – potentially driving low income countries to feel they need to tie up even more of their assets in foreign exchange reserves rather than investing them in development.

A second future protectionism risk is that of **unilateral use of carbon tariffs** - applying tariffs to imports in proportion to carbon emitted in making them. No country has yet used carbon tariffs, but failure to agree a global climate deal may increase the risk in future. France and Italy have called for them to apply to imports from the US, while the now stalled US Waxman-Markey climate bill set out provisions for penalising countries that do not reduce emissions as fast as the US (i.e., emerging economies). The World Bank has warned that carbon tariffs would hit low income countries disproportionately.

Another risk to globalisation and open trade stems from **intensifying security of supply concerns**, especially in the contexts of trade in energy and food. During the 2008 food spike, over 30 countries imposed export bans or restrictions on grains or other agricultural products; during the summer 2010, Russia banned wheat exports following a severe drought, causing knock-on perturbations in futures markets. Low income food deficit countries would be at especially high risk from such restrictions.

In the oil context, meanwhile, the **risk of further oil price spikes** also risks triggering more restrictive trade practices. These are arguably already in evidence, in the form of a shift towards long-term contracts in oil markets (leading to US warnings to China not **to try to "lock up" oil supplies), but could** gather pace significant in acute conditions, especially given the fact that emerging economies remain outside the formal membership of the International Energy Agency, which exists primarily for emergency co-ordination of oil importers during supply shocks.

Over the period to 2020, the risk of further bouts of food or oil inflation introduces the risk of a vicious circle in which countries lose confidence in open trade to meet their import needs – and hence precipitate a more generalised slide towards 'resource nationalism' or potentially even towards strategic confrontation between major powers. For poor countries that depend heavily on exports *or* on imports for their prosperity, the risk of such a scenario would be to find themselves on the losing end of a global game of musical chairs.

While effective international trade rules could help to mitigate this risk, it is also possible that the WTO could find itself left on the sidelines, as appeared to be the case during the 2008 food price spike (the GATT and Agreement on Agriculture allow temporary food export restrictions, and rules requiring members to take into account the impact on food importers apply only to developed countries; no specific actions are required of developing countries, despite the fact that a number of developing economies, such as Argentina, are major food exporters relied upon by low income food deficit countries).

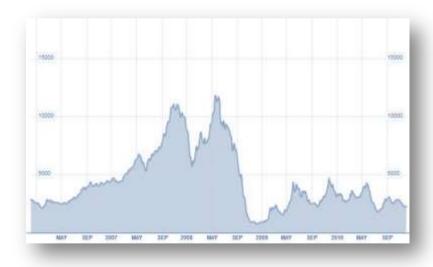


Figure 6: Cost of shipping, Baltic Dry Index (source: Bloomberg)

A third broad risk to open markets between now and 2020 stems from the potential impacts of sustained oil price inflation on transportation costs, whether this inflation results from 'peak oil' or simply from current under-investment in new exploration and production. During the last oil price spike, from 2004 to 2008, transoceanic shipping costs trebled — an increase in transport costs that, if compared to

trade tariffs, is equivalent to offsetting *all* of the trade liberalisation undertaken over the past three decades.

Increases in transport costs of this magnitude are especially significant in the context of trade in low-value added goods that are heavy or bulky such as grains and other bulk commodities. A 2009 OECD study found that a doubling in the cost of shipping is associated with an average 42% drop in trade in agricultural goods overall. In other words, future oil price increases (or, for that matter, future emission limits on marine bunker fuels) could potentially lead towards a decline in the amount of food traded globally, with especially significant implications for import-dependent countries. Conversely, higher transport costs could lead to pressures for goods to be processed before being traded internationally, so as to maximise cost efficiencies – potentially enabling poor countries to move higher up the value chain, if trade policies are reformed to allow them to do so.

One question this introduces for the period to 2020 is whether some developing countries should reduce their reliance on global markets (either for imports or exports, or both) in order to maximise resilience. To date, autarchy strategies have been seen as highly inefficient, given the extent to which they run counter to countries' comparative advantages. However, some countries are already aiming for self-sufficiency in some commodities (the Philippines has announced its intention to become self-sufficient in rice, for example), while others are seeking to reduce reliance on open markets through long term resource access deals. Exporters, meanwhile, could opt for more endogenous growth strategies. Another scenario again is the possibility of global trade markets becoming superseded by much more regional models of trade in some instances.

A further question is whether increased oil costs or emission controls could lead to a major **reduction in international passenger air travel**. Aviation currently accounts for only 2% of human CO2 emissions, but is also the fastest growing sectoral source of greenhouse gas emissions; and unlike other sources of emissions, such as ground and sea transport or power generation, there are limited options for renewable fuels in the aviation sector. If significant reductions in air travel took place by 2020, then this could have knock-on effects for international migration patterns, as well as for a range of export industries that depend on aviation.

7\ How has political influence changed by 2020?

The question of how the nature of political influence will change over the next ten years is one of the most important - and uncertain — variables examined in this report. This section sketches out a range of possibilities and uncertainties in areas including the impact of social networking technologies; new social movements; the evolving relationship between citizens and states; and issues of belief and worldview.

As the first section of this paper discussed, the world appears to be moving towards a more multipolar power distribution, in which the US sees its influence diminished in relative terms while that of emerging economies increases. But the changing global distribution of power is not limited to states: the rising power of nonstate actors is also an essential part of the picture. This said, futures analyses bundle a massively diverse set of actors within the broad term of 'nonstate actors'— for example, business, tribes, religious organisations, criminal networks, civil society networks and 'superempowered individuals'. However, within this broad area, four themes about the future of political influence crop up in the futures studies assessed for this report.

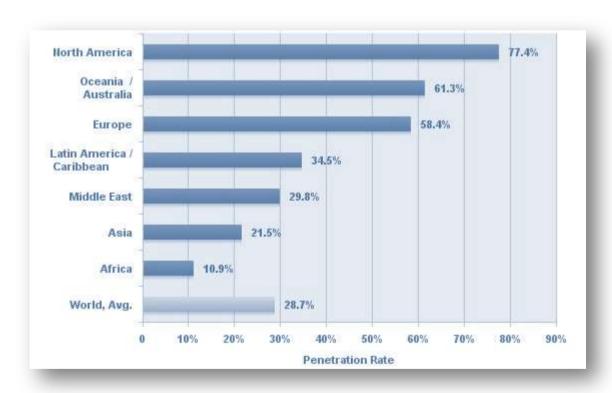


Figure 7: Internet penetration rates by region (source: Internet World Stats)

The first of these regards the continuing development of **social networking technologies** over the next decade, which are set to be a fundamental game changer in multiple contexts. Four sub-themes are worth highlighting in particular.

- First, the fact that while internet penetration has so far been limited primarily to developed countries, this is changing, and internet access in poor countries could accelerate rapidly if cellular telecom networks already massively widespread in low income countries upgrade to 3G protocols and enable a rapid roll-out of mobile internet. This could radically change the political context in these countries, through empowering civil society organisations and rapidly organised citizen movements like the anti-FARC protests co-ordinated over Facebook in 2008.
- Second, while web 2.0 technologies have so far tended primarily to enable relatively short-term 'surges' of activity (e.g. protests), we may increasingly see mass-collaboration projects that are sustained over longer term periods of time, allowing for more ambitious projects. The open source Ushahidi project, built during Kenya's 2008 post-election violence and subsequently used to co-ordinate humanitarian assistance in Haiti, is a useful example here.
- Third, and particularly important for global civil society organisations that derive significant income from developed country members, social networking technologies will change the nature of activism to 2020, enabling citizens to become far more engaged in campaigning and development than they have been to date. Two examples that may point to the shape of things to come are Avaaz.org, the web-based campaigning organisation that now has nearly 5 million members in all of the world's countries, and Kiva.org, which allows individuals to provide 'peetto-peer' microcredit finance (to date it has provided \$160m in loans from nearly 800,000 lenders).
- Fourth and finally, it is worth emphasising that social networking technologies enable regressive points of view as much as progressive ones (e.g. the problems of 'wingnuts' on the blogosphere, or the use of web 2.0 technologies as platforms for radicalisation).

A second broad theme in the changing nature of political influence is **the rise of new social movements**. While the futures studies assessed for this paper lacked a strong consensus on which social movements would have most impact to 2020 and beyond, three trends were especially noteworthy:

• First, the changing role of women. While surprisingly few futures studies pick up on gender issues specifically, those that do point to the broader political changes that accompany women's empowerment. The US National Intelligence Council, for example, observes that "the explosion in global economic productivity in recent years has been driven as much by fostering human resources — particularly through improvements in health, education and employment opportunities for women and girls — as by technological advances", and that "examples as disparate as Sweden and Rwanda indicate that countries with relatively large numbers of politically active

women place greater importance on societal issues such as healthcare, the environment, and economic development".

- Second, young people. As discussed earlier in the paper, imminent demographic tipping points mean that most developing countries will see very high numbers of young people coming of age between now and 2020 a shift that carries with it significant potential for social transformation (think of the cultural impact of the baby boomers on industrialised economies in the 1960s). In the developed world, exhaustive mapping has been undertaken of the values of 'Generation Y' or 'the millennials' as this generation is sometimes called, highlighting values such as a communitarian ethos (closely linked to having grown up with social network technologies), civic mindedness, a rejection of the individualist attitudes of the baby boomers and Generation X, and having perhaps unrealistically high expectations of life. However, this characterisation is heavily focused on young people in the developed world (and especially the US), and may well not apply to young people of the same generation in developing economies.
- Third, the rise of **supranational 'tribes'**. This refers not so much to tribes in the strictly ethnic sense, as to loose, self-**organising 'clans' that offer a narrative and a** sense of belonging to their members whether faith groups, or movements focused on particular issues (such as international development, or opposition to the European Union, or any of hundreds of other issues), or any other linking theme that is not primarily geographical. As social networking technologies increase their reach and capacity, supranational tribes can be expected to evolve further to 2020, with sometimes unpredictable effects.

A third broad area of uncertainty on the nature of influence in 2020 concerns the **relationship between citizens and states**. So much could be said about this theme that it arguably warrants its own section in this paper, but a few themes that crop up in the futures studies looked at are the following:

- First, the prospect of greater expectations of governments in the area of risk management. As the next section of the paper discussed, this is likely to be a turbulent decade, characterised by multiple converging risks. In this context, governments will face a paradoxical balancing act. On the one hand, citizens will tend not to reward them for managing risks successfully (e.g. far from winning votes for containing the risks of swine flu, governments found themselves criticised for over-reacting). But when things do go wrong, citizens will expect governments to clear up the mess, at the same time as demanding to know why they failed to prevent the crisis. This challenge for governments is likely to grow to 2020, and will not necessarily lead to effective risk management..
- Second, and on a related note, the risk of a backlash against democracy, or a rise
 of populist political movements. It is not yet clear that democracies are very

effective at dealing with crises or risks that either require sovereignty to be pooled (e.g. the eurozone at present), or that are highly long-term in nature (e.g. climate change). At the same time, a decade of risks, uncertainty and potentially weak economic performance could provide fertile soil for populist political movements. The question of what might emerge as populist alternatives to democracy is highly uncertain, as is the implication of such a trend for development or progressive politics.

- Third, the potential for a massive increase in direct involvement of citizens in the process of government. Online platforms could increasingly enable public sector budget-making to become not just more transparent, but actually crowd sourced with citizens moving from being relatively passive consumers of government services who may be 'consulted at best, to being active and highly empowered participants in decision-making and priority setting. Where governments fail to do this, civil society organisations may potentially be able to create parallel forums for the expression of citizen perspectives, that can in effect achieve the same thing through being seen to enjoy very high legitimacy.
- Fourth, a potential evolution in the discourse of rights. Human rights are wellestablished in international law, but current debates over rights to goods such as food or clean water are more contentious. For ActionAid in particular, given its human rights based approach, a key uncertainty is how the global discourse of rights unfolds from now to 2020. This issue was almost wholly overlooked in the futures studies examined for this paper.

Finally, a range of questions exists on **how people's worldviews and beliefs may** change between now and 2020.

- One key variable here is in the area of religions. While the last decade has seen much discussion of the idea of a 'clash of civilisations', the key religious divide over the next decade is perhaps more likely to be within religions than between them. The Tomorrow Project comments that: "Identities based on organized faith ... [will] polarize between 'fundamentalist' and 'open' expressions of belief. In the case of the churches, this polarization will loom larger in believers' lives than differences between the denominations". The question of how this religious dichotomy unfolds from now to 2020 has major implications for other uncertainties considered in this section, particularly given the potential threat posed to women's empowerment, and the fact that this threat could be exacerbated by high youth unemployment.
- Another broad area of uncertainty is how large or small are the groups that
 people see themselves as members of in 2020 (ranging from members of a
 "single human family" on one hand, to much more atomised and fragmented units of
 belonging on the other, such as neighbourhoods or highly specific 'tribes' of

opinion). This variable is illustrated by three scenarios prepared by FutureLab for the UK Department of Children, Schools and Families:

Three models of belonging in 2020

"Trust yourself" – "a world where society holds strongly individual values, where people take charge of their own lives and the state accepts few responsibilities", in which "changing work and housing patterns have led to an increase in mobility as people relocate to regions far away from their established communities and social groups, shrinking their horizons to encompass only themselves and their immediate family group";

"Loyalty points" – "a world where relationships between people and groups they belong to are managed by contracts, and personal reputations are carefully managed" in which "individuals find themselves at the heart of a lattice of affiliations and associations encompassing their work, interests, healthcare, family, leisure and consumption" coupled with "a shrinking of the state as people form and join associations and groups to address local needs rather than looking to government"; and

"Only connect" – "a world where people see themselves as members of society first and individuals second, and success is shared by everybody", in which there is a "renewed sense of the public sphere and a reinvigorated civil society" largely enabled by network technologies. "Working within disciplines or sectors, or restricting your resources only to people within your immediate vicinity or workplace, is increasingly seen as an old-fashioned and unproductive way to do business. As a result, public action is seen as achievable only through the independent action of individuals working across diverse settings".

This spectrum of possibility has far-reaching implications for development and other global issues in 2020, given the extent to which progressive political advocacy will depend on popular willingness to think in terms of a larger 'us', and to tend towards non-zero sum cooperation approaches rather than zero sum competition.

This tension between a larger and a smaller 'us' can be seen in numerous current contexts – for example, political debates over immigration in the European Union, the 'red/blue divide' in the United Stat, and the risk of inter-generational conflict as dependency ratios change. In the development context specifically, this variable will also shape the extent to which poverty reduction goals are framed in terms of 'the national interest', a broader interdependence-based account of 'enlightened self-interest', or a still more inclusive narrative of altruism and/or moral duty.

• A final, particularly interesting question in the area of influence and social change is whether the period from now to 2020 is likely to see a large-scale, transformational shift in values. This kind of outcome is imagined in the "Great

Transition" scenario developed by the Tellus Institute, which envisions "a values-led change in the guiding paradigm of global development ... catalyzed by the 'push' of deepening crises and the 'pull' of desire for a just, sustainable and planetary civilization". While it is difficult to discern any immediate prospect of such a shift, the prospect of a turbulent decade hallmarked by shocks and stresses —the subject of the next section — could conceivably change this.

8\ What global shocks do we see by 2020?

Finally, there is the question of what kinds of global shocks emerge between now and 2020, how they reshape the global landscape and what are their impacts on poor men and women.

While futures studies deal by definition with the uncertain, they also have a **tendency to extrapolate existing trends forward** in their search for what could happen next, and thus create an impression that change is more gradual and linear than is in fact likely to be the case. In fact, of course, the last few decades have been fundamentally shaped by shocks, from the two oil shocks of the 1970s to the fall of the Iron Curtain in 1989, and from 9/11 to the financial crisis and the combined food and fuel price spike in the decade just ended.

So it is worth concluding this discussion of drivers and uncertainties for the decade ahead by emphasising that it will be shocks, not stresses, that do most to define the next ten years - particularly given the extraordinary confluence of megatrends that will converge over the coming decade (see next section). While the shocks that will shape the next decade can't be predicted, it is at least possible to highlight some of the areas that they may come from:

- **Economic shocks** including further rounds of financial crisis (with, at worst, a systemic crisis overwhelming policymakers' capacity to respond);
- **Geopolitical and security shocks** including new high-impact terrorist attacks like 9/11 or a nuclear exchange in theatres such as East Asia or the Persian Gulf;
- Governance shocks including the failure of a major state, or a sudden process of political liberalisation in China;
- Infrastructure shocks including major disruption of the internet (through accidental or deliberate causes) or of other critical networks;
- Health shocks including that of a major pandemic with fatality rates comparable to or higher than the 1918 influenza epidemic;
- Resource shocks including new food or oil spikes on a similar or larger scale to those of 2008; and
- Climate shocks such as extreme weather events or at worst abrupt climate change scenarios.

The 'long crisis' of globalisation

Throughout this paper, the central linking theme has been the prospect of a period of *transition* for globalisation in the decade ahead, that will fundamentally reshape the context for development and for all other global issues too. Each one of the uncertainties discussed in this paper is critical to this process. The most critical uncertainty of all, however, is what this process of transition leads *to*.

The confluence of the massive demographic, resource, economic and social challenges discussed in this paper, coupled with substantial institutional deficits, adds up to what can be termed a 'long crisis' for globalisation (a concept development by David Steven and the author in work for the Brookings Institution and the NYU Center on International Cooperation). The long crisis could yield one of two outcomes.

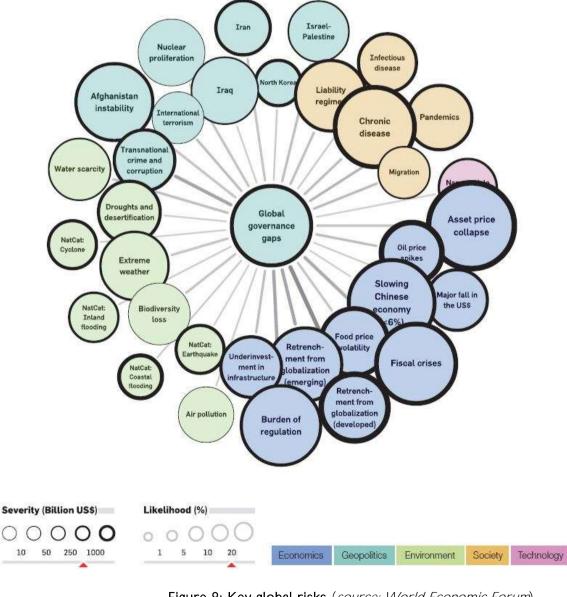


Figure 8: Key global risks (source: World Economic Forum)

On one hand, it could lead to **globalisation failing altogether**. More than one of the futures studies assessed for this paper pointed to the fact that globalisation has failed before (in the early 20th century, ushering in two world wars and a Great Depression). Poor people and poor countries would be likely to find themselves savagely hit by such an outcome, particularly given that it would be likely to lead to a massive decline in global commitment to development and to global problems like climate change going unaddressed.

On the other hand, globalisation's long crisis could also prove to be the catalyst for a transition towards a more just, sustainable and resilient globalisation that meets global challenges with genuine global solidarity in which the most vulnerable men and women are protected and helped to flourish by a nurturing, interdependent and globally aware human family.

These broad outcomes fit within a classification system developed in the 1970s by the futurist Jon Dator, who argued that there are essentially only **four generic storylines about the future**, which run as follows (with commentary here by Jon Turney in his *Rough Guide to the Future*):

Four Generic Stories About the Future

Continued growth: "This is still the most common view, and certainly the "official" view of most political and academic discussion. Growth is desirable because it has made good things possible for some people already, and will bring more good things to more people in future. The idea that growth might falter is usually discussed only in terms of economic recession, and almost always assumed to be a "Bad Thing" – as a glance as any newspaper will confirm."

Collapse of economic structures: "This is the family of futures which descend from Malthus via *The Limits to Growth*. It has a popular constituency, who believe that the carrying capacity of the planet has already been exceeded, and that growth cannot be sustained much longer. The last straw may be climate change, oil depletion or a variety of other things, but the consequences are similar."

Disciplined, sustainable society: "This is the first addition to the simple Malthusian versus Cornucopian visions. It means trying to manage things to avoid the worst. The "third way" is outlined in many detailed plans for organizing a transition from the current social and economic system. The premise is that growth cannot go on forever, and avoiding collapse is overwhelmingly important. So these scenarios try to outline paths to a sustainable, steady state. What form the transition might take is controversial, partly because of the difficulty of designing a no-growth economy that works according to the currently dominant capitalist model and does not fall into depression."

Transformation: "These kinds of visions are about transformation, not transition, because they embrace a radical, usually technologically driven, alteration of the conditions of human life, and possibly of humanity itself. Under this heading are filed the future pictures which see the next stage of evolution as involving the immensely powerful development of, for example, artificial intelligence, robotics, genetic engineering or nanotechnology. There are also low-tech variations [of this set of stories], in which the transformation is spiritual rather than scientific."

What appears *least* likely is that the world will be able to muddle through the 'long crisis' indefinitely, leaving existing political and economic systems in place largely untouched, in the hope that things to get 'back to normal' before too long. This is above all because of the nexus of issues around a growing middle class, rising consumption levels, and hitting planetary limits: the point about unsustainability, after all, is that it is *not sustainable*. But it also seems unlikely because of the extent to which governance systems – at levels, but above all at multilateral level – struggle to deal with complex, non-linear risks of the kind the world now faces. Current governance systems like to pigeonhole risks into neatly separated 'silos' that fail to reflect what the 21st century is really like, creating pervasive problems of policy coherence. At the same time, trust deficits look set to intensify over the next decade, and a crisis of authority may emerge as it becomes increasingly clear that elites are genuinely unsure of how to proceed on a range of risks.

Overall, the challenge of navigating globalisation's long crisis can be characterised as as process of "shooting the rapids":

"Charting a course through whitewater, there are many possible paths, but few attractive destinations. It is the river, not the paddler, that dictates the speed with which the boat moves. There is no opportunity to pause and rethink strategy, or to reverse direction: it is the capacity to reorganize while undergoing change that ultimately determines the journey's outcome. Above all, the challenge is a collective one: the direction of the boat depends on the combined efforts of all those on board.

"The task of building a resilient globalization is similar. Much could go wrong. The pace of the transition will be dictated by the risks themselves, yet governments will only succeed if they are prepared to take the initiative. Even in the best case, outcomes will be 'messy' and far from perfect. Results will be determined by governments' ability to act in concert, as well as with networks of non-state actors."

Conclusion: Ten recommendations for the next ten years

1. Be ready (because shocks will be the key drivers of change)

When Lehman Brothers collapsed, a breathtaking amount of political space suddenly opened up for progressive ideas and action, as the neoliberal model teetered. But as it turned out, progressives had no alternatives ready on the shelf – so the window of opportunity closed again a few weeks later, with minimal advantage taken of it. Progressives had failed to heed the advice that Milton Friedman offered his fellow monetarists during their wilderness years in the 1970s: "Only a crisis — actual or perceived — produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around. That, I believe, is our basic function: to develop alternatives to existing policies, to keep them alive and available until the politically impossible becomes politically inevitable."

In practical terms: With a decade of turbulence ahead, advocates of global justice need to be *ready* with concrete ideas to take advantage of shocks that open windows of political opportunity, suddenly and only briefly. Civil society organisations should put aside a substantial proportion of their policy and advocacy resource to develop 'massive asks', together with blitzkrieg campaigning strategies to roll them out rapidly when ten times as much political space opens up overnight, for three weeks only.

2. Talk about resilience (because poor men and women are in the firing line)

Over the next decade, the biggest story will be about risk — economic, environmental, security, social, health-related and so on. Poor people, and especially women, will usually be most vulnerable. A key part of the next decade's development agenda is thus defensive in nature: protecting poor people from massive trends that threaten to overwhelm them (and that they have done less than everyone else to create), and trying as far as possible to defend progress made over the last decade.

In practical terms: ActionAid's work on areas like women's rights and social exclusion means it is already well placed to speak to a global resilience agenda. But like other civil society organisations, it needs to gear up for a massive new push in and on areas of development focused on reducing vulnerability to new risks — like social protection, climate adaptation, peacebuilding, disaster risk reduction and humanitarian assistance — both in its own programme work, and above all through hard-edged advocacy in countries and internationally.

3. Put your members in charge (because they can bypass you)

Today's global civil society organisations are built on a model that assumes members to be largely passive, with participation limited to paying subscriptions, filling out postcards for campaigns, and going on a demonstration every now and then — much as governments ask for little participation beyond paying taxes and voting every few years. But over the next decade, this will change radically as new technologies enable a far more hands-on approach for committed activists — raising a real question about whether advocacy NGOs as we know them today will still exist in 2020.

In practical terms: ActionAid's members in developed countries will increasingly expect a more involved role in influencing the direction and priorities of the organisation — an expectation that may create tensions with ActionAid's commitment to transferring decision-making power in the organisation to poor people in developing countries. Yet ultimately, civil society organisations will have no choice but to navigate tensions like these as creatively as possible, given that the change is coming anyway. They should put their members *in charge* as far as possible — using technology platforms to ask them regularly what to campaign on, where, how to do it, and how they want to be involved.

4. Talk about fair shares (because limits change everything)

Inequality is starting to supersede the last decade's focus on absolute or dollar a day poverty. But it's resource scarcity and climate change that really change the game - and not only in the sense that poor people are particularly exposed to the impacts of these trends. For 200 years, left and right have disagreed on everything except the indefinite sustainability of rising growth. Take that out of the equation and, as Martin Wolf put it at the height of the food spike, "the political underpinnings of our world fall apart".

In practical terms: ActionAid is potentially incredibly well placed to be a leader on this agenda, given its roots and experience on issues like land reform. But it and other civil society organisations will face tough communication challenges as they start to unpack the *global* agenda of fair shares over the next decade, and to develop advocacy asks centred on asking affluent consumers to consume less. Above all, they need to help lead the global development movement towards a much more hard-edged engagement with the global climate change agenda, where environmental NGOs have struggled to cope with the equity issues involved in sharing out a global emissions budget — and have hence ignored the issue more or less altogether over two decades.

5. Specialise in coalitions (and not just of civil society organisations)

Over the next decade, power will become steadily more diffuse – shifting not just from the US to emerging economies, nor just from governments to supranational levels, but above all *outwards* to citizens, bloggers, NGOs, businesses, social movements and networks of all kinds. In this context, no single government or other actor will be able to tackle global issues alone – instead, success will depend on building coalitions of both states and non-state actors, that can act as shared platforms for pursuing shared asks. Effective civil society organisations will frequently need to be the catalysts and the glue for this process.

In practical terms: These kinds of coalition will be far more diverse than civil society coalitions like Make Poverty History. For civil society organisations to flourish in this environment, the key challenge will be interoperability: the capacity to communicate and work with radically diverse sets of partners, from UN agency staff to multinational companies, and from grassroots activists to government officials. Civil society organisations should ensure that as many of their staff members as possible have extensive experience outside the civil society sector, in as many different kinds of organisational context as possible, so that it they are able to act as 'translators' in melding together disparate groupings of change advocates.

6. Take on the emerging economies (including from within)

Everyone recognises that the old categories of developed and developing countries fail to capture the extent of the global powershift – but most of us still use them anyway. Nowhere is this clearer than in global issue contexts like climate change or trade, where there is a reflexive desire to see G77 states, including emerging economies, as the 'good guys', and OECD economies as the 'bad guys'. Yet emerging economy interests are increasingly diverging from those of low income countries on key issue areas, with climate change being only the most obvious example.

In practical terms: ActionAid is better placed than most to hold emerging economies to account for their performance on the global stage, rooted as it is in the global South — and increasingly with extensive activist communities based inside emerging economies. Civil society organisations should develop a cross-cutting goal of advocating for emerging economies to play a more responsible role in global multilateralism, as well as continuing to focus on domestic issues of social exclusion and poverty within them.

7. Bring news from elsewhere (because innovation will come from the edges)

It would be easy for development advocates to assume that in the next decade, tough economic conditions in developed economies will mean their main communication challenge is to try to shore up support for development. That may

be true up to a point; but at the same time, a decade of turbulence and institutional failure will lead to steadily increasing interest in 'new models for living' – some of which will come from the developing world, in turn enabling fresh and arresting new ways of framing what the development agenda means in the 21st century.

In practical terms: Even as it emphasises themes of vulnerability and injustice, part of what makes ActionAid interesting is that it also talks more than most NGOs about poor people as powerful (in particular through its human rights based approach). ActionAid should build on this by acting as a counterpoint to development narratives of victimhood — talking about the ways in which poor people are developing some of the most dynamic, innovative and resourceful responses to a volatile world, as a way of delivering on program, advocacy and fundraising objectives. Developing ActionAid's ability to undertake this role could also involve building up its capacities in areas like forward-looking research, analysis and programme experimentation.

8. Expect failure (and look for the silver lining)

The fact that a decade of risks will place such severe stress on governments and other organisations will lead to marked increases in fragility – not just of states, but cities, international organisations, and indeed NGOs – and at times outright failure. But this will introduce opportunities as well as challenges. The resilience writer Thomas Homer-Dixon calls this 'catagenesis': "a collapse or breakdown to a simpler form [coupled with] the birth of something new, unexpected, and potentially good ... not all systems adapt well to new challenges or stresses; those that do adapt well are generally called "complex adaptive systems" and they include things like tropical forests, private corporations, human societies and even individual people".

In practical terms: As well as watching for failures in the external environment and being ready for them (see item # 1 above), civil society organisations should expect to find their own operations (advocacy, programmes, fundraising and management) under substantially heightened stress in the decade ahead. They should prepare for this by modelling themselves on 'high-reliability organisations' - the subjects of intensive research into why certain organisations manage to succeed in avoiding catastrophes in environments in which normal accidents can be expected due to risk factors and complexity.

9. Work for poor people, not poor countries (as most of the former are outside the latter)

There will be plenty of argument over the Institute for Development Studies research that puts three quarters of the world's poor people in poor countries. But what *is* clear is the lines between rich and poor countries are getting more blurred, and that even as countries get richer, the poorest people are getting left further

behind (see item #4 on equality and fair shares above). By 2020, this process will be still further advanced – opening up new opportunities for international coalitions, and new needs for advocates for poor people in middle, and potentially even upper, income countries.

In practical terms: Civil society organisations need to start getting ready for a major shift towards operations in new countries, and advocacy messages that prepare for and then support this (for example, to counter arguments such as "why are we sending aid to India when it has a space program?"). In the process, they should expect to find themselves engaged in a dramatic retelling of what development is about — retaining the core elements of justice and human development, but recognising that the 21st century will change the contexts in which these concerns play out. This leads on to one final recommendation:

10. Be a storyteller (because stories create worldviews)

The Book of Proverbs has a saying that "where there is no vision, the people perish". This could have been written about the current global leadership deficit (as lan Bremmer and Nouriel Roubini put it, neither G8 nor G20, but G0) — a situation in which there are astonishingly few 'messengers' setting out grand narratives that describe where we are, how we got here, where we are trying to get to, and how to get there. Yet if diverse coalitions are key to effecting political change (see item # 5 above), it is *narratives*, and compelling visions of the future, that can animate networks and coalitions over the long term.

In practical terms: Civil society organisations should start to position themselves storytellers about the future. This would involve radically changing how they communicate, and to some extent letting go of being 'development NGOs' in favour of something much more ambitious — telling larger stories about global transition in which development is but one (essential) part.

About the author / Acknowledgements

About the author

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- Work with the Brookings Institution to set up a new program on resource scarcity and US national security. Past publications with Brookings include *Hitting Reboot: where next for climate after Copenhagen* (December 2009, with David Steven) and *Confronting the Long Crisis of Globalization: Risk, Resilience and International Order* (January 2010, with David Steven and Bruce Jones)
- Work to support the UN Secretary-General's office on the new UN High Level Panel on Global Sustainability, launched in August 2010.
- A study for the World Bank's 2011 World Development Report, exploring the implications of climate and resource scarcity for state fragility and the risk of violent conflict.
- A major study on the global implications of rising global food prices undertaken for Chatham House, culminating in the publication of *The Feeding of the Nine Billion: Global food security for the 21st century* (January 2009).
- Work with Oxfam on the development of its forthcoming global Economic Justice campaign on food justice in a resource-constrained world.

Alex is joint editor with David Steven of GlobalDashboard.org, a blog on global risks and foreign policy. All of the publications listed above are available at http://www.globaldashboard.org/articles-and-publications/

Prior to joining CIC in 2006, Alex was Special Adviser to the Rt. Hon. Hilary Benn MP, then UK Secretary of State for International Development, where he worked on issues including climate change, global governance, fragile states and the UK's 2005 G8 agenda. Before joining DFID, he was head of the climate and energy research program of the Institute for Public Policy Research in London. He is married and lives in London.

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Appendix: Sources consulted for this report

Autor, D. (2010). *The Polarization of Job Opportunities in the US Labor Market: Implications for Employment and Earnings*. Washington DC: Center for American Progress / Hamilton Project.

Bouwman, A. et al. (2006). *Integrated Modelling of Global Environmental Change: An Overview of IMAGE 2.4.* The Hague: Netherlands Environmental Assessment Agency.

Elgin, D. (1992). Awakening Earth: Exploring the Evolution of Human Culture and Consciousness. New York: William Morrow & Co.

Evans, A. (2009). *The Feeding of the Nine Billion: Global Food Security for the 21st Century.* London: Chatham House.

Evans, A. (2010). *Globalization and Scarcity: Multilateralism for a world with limits*. New York: NYU Center on International Cooperation.

Evans, A. et al (2010). *Confronting the Long Crisis of Globalisation: Risk, Resilience and International Order.* Washington DC: Brookings Institution.

Facer, K. (2009). *Educational, social and technological futures: a report from the Beyond Current Horizons programme.* London: Futurelab / DCSF.

Friedman, G. (2010). *The Next 100 Years: A Forecast for the 21st Century.* New York: Anchor Books.

Futurelab / DCSP (2009). *Three Worlds*. A *report from the Beyond Current Horizons programme*. London: Futurelab / DCSF.

Goldman Sachs (2010). "Is this the BRICs Decade?" in *BRICs Monthly*, Issue 10/03, 20 May 2010. Available at: http://www2.goldmansachs.com/ideas/brics/brics-decade-doc.pdf

Greer, John Michael (2010). "The Preponderance of the Small". 3 November 2010.

Harris, I. (2010). "Changing Money: Communities, Longer Term Finance and You". Lecture at Gresham College, 16 November 2010. Available at: http://www.gresham.ac.uk/printtranscript.asp?EventId=1029

Homer-Dixon, T. (2006). *The Upside of Down: Catastrophe, Creativity and the Renewal of Civilisation*. London: Souvenir Press.

International Energy Agency (2010). *World Energy Outlook 2010*. Paris: International Energy Agency.

International Fund for Agricultural Development (2010). *Rural Poverty Report 2010*. Rome: IFAD.

International Monetary Fund (2010). *World Economic Outlook 2010.* Washington DC: International Monetary Fund.

Lietaer, B. (2002). The Future of Money. London: Century Books.

Millennium Institute (2009). *A General Introduction to the Threshold 21 Integrated Development Model.* Arlington: Millennium Institute.

Millennium Project (2010). *State of the Future 2010*. Available at: http://millennium-project.org/millennium/SOF2010-English.pdf

National Intelligence Council (2008). *Global Trends 2025: A Transformed World.* Washington DC: US National Intelligence Council.

Raskin, P. et al. (2002). *Great Transition: The Promise and Lure of the Times Ahead. A report of the Global Scenario Group.* Boston: Stockholm Environment Institute.

Raskin, P. et al (2010). "The Century Ahead: Searching for Sustainability" in *Sustainability* 2010, 2, 2626-2651.

Reinhardt, C.M. and Rogoff, K.S. (2010). *This Time is Different: Eight Centuries of Financial Folly.* New Jersey: Princeton University Press.

Shirky, C. (2008). *Here Comes Everybody: The Power of Organizing without Organizations*. London: Penguin.

Shirky, C. (2010). *Cognitive Surplus: Creativity and Generosity in a Connected Age.* London: Penguin Books.

Turney, J. (2010). The Rough Guide to the Future. London: Rough Guides.

UNEP (2007). Global Environmental Outlook 4. Nairobi: UN Environment Programme.

Wilber, K. (2001). *A Theory of Everything: An Integral Vision for Business, Politics, Science and Spirituality.* Shambhala Books.

Wilks, A. (2010). *European Political Analysis: scenarios 2010-2017*. Prepared for ActionAid International. Unpublished.

World Economic Forum Global Risks Network (2010). *Global Risks 2010* Available at: http://www.weforum.org/pdf/globalrisks/globalrisks2010.pdf

References

 ν This trend does not only apply to the US and emerging economies: the European Union, too, has recently set out plans for a more aggressive approach to trade and investment, including on raw materials.

vi Evans, Jones and Steven, Confronting the Long Crisis of Globalization

http://www.globaldashboard.org/2010/10/08/and-the-winner-of-the-financial-crisis-is-ethiopia/

^{II} David Autor, *The Polarization of Job Opportunities in the US Labor Market*, Center for American Progress, 2010

III UK Royal Academy of Engineering, quoted in Turney p.82

^{iv} Kevin Kelly in Turney p. 85