

A CENTURY OF CHALLENGES

A DAY OF DEBATES

Event Report



Introduction

The inaugural '21CC: The Challenges of the 21st Century' event took place on Saturday 15 February 2014 at The Sheldonian Theatre. It was organised by a talented group of 11 undergraduates and supported by the Oxford Martin School. We brought together a mix of Oxford Martin School academics and external speakers to debate four key challenges affecting the world: shifts in economic power, infectious diseases, the future of food and humanitarian aid in conflict zones.

This brief report is a summary of some of the discussions rather than a transcript, and is intended to act as a prompt for further discussion and debate.

The Oxford Martin School is enormously grateful to Will Todman and Charles Dearman, who came up with the idea and approached us about it in Summer 2013. To see the Sheldonian full of people on a wintery Saturday morning was an encouraging sign that the current generation of students cares deeply about the future.

The 2014 21CC team was:

Charlie Dearman, Co-Director
Will Todman, Co-Director
Lottie Burrows, Aid & War, Logistics
Louis Chambers, Economics & Geopolitics
Emily Coleridge, Aid & War, Advertising
Lily Fletcher, Aid & War, Design

Elizabeth Harnett, Environment & Resources
Tanya Lawrence, Logistics, Advertising
Josh Meikle, Sponsorship
Ben Scrace, Communications, Tickets, Website
Niké Wentholt, Economics & Geopolitics

Our thanks go to the event sponsors, Absolute Strategy Research, ClimateCare and Waitrose, who had the vision to support a new event in its first year.

Carole Scott
February 2014





Shifts and shocks in global economics: what can we expect?

Professor Ian Goldin
Director, Oxford Martin School and
Professor of Globalisation and
Development

Professor Frances Stewart
Leontief Prize recipient,
UNDP Mahbub ul Haq Award recipient

Professor Rana Mitter
Professor of History and Politics of
Modern China, Oxford University

Dr Ian Harnett
Managing Director
Absolute Strategy Research

The day of debates opened with a look at some of the key shifts, and potential shocks, in the global economy. There was widespread agreement that the vast benefits of globalisation had to be acknowledged, such a rising life expectancy and reductions in absolute poverty. However, economic inequality is still rising, which raises significant questions about which countries will be best able to provide a secure, prosperous future and how.

Professor Goldin began by outlining one of the most fundamental shifts in the global economy. Emerging markets are growing at four-five per cent a year and have been for some time, whereas mature economies are struggling to grow. "The next twenty years will see developing economies continue to grow at three, four or even five times the rate of mature economies.

"The drivers of competitiveness, such as education, are underinvested and the resilience needed to bounce back from crises. Unfortunately we are losing these battles in the western world."

Professor Goldin argued that growth economies must learn some of these lessons and build in resilience now in order to avoid breaking in the face of crises that come with high growth.

Professor Frances Stewart responded by outlining some of the key problems that threaten stability. We read about conflicts every day, such as those in the Central African Republic and Syria. Elsewhere, there has been progress in democracy but it is now under challenge, such as the challenges in Thailand and Venezuela. Rising economic inequality is threatening the social stability of far too many countries and we need to rethink what we can do about it, particularly in the face of such high rates of unemployment. Professor Stewart concluded by warning that "Our overwhelming problem is climate change and we are not dealing with it. We need to ask 'Do we want growth or satisfactory lives?'"

Professor Rana Mitter picked up the theme, looking at China, where there is a policy focus on creating a 'reasonably prosperous' economy in order to ensure satisfactory lives. China's growth strategy has made some Chinese people very wealthy but there are significant questions now about how to balance growth and prosperity for a big population.

He gave the example of a migrant worker he had recently met. She doesn't have a permit and so isn't fully integrated into the city she has moved to from rural China. As a result, she has money to spend on consumer goods such as a tablet but her eleven year old son could only go to a backstreet school because of their unofficial status. With one brief insight into a real life, Professor Mitter helped the audience understand the fate of families like this will decide whether or not China becomes an integrated, responsible, stable economy.

On the question of the tension between growth and the environment, Professor Mitter said environmental pollution is still central to China's growth model, even though it's unacceptable globally. China is investing in green tech and is working to lower environmental costs but continuing legitimacy of communist party is based on pushing for growth despite consequences. With fervent protest on environmental issues among the population, this could be an increasing point of tension between the government and people if the political system is not reformed.

Ian Harnett focused on the issues facing developed economies, taking issue with Professor Goldin's assertion that the 'West' is running out of ideas. Quite the contrary, he argued, "crises stimulate innovation." There is huge scope for change but developed economies will need to shift from anti-inflation to full employment policies in order to reinvent and survive.

The central question in all these debates is "can we have growth and sustainability?" With the US heading for energy balance by 2020 due to shale gas, and with poorer economies dependent on growth to improve the lives of the world's poorest, this is clearly a question that needs to be the focus of research and debate for both growth and developed economies.

As Professor Goldin concluded, "As the global population increases, what constitutes a rational choice for individuals or individual countries becomes irrational for the collective good. Thinking through how we manage ourselves collectively is critical."

Can we end HIV, Tuberculosis and Malaria in the 21st Century?



Dr Mark Dybul
The Global Fund, Assistant Secretary
of State U.S.

Professor Adrian Hill
Co-Director, Oxford Martin
Programme on Vaccines

Professor Rodney Phillips
Co-Director, Oxford Martin Institute of
Emerging Infections

The second panel of the day offered optimism that better treatments and vaccines for infectious diseases can be found and finished with a call to action to ensure that efforts continue.

Professor Rodney Phillips opened by presenting optimism in the form of impressive drug development that has led to treatment of HIV/AIDS, tuberculosis and malaria, but tempering it with a degree of pessimism that despite immense effort, of the three, we only have a vaccine for TB.

Professor Adrian Hill began by painting a picture of the wider context. Pandemics come and pandemics go; that will never change. How we deal with them will. Leprosy was a huge problem in Middle Ages. It was a pandemic that cycled over hundreds of years, and which came and went for reasons we are not clear about. Other pandemics, like SARS, came and went quickly.

Other infectious diseases have been tackled successfully by human intervention. Professor Hill cited polio as one of the best examples. It has been expensive to tackle but those efforts have worked and polio is no longer a public health risk. HIV is much harder, as it has “a genetic diversity we had not seen before.” Even with such a difficult virus, we have, as Professor Hill was keen to point out, “done incredibly well. We can knock down the viral load and it’s not a huge leap to imagine technologies that will wipe out

the virus reservoir.” On a similarly optimistic note, Professor Hill pointed to developments with malaria. “There is likely to be a malaria vaccine licensed in the next year, which could reduce deaths in children by about 30 to 40 per cent.”

He also highlighted moves to eradicate transmission, which is changing the research agenda. The Gates Foundation is spending a lot of money on disease control, with people developing vaccines that stop an infected person transmitting the disease. This will make a big impact and already there is good progress with the tools to do this for malaria and there is hope that a similar approach will be taken for HIV.

Despite his optimism, Professor Hill did have a word of warning. “We eradicated TB as a public health problem in the 50s. However, research then stopped, which was a mistake because of the timescales involved in new developments.”

He pointed to the business model for drug development as a key stumbling block to progress in some infectious diseases. “Drug companies need to make a profit and so they only want to invest in difficult diseases where there is a major market. For TB, the profit margin is not large enough and so someone else has to come in to pay – philanthropic or public sector intervention.”

Dr Mark Dybul joined the panel to look particularly at work in Africa. He started by saying that if we look back 12 years “there was nothing happening. We had 50,000 people on retro virals and almost all developed drug resistance. Now there are about 10 million and drug resistance is low. This is a breath-taking development. When we first introduced programmes into Sub-Saharan Africa the public health community said we were crazy. Things were said on floor of the UN that bordered on racism; that people

in Africa weren’t smart enough to do this.”

At the start of the breakthrough in Africa, the approach was quite a blunt tool, taking national approaches. A key development now is to take an epidemiological approach, looking at ‘hotspots’ of infection to direct resources. The infection rates for most of Africa look similar to Europe but within a region, you find very high numbers. By mapping hotspots you can see that within a five mile radius there can be a ten times greater risk of infection. This mapping means that health agencies can look in a precise way at where new infections are occurring.

Most progress has been seen in Sub-Saharan Africa, South America and South East Asia but Dr Dybul flagged up a couple of pockets of concern. There are rising HIV rates in Eastern Europe, driven by people who inject drugs and sex workers. “Injecting drugs is something that middle class people do and spread to families.” The US currently has a higher rate of infection than most parts of Africa, with groups such as sex workers, homosexual men, drug injectors and prisoners being the most high risk.”

Dr Dybul concluded with a call to action. “We are the first people in history to see how we could eradicate TB, malaria and HIV. It takes a global movement to do it, and young people need to take responsibility and be engaged to make sure that we seize this remarkable moment in history. African heads of government care about youth, so we need youth globally to rise up and keep this on the agenda.”

He left us all with one very simple action: “Thank your government for staying committed to its financial investment. Letting them know that this is what we want, will help keep the investment going.”



Food in a changing world: can we feed 10 billion?

Returning to a full house after lunch, Lord Krebs opened the panel on the future of food by reminding us that in the hour we are going to spend talking about this issue today, there will be about 10,000 more mouths to feed in the world.”

There are a number of forces converging that make food such a pivotal issue: population growth, demand for land, demand for water, the energy intensity of food production, increases in red meat consumption (production for which is more environmentally damaging than plant-based diets), the switch in many areas to using land for biofuels; food waste. All these factors present real challenges in delivering a sustainable and secure food system.

Lord Krebs posited ‘What’s the answer? Is it a matter of redistribution? Many people have too much to eat. Is about new technology? Is it essentially an issue of sustainability? Is it a problem of waste? Or is it a question of the world needing to eat less meat?’

The panel acknowledged that they were unlikely to be able to answer these issues in one short session but that they could outline some of the possible responses to the challenges.

Professor Liam Dolan began by laying out an essential issue: “It is widely acknowledged that we’re going to have to double the amount of food we produce by mid-century.” As a plant scientist he feels there are real causes for optimism, because we “do have the tools to develop new plants that might address some of the problems.

Plant scientists need a ‘second green revolution’ in order to breed plants that increase crop yields but reduce the amount of fertiliser needed in order for the need for more food to be consistent with the need to reduce environmental damage. Cereal yields

increased two to three times in last fifty years but the amount of fertiliser needed to produce this, increased by five to six times.

Other developments in plant science focus more on resilience. For example, rice is bad at surviving floods but floods are increasing in areas of the world where rice is grown; countries where the poorest cannot afford to lose their crops. DNA sequencing has helped breeders to develop flood resistant rice.

Water use is major threat, so we need to breed crops that can increase water efficiency, and we need plants with enhanced nutrient uptake ability to reduce use of nitrogen and other fertiliser. All of these develops are either happening or will happen soon, thanks to improvements in plant breeding.

Professor Dolan argued that we must “take a rational approach to the problem, evaluating evidence as it is presented.” On the question of GM crops, Professor Dolan was clear, stating that there’s no evidence that they’re not safe with careful regulation and do offer potential. For example, when the Hawaiian Papaya industry was decimated by ringspot, genetic engineering transformed papaya and now seventy five percent of Hawaiian papaya is genetically modified.

Dr John Ingram approached the issue from a consumption perspective. “A greater proportion of the population is set to suffer from excessive consumption. Over consumption threatens our ability to deliver a functioning food system.” Lord Krebs agreed. It is the ‘elephant in the room’ and is more important aspect than sheer pop numbers, quoting Joseph Stiglitz’s calculation that “if everyone in the world consumed as much as people in the USA, it would be equivalent to 77 billion people in the world.”

Dr Ingram argued the case to think carefully about what to measure in order to make improvements in both efficiency and sustainability of the food system. Alongside environmental consideration are business sustainability and social sustainability. In this, nutrition and health are hugely important dimensions. He cited the case of China, where the issue of food scarcity has been replaced with that of over consumption of foods that cause diabetes, obesity etc. Over fifty per cent of the adult population in China are now clinically pre-diabetic. In terms of health alone it is highly desirable to bring about a change in consumption habits and levels.

Waste and inefficiency are two pivotal risks to a sustainable, functioning food system, according to Dr Ingram. “Of the 3000 calories harvested per person per day, only 600 are available for human consumption. We must look to savings all along the chain. Whatever measure you use, we have to improve efficiency, cut waste and reduce environmental degradation.”

Talking more on the subject of waste Dr Ingram said it was an extraordinary phenomenon and we need to look at affordability not price when examining possible responses. Thirty five per cent of purchased food is thrown away – that’s because we can afford to. If we couldn’t, we wouldn’t, as demonstrated by the fact that at the end of World War II, just 2% of food was wasted.”

It was a sobering and shocking fact that left circa 400 people questioning what could they do at a personal level to change their own consumption and waste.

The future of aid: protecting civilians or supporting war?



Dr Jane Cocking, OBE
Humanitarian Director, Oxfam

Dr Hugo Slim
Oxford Institute for Ethics Law and
Armed Conflict

Sophia Swithern
Global Humanitarian Assistance
Programme Leader, Development
Initiatives

The final debate of the day focused on the complex issues involved in delivering aid in conflict areas and whether by doing so, agencies were in danger of supporting war.

Dr Hugo Slim introduced the topic by recounting how Florence Nightingale refused to be involved in setting up the British Red Cross on the basis that it would simply render war more easy. To this day, it is difficult to deliver aid in a setting where it may be deliberately withheld by warring factions on the ground or diverted to their own efforts to win a conflict. He pointed to Syria as a shocking example of this problem, with Assad using his grip on aid as a weapon.

Sophia Swithern gave the audience a whistle-stop tour of some of the key stats and questions involved.

The majority of those in need are internally displaced rather than cross border refugees. Syria and South Sudan are classic examples. This has massive implications for accessing the most vulnerable.

Two thirds of aid goes to conflict states and the US, EU and UK continue to give the most humanitarian aid. However, the landscape is changing; austerity has led to drops in funding from traditional governments but nations like Qatar are increasing the amount they give.

There are big variations in the attention given to different conflicts. A barometer is the extent to which

UN appeals are funded: the Syrian appeal is 45 per cent funded, Central African Republic 33% and South Sudan just 15%. Fifty five per cent of humanitarian aid funding goes to long term situations but tend to be given in 'emergency mode' chunks.

Ms Swithern finished by reminding us all that humanitarian aid doesn't exist in a vacuum. Natural resources, peace-keeping, remittances and development assistance are all at play too.

Dr Jane Cocking demonstrated Oxfam's approach by being up front about the fact that all humanitarian assistance will always be an inadequate solution to an event that should never happen and that the environment in which they work is messy.

Aid has potential to support communities and individuals by provision of basic needs; it also has the potential to assist by empowering, bearing witness and giving a voice as the provision of basic services.

It can support war, primarily through the introduction of resources and diversion of resource toward military objectives rather than social ones. Taking sides can shift power but it does not support conflict by letting actors off the hook who would otherwise be providing the services.

She took a look at how Oxfam maximises the benefit of systems and minimises making things worse.

They make sure to be distinct from all military forces. For example, in the DRC, most actors drive around in white cars. Oxfam's are purple. Often they'll drive down contentious routes and it is instantly clear who we are and what we are there for.

Community engagement is at the heart of work in conflict settings.

For example, rather than delivering food aid, Oxfam channels cash to families, which means that money is going into the hands of women who spend it, and it is being spent in local markets.

Low tech interventions are as important as large scale. For example, introducing tiger worms for sanitation, rather than latrine-emptying tech. Doing this means that the waste fits into a margarine container, not a ten tonne truck.

Avoiding supporting recruitment and training bases is critical, Dr Cocking argued in response to a question from the floor. Oxfam works with the community to identify structures that are genuinely empowering – for example, they work with committees of women because conflict is still predominantly carried out by men.

Asked what proportion of donor money goes to actual aid, both Sophia and Jane gave robust responses. Sophia said that reporting and transparency were vital but that 'It is naïve to assume that we can just parachute money in and that penny for penny it will go to the pockets of those who need it. Logistically difficult places demand expenditure to get the money there.' According to Dr Cocking, that expenditure represented anything between two and nine per cent but that it can go as high as 20%, because they have to invest in research, development, equipment testing, and working with the local community to gather opinions and buy in on the best options.

The panel discussed the issues around corruption and all agreed that diverting funds to tackle the root causes of corruption was not the role of aid agencies. As Dr Cocking argued, "I can't look someone in the eye and say that I'll be able to tackle the root causes eventually but for now I can't help you because that's what I'm working on."



“This wonderful day provided a flavour of how we can all make a difference: bringing some great people together on big topics, and engaging with students.”

“If we want to make a difference to our world, we’ve really got to do things differently. This is a great attempt to begin that process.”

Professor Ian Goldin, Director, Oxford Martin School

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P5 caption: Zaatari Syrian refugee camp, Jordan. Credit: Caroline Gluck/Oxfam