

Institution: University of Oxford		
Unit of Assessment: 16 - Economics and Econometrics		
Title of case study: Dull Disasters: Disaster preparedness and planning using insurance-based finance		
Period when the underpinning research was undertaken: 2004 - 2016		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Professor Stefan Dercon	Professor of Economic Policy	1 Dec 2000 - present
Period when the claimed impact occurred: 2017 - 31 July 2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact (indicative maximum 100 words)		
<p>Do extreme events have to turn into disasters with huge losses of life and suffering? Dercon's research shows that by planning ahead and, in particular, by putting in place insurance-based financial instruments to fund relief efforts, the costs of extreme events may be mitigated. This framework, set out in his 2016 book <i>Dull Disasters? How Planning Ahead Will Make A Difference</i>, has transformed the approach to disaster-risk financing adopted by the Department for International Development (DFID), the International Monetary Fund (IMF), the World Bank, and the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). Dercon's recommendations have led to these organisations putting in place anticipatory financing mechanisms to ensure timely, cost effective and reliable funding in response to extreme events, and to provide incentives to build resilience.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>A long-standing focus of Professor Dercon's research has been the costs to impoverished people in terms of their lives, livelihoods and assets from exposure to extreme events and how these might be mitigated. His research was the first to quantify the long-term consequences of the 1984 famine in Ethiopia, identifying the effects on the physical well-being, education, and earning capacity of infant survivors, twenty years after the event [R1]. In this paper, and other research [R2], he shows that the impact of famine relief efforts such as 'Live Aid' are marginal at best and often statistically insignificant.</p> <p>In other work, Dercon examines why insurance against extreme natural events is so limited. He focuses on mechanisms to address the underlying 'market failure' that leads to the lack of an insurance market. Standard indemnity insurance products that are based on declared losses by the policy holder have proved not to be feasible due to high transaction costs and problems of moral hazard. An alternative is parametric (index) insurance products, which are triggered on the basis of some objective observable indicator (such as rainfall level). However, the take-up of these insurance products by vulnerable households tends to be low due to lack of trust and poor understanding, and the vast majority of people remain unprotected. In [R3], Dercon and co-authors demonstrate the possibility of improving uptake through the provision of group-based products. Dercon concludes that relying entirely on private insurance products to protect large vulnerable populations is unrealistic and risks exposing them to considerable hardship, and therefore effective public responses remain a key requirement [R4].</p> <p>Between 2011 and 2017, Dercon was seconded to the UK Department for International Development (DFID) as Chief Economist while retaining a part-time academic position at the University of Oxford. In this role, Dercon observed the limitations of existing public responses at times of crisis, whether from within countries or as international relief efforts. For Ebola in West Africa, between 2014 and 2016, drought in Ethiopia in 2015, and the 2015 earthquake in Nepal, public responses came late, were poorly prepared, and underfunded. In their book <i>Dull Disasters</i> [R5], Dercon and co-author Daniel Clarke (Oxford DPhil 2007-2011 and Senior Financial Sector Specialist at the World Bank, 2012-2016) synthesize learning from earlier research [R1-4] and direct experience to set out the problems that can cause extreme natural events to turn into</p>		

disasters and to provide solutions. They argue that the main problem lies in a funding model based on a 'begging bowl' approach that relies on appeals to the UN and donor governments, on fundraising by NGOs after the disaster struck, and on political pressure to reallocate funding in government budgets [R5]. The solution lies in a co-ordinated plan for post-disaster action with, most importantly, financing on standby to ensure that the plan can be implemented [R5, pp 3-6]. Dercon makes the case for a publicly-funded insurance-based systems with pre-agreed financing mechanisms (such as sovereign insurance, catastrophe bonds and pre-committed donor finance) to fund disaster response plans that are determined in advance. Pay-outs under these arrangements are triggered by objective data (such as wind speed, Richter scale reading, or number of drought days) as they are for index insurance products. The title of the book, *Dull Disasters*, highlights its goal of making disasters less 'exciting and adrenaline fuelled' events by offering well-prepared, more effective, well-targeted responses and a framework of lessons and principles to guide future thinking and practice.

3. References to the research (indicative maximum of six references)

R1: Dercon, S and C. Porter (2014), "Live Aid Revisited: Long-term impacts of the 1984 Ethiopian famine on children", *Journal of the European Economic Association*, 12(4), 927-48. <https://doi.org/10.1111/jeea.12088> [output type: D]

R2: Broussard, N., S. Dercon, and R. Somanathan (2014). "Aid and Agency in Africa: Explaining Food Disbursements Across Ethiopian Households 1994-2004", *Journal of Development Economics*, 108, May, 128-137. <https://doi.org/10.1016/j.jdeveco.2014.02.003> [output type: D]

R3: Dercon, S., R.V.Hill, D.Clarke, I.Outes-Leon, A.Seyoum Taffesse (2014). "Offering rainfall insurance to informal insurance groups: Evidence from a field experiment in Ethiopia", *Journal of Development Economics*, 106, January, 132-143. <https://doi.org/10.1016/j.jdeveco.2013.09.006> [output type: D]

R4: Dercon, S. (2004) *Insurance against Poverty*, Oxford University Press, Oxford, UK. [Available on Request – output type A]

R5: Dercon, S and D Clarke (2016). *Dull Disasters? How Planning Ahead Will Make A Difference*, Oxford University Press, Oxford, UK <http://hdl.handle.net/10986/24805> [output type A]

4. Details of the impact (indicative maximum 750 words)

Since the publication of *Dull Disasters* [R5], Dercon's framework has been adopted by several organizations, leading to major policy innovations at DFID*, the International Monetary Fund (IMF), the World Bank, and the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). These organisations have each implemented a range of significant and pioneering activities to operationalise Dercon's proposed framework that aim to bring insurance-like approaches (based on pre-agreed financing including from insurance markets) into the responses to humanitarian crises and natural disasters.

'*Dull Disasters, alongside the World Bank's DRFIP [Disaster Risk Financing and Insurance Programme] and the Red Cross forecast-based financing work, has helped build political consensus in the UK and globally that has led to work on establishing anticipatory financing mechanisms within the [UN] Central Emergency Response Fund (CERF) and the IDA [International Development Association] Crisis Response Window...[this] has led to the exploration of anticipatory financing mechanisms across several countries and humanitarian agencies (Malawi, Kenya, Afghanistan, Somalia, and WFP [World Food Programme], FAO [Food and Agriculture, UN], ICRC [International Committee of the Red Cross], IFRC [International Federation of Red Cross and Red Crescent], Start Network etc).*' Former DFID lead advisor on Disaster Risk Finance and Insurance and current Senior Consultant on Disaster Risk Finance within the World Bank Group [E2].

DFID: Creation of The Centre for Disaster Protection

According to the former DFID lead advisor on Disaster Risk Finance and Insurance it is: '*...no overstatement to say that 'Dull Disasters' transformed the way that DFID thought about the role of disaster risk financing, its linkages to humanitarian financing and UK objectives on Humanitarian Reform... The transformation that 'Dull Disasters' ignited led to, for example, the creation of a new team in DFID (that I led and worked closely with Stefan and his former student and collaborator, Dr Daniel Clarke) that worked to develop and operationalise the framework postulated by Dull Disasters within DFID'* [E2].

The proposal for a Centre for Disaster Protection within DFID was announced by then UK Prime Minister Theresa May at the G20 meeting in July 2017, stating that it '*will use world-leading UK expertise and innovation to help developing countries strengthen disaster planning and use insurance to provide more cost-effective, rapid and reliable finance in emergencies, such as the severe drought in East Africa. This will reduce the need for expensive humanitarian aid, reassure private investors and help people rebuild their lives. Insurance protection built through this centre could provide £2 billion when crises hit to ensure that the high costs of disasters aren't borne by people or businesses trapping them in cycles of poverty'* [E3]. The approved Business Case [E1] extensively and directly references *Dull Disasters* and Dercon's research as the framework and source of inspiration for the centre. The centre became active in 2019 with Daniel Clarke as its first Director and is initially funded by GBP30,000,000 from Prosperity Fund and GBP3,000,000 from Commonwealth Summit 2018-20 Fund [E4]. London-based, it is a partnership between the UK Government (DFID and the Government Actuary's Department), the World Bank, leading research institutions and the private sector.

Early benefits of the Centre for Disaster Protection include the provision of technical assistance to the Caribbean, the Association of South East Asian Nations (ASEAN)'s new regional risk pool, Indonesia, the Philippines and Kenya [E6, p.2]. Key activities include Disaster Risk Finance training to executives in South Africa, the Caribbean and Asia and innovation labs prior to the replenishment of the International Development Association (IDA19) [E5, E6].

The basic concepts and frameworks put forward by *Dull Disasters* have inspired, through the Centre for Disaster Protection, a series of wider innovations in the use of disaster-risk finance for broader applications including the establishment of an Innovation Lab, in partnership with Lloyds of London, focused on developing new financial instruments that combine incentives for resilience with risk transfer, such as Resilience Impact Bonds [E4, pp.3-4]. Work is also underway by the Centre for Disaster Protection and the International Rescue Committee on how risk financing can be used to speed response in refugee crises [E5].

World Bank: Creation of the Global Risk Financing Facility (GRiF)

A Multi-Donor Trust Fund designed in partnership by DFID, the World Bank and the German Federal Ministry of Economic Cooperation and Development (BMZ), the GRiF was launched in October 2018, with over USD200,000,000 in pledges from Germany and the UK. Utilising the framework described in *Dull Disasters* [R5], the GRiF's objective is to strengthen the financial resilience of vulnerable countries by enabling more timely and more reliable responses to climate and disaster shocks, '*and over time to a wider range of crises, through establishing or scaling up pre-arranged risk financing instruments, including market-based instruments like insurance'* [E7a]. The former DFID lead on Disaster Risk Finance and Insurance states: '*I led the design and implementation on DFID side until January 2019, and now have some involvement in the projects it funds on the World Bank side. On this DFID side, this was directly inspired by 'Dull Disasters', and I worked closely with Stefan Dercon and others in the early stages to design the underlying structure and principles that guide the operation of the Facility'* [E2].

The GRiF co-financed a range of World Bank projects with the International Development Association [E7b]. Projects include the 'Resilient Livelihoods Project', designed to improve resilience among the poor and vulnerable population of Malawi, to which USD125,000,000 has

been designated. By March 2020 nearly 128,000 people had benefitted from the resulting Social Cash Transfer programme [E7d]. In Mozambique, USD132,270,000 was assigned to support Mozambique's Disaster Risk Management and Resilience Programme, which seeks to improve Mozambique's financial protection against natural disaster, strengthen disaster preparedness and response, build climate resilience into vulnerable education infrastructure and establish a sovereign risk financing program. It is estimated that the programme will directly benefit a total of 3,360,000 people [E7c].

IMF: Informing Policy on Small States' Resilience to Natural Disasters and Climate Change

The framework underpinned policy proposals presented within an IMF Board Policy Paper in 2016 on small states' resilience to natural disasters and climate change, highlighting the need to increase focus on preparedness and funding [E8]. The new policy has been implemented in the Seychelles, where climate change, compounded recently by El Nino, has put Seychelles' archipelago and biodiversity systems at risk. The IMF's June 2017 Country Report outlined how Dercon's Risk Management framework might be applied to the Seychelles [E9, p.16] and further cited his research multiple times [E9].

The United Nations Office for the Coordination of Humanitarian Affairs (OCHA): Influencing Policy Change and Humanitarian Outcomes

The Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator invited Dercon to New York in January 2019 to work with his team to improve their approach to humanitarian financing, and thereafter took *'direct action to implement some of the policy recommendations from Dull Disasters in OCHA's work'*. He describes how they: *'initiated work to develop OCHA's policy position on anticipatory action for natural disasters, modelled closely on the conclusions of Dull Disasters. This culminated in... our collaboration with the World Bank on their Famine Action Mechanism, and pilots through the UN's Central Emergency Response Fund (CERF) to respond to drought in the Horn of Africa. The launch of anticipatory action pilots in the CERF led to increased donor support, in particular from the UK and Germany, resulting in a historic record year of funding of over \$800m.'* [E10].

This initiative has had profound impacts in mitigating the consequences of disastrous situations. In 2018, Madagascar faced *'...one of the largest outbreaks [of plague] ...in decades'* with more than 2,700 cases predicted between August and October [E10, E11]. Through the UN's Central Emergency Response Fund (CERF), OCHA provided USD1,000,000 to interrupt disease transmission through community engagement activities. In total, the CERF funds benefitted 1,460,000 people and only 250 cases (including 50 deaths) were reported in that period [E11].

In July 2020 a high probability of severe flooding was forecast for mid-month along the Jamuna river, Bangladesh. This triggered the immediate release of USD5,200,000 from a CERF pilot [E10] to help communities urgently prepare and protect themselves. Before the event it was anticipated that some 61,500 families in the flood plains would receive a one-off unconditional cash transfer of 4,500 taka (USD53). This release of funding is the first time CERF has been used in this way and was the fastest CERF allocation in history – within four hours of the trigger being activated, the delivery agencies had been given authority to spend the money [E12].

Summary of Dercon's Research Impact:

The Under-Secretary-General, and former Permanent Secretary for the UK's Department for International Development (DFID) says *'Professor Dercon's work set out in 'Dull Disasters' is having an impact on the lives of millions of people affected by crises and is playing a significant role in re-shaping the way in which the global humanitarian system is meeting the challenges of the next decade'* [E10].

*Note – DFID was merged with the Foreign Office in June 2020 to create the Foreign, Commonwealth and Development Office

5. Sources to corroborate the impact (indicative maximum of 10 references)

E1: UK Department for International Development Centre for Disaster Protection (CDP), Business Case and Summary 205231, October 2017, pp. 2,3,4,7.

E2: Factual statement from the Senior Consultant in Finance, Competitiveness and Innovation within the Crisis and Disaster Finance Team at the World Bank. Formerly Lead Advisor, Disaster Risk Finance at DFID (2nd February 2020).

E3: UK Government Press release (8 July 2017), 'PM announces new measures to help Africa boost its prosperity and stability: Prime Minister Theresa May is to unveil an ambitious package of support to create new wealth in Africa'. <https://www.gov.uk/government/news/pm-announces-new-measures-to-help-africa-boost-its-prosperity-and-stability>

E4: Lloyds of London

- a) Innovative finance for resilient infrastructure: Preliminary Findings
- b) [Insurance Business: Lloyds of London aims for a breakthrough in disaster resilience \(22 Oct 2018\)](#)

E5: Centre for Disaster Protection (CDP) briefing paper: Innovative Financing for Responses to Refugee Crisis (June 2019).

E6: UK Department for International Development Centre for Disaster Protection (CDP)

- Annual review - September 2018.
- Annual review - September 2019.

E7: World Bank: The Global Risk Financing Facility (GRiF)

- a) World Bank website announcement of launch of GRiF (2018)
- b) GRiF website – projects in focus - <https://mailchi.mp/486e2faab309/grifs-first-year-of-implementation?e=5e4e0c1e5d>
- c) World Bank Mozambique Press Announcement
- d) [World Bank: Social Support for Resilient Livelihoods Project, Malawi - https://projects.worldbank.org/en/projects-operations/project-detail/P169198](#)

E8: IMF Policy Paper: Small States' Resilience to Natural Disasters and Climate Change – Role for the IMF (December 2016).

E9: IMF Country Report No. 17/161: Seychelles (June 2017)

E10: United Nations Office for the Coordination of Humanitarian Affairs (OCHA)

- a) Factual statement from the United Nations Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, 12th February 2020.
- b) UN CERF Press Release (4 June, 2019) - <https://cerf.un.org/news/press-release/un-emergency-fund-allocates-us45-million-stave-famine-risk-horn-africa>

E11: CERF Resident / Humanitarian Coordinator Report on the Use of CERF funds: Madagascar Rapid Response Plague Outbreak 2018

E12: Case Study: Bangladesh

- a) UN OCHA Anticipatory Humanitarian Action (June 2020): Pilot 2020 Monsoon floods in Bangladesh - <https://reliefweb.int/report/bangladesh/anticipatory-humanitarian-action-pilot-2020-monsoon-floods-bangladesh>
- b) CERF Press Statement regarding the pilot (14 July, 2020): <https://cerf.un.org/news/story/new-approach-saving-lives-cerf-bangladesh>