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From 'Crowding Out to Crowding In': Towards an Institutional Analysis of Adaptation Funds

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ABSTRACT

Quantifying the cost of funding adaptation to climate change ('adaptation finance') is difficult. There is a broad range of estimates, with the UN suggesting an annual requirement of \$49–171 billion by 2030. The issue becomes more complicated when other aspects – governance, implementation and inefficiencies that may arise through the interaction of different funding sources and agencies – are also considered. This paper applies institutional analysis to review existing sources of adaptation finance, identify some problems and suggest questions that must be tackled at further meetings of the Conference of Parties to the United Nations Framework Convention on Climate Change, and of the committees on specific issues set up under its aegis, especially through the Green Climate Fund.

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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AfDB	African Development Bank
AU	African Union
CDM	Clean Development Mechanism
COP	Conference of Parties
FAO	Food and Agriculture Organisation
FDI	Foreign Direct Investment
GCF	Green Climate Fund
GEF	Global Environment Facility
GhGs	Greenhouse Gases
IPCC	United Nations Intergovernmental Panel on Climate Change
MCII	Munich Climate Insurance Initiative
ODA	overseas development assistance
PPP	public-private partnerships
SADC	South African Development Community
SGP	Small Grants Programme
UN	United Nations
UNEP	UN Environment Program
UNEP-FI	UN Environment Program-Finance Initiative
UNFCCC	UN Framework Convention on Climate Change

INTRODUCTION

The volume of funds that developed countries (except Japan) have delivered for adaptation to climate change ('adaptation finance') has been much lower than promised¹ and reaction to management of the funds has been somewhat critical. Commentators have also observed that existing institutional processes dealing with climate change leave much to be desired. While the 17th meeting of the Conference of Parties (COP) of the UN Framework Convention on Climate Change (UNFCCC) in Durban in 2011 (COP 17) at least kept the Kyoto Protocol alive – which seemed doubtful after the COP 16 Cancun meeting in 2010² – no legally binding agreement has yet been reached.³ Similarly, regulated mitigation markets such as the European Emissions Trading Scheme and the Clean Development Mechanism (CDM)⁴ have been subject to serious criticism,⁵ while the size of new and voluntary carbon markets, including those that generate primary trading certificates from projects in China and Africa, is steadily increasing.⁶

These trends indicate that the best way forward may not lie in regulated institutional approaches to climate finance, and there have been suggestions that the role of the UN and the operation of the UNFCCC should be reduced to a minimum. At the same time, the establishment of the multilateral Global Climate Fund (GCF) at COP 16 and the elaboration of some of its operational aspects at COP 17 ('the COP 17 Decision')⁷ were viewed as an opportunity to redesign the messy institutional process of climate change finance. The present paper, building on previous work,⁸ introduces some of the institutional and market challenges arising from financing adaptation to climate change and provides pointers as to how COP 18, scheduled for Doha in November 2012, can help resolve them. It should be noted, however, that it is not an attempt to cover all possible sources of adaptation finance, but rather those that illustrate some central issues. Nor has the question of fast-track finance, currently a major topic under the GCF, been specifically dealt with; however, concerns around that issue might profit from some of the analyses presented here.

INSTITUTIONAL APPROACH TO FINANCING ADAPTATION

The complexity of institutional mechanisms for financing adaptation is evident from a much-cited study by Bouer and Aerts⁹ identifying eight main sources of finance. In descending order and with substantial overlaps they are: public expenditure, UNFCCC funds, Global Environment Facility (GEF) funds, Overseas Development Assistance (ODA), disaster preparedness, Insurance, disaster pooling, and Foreign Direct Investment (FDI).¹⁰ (Since the recent establishment of the Adaptation Fund, the proportion of UN funds will have increased.) This study has been critiqued elsewhere¹¹ on certain grounds. The term 'public expenditure' is imprecise and as a source of funds, overestimated (much public expenditure in Africa, for example, relies on budgetary ODA). In addition, although regional organisations source a major part of their finance from the multilateral channels listed, there is also a place for regional capital mobilisation. Nonetheless, the study is illustrative of major sources of adaptation finance, the major components of which are discussed below.

UN Framework Convention on Climate Change

Once agreed and ratified, proceedings of COP would result in a document binding under international law.¹² A question then arises as to whether the importance accorded the UNFCCC, especially on financing issues, is warranted. Hall *et al*¹³ cite three reasons why the UNFCCC becomes pivotal, even for developing countries: First, greenhouse gas emissions (GhGs) have the same effect on climate irrespective of their source, hence the problem is one of global commons; secondly, it is important to have a forum that commands the participation of most countries, if not all, because ‘free riding’ by even a few can undermine emissions reductions and introduce competitiveness concerns; and thirdly, the UNFCCC is important from a symbolic point of view and because alternatives to it ‘have become associated ... with a lack of ambition’. The final argument appears circular but the study subsequently makes the point that collective action requires legal arrangements. The difficulty with those, however, is that:¹⁴

treaty-focused negotiations can often drive states to focus on committing to the weakest possible actions; the resulting treaties can then become rallying points for national-level actors who do not wish to go beyond what their countries have formally committed to, and in turn undermine those who advocate more ambitious efforts to cut emissions.

In a post-Cancun *New York Times* article¹⁵ Michael A Levi, a senior fellow with the New York-based Council on Foreign Relations states:

The Cancun agreement should be applauded not because it solves everything, but because it chooses not to: it focuses on those areas where the UN process has the most potential to be useful, and avoids other areas where the UN process is a dead end.

As to what may be handled outside the UN process, Levi mentions the ‘important work of cutting emissions’. Houser¹⁶ argues that unlike international trade agreements, a legally binding multilateral treaty can do more harm than good if it does not meet with the political acceptance of different states. The thrust of his argument, however, is that the UNFCCC should not prioritise the Kyoto protocol and its associated debates regarding binding commitments, as this may preclude other important agreements. The Harvard Project on International Climate Agreements has suggested that for functional and strategic reasons a sectoral approach, or allocation of policies across institutions, which deals with mitigation, adaptation, and geo-engineering – albeit fragmented – might be preferable to a comprehensive one.¹⁷ On the issue of financing, it refers to the indirect linking of different carbon trading mechanisms and the CDM, in which

a complex network’ of governments, corporate houses [and] intergovernmental organisations is evolving despite any comprehensive treaty, though such a treaty ‘would lend much more economic certainty and environmental impact to the network.’¹⁸

It is tempting to apply the principle of ‘regulatory crowding out’, in which a regulatory mechanism may act as a disincentive to the operation of hierarchically inferior regulations or private initiatives; in this case it is possible that the UNFCCC process crowds out other

sources of finance.¹⁹ On the specific issue of interaction between the UNFCCC and other vehicles of climate finance, however, the Geneva-based research group South Centre has warned that reliance on private initiatives or other multi- or bilateral interventions by developed countries may displace UNFCCC initiatives to the detriment of developing countries.²⁰ The main concerns are a failure to meet criteria for predictability and adequacy of financing, the inconsistency of programme priorities and eligibility criteria, and the possibility of introducing new conditionalities otherwise curbed by COP policies.²¹ Another major criticism, especially with regard to discussion on ODA, is that 'a dollar channelled through the World Bank or through bilateral aid agencies can be counted by the donor as an ODA flow and also as a climate finance flow'.²² There is some evidence to support this allegation of intentional double counting of adaptation finance and ODA.²³

While these reasons for allowing primacy to the UNFCCC process are all compelling, several private finance initiatives, community finance and voluntary adaptations operate outside it. To bring all of them within the ambit of the UNFCCC would be difficult and possibly undesirable if there are substantial administrative or transaction costs. Hence, although the COP 17 Decision recognised the GCF as 'an operating entity of the Financial Mechanism of the Convention',²⁴ there is no clarity on interaction between finance mechanisms.

The Adaptation Fund

Following COP 13 in Bali in 2007 the Adaptation Fund was removed from the trusteeship of the GEF and placed with a 16-member board mainly comprising representatives of developing countries. This fund has been the one most welcomed by developing countries²⁵ primarily because of its decentralised management and greater board representation for developing countries, and the fact that it constitutes a centralised source of revenue. Following a recent agreement its funding will be raised from a levy of 2% on proceeds from the CDM, thus facilitating mitigation profit as a source of adaptation finance. The decentralised management of the Adaptation Fund is through so-called 'direct access' to disbursement of funds: recipient countries can access finance directly or assign an agency to do so on their behalf.²⁶ This contrasts with a system of channelling funds through a third party implementation agency, usually a multilateral organisation selected by the fund administrators.

Recognising that permitting National [or multilateral] Implementing Entities (NIEs) approved by the Adaptation Board to access resources directly is 'a change in the ... financing architecture', Horstmann²⁷ notes that it is incumbent upon the Adaptation Fund to show that 'national governments can be entrusted with direct funding of implementation by way of 'concrete adaptation projects'. She regards existing audit and transparency requirements as deficient, for four main reasons. The first is the absence of disclosure requirements at different stages of the selection process; second, there is no provision for guiding NIEs to meet risk management standards; third, there is no common standard to facilitate independent evaluation and finally, requirements for stakeholder participation, especially in the early stages, are inadequate.²⁸ The Adaptation Fund Board has pointed out its own uncertainty in deciding which projects are eligible for funding because there is no agreed definition of what constitutes a qualifying 'concrete adaptation project'.²⁹

The Global Environment Facility

Established in 1991, the GEF acts as trustee for funds in relation to climate change, biodiversity, international waters, ozone depletion, persistent organic pollutants and land degradation³⁰ and is managed jointly by the UN Environment Programme (Unep), the UN Development Programme (UNDP) and the World Bank. Under Article 21.3 of the UNFCCC³¹ the GEF is entrusted with the operation of the financial mechanism of UNFCCC except for the Adaptation Fund. Morita³² has compared the work of various GEF funds – including the GEF-UNDP Small Grants Programme (SGP) the GEF Trust Fund, the Least Developed Countries Fund and the Special Climate Change Fund – in Samoa. She concluded that ‘the most effective financing system for adaptation to climate change is one under which global financial organisations provide grants to local organisations’.³³ The SGP, however, she considers more efficient due to its lower monitoring and verification costs and ‘more effective’ governance. It is clear from Morita’s comparison that larger funds (the SGP as a proportion of total disbursements is insignificant³⁴) are less efficient than the SGP due to higher monitoring and verification costs. It also seems that a fundamental problem with World Bank sponsored projects – conditionalities leading to tensions between funder and funded³⁵ – is also present in the larger funds.

Möhner and Klein³⁶ conducted a thorough critique of the GEF, primarily from a governance and institutional viewpoint. They question the World Bank’s assertion that the main problem with the GEF is ‘financial adequacy’ (lack of funds), rather than ‘technical adequacy’. Because the GEF does not have a benchmark to evaluate technical adequacy, they attempt an assessment of such adequacy using efficiency, fairness and responsiveness (and using priority activities, and eligibility and disbursement criteria, as indicators). They conclude that the GEF activity cycle is inefficient and has become more so over time, and that there are distortions in UNFCCC guidelines (read with COP decisions) and GEF functioning on the one hand, and GEF guidelines and the work of implementation agencies on the other.³⁷

In addition, there have been criticisms of the limited funding available through the GEF. A consultant with the Centre for Forestry research³⁸ observes that Central Africa has largely been left out of adaptation flows, primarily due to flaws in the Assessments of Impacts and Adaptation to Climate Change programme developed and funded by the GEF in collaboration with Unep and the UN Intergovernmental Panel on Climate Change (IPCC).

The question of trusteeship by the World Bank is important. Leaving aside detailed critiques of World Bank projects, especially on climate change,³⁹ it should be noted that Robert Goodland, a former environmental advisor to the Bank, observes that the way forward is to ‘de-emphasise adaptation’, arguing that adaptation as implemented by the World Bank is in the grip of ‘regulatory capture ... where environmental regulators and social regulators acting in the public interest become dominated by the vested interests of the infrastructure trickle-down lobby’.⁴⁰ Given such low confidence in the Bank as a trustee it may be worth debating whether other organisations should replace it as trustee of new funds, with the World Bank adopting a consultative and advisory role.

Overseas Development Assistance

All leading aid agencies propose to solve funding conflicts between general development and adaptation by ‘climate-proofing’ development activities or ‘mainstreaming climate change’ (the 2010 Bangkok Dialogue on Climate Change and Aid Effectiveness⁴¹ popularised this issue, and incidentally would profit from an African chapter).⁴² While this approach has advantages in attempting to arrest spillovers, Gupta⁴³ argues first, that transfer of climate-proofing technologies may be incompatible with developing countries’ development priorities, secondly that target groups for general development are different from those for adaptation (hence there may be a diversion of funds⁴⁴), and thirdly, mainstreaming may amount to another condition and therefore is likely to fail. As far as implementation cost is concerned, however, she is unable to find an alternative.⁴⁵ If mainstreaming were to remain, therefore, a mechanism would be necessary to prevent diversion of funds.

An issue common to ODA and the GEF is the governing institutions and implementing agencies that relate to them. While mitigation in developing countries is controlled through a ‘designated national authority’ that operates in accordance with UNFCCC guidelines, governance of adaptation is left to existing government institutions. Thus, while there may be additional funding for adaptation there is no separate institutional mechanism to improve governance; Helm, for example, points out that in all estimates of costs of adaptation to climate change, the British government’s 2006 Stern Review ignores administrative and policy costs and does not even discuss it in the main text.⁴⁶ It would be inappropriate to conclude that all government departments easily fall victim to corruption, but it is true that there is no clarity on standardised checks to prevent diversion of funds for maladaptive activities.

The legal and financial safeguards to ensure that funds set aside for one activity are not spent on another and that revenues generated by those activities are properly re-invested, are referred to as ‘ring-fencing’.⁴⁷ The term originates in commerce but is also used for projects that involve simultaneous activity in different operations and capacities.⁴⁸ It is surprising that no major development organisation has a standardised guide to ring-fencing adaptation finance from ODA.

Najam⁴⁹ argues that while funds for adaptation should be ‘new and additional’, there should be complementarity of tracking the implementation of ODA and adaptation finance. One way would be to develop a global system of tracking adaptation funds building on the imperfect, but useful, experiments to track ODA devised by the OECD. In this regard it should be noted that UNFCCC requirements do not include reporting on the utilisation of funds. One problem that Najam touches on⁵⁰ but does not elaborate is how to measure whether adaptation finance has worked, given that a project’s success cannot be measured in carbon or money. The recurring problem of devising a common metric to establish whether adaptation is taking place cannot always be separated from the results of ODA. While not listed as an objective,⁵¹ the development of such a metric could be an area of interest for the ClimDev-Africa Special Fund, a 2010 joint initiative of the AU Commission, the African Development Bank (AfDB) and the UN, managed by AfDB. For the purpose of ‘following the money’, however, it would be sufficient to track whether funds have been properly allocated at different milestones, irrespective of the outcome.

Regional banks

In a recent study the Asian Development Bank (ADB) advocated an increasing role for regional financial arrangements to combat climate change, on the premise that ‘climate change is a global public good [but] the current global debate on the subject seems to be paying inadequate attention on [sic] the important role that regional financial arrangements will play in this area’.⁵² Regional collective actions are better positioned to address climate change issues than are multilateral institutions,⁵³ given their potential for harnessing economies of scale, attracting additional regional resources, and decentralising administration and decision making. There is no analysis, however, of whether regional funds actually or potentially function better than their multilateral counterparts in relation to product innovation, institutional effectiveness or leverage of private finance. Regional finance, therefore, becomes an additional rather than an alternative option. The term ‘additional’ also connotes an addition to development assistance and national funds and the ADB suggestion does not meet this test, as several existing funds rely on donor support or national contributions.⁵⁴

The issue is especially important given that several African leaders at COP 16 suggested establishing an African Green Fund managed by AfDB. The idea of such a fund originated in COP 15 when the Africa Group led by Ethiopian prime minister Meles Zenawi argued that 40% of all Copenhagen pledges should go to Africa, with the AfDB managing them.⁵⁵ From statements by AfDB⁵⁶ it appears that it would prefer adaptation funds to be managed regionally rather than by an international body (‘[t]hese funds should not be centralised anymore’⁵⁷). If this is the intent, the issue becomes whether the AfDB, which Africans regard with less suspicion than the World Bank, or UNFCCC would be the preferred agency. It may also be noted that a regional policy would probably not evoke the same political tensions that characterise the UNFCCC, but trade-offs between South Africa and the rest of the subcontinent could prove to be a problem: there might be a clash of funding priorities and a marked difference in resource allocation and policy developments in the climate change field. The South African government may use its stake in sub-Saharan regional banks to block funding for projects not consonant with its own agenda.

There is, however, no discussion as to how multilateral organisations and regional banks can act in concert: for example, the AfDB could certainly reduce the transaction costs of channelling multilateral funds in line with national assessments of African Union (AU) member states. One might also submit that organisations such as AfDB are well placed to fulfil supplementary audit and implementation functions, including ring-fencing, and to review the normal functioning of national and local agencies, and of multilateral trustees. Disappointingly, this proposal was not discussed at COP 17.

PRIVATE FINANCE AND THE ISSUE OF AUTONOMOUS ADAPTATION

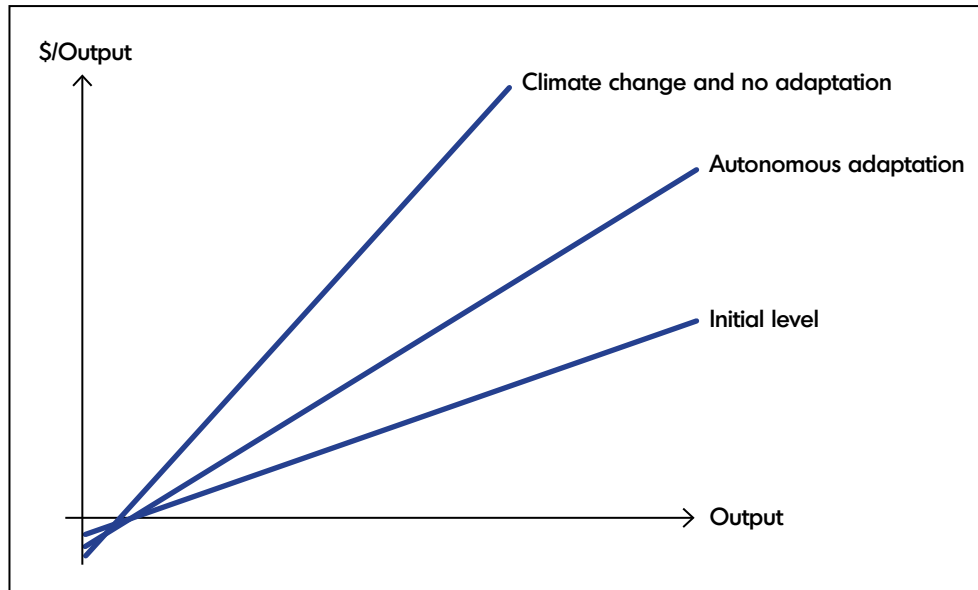
Bouwer and Aerts⁵⁸ point to FDI, insurance and aspects of disaster preparedness as sources of private finance. The Climate Finance Options website⁵⁹ jointly maintained by UNFCCC, UNDP and the World Bank, however, reveals not only a variety of sources (multilateral, bilateral, charitable and private) but also, in addition to the institutional options discussed

earlier, a very wide range of financial mechanisms including co-financing, lease financing, equity and debt. Although the website is not exhaustive, 30 specialised funds are listed in connection with adaptation alone.⁶⁰ Adaptation insurance would be a further, separate category, as would emerging carbon markets in areas and sectors classified under adaptation.⁶¹ The main argument against regulating all these sources (ie crowding out) has already been touched on in regard to the UNFCCC process. Given the inadequacy of institutional finance to deal with adaptation requirements it is important not to discourage private initiatives, but rather to provide a framework for effective private finance.

In regard to mechanisms such as equity and debt, the problems in Africa are for the most part common to mitigation and adaptation finance. The Johannesburg Stock Exchange accounts for 94% of the subcontinent's total equity and is more than 14 times larger than all other sub-Saharan markets combined.⁶² One study explored whether investors avoid the subcontinent for orthodox financial reasons (e.g. liquidity and market size), or because of specific issues such as lack of information and perceptions of excessive risk or other unknown variables; it concluded that the main reasons are power outages, transport failure and logistical delays. Obstacles related to small market size, including regulatory and political economy factors, have also stifled enterprise. All countries in sub-Saharan Africa, including South Africa, would look to venture capital to initiate climate change schemes rather than to add capital later in the projects' life.⁶³

With regard to debt, foreign commercial lending is difficult to access and typically limited to short-term transactions, first because of poor sovereign credit ratings; secondly, because long-term loans in significant volumes and on acceptable terms are hard to obtain locally; and thirdly, longer payback and build-out periods make projects more prone to regulatory interference and at the same time dependent on governmental guarantees.⁶⁴ Regional organisations such as the South African Development Community (SADC) Banking Association, and banks such as AfDB, have a major role to play to enhance market capitalisation and incentivise small-scale infrastructure projects, through public-private partnerships (PPPs) among other methods.

That said, why regulate the flow of private finance other than to incentivise it and reduce transaction costs? In common with the ODA adaptation-finance problems the first issue is double counting and in this context specifically, the need to determine 'autonomous adaptation'. The IPCC draws a distinction between autonomous and planned adaptation, observing that 'to assess the dangerousness [*sic*] of climate change, impact and vulnerability, assessments must address the likelihood of autonomous adaptation'.⁶⁵ In endorsing and extending the Stern Review, Sanderson and Islam⁶⁶ describe autonomous adaptation as 'the response to climate change that economic agents choose while acting autonomously; its extent is determined primarily by the agent's ability and willingness to respond to change, which is limited by factors such as time and availability of resources. They argue that if autonomous adaptation is not taken into account, the impact of climate change can be overstated. They illustrate this by a simple model:

Figure 1: Planned and autonomous adaptation

Source: Sanderson J & S Islam, *Climate Change and Economic Development*. New York: Palgrave, 2007, p. 113

The figure represents the marginal cost curve for climate sensitive output such as agricultural products, where the marginal cost curve shifts to the left as a result of climate change, increasing costs at every point of production. As the figure shows, the opportunity for planned adaptation is determined by the level of damage remaining between the initial state and the autonomous adaptation scenario.⁶⁷ Sanderson and Islam concede that the level of autonomous adaptation is difficult to establish; hence the valuation of planned adaptation may be inaccurate.⁶⁸ There are other explorations⁶⁹ of how to estimate autonomous adaptation using proxies such as adaptive capacity, resilience and vulnerability, but for present purposes it is enough to point out that a prerequisite for the institutional approach to adaptation finance is to estimate how adaptation is being tackled autonomously, primarily through private finance or voluntary efforts.

Another economic argument for keeping an institutional check on private finance is that such funding is often inefficient: for example, funding for one project or activity ostensibly for adaptation could spill over into mitigation and energy efficiency. The converse may also apply when funding for mitigation or energy efficiency leads to an enhancement in adaptive capacity. An example of how a single project may fulfil the dual role of reducing vulnerability to climate change and contributing to mitigation is provided in a case study by Ayers and Huq⁷⁰ on adaptation in Bangladesh. One of the projects examined is an organic waste composting project in Dhaka. The authors claim that this, like other compost projects,

mitigate[s] GhGs directly through reduction of methane emissions and indirectly by contribution to carbon sequestration of crops; adaptation through soil improvement in drought-prone areas; sustainable development, because poverty is exacerbated when climate change reduces the flows of ecosystem services.⁷¹

This is problematic because mitigation, energy efficiency and adaptation are not always substitutes for each other, unless corrected by regulation.⁷² Institutions and regulatory intervention are therefore necessary to capture 'positive leakages', to incentivise mitigation, adaptation, and energy efficiency and to avoid unaccounted spillover. Further to these arguments, the issues raised by South Centre on the need to ensure that private finance is in line with policy priorities on climate change should be noted.

Finally, the importance and complexities of insurance cannot be overestimated. A study on micro-insurance in Malawi⁷³ clearly showed that costs associated with climate-change risks are higher than those associated with weather variability, hence specialised insurance instruments are needed. More importantly, the costs cannot be passed to beneficiaries through high premiums, but must be met through private initiatives or public funding. At the 2008 COP 14 in Poznan, the Alliance of Small Island States insisted that the most important aspect of a global climate deal was insurance to deal with adaptation.⁷⁴ The Washington-based Pew Centre on Global Climate Change (now renamed the Centre for Climate and Energy Solutions) believes that there is a role for both bilateral and multilateral assistance in specialised climate change funds and in buttressing existing vulnerability instruments, and has accordingly advocated two funds. The first would be an international response project under which donor countries would regularly contribute to a multilateral fund to help countries suffering extreme climatic impacts and the second, an insurance 'backstop' scheme through which donor countries would support the introduction or expansion of insurance-type instruments in vulnerable countries by committing funds to subsidise premiums, or reinsure governments or primary insurers.⁷⁵

To date, the most systematic framework for risk management in the wake of climate change is that developed by the Munich Climate Insurance Initiative (MCII),⁷⁶ currently tabled for discussion at the UNFCCC. It consists of twin pillars – prevention and insurance – to be fully financed by a post-Copenhagen multilateral fund.⁷⁷ There has not yet been a systematic incorporation of this into any agreement. Two additional issues may be noted:

- many of the most damaging aspects of climate change are too costly to be insurable. Instead, they require other solutions (for example, building dams or relocating houses). This does not, however, mean that insurance may not be an instrument for slow-onset climate impacts such as sea-level rise and desertification. The challenge is to find alternatives to high insurance premiums.⁷⁸ Hence there is a need to look to mechanisms other than the market to source funds, but to the market for their management;
- insurance may be seen as a subsidy that encourages maladaptive practices and can distort private participation. The same may be said of subsidised premiums. There is, however, a role for PPPs in insurance,⁷⁹ primarily because most purely business initiatives in this sector would be unsustainable.

Clearly, the degree of institutional paternalism required for private finance is also true for insurance.

LESSONS FOR THE GREEN CLIMATE FUND

One of the main reasons why the Cancun Agreement has been heralded as far superior to that of Copenhagen is the establishment of the GCF. In regard to adaptation finance COP 17 was seen as largely successful also because countries pledged to contribute to the start-up costs of the Fund.⁸⁰ As noted earlier, there is a multitude of different and sometimes complex sources of finance and one must question how the GCF is any different. The British-based charity Oxfam argues⁸¹ that there is an unprecedented opportunity for a 'one-stop shop' mechanism that would reduce the complexity and transaction costs of dealing with many different funds. In the volume of funds it seeks the GCF is extremely ambitious, looking to an annual \$100 billion by 2020 (although precise amounts are still under discussion). Structuring such a fund is a controversial and difficult task, and a transitional committee of 40 representative members – including eight from Africa – was established in Cancun to this end.⁸² To ease the division of work, the committee divided itself into four work streams (respectively: scope, governance and institutional arrangements, operation modalities, and monitoring and evaluation) with representatives from Africa concentrating on the second.

In spite of the broad language used to describe the GCF in the Cancun Agreement there has been little agreed upon against which to judge its potential for success. Farrukh Iqbal Khan, the lead negotiator for Pakistan, points out⁸³ that the mere establishment of the fund in the absence of any agreement as to how it is to be sourced 'amounts to creating an empty pot'. For this reason many expectations were pinned on COP 17, because the structure of the GCF was scheduled for finalisation once the transitional committee presented its findings; a draft report was submitted in October 2011.⁸⁴ Progress on the GCF was initially held back by Saudi Arabia and the US,⁸⁵ due to domestic political opposition to budgeting money for the GCF. Nevertheless some progress was made during the final sessions of COP 17, and some decisions were taken, though most are still pending.⁸⁶

The draft report, however, did not reflect all the concerns expressed in submissions to the transitional committee. For example, Zambia's proposal that the fund take a gender perspective into account⁸⁷ by enhancing women representatives at different stages⁸⁸ received only a brief mention in the draft.⁸⁹ This aspect could be investigated further, to see how gender issues could be mainstreamed into the process of climate change finance, as has been advocated in regard to trade arrangements.⁹⁰ Some other concerns relevant to AU members may be gleaned from submissions by Zambia (which has been very active in these discussions) and by civil society organisations, and representations from members of the transitional committee. Unfortunately, as most of the work has been postponed to future meetings, the hopes pinned on Durban have to be deferred to COP 18. Such concerns may be discussed under several sub-headings:

Direct Access Modalities: One of the innovations of the GCF is the possibility of direct access by member states to funds earmarked for disbursement. Zambia, however, noted that some developing countries may not have the institutional capacity to participate in the envisaged scheme.⁹¹ This issue is problematic as 'capacity to access funds' and 'adaptive capacity' are two separate issues, hence merit different accounting treatments. The problem may be resolved by establishing clear guidelines, legal certainties and provision

for technical advice on how to minimise transaction costs. Shortcomings regarding audit and transparency requirements for the Adaptation Fund must be addressed for the GCF as well, given the need for confidence among the parties financing it. This concern is absent from the COP17 Decision and the draft report.

Relationship with other sources of climate finance: One issue that certainly must be addressed is complementarity with bilateral channels, given the substantial differences between funds disbursed by different countries and that some bilateral funds have proved far more effective than others. The primary method devised so far is to have several ‘thematic windows’,⁹² which are sub-structures within a fund that allow for specialisation in a particular sector, issue, or access modality. In addition to themes by scope and geography, the choice of instruments and sources of finance have been identified as tools for thematic windows.⁹³ Muller⁹⁴ describes these thematic windows as ‘budgetary line items... (which) can be used either to ring-fence certain assets or earmark certain contributions’. It may be useful for the transitional committee to develop guidelines for such ring-fencing.

Drawing on experience with the World Bank, the Zambian committee member pointed out that contributors often ‘window-shop’, leaving some ‘windows’ unattended. Moreover, as a Food and Agriculture Organisation (FAO) submission notes,⁹⁵ existing financial mechanisms exclude some activities within a certain sector that may have high adaptive potential. In addition, specific issues of finance delivery such as delayed returns on investment by farmers, and methods of bridging short-term income loss, are often neglected.⁹⁶ While it would be impossible to plan for all such specifics there is clearly a case for GCF oversight.

Dealing with private funds: The current wording of the GCF opens a window for private finance. As noted earlier there is ample scope for private participation in financing adaptation, but also for high agency costs and failure to meet development goals. In a submission on the relationship between GDF and private finance, ADB indicated its preference for the fund to operate rather like a multi-billion dollar pension fund, with sub-funds to cater for different markets and financing mechanisms.⁹⁷ A Japanese submission suggested that grants from the GCF should be used to cover incremental costs of investment for mitigation and adaptation projects.⁹⁸ Incremental adaptation costs to incentivise private investment could include the costs of combining climate resilience components with basic investments for coastal infrastructure, rural roads, and agriculture. This submission also rejected the proposal that the GCF should look beyond grants and provide quasi-market based and concessional loans (as has been suggested by Germany⁹⁹ and Barbados¹⁰⁰), as the Fund would then be competing with multilateral development banks. Hence the suggestion is to support existing financial mechanisms by creating a window for them to continue their operations, and provide incremental costs should they fall short.

While this suggestion is tempting given that the GCF should not be crowding out other funds, problems encountered vis-à-vis the consistency and predictability of existing funds remain unresolved. Further, as the Saudi Arabian representative pointed out, there is a danger of the GCF’s simply subsidising other investments,¹⁰¹ which can be settled only by arriving at some sort of consensus on the tired issue of what truly is ‘additional’ in

climate change finance. Clearly, this would differ as between mitigation and adaptation. Paragraph 7 of the COP 17 Decision places the onus on national authorities to decide on consistency between the GCF and other sources of adaptation finance, but has asked the board of the transitional committee to develop a ‘no-objection procedure’ that can be implemented by such authorities.¹⁰²

Some of the issues highlighted in the discussion of private finance (such as market capitalisation and lack of equity) have been discussed by the UN Environment Programme Finance Initiative (UNEP-FI),¹⁰³ and the need for innovative PPPs has also been addressed, in addition to the role of institutional mechanisms to leverage private investments by way of political, currency and legal risk insurance. What are, however, missing are problems related to climate risks in general. Given the distinction mentioned earlier between climate risk insurance and other forms of insurance offered by private firms, there is need for the GCF to intervene. Furthermore there have been no suggestions as to how to ‘mainstream’ into the GCF an adaptation insurance model such as the one mooted by MCII.

Trusteeship of the GCF: The role of the World Bank vis-à-vis climate finance has always been contentious and there have been several protests concerning the Bank’s appointment as interim trustee of the GCF.¹⁰⁴ A number of countries, including India and the Philippines, have pointed out that there would be a conflict of interest if World Bank employees served as trustees of the GCF and also as consultants in its design.¹⁰⁵ More important is the ‘sunset clause’ issue: the founding document of the Special Climate Change Fund (SCCF), one of the two components of the Climate Investment Fund of the World Bank, contains the provision that the SCCF may cease operations when a comprehensive climate trust fund is established.¹⁰⁶ Hence the future of the SCCF would have had to have been arrived at in Durban, along with a decision on whether the World Bank would be more acceptable and useful as a trustee or as a consultant to the GCF. The suggestion for an international bidding process (as mooted by the EU) for the selecting the trustee is somewhat problematic, as the World Bank would have an overwhelming advantage given its prior experience.

Perhaps, as was suggested in the context of the African Green Fund, regional organisations are better placed to serve as trustees. The COP 17 Decision requires the board of the transitional committee to select the trustee through ‘an open, transparent and competitive bidding process in a timely manner’,¹⁰⁷ but does not examine the complexities of selection outlined above.

Monitoring funds and accountability of the GCF: A submission from an Australian member of the transitional committee¹⁰⁸ identified a gap between existing national information-gathering under the UNFCCC process of sectoral priorities (ie the National Action Plan for Adaptation and proposed National Action Plans for Mitigation) and reporting on funding modalities and governance. This could be closed by introducing a system of regular submissions. Zambia’s representative stressed the need for periodic independent evaluations of the GCF and all its operating entities. South Centre has also suggested evaluations by independent bodies at four levels, respectively fund, entity, thematic and project.¹⁰⁹ In addition to reporting requirements and evaluation, the British-based Oxford Institute for Energy Studies has stressed the need for a dispute resolution mechanism and complaints procedure.¹¹⁰

As regards what matters are to be evaluated, UNDP has suggested that the monitoring and assessment of GCF funds should borrow from its best practices on assessment of development effectiveness and capacity development.¹¹¹ Directly transposing assessments of ODA on to adaptation evaluation should be mediated with some caution, however, as the effects are different (some general development goals are not necessarily reflective of adaptation priorities or may be maladaptive), so it would be important to inject into the GCF process some discussion on developing a unique index for measuring adaptation.

CONCLUSION

Helmut Reisen, head of research at the OECD Development Centre, referred to the architecture of multilateral development finance as ‘a non-system. ... [that] does not result from coherent design, but is a child of spontaneous disorder.’¹¹² Given its close affinity and overlaps with ODA, it is tempting to describe adaptation finance in a similar vein. In addition – given the enduring difficulty of arriving at a common metric to determine the value of adaptation projects or activities – it is not difficult to guess why arriving at a standard definition of ‘vulnerability reduction’ or ‘enhancing adaptive capacity’ is contentious and, taken with the related problem of measuring autonomous adaptation, renders the volume and effects of planned adaptation finance difficult to assess.

Nonetheless there is scope for ‘coherent design’ to promote increased funding and concurrently arrest some of the perverse incentives that characterise this finance. Complementarities between different funding sources and the role of regional organisations can be made clearer and more representative. Unfortunately there is a lack of confidence in existing mechanisms for providing climate finance, and it is possible that the GCF can be structured to gain some much-needed relief.

ENDNOTES

- 1 For statistics on the difference between amounts pledged, approved, deposited and disbursed, see <http://www.climatefundsupdate.org/graphs-statistics/pledged-deposited-disbursed>.
- 2 Khan FI, ‘The Green Climate Fund: what needs to be done for Durban (COP 17)’, Oxford Environment and Energy Brief. Oxford: Oxford Institute for Energy Studies, February 2011, p. 3.
- 3 The current arrangement is an ‘agreed outcome with legal force’, which differs from a legally binding agreement. Werksman J, ‘Q & A: The Legal Aspects of the Durban Platform Text’. Washington, DC: World Resources Institute, December 2011, <http://insights.wri.org/news/2011/12/qa-legal-aspects-durban-platform-text>.
- 4 Despite the uncertain future of the Kyoto Protocol the Cancun Agreements drove CDMs into more major investments in emission reduction in the developing world. Press Release, ‘UN Climate Change Conference in Cancun delivers balanced package of decisions, restores faith in multilateral process’. Bonn: UN Climate Change Secretariat (UNFCCC), 11 December 2010, http://unfccc.int/files/press/news_room/press_releases_and_advisories/application/pdf/pr_20101211_cop16_closing.pdf.

- 5 Paulson E, 'A review of CDM literature: From fine-tuning to critical scrutiny', in *International Environmental Agreements: Politics, Law and Economics*, 9, 1, 2009, p. 69.
- 6 Prins G & S Rayner, 'The Wrong Trousers: Radically Re-thinking Climate Policy', Joint Discussion Paper. James Martin Institute for Science and Civilisation, Oxford University and MacKinder Centre for the Study of Long-Wave Events, London School of Economics, 2007.
- 7 Draft Decision on Green Climate Fund Report of the Transitional Committee, FCCC/CP/2011/L.9, <http://unfccc.int/resource/docs/2011/cop17/eng/l09.pdf>.
- 8 Roy S & S Kiratu, 'Financing Solutions to Climate Change in sub-Saharan Africa: Towards an assessment of Institutional and Market Challenges', in SAIIA-Chatham House, *Trade and Climate Change: Challenges for Southern Africa*. Pretoria: Jacana Publishers, 2010.
- 9 Bouwer LM & J Aerts, 'Financing climate change adaptation', *Disasters*, 30, 1, Wiley On-Line Library, 2006.
- 10 *Ibid.*
- 11 Roy S, 'Trading in Vulnerability: An analysis of incentive based adaptation to climate change', *Working Paper in Law & Economics*. Helsinki: Transnational European Law & Evaluation Project: EMLE, 2010.
- 12 The UNFCCC is a hard law, rather than a declaratory, instrument. Under the convention, however, so far only the Kyoto Protocol lays down mandatory obligations. See Roy S, 'The evolving nature of international environmental law', paper submitted to the Indian Government Ministry of External Affairs, New Delhi, 2004.
- 13 Hall DS *et al.*, 'Policies for developing country engagement', Discussion Paper, 08-15. Boston: Harvard Project on International Climate Agreements, October 2008, p. 22.
- 14 *Ibid.*, p. 23.
- 15 Broder J, 'Climate Talk End With Modest Deal On Emissions', *The New York Times*, 11 December 2010.
- 16 Houser T, 'Less can be more: protecting Cancun's fragile victory'. Washington, DC: Peterson Institute of International Economics, 15 December 2010, <http://www.piie.com/realtime/?p=1906>.
- 17 '[T]he specific regulatory challenges ... are so varied that a single institutional response is exceptionally difficult to organise ... [T]he benefits of a comprehensive regime may not seem sufficient to justify the bargaining efforts and concessions ... required of individual states with often divergent interests.' Harvard: Project on International Climate Agreements, Policy Brief on Institutions for International Climate Governance, November 2010, p. 9.
- 18 *Ibid.*, p. 11.
- 19 For an analysis of crowding-out in general, see Cardenas JC, Local Environmental Control and Institutional Crowding-out, *World Development*, 28, 10, pp. 1 719–1 733.
- 20 'Developed Country Climate Financing Initiatives Weaken the UNFCCC'. Geneva: South Centre, SC/GGDP/AN/ENV/7, January 2009.
- 21 *Ibid.*, paragraphs 9, 10, 16.
- 22 *Ibid.*, paragraph 17.
- 23 *Ibid.*, paragraph 19.
- 24 Paragraph 7 of COP Decision.
- 25 For example, former South African environment minister Marthinus van Schalkwyk, believed this change 'a major victory' that gives 'developing countries a more direct and equitable voice in how funds are prioritised and spent'. Granich S & Kelly M, 'The Bali Road Map', Stockholm Environment Institute. *Tiempo* 66, 2008.

- 26 Brown J, Bird N & L Schalatek, 'Direct access to the Adaptation Fund: realising the potential of national implementing entities,' Washington, DC: Heinrich Böll Foundation North America, and London: Overseas Development Institute, 2010.
- 27 Horstmann B., Promoting an effective and transparent use of funds through the Adaptation Fund, Berlin: Transparency International Report on Corruption and Climate Change 2011, pp. 246–254.
- 28 *Ibid.*, pp. 249–253.
- 29 Report by the Secretariat on Initial Screening/Technical Review of Project and Program Proposals, AFB/PPRC.1/11/Rev, Bonn, 10 June 2010, http://adaptation-fund.org/system/files/AFB.PPRC_1.11.Rev_1%20Report%20by%20the%20secretariat%20on%20project%20review.final_.pdf, accessed 16 June 2011.
- 30 GEF (Global Environment Facility), 'Country Support Programme: Knowledge facility for GEF focal points. Global environmental benefits', http://www.gefcountrysupport.org/report_detailcfm?projectId=179, accessed 16 May 2010.
- 31 The text of the Convention is available at <http://unfccc.int/resource/docs/convkp/conveng.pdf>. It should be read with relevant COP decisions. See <http://unfccc.int/documentation/decisions/items/3597.php?dec=j&such=j&cmp=/CMP#beg>.
- 32 Morita K, 'A study of the financing system possibilities for adaptation to climate change'. Presentation to the Amsterdam Conference on Human Dimensions of Global Environmental Change, 24–26 May 2007, http://www.2007amsterdamconference.org/Downloads/AC2007_Morita.pdf, accessed 1 January 2010.
- 33 *Ibid.*, p. 29.
- 34 GEF/C.28/4/Rev.1, 19 May 2006.
- 35 Hopkins R *et al.*, 'The World Bank and Conditionality.' *Journal of International Development*, 9, 4, Wiley On-Line Library, 1997, pp. 507–516.
- 36 Möhner A & R Klein, *The Global Environment Facility: Funding for Adaptation or Adapting to Funds?* Stockholm: Stockholm Environment Institute, 2007.
- 37 *Ibid.*
- 38 Pavageau C, 'Is adaptation to climate change forgotten in Central Africa?' Bogor: Centre for International Forestry Research, 22 August 2011, <http://blog.cifor.org/4009/is-adaptation-to-climate-change-forgotten-in-central-africa/>, accessed 26 August 2011.
- 39 Redman J, *Dirty is the New Clean: A critique of the World Bank's Strategic Framework for Development and Climate Change*. Washington: Institute for Policy Studies 2008; Celine Tan, 'World Bank's Climate Funds will undermine Global Climate Action', Penang, Third World Network Briefing Paper, April 2008.
- 40 Goodland R, 'Greening Aid? Understanding the Environmental impact of Development Assistance', Lecture: Woodrow Wilson International Centre for Scholars, Washington, DC, 11 June 2008.
- 41 Asia Pacific Climate Change Finance and Aid Effectiveness Dialogue, Bangkok, 19– 20 October 2010 held under the auspices of the Capacity Development for Development Effectiveness Facility supported by the Asian Development Bank, Government of Korea, Government of Japan, and UNDP.
- 42 The Bangkok Dialogue relied mainly on Asia-Pacific case studies. For findings from such studies see Thornton N, 'Realising Development Effectiveness: Making the Most of Climate Change Finance in Asia and the Pacific', Capacity Development for Development Effectiveness

- Facility, October 2010, http://www.aideffectiveness.org/images/stories/Making_the_Most_of_Climate_Change_Financing_in_Asia_and_the_Pacific-CDDE_Report_2010.pdf.
- 43 Gupta J, 'Climate Change and Development Cooperation: Trends and Questions,' *Current Opinion in Environmental Sustainability*. Amsterdam 2009, 1, pp. 207–213.
- 44 Yamin F, 'The European Union and future climate policy: is mainstreaming adaptation a distraction or part of the solution?' *Climate Policy* 2005, 5:349-361.
- 45 *Ibid.*
- 46 Helm D, 'Government failure, rent-seeking and capture in the design of climate policy,' *Oxford Review of Economic Policy* 2010, 26, 2, pp. 182–196.
- 47 'Ring-fencing is a legal or financial arrangement ... separating the activities, assets and liabilities, revenues and costs ... generated by a specific business from the general business of an entity.' *Guide To Ring-fencing of local government-run water utilities*. Washington. World Bank. 2005.
- 48 Karakezi S. *et al.*, 'Ring-fencing Funds for the Electrification of the Poor: Lessons for Eastern Africa', African Energy Policy Research Network, Nairobi, 2005.
- 49 Najam A. 'Climate Change Funds and Development: How to ensure transparency and access to information on funding streams for adaptation,' Bonn. Transparency International. Report on Corruption and Climate Change 2011, pp. 239–245.
- 50 *Ibid.*, p. 245.
- 51 The objectives are laid out in Framework Document for the Establishment of the ClimDev-Africa Special Fund, African Development Bank, October 2009, [http://www.afdb.org/fileadmin/uploads/afdb/Documents/Legal-Documents/Framework%20Document%20for%20The%20Establishment%20of%20The%20ClimDev-Africa%20Special%20Fund%20\(CDSF\).pdf](http://www.afdb.org/fileadmin/uploads/afdb/Documents/Legal-Documents/Framework%20Document%20for%20The%20Establishment%20of%20The%20ClimDev-Africa%20Special%20Fund%20(CDSF).pdf).
- 52 Sharan D, *Financing Climate Change Mitigation and Adaptation: Role of Regional Financing Arrangements*, Asian Development Bank Sustainable Development Working Paper Series, 4, December 2008, http://dev.thegncs.org/sitefiles/file/Asia_Adaptation_Financing_ADB_Sharan_2008.pdf.
- 53 *Ibid.*, pp. 3–6.
- 54 See, for example, the Asia Pacific Carbon Fund and the Poverty and Environment Fund of the ADB.
- 55 African Development Bank, Side Event Concept Note: Consultation on the proposed African Green Fund, Abidjan, 9 December 2010, http://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/The%20African%20Green%20Fund_AfDB%20COP16%20Side%20Event%20Concept%20Note.pdf.
- 56 Inter Press Service News Agency, 'Defining Africa's Green Fund: Interview with Dr. Anthony Nyong', IPS Terra-Viva, 9 December 2010, <http://www.ips.org/TV/cop16/defining-africas-green-fund/>.
- 57 *Ibid.*
- 58 Bouwer & Aerts, *op. cit.*
- 59 <http://www.climatefinanceoptions.org/cfo/Funding%20Sources>, accessed 26 August 2011.
- 60 http://www.climatefinanceoptions.org/cfo/FundingSourceByFocusArea?page=1&term_node_tid_depth=223.
- 61 Mavuso W, 'Africa must build capacity to participate in bio-carbon markets', *The Swazi Observer*, 23 July 2011.

- 62 Moss T, Ramachandran V & S Standley, 'Why doesn't Africa get more equity investment?' Centre for Global Development, Washington, DC, February 2007, <http://www.cgdev.org/> or http://papers.ssrn.com/sol3/papers.cfm?abstract_id=981196#.
- 63 *Ibid.*
- 64 Sheppard R, *et al.*, 'Financing infrastructure in sub-Saharan Africa', Gridlines, 13. Washington, DC, World Bank, Public-Private Infrastructure Advisory Facility, September 2006.
- 65 'Climate Change 2001: Impacts Adaptation and Vulnerability, A Report of Working Group II of IPCC', UN Intergovernmental Panel on Climate Change, Wembley UK, p. 881, http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg2_report_impacts_adaptation_and_vulnerability.htm, accessed 30 July 2010.
- 66 Sanderson J. & Islam S, *Climate Change and Economic Development*. New York: Palgrave. 2007, p. 113.
- 67 *Ibid.*, p. 116. Sanderson and Islam further observe that severe changes and gradual changes would have to be reflected in the above curve as in the former case the rate of utility loss would reduce over time. A choice between 'adaptation' and 'mitigation' policy would have implications for mitigation policies in general because the relative benefit of prevention would be higher, if utility is measured just after the change.
- 68 *Ibid.*, p. 115.
- 69 Roy S, 'Trading in Vulnerability', *op. cit.*
- 70 Ayers J & S Huq, 'The Value of Linking Adaptation and Mitigation: A Case Study of Bangladesh.' *Environmental Management*, 43, 5, 2009.
- 71 *Ibid.*, p. 9.
- 72 The author knows of no clear study on how to characterise adaptation and mitigation activities as substitute or complementary goods. There is research to show how regulation may allow their interaction to approximate substitutes. Ingham A, Ma J and A Ulph, 'How do the Costs of Adaptation affect Mitigation when there is Uncertainty, Irreversibility and Learning?', Tyndall Centre for Climate Change Research, Working Paper 74, Norwich, June 2005, <http://www.tyndall.ac.uk/content/how-do-costs-adaptation-affect-optimal-mitigation-when-there-uncertainty-irreversibility-and>, accessed 15 June 2011.
- 72 Hochrainer S *et al.*, 'Investigating the impact of climate change on the robustness of index-based microinsurance in Malawi.' Washington, DC: World Bank, 2008, http://www.fanrpan.org/documents/d00543/Malawi_CC_World_Bank_May2008.pdf.
- 73 Integrated Regional Information Network (IRIN), 'Climate risk insurance the buzz in Poznan', Johannesburg, 12 December 2008.
- 74 Burton I *et al.*, 'Adaptation to climate change: International policy options', Pew Centre on Global Climate Change, 2006, http://www.pewclimate.org/docUploads/PEW_Adaptation.pdf. See Department for International Development, 'Adaptation to climate change: Can insurance reduce the vulnerability of the poor?' DFID Fact Sheet 8. London: Global and Local Environment Team, Policy Division, DFID, 2004.
- 75 MCII was set up in 2005 by UNU-EHS; Germanwatch, the International Institute for Applied Systems Analysis; the Munich Re Foundation; the Potsdam Institute for Climate Impact Research, the European Climate Forum, the Tyndall Centre, the Energy and Resources Institute and the World Bank.
- 76 MCII, 'Insurance instruments for adapting to climate risks: A proposal for the Bali Action Plan, version 2.0', MCII submission to the fourth session of the Ad Hoc Working Group on

- Long-Term Cooperative Action under the Convention, Poznan, December 2008, http://www.climate-insurance.org/upload/pdf/MCII_submission_Poznan.pdf.
- 77 International Institute for Applied Systems Analysis. 'Climate change: What role for insurance?' IIASA Policy Brief, 04. Laxenberg: IIASA, December 2008.
- 78 For details on possible public-private insurance partnerships generally, see Varkie M, 'Latin report: Public-private insurance', Project Finance Magazine, June 2009. For public-private insurance partnerships in relation to climate change, see Bals C, 'Public-private risk sharing options', 2008, http://unfccc.meta-fusion.com/kongresse/SB28/downl/080607_SB28_Christoph_Bals.pdf.⁷⁹ Stavins R, 'Assessing the Climate Talks – Did Durban Succeed?', <http://www.robertstavinsblog.org/2011/12/12/assessing-the-climate-talks-did-durban-succeed/>.
- 80 Oxfam Submission on Views Concerning Work Stream I of the Transitional Committee, http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/oxfam_wsi_230511.pdf, accessed 25 August 2011.
- 81 The list of members can be found at: http://unfccc.int/cooperation_and_support/financial_mechanism/green_climate_fund/items/5938.php, accessed 25 August 2011.
- 82 Khan FI, *op. cit.* p. 2.
- 83 Draft Report of the Transitional Committee to the 17th session of the Conference of Parties, TC-4/2, 7 October 2011, http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/tc4-2.pdf.
- 84 'An American Predicament threatens the Green Climate Fund'. Guest post by members of Less Developed Countries' representatives to COP 17, 3 November 2011, <http://www.iied.org/blogs/american-predicament-threatens-green-climate-fund>.
- 85 See endnote 7.
- 86 Submission by Malawi, http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/tc2malawi.pdf, accessed 25 August 2011.
- 87 *Ibid.*, pp. 2–3.
- 88 Annex on Governing Instrument to the Green Climate Fund, Para 13. See endnote 7.
- 89 Kiratu S & S Roy, 'Beyond Barriers: The Gender Implications of Trade Liberalisation in Southern Africa'. Winnipeg: International Institute for Sustainable Development Publications Centre, 2010.
- 90 Submission by Zambia, http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/submission_by_ms_carol_mwape_zambia_on_ws_iii.pdf.
- 91 Transitional Committee Second Meeting Background Note: Thematic Windows, Sub-Workstream III.2: Managing Finance, Workstream III: Operation Modalities, TC-2/WSIII/4, 29 June 2011, http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/tc2_ws3_4_280611.pdf.
- 92 This is a departure from the understanding of thematic windows under the GEF framework in which funding windows are classified only by focal areas: climate change, biological diversity, land degradation (primarily desertification and deforestation), international waters, ozone layer depletion, and persistent organic pollutants.
- 93 Muller B, 'Dissecting the Green Climate Fund'. Oxford: Oxford Institute for Energy Studies Policy Brief, 20 July 2011, p. 1, http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/fao_wsi_iii_080611.pdf.
- 94 *Ibid.*
- 95 Submission by the Asian Development Bank on 'Workstream 3: Operation Modalities', http://unfccc.int/files/meetings/awg/application/pdf/adb_wsii_250511_.pdf.

- 96 Submission by Nakao I to the Transitional Committee on Workstream 3, Transitional Committee Internal Reference Document 9, 3 August 2011, pp. 52–54.
- 97 Submission by Konukiewitz M to the Transitional Committee on Workstream 3, *op. cit.*, p. 51.
- 98 Submission by Gibbs D to the Transitional Committee on Workstream 3, *op. cit.*
- 99 Submission by Alabdulkader A to the Transitional Committee on Workstream 3, *op. cit.*, pp. 11–16.
- 100 See endnote 7.
- 101 Unep Finance Initiative, ‘The Green Climate Fund: the private financial sector’s perspective’, August 2011, http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/unep_fi_submission_on_private_sector.pdf.
- 102 ‘Conflict of interest? World Bank’s role in global climate fund causes outcry’. London: Bretton Woods Project, 14 June 2011, <http://www.brettonwoodsproject.org/art-568570>.
- 103 Raman M, ‘World Bank’s Conflict of Interest in Green Fund Design?’ Penang. Third World Network, 3 May 2011, <http://www.twinside.org.sg/title2/climate/info.service/2011/climate20110501.htm>.
- 104 The issue is not as clear-cut as some representatives at Cancun asserted. It requires an interpretation of paragraphs 57 and 58 of the SCF Agreement.
- 105 Annex on Governing Instrument to the Green Climate Fund, Para 16. See endnote 7.
- 106 Submission by McDonald E to the Transitional Committee on Workstream I, Transitional Committee Internal Reference Document I, 25 May 2011, p. 6, http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/tc_tsuws_tsubmissions1.pdf.
- 107 Submission of South Centre to the Transitional Committee to Design the Green Climate Fund on the issues of Workstream 4: Monitoring and evaluation, 8 June 2011, http://unfccc.int/files/cancun_agreements/green_climate_fund/applic/pdf/southcentre_wsiv_080611.pdf.
- 108 Muller B, ‘Some Further Thoughts on the Draft TC Workplans’. Oxford: Oxford Institute for Energy Studies, 27 May 2011, http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/oies_wsi_wsiii_270511.pdf.
- 109 UNDP. Inputs to the GCF Transitional Committee on Workstreams 2 and 4; issues raised during the first technical workshop of the Transitional Committee, 8 June 2011, http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/undp_wsii_iv_080611.pdf.
- 110 Helmut R, ‘Ownership in the Multilateral Development-Finance Non-System’ in Financing Development 2008: Whose Ownership? Paris:OECD, 2008, p. 40.

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