Challenge Funds in International Development

Research Paper

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December 2013

The use of challenge funds to promote economic and social development continues to grow, but has been the subject of relatively little research. This paper develops a definition of what challenge funds are and how they differ from other development funding mechanisms, taking into account their purpose, financial terms, agency relationships, screening processes, selection mechanisms, implementation and risk sharing characteristics. A challenge fund provides grants or subsidies with an explicit public purpose between independent agencies with grant recipients selected competitively on the basis of advertised rules and processes who retain significant discretion over formulation and execution of their proposals and share risks with the grant provider. This paper draws on a review of fifty challenge funds being operated by international agencies in order to explore variation in their characteristics. A distinction is drawn between business oriented 'enterprise' challenge funds and civil society or social development challenge funds, and between relatively 'light touch' and 'hands-on' approaches to their management. The paper concludes with suggestions for further research.

Key words

Challenge fund, development finance, enterprise development, private sector development, social development, civil society and innovation.

This paper is the product of a collaborative 'Knowledge Transfer Partnership' (KTP) between Triple Line Consulting and the University of Bath and is funded jointly by the UK Technology Strategy Board and the Economic and Social Research Council. This KTP focuses on the management and evaluation of challenge funds. Developing a critical understanding of challenge funds and issues inherent in their management is the first element and collaborative research relationship. Appropriately enough, the KTP is itself a challenge fund. KTPs aim to bring academia and industry together with the purpose of mutual learning. A core service area of Triple Line Consulting is challenge fund management, which includes programme design, grant screening, risk management, capacity building of grantees, monitoring and evaluation, impact assessments and learning. We are grateful for comments provided by Dr Joe Devine, Kerri Elgar, Lydia Richardson and Clarissa Poulson.

1 Introduction

Challenge funds are an increasingly prominent part of the landscape of international cooperation and development, spanning the public and private sectors. They are currently best known as a means to reduce poverty through private enterprise, but they also fund the activities of civil society and non-profit organisations, as well as academic research. At best they offer a transparent, flexible and cost-effective means to achieve complex public goals, however critics point out that evidence on their impact is very limited (e.g. Elliot, 2013).

Open invitations by public agencies to fund projects contributing to a stated public goal have been around for a very long time, particularly for academic research, but the origin of what are currently referred to as challenge funds in international development by the Department for International Development (DFID) can be traced back to the 'reinventing government' policy agenda of the 1979-90 Thatcher governments. Foley (1999) reports that by 1996/97 there were 56 government challenge funds operating in the UK, disbursing £3,390 million. Of these, the largest was the Single Regeneration Budget (SRB), formed in 1994 to unify twenty existing urban regeneration funds in the UK. The initial budget of the SRB was £1.4 billion and ran for seven rounds, the last taking place in 2002-3 (John and Ward, 2005:73). Its eventual demise reflected growing criticism that central government design and management of the fund was undermining local and regional government (Brownhill, 2007). In the international development field, the Joint Funding Scheme for public matching funding of UK NGO aid also expanded rapidly during this period, and by 1992/93 was allocating £28 million a year to more than 1,000 projects (Gibson, 1993:184). The first enterprise challenge fund within the British overseas development assistance programme was the UK Business Sector Challenge Fund, launched in 1997/98. This was followed by the Financial Deepening Challenge Fund and the Business Linkages Challenge Fund in 2000. The number of challenge funds operating increased rapidly, as part of New Labour's policy of moving away from direct or 'retail' project management, and has continued since the Coalition government came to power in 2010.

A web search conducted in July 2013, identified 39 DFID live or recently closed challenge funds, including 20 running in partnership with other agencies (see Appendix 1). A further 23 were identified being operated by one or more other donor agencies, including AusAid (Australian Agency for International Development), SIDA (Swedish International Development Cooperation Agency) and USAID (United States of America Agency for International Development). Financial data available from the websites of the funds listed in Appendix 1 suggests they have a combined value of more than £1 billion, though in several cases the figure cited was only for the most recent round of disbursements.

The use of challenge funds to promote economic and social development continues to grow, but has been the subject of relatively little research. This paper first offers a rigorous definition of the term; clarifying how challenge funds differ from other aid and development funding mechanisms. Secondly, it draws on a database of fifty challenge funds operated by DFID and other international development agencies to review variation in their characteristics. Thirdly, it explores strategic options in the design and management of challenge funds. The paper concludes by setting out an agenda for additional research to strengthen the evidence base to inform use of challenge funds as an aid modality.

2 What is a challenge fund, what isn't and how useful is the distinction?

2.1 Definition

While never simple, the global aid and development finance landscape seems to have become ever more complex. Alongside challenge funds, for example, there are also adaptation funds, impact investment funds, innovation funds, managed funds, social funds, social impact funds and many more. Additional financing mechanisms include cash and performance budgeting, competitive tendering and procurement, open facilities, outsourcing, windows and quasi-markets. Therefore, this paper feels it is useful to provide a more systematic and robust definition for challenge funds in order to clarify what they actually are and are not.

Foley (1999) draws on the 1996 Her Majesty's Treasury Challenge Handbook to suggest that challenge funds have seven essential features: public competition, scarcity of funds, performance related payment, implementation by the bidder, partnership, innovation and private sector participation. Not all these characteristics are referred to in more recent definitions. For example, the International Labour Organisation (ILO) defines challenge funds as '*open financing mechanisms that allocate grant funding through a competitive process… to meet specific objectives*' (Coop Africa, 2010:2). SIDA (2013) emphasises their role in allocating donor money for specific purposes in a predefined field. Problem-solving, risk sharing and innovation are also widely cited as important, though often by authors who identify challenge funds exclusively with private sector development.[1]

To arrive at a definition for this paper, we build on: (a) the **core idea of a 'challenge'** that one agency defines a goal, but invites others to achieve it; and (b) **seven institutional characteristics** of any financing instrument. This entails the transfer of resources from one party to another for specified purposes, subject to rules or norms governing screening, monitoring and enforcement - in line with an explicit or implicit contract. These elements are listed in Table 1 and yield the following seven point definition:

A challenge fund: (1) provides grants or subsidies (2) with an explicit public purpose (3) between independent agencies (4) with grant recipients selected competitively (5) on the basis of advertised rules and processes (6) who retain significant discretion over formulation and execution of their proposals and (7) share risks with the grant provider.

[1]Elliot (2013) defines a challenge fund as '*matching grants on a competitive basis*'. For Gulrajani (2013:3) '*the challenge fund modality is a vehicle for facilitating public-private engagement between donors and corporate actors*'. For KPMG (2012:1) '*challenge funds have emerged as an innovative way to engage with private sector…*' For Heinrich (2013:6) '*such funds competitively award grants to business models or projects that are able to address a particular, defined development problem*'. Armstrong *et al.* (2011:5) define challenge funds as '*cost-sharing grant schemes which are designed to challenge the private sector to propose innovative new business models that engage and benefit the poor, on a replicable and sustainable basis*'.

Table 1: Characteristics of a challenge fund

Feature	Challenge fund characteristic
(1) Nature of the transfer	Grant or subsidy component.
(2) Public goal	Specified public goal(s) set out in advance.
(3) Relationship	An inter-agency agreement.
(4) Eligibility for funds	Competition (expected bid value greater than fund value).
(5) Screening and selection	Clearly advertised rules and procedures.
(6) Divisions of labour	Grantee autonomy in proposal design and implementation.
(7) Risk management	Risk sharing to promote innovation.

2.2 Distinguishing challenge funds from other funding mechanisms.

A test of the robustness of this seven point definition is whether it establishes a clear distinction between challenge funds and other means of financing development. Table 2 shows that only one of the other listed funding mechanisms - open research grants - unambiguously shares all seven characteristics that define challenge funds. These grants differ from challenge funds only in their goal. In particular, open research grants are similarly open with respect to the mechanism-linking goal achievements to disbursement of money: information asymmetry between funder and fund recipient being integral to both. If this were not the case, then the grant giver could either carry out the activity directly itself or could outsource it to another agency through a contract that specified activities and performance targets more tightly, thereby also outsourcing all or much of the risk of performance shortfalls. As with challenge funds, scholarly research into competitive research fund allocation is surprisingly thin[2].

The use of the term managed fund is less precise than the term challenge fund, and suggests a more fluid portfolio of bilaterally negotiated agreements with hand-picked partners ranging from private firms to community-based organisations. The term also implies that the funder retains greater control[3]. One possible rationale for this is that distinct projects cannot be appraised in isolation from each other, but instead need to be assessed as complementary elements of a joined-up strategy for achieving systemic change. Examples include funds to support linked technical and institutional innovation in specified sub-sectors, value-chains and geographical corridors, including those that take a systemic approach to '*making markets work for the poor*' (e.g. Boomgard et al., 1992; M4P, 2008). Interdependence also underpins integrated or sector-wide programmes of investment and policy

[2] One exception that has been subject to more rigorous research is the use of challenge funding to finance agricultural research. In particular, cross-section evidence from the USA suggests that competitive grant allocation between States does not lead to more innovation (measured by relative State-level crop yields) than grant allocation based on more stable and predictable needs-based formulae (Huffman and Evenson, 2006).

There is no shortage of informal debate among academics over the issues raised by competitive research fund allocation. Common complaints include: (1) difficulties of raising required matching funds; (2) lack of funding for pure research relative to applied research; (3) loss of academic freedom due to pressure to conform to research funders' criteria; (4) high transactions costs in preparing bids and responding to reviews, along with long delays; (5) the deadweight nature of these costs, especially when success rates are low; (6) lack of flexibility in implementation;and(7) conflict over intellectual property rights.

[3] Global funds can be regarded as a form of a managed fund with a definite public purpose operating at the global level. They may employ a variety of modalities, including challenge funds to allocate funding (Isenmann *et al*. 2010).

reform in the public sector, including those that seek to improve supply of services but also stimulate public demand for them, particularly from those who are socially excluded. Managed investment funds have also been widely used in the health sector to promote research in neglected fields, including anti-malarial drugs and HIV/AIDS. Poulton and Macartney (2012:103) suggest that such funds mature slowly because managers take time to acquire relevant expertise, networks and trust.

The public purpose of <u>prize funds</u> is less clear, as these can also serve as a corporate public relations tool. They primarily reward the past performance of the recipient (who may not even have to bid) and have weaker/lower expectations about how funds will be spent and for what purpose. Nevertheless, prize fellowships, such as offered by the Ashoka Foundation or the Stars Foundation, bear strong similarities to the challenge fund model. <u>Technical assistance</u> not only restricts the grant element to in-kind services, but resembles managed funds in being more proactively and less transparently controlled by the funding agency.

Table 2 sums up this discussion and indicates that other financing mechanisms listed differ unambiguously from challenge funds with respect to at least one characteristic. For example, <u>advanced market commitments</u> and <u>social impact bonds</u> explicitly seek to contractually transfer risk between parties (from and to the private sector respectively), rather than to share risk and uncertainty between them. Overall, while this discussion supports the idea that there is such a thing as a distinct challenge fund mechanism, it also points towards the value of a more thorough investigation of the multiple characteristics of challenge funds.

Table 2: Distinguishing challenge funds from other financing mechanisms.

	1. Grant or subsidy element	2. Explicit public purpose	3. Inter-agency contract	4. Competitive selection	5. Open selection process	6. Autonomy in imple-mentation	7. Risk sharing
Challenge fund	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
Open research grants	Y	Y	Y	Y	Y	Y	Y
Managed funds	?	?	?	?	?	Y	Y
Prize fund	Y	?	?	?	?	Y	?
Technical assistance	Y	Y	Y	?	?	?	Y
Advanced market commitment	Y	Y	Y	Y	Y	Y	N
Social investment bond	Y	Y	Y	?	Y	Y	N
Social impact investing	?	Y	Y	N	N	Y	Y
Public investment	Y	Y	N	?	?	N	Y
Unconditional gifts	Y	?	?	N	N	Y	N
Venture capital fund	N	N	?	?	?	?	Y

Public procurement	N	?	Y	Y	Y	N	N

3 Variation in the characteristics of challenge funds

3.1 Methodology and conceptual framework

The empirical component of this paper is based on data for fifty challenge funds operating broadly within the field of international development, cooperation and aid. These were identified through an extensive review of secondary and unpublished material, combined with internet searches and snowballing interviews starting with development practitioners of Triple Line Consulting. This search was restricted to English language websites, and given variation in challenge fund terminology and transparency we cannot claim that it is definitive. The research screened funds against the definition of a challenge fund adding three additional criteria: that the fund had been in operation during or since 2010; availability of threshold level data; and that funding sources and disbursement were not restricted to a single country.[4][5]

This section is based on a distinction between two broad categories of challenge funds. First, the term enterprise challenge fund (ECF) is used to refer to funds that promote innovation and enterprise oriented to serving the '*bottom of the economic pyramid*' or '*making markets work better for poor people*'. The key distinguishing feature is that the funded activity should also pass the business test of being potentially viable without recurrent subsidy. Second, social and civil society challenge funds contribute primarily to public spending in pursuit of wider social, economic and civic goals including promoting poor people's livelihoods, human rights and public sector accountability.[6] Funded activities are not expected to pass such a strict business test of being potentially sustainable without further public support. Funds that could not be unambiguously classified in either group were allocated to an intermediate 'mixed/both' category. This classification is not strictly based on the legal status of potential grantees, for example, as for-profit enterprise or not-for-profit organisations. Rather, it depends on whether the primary activity of successful grantee is to conduct commercial business with customers/clients in return for payment, or to disburse funds or services regardless of financial return. This in turn has important implications for the nature of performance feedback loops to primary intended beneficiaries: the repeat business or 'exit' loop being stronger for ECFs; and the political accountability or 'voice' loop being stronger for social and civil society challenge funds (Hirschman, 1970).

[4] The Seed Alliance, the African Innovation Challenge Fund (AICF), and the International Development Research Centre (CRDI) Challenge Fund were omitted for lack of information, while the Nirmal Gram Puraskar (administered by the Indian Ministry of Drinking Water and Sanitation) is an example of a challenge fund administered and disbursed in one country only (see http://nirmalgrampuraskar.nic.in/).

[5] The Development Awareness Fund was included in the sample despite the transfer of funds from DFID to UK based grantees for UK based activity as the fund focused on cultivating awareness of international development orientated areas. Please see Appendix 1 for more details

[6] The original methodological plan was to compile indicators for each selected fund to reflect variation in their design and operation against the seven characteristics identified in the previous section and then to subject the data to a cluster analysis in order to generate a typology of challenge funds inductively. However, this intention was thwarted by the sheer heterogeneity of challenge funds, missing data and the small overall sample size. Classification of funds was further complicated by funds with multiple windows: each with different characteristics, yet not sufficiently different to warrant being treated as distinct funds.

In both cases the ultimate public goal is to benefit the lives of one or more categories of final end users, whether as customers, clients, workers, members, beneficiaries or citizens. However, in the case of ECFs an important intermediate performance indicator is the financial self-sustainability of the grant recipient itself. These grants are also expected to pass a development test, often linked to their potential contribution to overcoming market failures. However, passing this test is in itself not sufficient to be awarded a grant. In contrast, social and civil society challenge funds take value-for-money and cost-effectiveness considerations into account and focus less on evaluating future funding that might contribute to the grant recipient's own financial self-sustainability and organisational capacity. Therefore they place a stronger emphasis on the social, economic and political impact of the services provided.[7]

The two types of fund distinguished can be loosely linked to distinct development discourses and spheres of activity: i.e. private sector development, market and economic growth (for ECFs); and social development, needs, rights, governance and justice through civil society and public action (for social and civil society challenge funds). At the same time, all challenge funds confront a common set of design issues linked to information asymmetry and principal-agent relationships between grant providers and grantees (See Appendix 2, Table 3).

An overarching theme that links several of the challenge funds is the power relations of how far the grantor encroaches on the activities of the grantee in return for funds. This in turn suggests a useful hypothesis: that there is a broad trade-off between transaction costs and performance risk to the grantor, with 'controlled high cost' designs at one end of the spectrum and 'liberal light touch' designs at the other. It is interesting to consider how this tension is addressed in the same way by enterprise, social, civil society and mixed/joint funds.

3.2 Variation in scope, purpose and agency involvement.

Table 4 (see Appendix 2) provides summary information on the scope, purpose and agency involvement of challenge funds identified. 21 were classified as ECFs, 24 as social and civil society challenge funds and five as mixed/joint. Further details of each can be found in Appendix 1. The challenge funds identified operate at global, regional and national levels, with ECFs more likely to be regional or national, while social and civil society challenge funds more likely to be global or regional in scope. Two-thirds are funded all or in part by DFID, with greater funding directed at social and civil society challenge funds. Half are supported by more than one funder. The DFID funded Civil Society Challenge Fund (CSCF) for example, has financed UK based NGOs and their civil society partners in southern countries globally since 2000. It aims to strengthen the role of civil society to reduce poverty and promote voice, inclusion and critical services for poor people and marginalised and vulnerable groups globally, including in challenging environments (CSCF, 2013:9). In contrast, the Africa Enterprise Challenge Fund (AECF) is an example of an ECF resourced by multiple donors.[8] With a fund size totalling £130.6 million, this challenge fund aims to support private sector businesses in Africa with interest free loans and grants intended to innovative, commercially viable, high impact commercial activities in the areas of agribusiness, finance, renewable energy and adaptation to climate change (AECF, 2013; AECF, 2013b:8).

ECFs are targeted more at for-profit enterprises, while social and civil society challenge funds at NGOs. Mixed funds, such as the joint USAID-DFID Development Innovation Ventures (DIV) fund, is open to

[7] See Copestake (2013) for a fuller explanation and discussion of this distinction.

[8] These are the Alliance for a Green Revolution in Africa (AGRA), Australian Aid (AusAid), the International Fund for Agricultural Development (IFAD) the Kingdom of the Netherlands, DFID/UKAid and Danida.

international NGOs, entrepreneurs, public-private partnerships (PPPs) and academic research teams. This fund has a broad remit to '*tap into promising solutions to core development challenges, from anyone, anywhere*' (DIV, 2013), and like many funds, it also specifies more than one target activity.

Some challenge funds are also restricted to a single country. For example, the SIDA Emprender Paz challenge fund that aims to encourage private businesses in Colombia to link profit-making with 'peace-building initiatives' (SIDA, 2013) and the DFID Economic Empowerment of the Poorest Programme (EEP[9]), which aims to help Bangladesh achieve the first Millennium Development Goal (MDG) of eradicating extreme poverty and hunger by 2015 (Shiree 2013). Other challenge funds are regionally focused, such as the AECF (AECF 2013). However, geographical criteria may also be more complex, as illustrated by DFID's Agricultural Technology Transfer Research Challenge Fund (Agri-TT) which facilitates links *'with China to accelerate agricultural technology transfer to developing countries*' (Agri-TT, 2013).

3.3 Variation in fund terms

Data on the size of challenge funds is limited. A typical fund size is just under £50 million, with ECFs generally half this size, and social and civil society challenge funds slightly larger (see Table 5, Apppendix 2).[10] The smallest fund in the sample is the Business Sector Advocacy Challenge Fund (BUSAC) (£2 million), despite being funded by a consortium of funders (DANIDA, USAID and the EU) that aims to '*contribute to the creation of a more enabling business environment for development and growth of the private sector*' in Ghana (BUSAC, 2012). One of the largest funds in the sample is the DFID-funded Global Poverty Action Fund (GPAF) (£120million[11]) which aims to '*support projects that focus on poverty reduction and contribute towards the achievement of the Millennium Development Goals*' (Government of the United Kingdom, 2013:1).

The tendency for social and civil society challenge funds to be larger than ECFs is reflected in higher minimum and maximum grant sizes, along with typical grant funding periods of just under three years compared to just over two years for ECFs. For example, the shortest grant period is three months, for the ECF GSMA mWomen Innovation Fund for mobile network operators (GSMA mWomen, 2013:10). At the other extreme the DFID Human Development Innovation Fund for Tanzania, offers project funding for up to four and a half years (DFID, 2013:3) and the CSCF, which closed to new grants in 2011 has funded projects for up to 60 months.

The average size of a grant or subsidy to a single grantee across the full sample was £155,000. However, the largest grant available was £6.4 million[12] (US$10 million) from the ClimDev Special Fund (CDSF) (Climate Finance Options 2013). On the assumption that typical grant size fell equidistant between these maxima and minima points, it can be estimated that a typical ECF had 37 grantees and

[9] Also known as 'SHIREE', a Bangleshi word meaning 'steps' and an also an acronym standing for 'Stimulating Household Improvements Resulting in Economic Empowerment'.

[10] For example, data on average grant size was located for only seven of the funds. The mean figure across these seven was £207, 582.

[11] This is jointly managed by two UK companies: Triple Line Consulting and Crown Agents. This total sum for the fund size includes funds pledged to date (£109.9 million as of November 2013) and an additional £10.1 million originally disbursed through an earlier DFID challenge fund called Additional Support for Civil Society Organisations (ASCSO). ASCSO was renamed GPAF in later 2010 and total DFID funding through both funds combined today is £120 million (Triple Line Consulting & Crown Agents, 2012).

[12] Foreign exchange rates for all currencies as converted in July 2013.

the typical social and civil society challenge fund had 38.[13] There is a need for further research into this topic in order to cast light on whether challenge funds of different types may be subject to economies and diseconomies of scale, arising from the balance between sharing of fixed costs and loss of specialised focus, for example. Size may also be related to aspirations to achieve systemic goals, or limits on how much funding to commit to more innovative but also higher risk activities.

ECFs are in general more likely to offer in some cases partial funding of proposed activities, whereas social and civil society challenge funds are more likely to provide full grants.[14] For example, in the case of the Afghanistan Business Innovation Fund (ABIF), DFID 'expects' the potential grantee to 'make a significant cash contribution to the investment' around a norm of 20% (Imurabba, 2013). This fund aims to help Afghani enterprises overcome market risks and to encourage investment leading potentially to increased employment opportunities and income (Itad, 2013). More commonly enterprise challenge funds require matching or 50% funding. Examples include the AusAid Enterprise Challenge Fund that supports enterprise projects across the Pacific and South East Asia by '*creating income generating opportunities and access to goods and services with a positive economic benefit for poor people*' (AusAid, 2012:2; ECF, 2013) and the DFID Food Retail Industry Challenge Fund (FRICH) which expects grantees to cover at least half of the project costs. This fund aims to link poorer African farmers to UK and European markets to increase market access and improve incomes (DFID, 2013b), with grant sizes ranging from £150,000 to £1 million (Ceres, 2013).

3.4 Variation in screening and selection.

Challenge funds are susceptible to the potential adverse selection problem of acting as a magnet for bidders unable to secure funding from elsewhere. Strict selection criteria and matching fund requirements can mitigate this, but only when combined with robust screening and management. Table 6 (Appendix 2) summarises readily available statistics on management of funds. The majority (64%) of funds reviewed in this study are operated through a contracted-in fund manager, this being true for both enterprise and civil society challenge funds, though less so for the small number of mixed/joint funds. The core responsibilities of fund managers vary but generally include project proposal screening, financial and risk management on behalf of the funder(s).[15]

[13] When the number of grantees is not provided, this was estimated by dividing the total challenge fund size by either average grant size of the mid-point between specified maximum and minimum grant sizes.

[14] Social and civil society challenge funds in the sample requiring the grantees to provide a component of self-funding to cover elements of project cost are the Canadian Fund for African Climate Resistance, Climate and Development Knowledge Network Innovation Fund, Global Poverty Action Fund (GPAF), Human Innovation Fund for Tanzania. In addition, two challenge funds used both a cost sharing and a grant element to transfer funds across its project portfolio: the GPAF and the Climate and Development Knowledge Network Innovation Fund. In the case of the GPAF, the fund operates two funding windows. First, the Impact Window is open for medium sized UK based not-for-profit organisations who are able to provide matched funding for at least 25% of the proposed project cost. Second, the Community Partnership window calls for smaller sized UK NGOs to apply for funds and the successful applicants among these are not expected to provide any matched funding (Government of the United Kingdom, 2013b).

[15] To take the example of the Global Poverty Action Fund and Civil Society Challenge Fund DFID (the donor) is responsible for the design of the fund, its policy direction and for overall decision making. The fund manager plays a management and advisory role and executes decisions taken by DFID. It is responsible for the funding mechanism, financial management, programme management, transparency and accountability, and for reporting on impact and learning. Grantees are accountable to DFID.

Fund managers may also have responsibility for monitoring and evaluation as well as learning, although in at least 15 cases this was contracted to a separate organisation.[16] This study found no clear difference between enterprise and civil society challenge funds in these arrangements is evident from the data. Generally, while there is now more experience in the design of challenge funds within development agencies and consultancies, there is relatively little information in the public domain about the theory and practice of challenge fund design, including how to ensure reasonable transparency and accountability while at the same time realising potential economies of scale and scope.

There appears to be a trend to outsource the management of challenge funds and most fund managers are consultancy firms.[17] An interesting exception is SNV World, a technical service provider that is now an NGO, having become fully independent from the Dutch Ministry of Foreign Affairs in 2002. With an overall mission to promote sustainable development and improve the quality of life of people living in poverty, it shares with many NGOs a growing interest in collaboration with private businesses (SNV World, 2013). In 2012 it was appointed as fund manager for the DFID funded Vietnam Business Challenge Fund, which aims to support the Vietnamese private sector *'to develop innovative inclusive business models that deliver both commercial benefits for the company and social impact for the low-income population through increased job availability, better wages and improved accessed to essential goods and services'* (Government of the United Kingdom, 2013c). This example raises interesting questions about the possible comparative advantage of different types of organisations in management of challenge funds, particularly with respect to overseeing compliance with the business and development goals of ECFs, and how far these are taken into account alongside commercial factors in allocation of fund management contracts.

A fund manager's contractual role be viewed as varying across a spectrum. At one end, a relatively 'light touch' challenge fund management entails little or no involvement in implementation of funded activities. At the other end, 'hands-on' management entails fund managers being required to exert considerable influence on projects, particularly through direct involvement in performance management systems and associated capacity building. Over the course of the last decade, DFID and other funders have tended to encourage an increasingly more 'hands-on' approach and implemented/suggested clearer 'theories of change' for the role of the fund manager (Triple Line Consulting & Crown Agents, 2013). At the same time, it appears that the nature and extent of competition within the challenge fund management sector is also changing, including: more fund management contracts are open to international companies; the strategic balance between specialisation and a combination of other management consulting roles and finally; the extent to which individual funders are reliant on particular firms.[18]

Challenge fund websites and other information sources hosted by donors do not generally provide information about application and acceptance rates. Nor do they detail advertising and management

[16] Websites for 19 funds did not indicate where responsibility for M&E was situated.

[17] Fund managers identified through this review were Abt Associates, Cardno Emerging Markets, Coffey International Ltd, COWI, Crown Agents, FHI 360, Genesis Analytics, GRM International, Harewelle International, Hivos, KPMG Development Services Ltd, Landell Mills, Maxwell Stamp PLC, Manusher Jonno Foundation, Nathan Associates, Network of European Foundations (NEF), PricewaterhouseCoopers, Social Development Direct Ltd and Triple Line Consulting Ltd,

[18] The Independent Commission for Aid Impact (2013) reports that private sector contractors accounted for 9% of DFID total expenditure in 2011/12, but does not indicate what proportion of this was channelled to and through challenge funds.

costs relative to the value of funds disbursed.[19] However, websites do provide qualitative information about how grantees are screened and recruited. Marketing mechanisms to attract potential grantees may include print advertising, radio, websites, e-mail circulation lists (including applicants from previous funding rounds), NGO and business networks and pre-launch workshops. In attracting grant applications, there are trade-offs for the funder. This includes minimising expenditure and keeping costs low, achieving a fair coverage and attracting sufficient numbers potentially eligible grantees to secure bids of the highest quality. While unsuccessful applicants may benefit from the learning process inherent in a failed grant application, there is considerable potential for the public and private interests (of funders, fund managers and bidders) to diverge considerably. For example, restricting advertising or selection to previous winners reduces transaction costs, but at the potential price of equity of opportunity and originality of proposals.[20] It cannot be assumed that overall cost-effectiveness or value-for-money is the over-riding consideration for selecting challenge funds over other funding mechanisms, given that they may also be a useful way for donors to achieve other goals, such as relatively rapid fund disbursement. Another possible benefit of the challenge fund mechanism is to reduce direct donor overhead costs by passing them on down the aid chain to fund managers and bidders. Apparent value-for-money of a challenge fund may also be improved by hiding costs up the aid chain. Challenge funds are also a means to strengthen public-private partnership on ideological grounds, to leverage private funding to offset public funding shortfalls and to diversify donor partners, particularly in conflict areas (e.g. see Mallet and Slater, 2013).[21]

The distinction between relatively 'light touch' and 'hands-on' approaches also applies to grant proposal screening. The USAID 'Powering Agriculture: An Energy Grand Challenge for Development Fund' is an example of a fund that provides seed funding for preparation and submission of proposals (Federal Business Opportunities, 2013). Likewise, the GPAF fund manager and DFID-run regional workshops for would be applicants to provide guidance on how to make a successful application.[22] Multiple screening is also common. For example, the DFID-funded Tanzania Zonal Innovation Fund (Research into Use, or RIU) issues a 'first call of concept notes' from which it compiles a short-list of potential grantees (Economic Development Initiatives Ltd., 2009:2). Other examples of two stage processes with a 'light touch' expression of interest stage followed by full submission are the Shell Springboard innovation prize (Shell Springboard, 2013), the Children and Violence Evaluation Challenge Fund (The Children and Violence Evaluation Challenge Fund, 2013), Innovations Against Poverty (SIDA, 2012) and the Ashen International Award (Ashen, 2013). Additional variation arises from the involvement of independent assessors, donor and fund managers in screening, as well as introduction of 'light touch' funding windows for augmenting funding to existing grantees (the USAID

[19] This is now changing, in part as a response to pressure to improve the quality of data available on the use of aid under the International Aid Transparency Initiative (Development Initiatives, 2012; Tierney *et al.,* 2012). For example, the Civil Society Challenge Fund and Global Poverty Action Fund are both bound by IATI guidelines.

[20] Cunningham *et al.* (2012:6) highlights the danger of this 'halo' effect in the case of subsidies for business R&D, while Poulton and Macartney (2012:103) also suggest that *'… without active and on-going efforts to market a fund it runs the danger of servicing a small number of private actors, whose motives for engagement could readily slip from help for innovation to rent-seeking*.'

[21] From the point of view of the bidder, the grant application cost plus the net present value of grant administration costs adjusted to reflect the chance of success, can be viewed as a kind of surrogate price for the funds: raise this 'price' and demand for funds will go down, lower it and they are likely to go up.

[22] See https://www.gov.uk/global-poverty-action-fund-gpaf#related-community-partnership-window-documents

DIV being an example). Appendix 3 provides more detailed case studies of an ECF, a social and civil society challenge fund and a mixed fund in the process of screening and selecting grant-holders[23].

3.5 Implementation, risk sharing and evaluation.

The issue of choosing the right balance between a 'light touch' and a 'hands-on' approach to challenge fund management persists once projects have been approved. Waterman and Meier (1998) assert that two critical influences on this are goal congruence between funders and grant recipients, and their relative levels of knowledge and understanding of the many factors contributing to project outcomes. The highest levels of monitoring and supervision are associated with the classic principal-agent problem where there is both goal divergence and strong information asymmetry in favour of the recipient. In contrast, Booth (2012) has warned against underestimating the scope for partnership, co-production and collective action within aid relationships based on shared goals and understanding. Possible pay-offs to devolving autonomy over implementation to grantees arise through tapping local knowledge and specialist expertise, as well as through synergy with their other activities, and the scope for piggy-backing on their established governance and accountability mechanisms to shareholders, trustees, clients, members, peer groups and/or host country regulators. The personal consequences of success or failure of a project may also be greater for staff in a relatively small grant receiving agency than it would be if the same project and staff were located within a larger donor bureaucracy. Challenge funds may also have the additional political advantage for donors of distancing them from risky or sensitive activities, at least to the extent that grantees are more locally owned and accepted. At the same time, grantees can benefit politically, as well as, financially from the external funding link.[24]

What is clear, even this brief discussion, is that the issue of cost-effective management of challenge fund projects cannot be separated from the issue of risk sharing. Nearly all challenge funds invite applicants to be innovative rather than risk averse in project design.[25] The justification for ECFs and innovation often also includes reference to insurance market failures, and this argument also applies to social and civil society challenge funds to the extent that even public sector providers of welfare services may be deterred from innovating because of risk. While rarely explicitly stated, some willingness on the part of the donor to share the risks of project failure is implicit in the practical and reputational limits to how far it is likely to go in seeking to recover funds from projects that fail. Challenge funds also reflect a tacit understanding that the outcomes of development activities are often unavoidably uncertain, particularly in complex contexts, and that imposing overly strict controls on intermediary organisations may undermine their creative capacity to add value. This is an

[23] Examples of challenge funds were selected as their fund sizes were closest to the mean fund size for each of the three types of challenge funds discussed throughout this paper

[24] See Booth (2013) for a broader discussion of the advantages of 'arms-length' approaches to aid, and Collier (2013) for an exploration of aid for public private partnerships as a means to promote 'pioneer investment'. Host governments are of course also wise to this approach, and can respond by imposing strict limits on the external funding local organisations can receive and how it is spent. For example, Ethiopia requires that 80% of all external funding to NGOs should be passed on to intended beneficiaries. While achieving the political purpose of asserting government control this may foster aid hand-outs and dependency.

[25] For example, DFID's Malawi Innovation Challenge Fund (MICF) was established to '*encourage businesses in Malawi to come up with innovations in technology, services and other businesses models that effectively connects the poor to markets in agriculture and manufacturing*' (Face of Malawi, 2013). Meanwhile, the Grand Challenges Canada Fund aimed to '*support bold ideas with big impact on global health*' (Grand Challenges, Canada 2013).

important counter-point to final impact (or 'outcome' additionality) more narrowly and mechanically as the result of relaxing capital constraints (or 'input' additionality). [26]

Despite the desire for innovation, different challenge funds have varying risk appetites. Some challenge funds explicitly outline the desire to fund riskier, perhaps more untested projects, whereas others make little reference to risk explicitly. The GPAF clearly states that it '*balances higher risk for higher rewards from innovative work and lower risk for work to deliver tried and tested approaches*' for both its Community Partnership and Impact windows (Government of the United Kingdom, 2013) while the CSCF which closed to new grants in 2011 aspired to fund 'innovative service delivery in challenging environments'. In addition, the ABIF encourages Afghani enterprises with considerably riskier business models to apply for funding, determining the size of a grant allocated on the basis of the specific risks and potential returns expected from each project (Imurabba, 2013b). The AECF also openly acknowledges a risk sharing element in its selection of projects aimed at incentivizing private sector actors to engage with the rural poor to improve access to a better functioning market systems. Indeed, the AECF often chooses 'riskier projects with potential' to test new and innovative ideas. This approach makes both risk and failure an inherent design feature as all projects may not succeed (AECF, 2012:9). The Girls' Education Challenge Fund's Step-Change Windows offers projects funding, with 10% of funding released on payments-by-results basis, a funding modality chosen to incentivise a focus on learning, enrolment and continued school attendance. While these examples illustrate different ways of inviting and accepting risk, what is missing are benchmarks for what amount of project failure and success is acceptable, or how best to measure and evaluate this relative to fund goals (Elliot, 2012; Cunningham *et al.*, 2012:6).

To the extent that the architects of challenge funds are informed by a laudable appreciation of uncertainty and the importance of risk sharing, then there is a potential moral hazard problem that grantees may forego taking sensible measures to mitigate the risk of project failure in the knowledge that these are less likely to be punished. This helps to explain why an emphasis on grantee autonomy and innovation is not at all inconsistent with a strong emphasis on compliance with guidelines for monitoring and evaluation of project activities, including reporting on financial expenditure, results and lesson learning. A more positive point leading to the same conclusion is that effective learning and dissemination is particularly necessary and important for innovative activities that seek new ways of achieving difficult goals. Demand for strong evaluation also originates from the political requirement to account for the use of public money, particularly when transferred to private companies and in a context of public spending cuts.[27] Ample scope also remains for simplifying and standardising guidelines, contracts and compliance mechanisms for monitoring and evaluating challenge funds, including reducing the fragmentation and duplication of effort arising from donor requirements and idiosyncrasies.

There is variation in how far challenge funds either impose their own self-contained monitoring and reporting mechanisms or can rely on those that grantees already have in place for reporting to others.

[26] This in turn explains the full significance of the subsidy rate. Cunningham *et al*. (2012:6), for example, suggest that in the case of subsidies for firms' R&D, substitution effects (i.e. lower input additionality and crowding out) falls sharply when it exceeds 20% of their total investment. They also make a useful distinction between direct outcome additionality and indirect or 'behavioural' additonalilty arising from deeper changes in institutions and attitudes.

[27] Martens (2002) provides a formal model to explain why funding for aid evaluation is likely to be sub-optimal. However, this pessimistic view is not wholly borne out by more recent evidence. In the UK, the work of the International Development Select Committee is particularly important, to which the Independent Commission for Aid Impact reports. More official resources are also going to independent bodies like 3ie, adding to substantial aid accountability activities of media, lobby groups, think tanks, NGOs and universities.

An example of a fund's self-contained monitoring system is the Tanzania Zonal Innovation Fund, where receipt of funds was conditional on grantees completing grant management training on reporting requirements, financial control and overall fund dispersal procedures (Economic Development Initiatives Ltd., 2009). The ClimDev Special Fund is another example of harmonization with the grantees' own reporting mechanisms, contracts being signed between grant recipients and independent 'implementing agencies' (African Development Bank, 2009:11).[28] As already reported in Table 6 (Appendix 2), many challenge funds also contract independent monitoring and evaluation bodies to oversee this element of fund management.[29] Challenge funds generally tend to reflect the results-based management systems and cultures of their sponsoring donors, complete with theories of change, logical frameworks, quality assurance and auditing processes, mid-term reviews and impact evaluation studies. In the spirit of the Paris-to-Busan quest for aid effectiveness, the trend for self-contained monitoring procedures of challenge funds is likely to continue. Consolidation or pooling of funds between donors is one way to address this alongside other Paris agenda goals, including promoting transparency, results-orientation and closer alignment with host government processes.

It is beyond the scope of this paper to enter into a more detailed review of monitoring, evaluation and learning systems within challenge funds, but one specific point is worth highlighting. This concerns the relationship between challenge fund evaluation at the individual project level and evaluation at the overall fund level. This relates back to the question of overall challenge fund scope and design. At one extreme there doesn't need be an expectation of synergy between projects. Instead, the rationale for the challenge fund rests on specialisation and cost-effectiveness in supply of funding, including scope for cost saving in monitoring, auditing and evaluation through systematic sampling. At the other extreme, systemic impact may be critically important to the challenge fund's purpose, with important implications for the way it is evaluated (Kessler, 2013). In the case of sector or value-chain specific ECFs, for example, systemic effects could include market leadership and championing of innovation with imitation by competitors, forward and backward linkages stimulating improvement in supply of inputs and services, and support for collective action including improved regulation. Johnson and Boulton (2013) provide an interesting example of an impact evaluation that employs ideas drawn from 'complexity theory' to explore the systemic effects of the Kenyan Financial Sector Deepening Challenge fund.

A discussion on monitoring, evaluation and learning within challenge funds raises the question of who should take responsibility for impact evaluation at both project and fund levels. In the case of ECFs there is a consensus amongst academics that private for-profit firms lack both incentives and skills to assess the development impact of projects (as opposed to their contribution to business sustainability), and therefore, should not be required to take on this responsibility for this (Kessler, 2013; see also Collier, 2013). In contrast, non-profit development NGOs may have a stronger interest in monitoring and evaluating the social impact of their work. However, their ability to do so with sufficient objectivity and scope, on an adequate scale and over a long enough time span remains a matter for future research and debate.

[28] The African Development Bank, the United Nations Economic Commission for Africa, the Commission of the African Union Climate Change and Desertification Control Unit.

[29] Examples include Itad responsibility for monitoring and evaluation support to the Food Retail Industry Challenge Fund (Itad, 2013b), and the appointment of Coffey International by DFID to conduct impact evaluation and value-for-money assessment of the Girls' Education Challenge Fund (Coffey International, 2013).

The concept of systemic and fund-wide monitoring and evaluation of challenge funds also relates back to the issue of risk, with scope to compare *ex ante* risk appetite with *ex post* outcomes across the project portfolio for each funding round. How far, for example, are donors willing to accept project failures in terms of impact (if not compliance with use of funds) as an acceptable price for backing a few celebrated winners? An example is the early and timely support of M-PESA from the Financial Sector Deepening Fund. This also raises the issue of how far challenge funding can and should be interlinked with 'hands-on' managerial and technical assistance, blurring the definitional boundary with a managed and social impact funds.

4 Conclusions and scope for further research

This paper has documented the proliferation in use of challenge funds in international development, particularly by DFID. It has offered a seven point definition of what challenge funds are and how they differ from other development financing mechanisms. The study uncovered an important distinction between enterprise challenge funds oriented towards private sector business development ,with the expectation of delivering financially self-sustaining services and civil society challenge funds, oriented towards social development, including public service delivery and dependent for their sustainability on further grant or subsidy transfers. Drawing on web-based information for fifty funds, the paper has explored the variations in challenge fund design in relation to: scope, grantee/project eligibility, grant proposal screening, competition, financial terms, division of labour in implementation and risk sharing.

One recurring issue in the literature on challenge funds is how to strike an appropriate balance of power and responsibility between funders (including their appointed fund managers) and grant recipients. This is linked to the extent of risk sharing as well as input additionality and how far funder/fund managers succeed in inter-linking their supervisory role with those of other stakeholders (i.e. governance as well as financial leverage). For enterprise challenge funds 'lightness of touch' in relation to management depends in part on the competitive market position of grant recipients and the exit options of poor/marginal customers, although consumer voice is also an important and neglected issue. For social challenge funds, the voice of intended beneficiaries is an even more critical issue in assessing impact, whether exercised politically through civil society activities or through more formal aid funded feedback mechanisms. Also of interest, there is the scope for mixed challenge funds to address both business and social development issues within specific sectors or areas of activity, often as one component of a wider sector or value chain intervention strategy.

The paper has flagged up questions requiring further research. For example, at the aggregate level there is scope for stronger collective action among donors and fund managers to conduct comparative research into the provisions of different funding mechanisms, including establishment of performance benchmarks for particular types of funds. This paper has made a modest start in exploring differences between challenge funds and other funding mechanisms, as well as comparing and contrasting ECFs and social and civil society challenge funds. The evolution of comparative research into microfinance globally through CGAP (The Consultative Group to Assist the Poor) and the MIX market provides one possible role model.[30] Meanwhile, there is also very considerable scope for case study and qualitative research into the operation of specific challenge funds.

[30] MIX describes itself as the premier source for objective, qualified and relevant microfinance performance data and analysis. It provides performance information on microfinance institutions (MFIs), funders, networks and service providers dedicated to serving the financial sector needs for low-income clients. The MIX market

Given the principal-agency relationship at the heart of challenge funds, institutional and transaction economics offers important theoretical insights to inform a future research agenda (e.g. see Martens, 2002; Poulton and Macartney, 2012). However, challenge funds are also embedded in wider political and cultural structures and relationships, and it is important that research into their structure, conduct, performance and evolution is informed by multiple disciplinary perspectives. At the applied level, there is potential to improve the organisation, scale, quality and cost-effectiveness of monitoring and evaluation of challenge funds. The scope of impact assessment can also usefully expand beyond confirming whether challenge funds projects achieve their stated goals (e.g. as explored by Kessler, 2013) to including more open-ended or exploratory research into systemic and unintended impacts as well as aggregate performance of funds as a whole. More broadly, challenge funds are interesting institutional hybrids, linking the public and private sector through a complex mix of market, hierarchy and network relationships. Understanding these is one element of the wider agenda of assessing the post-Washington consensus global development architecture (Gore, 2013).

(www.mixmarket.org) provides instant access to financial and social performance information covering approximately 2,000 MFIs around the world

Appendix 1. List of challenge funds analysed.

Table A1: Enterprise challenge funds

Fund Name	Scale	Fund Size[31] (UK GBP, million)	Fund Manager	DFID Funded?	Other donors	Date of Activity	Fund transfer method	Website
Afghanistan Business Innovation Fund	Country	8.55	Landell Mills	Yes	AusAid	2012-2014	Cost sharing	www.imurabba.org
Africa Enterprise Challenge Fund	Regional	130.6 *	KPMG Development Services Ltd	Yes	AusAid, CGAP, IFAD, RNE, SIDA	2006 (ongoing)	Cost sharing	www.aecfafrica.org
Agricultural Technology Transfer Research Challenge Fund	Regional	3	Landell Mills	Yes	-	2013-2016	100 % grant	www.agritt.org
Business Innovation Facility	Regional	5.5		Yes	-	2010-2013	Cost sharing	www.businessinnovationfacility.org
Construction Ideas Fund (Nigeria)	Country	*	Coffey International (GEMS Construction and Real Estate Project)	Yes	-	2013 (ongoing)	Cost sharing	www.gov.uk/construction-ideas-fund
Enterprise Challenge Fund	Regional	7.25 * (to date)	Coffey International	No	AusAid	2007-2013	Cost sharing	www.enterprisechallengefund.org
Enterprise Innovation Challenge Fund	Regional	26.55	Compete Caribbean	Yes	IDB, CIDA	Ongoing	Cost sharing	www.competecaribbean.org
Food Retail Industry Challenge Fund	Regional	2.4	Nathan Associates	Yes	-	2007 (ongoing)	Cost sharing	http://projects.dfid.gov.uk/project.aspx?Project=114009
GSMA mWomen Innovation Fund	Regional	4.1	Coffey International	No	USAID, AusAid, Visa	2013 (ongoing)	Cost sharing	http://www.gsma.com/mobilefordevelopment/gsma-mwomen-innovation-fund-overview-and-guidance-for-ngo-applicants-slides
Innovation Fund for the Americas	Regional	*		Yes	USAID, Gates Foundation	2013-ongoing	-	www.usaid.gov/div/portfolio/usaid-announces-innovation-fund-americas
Innovations Against Poverty	Global	2.58 * (to date)	PWC	No	SIDA	2010 (ongoing)	Cost sharing	www.sida.se/English/Partners/Private-sector/Collaboration-opportunities/Challenge-Funds/Innovations-against-poverty/

[31] All recorded fund sizes listed in this paper relate to the amounts of funds disbursed to grantees and where possible, excludes fund management costs and other administrative costs. Funds where this data has not been possible to attain with certainty or because fund data size data relates to only one round of funding or funds released to date from a bigger, pledged but unknown fund pool size have been denoted with an * beside the fund size in all three Appendix 1 tables. All fund sizes were recorded July 2013.

Fund Name	Scale	Fund Size[31] (UK GBP, million)	Fund Manager	DFID Funded?	Other donors	Date of Activity	Fund transfer method	Website
Latin America Impact Economy Innovations Fund	Regional	0.55 * (2012 round)		No	Fundación Avina, Avina Americas, Omidyar Network, The Rockefeller Foundation	2012 (ongoing)	100% Grant	www.avina.net
Malawi Innovation Challenge Fund	Country	7.6		Yes	UNDP	2013 (ongoing)	-	www.devex.com/en/projects/malawi-innovation-challenge-fund-micf-management-services-292674
mFarmer Initiative Challenge Fund	Regional	*	Coffey International	No	Bill & Melinda Gate Foundation, USAID	2011-2014	Cost sharing	www.gsma.com/mobilefordevelopment/programmes/magri/mfarmer-initiative
Powering Agriculture: An Energy Grand Challenge for Development	Global	13.05		No	SIDA, USAID, Duke Energy, USDA, OPIC	2012 (ongoing)	100% Grant	www.poweringag.org
Responsible & Accountable Garment Sector	Regional	3.5	Maxwell Stamp PLC	Yes	-	2010-2013	Cost sharing	www.gov.uk/responsible-and-accountable-garment-sector-challenge-fund
Shell Springboard	Global	2.25* (funds disbursed to date)		Unsure		2005-going	100% Grant	www.shellspringboard.org
Tanzania Zonal Innovation Fund (RIU)	Country	*		Yes	-	2008-2012	-	http://r4d.dfid.gov.uk/Output/183354/Default.aspx
The Sawaed Programme	Regional	*		No	Mohammed in Rashid Al Maktoum Foundation	2009 (ongoing)	Cost sharing	www.mbrfoundation.ae/English/Entrepreneurship/Pages/Sawaed.aspx
UN Joint Programme 1 on Wealth Creation, Employment and Economic Empowerment Challenge Fund	Country	*		No	ILO	2009 (ongoing)	Cost sharing	www.ilo.org/public/english/employment/ent/coop/africa/download/jp1_guidelines.pdf
Vietnam Business Challenge Fund	Country	*	SNV	Yes	-	2012-2015	Cost sharing	www.gov.uk/vietnam-business-challenge-fund

Table A2: Civil society challenge funds

Fund Name	Scale	Fund Size (UK GBP, millions)	Fund Manager	DFID Funded?	Other donors	Date of Activity	Fund transfer method	Website
Additional Support to Civil Society Organisations	Global	See Global Poverty Action Fund below	Triple Line Consulting & Crown Agents	Yes	-	2010-2012	100% Grant	
Bangladesh Health Innovation Challenge Fund	Country	*	GRM International	Yes	-	2013-Present	-	www.grminternational.com/newsroom/news/dfid_and_grm_futures_launch_bangladesh_health_innovation_challenge_fund
Canadian Fund for African Climate Resistance	Regional	12.42*		Unsure	CIDA	2012-2014	Cost sharing	www.acdi-cida.gc.ca/acdi-cida/acdi-cida.nsf/eng/ANN-11983223-HVT
Civil Society Challenge Fund	Global	160	Triple Line Consulting, Crown Agents	Yes	-	2002- 2015	100% Grant	http://projects.dfid.gov.uk/project.aspx?Project=201242
Civil Society Support Programme	Country	30.15	Consortium - British Council, IDL, INTRAC	No	DANIDA, Irish Aid, Kingdom of the Netherlands, RNE, SIDA, UKAID	2012-2017	100% Grant	www.cssp-et.org
Climate & Development Knowledge Network Innovation Fund	Regional	1.1* (to date)		Yes	-	2011 (ongoing)	Both cost sharing & grants	http://cdkn.org/about/who-we-are/innovation-fund/
Development Awareness Fund	Country	26.5	Triple Line Consulting	Yes	-	2006-2013	100% Grant	http://webarchive.nationalarchives.gov.uk/20100407200008/dfid.gov.uk/working-with-dfid/funding-opportunities/not-for-profit-organisations/daf/
Economic Empowerment of the Poorest Programme (SHIREE)	Country	65	Harewelle International Ltd, PMTC Bangladesh, Bath University, British Council, Unnayan Shamannay	Yes	Gov. of Bangladesh	2005-2016	-	www.shiree.org
Emprender Paz	Country	7.85		Unsure	SIDA	2008 (ongoing)	-	www.emprenderpaz.org
Financial Education Fund	Regional	3.74	Cardno Emerging Markets, Genesis Analytics	Yes	-	2008-2013	100% Grant	www.financialeducationfund.com
Girls' Education Challenge Fund	Global	300	PWC, FHI 360, Nathan Associates, Social Development Direct Ltd	Yes	-	2011-2016	Grant elements & Payment by Results (10-20%)	www.gov.uk/girls-education-challenge

Fund Name	Scale	Fund Size (UK GBP, millions)	Fund Manager	DFID Funded?	Other donors	Date of Activity	Fund transfer method	Website
Global Poverty Action Fund	Global	120[32]	Triple Line Consulting, Crown Agents	Yes	-	2011-2016	Both cost sharing & grants	www.gov.uk/global-poverty-action-fund-gpaf
Governance & Transparency Fund	Global	130	KPMG Development Services Ltd	Yes	-	2007-2013	100% Grant	www.gov.uk/governance-and-transparency-fund-gtf
Health Enterprise Fund	Regional	*	Abt Associates	Yes	USAID, UKAID	2013 (ongoing)	100% Grant	www.healthenterprisefund.org
Human Development Innovation Fund for Tanzania	Country	30		Yes	-	2013-2018	Cost sharing	http://projects.dfid.gov.uk/project.aspx?Project=203539
Humanitarian Innovation Initiative	Global	9.5		Yes	USAID	2013-2015	Cost sharing	www.usaid.gov/div/humanitarian-initiative
Making All Voices Count- A Grand Challenge for Development	Global	29.43	Hivos	Yes	USAID, SIDA, Omidyar Network	2013 (ongoing)	100% Grant	www.makingallvoicescount.org
Rights & Governance Challenge Fund	Country	37.98	Manusher Jonno Foundation	Yes	RNE	2008- 2013	100% Grant	http://projects.dfid.gov.uk/project.aspx?Project=113976
Rights, Democracy & Inclusion Fund	Country	7.47	GRM International	Yes	SDC, AusAid, Danida	2006 (ongoing)	100% Grant	www.rdif.org.np/index.html
Sightsavers' Innovation Fund	Global	1*		Yes	-	2012 (ongoing)	100% Grant	www.sightsavers.org/in_depth/quality_and_learning/innovation_fund/18248.html
The Arab Partnership Economic Facility	Regional	70		Yes	FCO	2011-2015	-	http://projects.dfid.gov.uk/project.aspx?Project=203438
The Arab Partnership Participation Fund	Regional	31.36 * (amount disbursed to date)		Yes	FCO	2013-2017	-	www.gov.uk/arab-partnership-participation-fund
The Children and Violence Evaluation Challenge Fund	Global	.65* (first round)	NEF (Network of European Foundations)	No	Oak Foundation, Bernard van Leer Foundation, UBS Optimus Foundation	2011 (ongoing)	100% Grant	www.evaluationchallenge.org
The ClimDev Special Fund	Regional	84.21*	African Development Bank (ADB)	No	African Development Bank, SIDA, African Union Commission, UN Economic Commission for Africa	2012-2014	-	www.climdev-africa.org/The-ClimDev-Special-Fund

[32] Includes Additional Support to Civil Society Organisations funding.

Table A3: Mixed/joint challenge funds

Fund Name	Scale	Fund Size (UK GBP, millions)	Fund Manager	DFID Funded?	Other donors	Date of Activity	Fund transfer method	Website
Ashden International Awards	Global	*		No	Christian Aid, Citibank, Eurostar, Impax, The World Bank	2001 (ongoing)	-	www.ashden.org
Business Sector Advocacy Challenge Fund	Country	1.96	COWI	Yes	USAID, Danida, EU, DFID	2004 (ongoing)	Cost sharing	www.busac.org
COOP Africa Challenge Fund	Regional	.42* (one round)	COOPAfrica	No	ILO	2008 (ongoing)	Cost sharing	www.ilo.org/coopafrica
Development Innovation Ventures	Global	*		Yes	USAID	2013-2015	Cost sharing	www.usaid.gov/div
Grand Challenges Canada	Global	143		No	Government of Canada, Bill & Melinda Gates Foundation	2008-2013	Cost sharing	www.grandchallenges.ca

Appendix 2. Tables from the case study research

Table 3: Some sources of variation in challenge funds

Challenge fund characteristic	Possible variants
(1) Grant or subsidy component	Level of requirement for matching and/or leveraged funding from other sources. Tranching, and level of entitlement to follow-up grants or loans.
(2) Specified public intent	Choice of sector, goals, indicators and standards for monitoring them.
(3) Inter-agency relationship	Extent to which the funder owns or has political and financial leverage over grantees.
(4) Eligibility and the extent of competition.	How and how widely funding is marketed. Broader or narrower eligibility criteria.
(5) Screening and selection rules and procedures	Broader or narrower criteria and design guidelines. Extent of transparency and independence. Number of rounds and overall cost.
(6) Grantee autonomy in bid implementation	Complexity of guidelines. Extent to which compliance with them is monitored and enforced.
(7) Risk sharing to promote innovation	Permitted variation in activities and outcomes without triggering sanctions.

Table 4: Variation in scope, purpose and agency involvement.

	ECF	Social	Mixed/ joint	Total
Total number of cases (of which)	21	24	5	50
• global coverage	3	9	3	15
• regional	12	7	1	20
• one country only	6	8	1	15
• DFID funded	12	19	2	33
• multiple funders	10	11	3	24
Eligible to be a grantee[33]				
• Civil Society Organisation	7	20	4	31
• Enterprise	16	11	4	31
• Other[34]	5	9	5	19
• Mixed	4	12	4	20
Stated sectors and activities				
• Agriculture	7	-	-	7
• Civil society		1	1	2
• Climate Change	3	3	3	9
• Construction	-	2	-	2
• Democratisation	-	3	-	3
• Education	2	6	-	8
• Economic growth	2	1	-	3
• Enterprise	14	1	2	17
• Food security	3	1	-	4
• Gender	1	2	-	3
• Governance	-	9	2	11
• Health	1	6	1	8
• Finance	1	1	1	3
• Hunger reduction	-	6	-	6
• Forestry	-	-	1	1
• Livelihoods	4	1	-	5
• Legal reform	-	2	-	2
• Market failures	1	-	-	1
• Social inclusion	-	2	-	2
• Technology	2	-	1	3
• Trade policy	1	1	-	2
• Poverty reduction	6	4	4	14
• Water & sanitation	-	3	-	3

Source: Appendix 1.

[33] Data missing for one fund.
[34] Including academic institutions, research institutes, co-operatives and mixed consortia.

Table 5: Variation in terms of funding available.

	ECF	Social	Mixed/joint	Total	Cases with data
Total number of cases	21	24	5	50	
Mean fund value (£ million)	20.5	62.5	72.5	49.1	30
Mean minimum grant size (£ '000)	92.4	263.5	45.0	154.6	30
Mean maximum grant size (£ '000)	964.9	2,162.7	323.0	1,652.7	37
Average grant duration (years)	2.0	2.9	1.7	2.4	18
Number of cases with…					
• cost sharing	14	5	4	23	42
• full grants	4	15	0	18	43

Source: Appendix 1.

Table 6: Variation in fund management

	Enterprise	Social	Mixed/joint	Total
Total number of cases with…	21	24	5	50
• A contracted fund manager?	13	17	2	32
• Independent Monitoring & Evaluation (M&E)[35]	7	6	2	15

Source: Appendix 1.

[35] Of the sample, 15 challenge funds had clearly stated independent parties conducting fund monitoring and evaluation, 16 challenge fund managers conducted monitoring and evaluation assessment in-house and 19 challenge fund managers did not provide clear information on the manner in which the associated funds' monitoring and evaluation takes place

Appendix 3. Case studies of challenge fund selection and screening processes.

Case Study 1. The UN Tanzania and ILO Wealth Creation, Employment and Economic Empowerment Challenge Fund (an enterprise challenge fund) In tandem with the Coop Africa Cooperative Facility for Africa, the United Nations (UN) ran a number of challenge funds with the objective of supporting African projects including co-operatives, self-help groups and local member-based organisations working to overcome *'a variety of development constraints such as unemployment, lack of social protection, lack of empowerment and poverty*' (ILO, 2010). One such challenge fund was the Wealth Creation, Employment and Economic Empowerment Challenge Fund. Applicants interested in receiving funding from the ILO-UN funded mechanism were screened and selected on a competitive basis through a multiple step process. With projects expected to share the project costs, grants of up to £130,000 could be awarded to winning projects (Coop Africa, 2010:7). Eligibility criteria enabling application included: the organisation or institution interested was a 'cooperative-type organisation', working as a primary co-operative, in unions, federations or colleges; -the applicant organisation must have been compliant with international labour standards (Coop Africa, 2010).

The first step called for interested parties to submit an initial proposal outlining the project applying for funding following the styled templates provided by the fund. Unlike many other challenge funds, the Wealth Creation, Employment and Economic Empowerment Challenge Fund had an open call for proposals through which applicants receive feedback on the proposal about five weeks after application submission rather than strict deadlines restricting application timelines. Submitted draft proposals were received and organised by the fund's Regional Advisory Groups and deferred to the Fund Secretariat (comprised of the ILO and Coop Africa coordinating team). The second stage saw proposals being vetted by the Fund Secretariat and those of interest where then given to 'experts' who were independent national and international consultants involved to *'provide independent expert assessment of quality of projects during [the] selection process*' (Coop Africa, 2010:7). Assessed by the experts guided by an assessment template, the strongest projects were selected and the proposals were then returned to the Secretariat with comments to be shortlisted for the Selection Committee. The Selection Committee entailed of representatives from various UN bodies, the ILO and the Food and Agriculture Organisation (FAO). The third step in the selection process was the review by the Selection Committee of the proposal to decide upon which ones would receive funding and under which conditions they would do so. Finally, the Secretariat then contacted successful projects outlining the conditions underlying their awarded grants with funds being released to the grantees upon signing the grant agreement (Coop Africa, 2010:9).

Case Study 2. The Shiree Economic Empowerment of the Poorest Innovation Fund (a social challenge fund). In line with assisting the Government of Bangladesh in the achievement of eradicating extreme poverty, the EEP utilises a challenge fund mechanism to discover and fund *'novel, undocumented and even, untested approaches which address the economic needs of the extreme poor*' (Shiree, 2009:21). NGOs working in Bangladesh with innovative ideas and projects addressing issues related to poverty and food security were invited to apply for funding through the Innovation Fund. Eligibility was open to NGOs working in the Chittagong Hill Tracts, the *hoar* district and coastal districts. Depending on the region, the NGOs had to implement the funded activity directly or through an implementing partner, with areas for funding including *'innovative ideas, processes, systems and technologies… likely to generate assets, improve incomes, decrease dependency and vulnerability*' (Shiree, 2009:21).

The first stage of this challenge fund's project screening and selection procedure involved the shortlisting of applicant NGOs after initial proposals had been received. An Independent Assessment Panel appraised the proposals considering the viability to succeed based on '*impartial written assessment of each NGO's institutional and financial strengths based on field investigations*' (Shiree, 2009). Following the initial screening stage, stronger projects were shortlisted and passed to the fund manager for further consideration. The fund manager then forwarded the shortlist to the National Steering Committee, a committee encompassing Government of Bangladesh, DFID, academics and civil society representatives. Projects were assessed on their ability to meet the overarching objective of the challenge fund, their potential to eradicate poverty, as well as prove value for money. The final stage of the selection process ensured that selected projects had the capacity and knowledge to manage any awarded funds from the Innovation Fund. The fund's contract negotiation team were charged with ensuring the successful NGOs received training in and understand to best to manage finances and adhere to developed logframes (Shiree, 2009).

Case Study 3. Development Innovation Ventures (a mixed challenge fund). The DIV was established in a joint effort by DFID and USAID as a fund to locate and finance projects developing innovative ideas and resources to overcome the world's lingering development issues in a cost effective manner. The four funding themes cover humanitarian assistance, hygiene, water and sanitation as well as resolving development issues in Haiti and the Latin America and Caribbean areas. The fund is open to U.S and non U.S NGOs, faith-based organisations, U.S and non U.S private businesses, international organisations, business and trade associations, academic groups and civic groups. Applicant must be a legally recognised organisation, aiming to develop an innovative project covering one of the four funding themes above (DIV, 2013). The initial stage calls for interested parties to submit a letter of interest (LOI) responding to an advertised set of deadlines. The DIV team assess the project as outlined in the LOI in relation to eligibility and suitability. The USAID Office of Acquisition and Assistance then notifies all applicants of their outcome of the screening. Successful projects are then asked to complete and submit a full application. Stage two, post screening, the DIV appraisal team assesses full applications based on three key criteria: cost effectiveness, potential for scaling up and proof of concept. Against this criteria, the most competitive and innovative projects are selected. Successful projects are notified and initial contract and funding agreements are developed. Stage three, post selection, proposals are considered for one of three funding options based on suitability, size of the project and how developed the project is at the stage of funding. The first funding stage, 'stage one' or the 'seed financing' stage offers the least amount of capital and serves the purpose of testing the initial viability and innovation of a new, less developed project. 'Stage two' funding or funds available for 'testing and scaling' is available to projects to fund evaluation of projects and their potential beneficial development impact through strenuous impact testing. Successful, viable, innovative projects that are deemed to be suitable for widespread implementation are awarded the largest amount of DIV funding through 'Stage three' funding for 'widespread implementation'. If a project is awarded stage one funding and performs well, it is given the chance to apply for further DIV funding available through the challenge fund to test impact and to scale up if it is proven to be a worthwhile, innovative and life improving project (DIV, 2013b).

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