

ecbi policy brief

How many people
does it take ...
... to administer
long-term climate finance?

REVIEW DRAFT

September 2010

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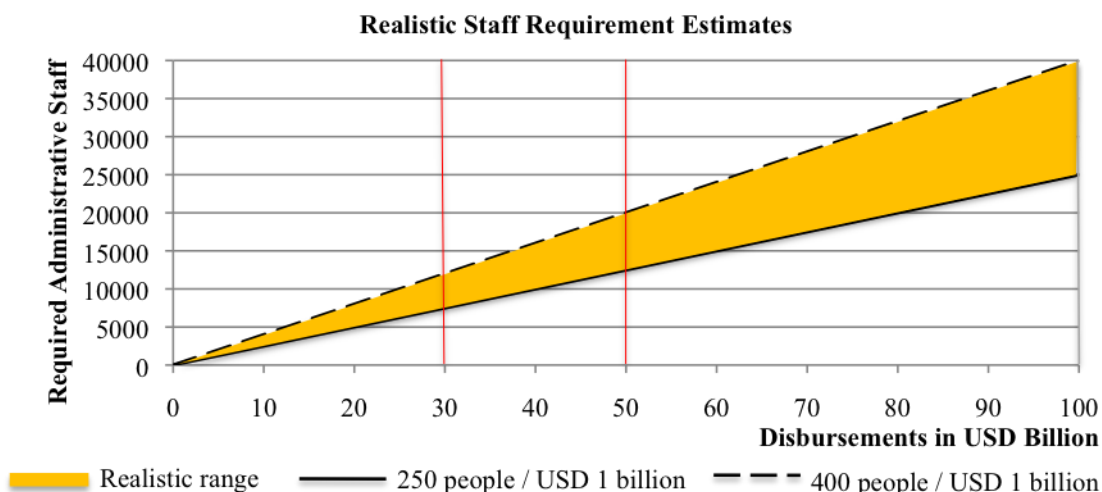
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Executive Summary

In the December 2009 Copenhagen Accord developed countries pledged to provide “new and additional” resources of USD 30 billion fast start finance over 2010 to 2012, to be scaled up to USD 100 billion a year by 2020. This is a major increase in North-South flows: the total current volume of development assistance is around USD 150 billion per year. This paper provides a rough estimate of the level of staffing needed to administer the new and additional climate finance by investigating the current levels of full-time equivalent staff in twelve major international development agencies. A short time-series analysis shows how agencies add staff to handle additional flows, and three case studies reveal crucial nuances behind the overall staffing intensity (“staff-per-unit-of-funds-administered”) figures.

On average, the 12 funding entities in question employ 25.4 official full time staff per USD 100 million in disbursements. Initially, we found a wide range of staffing intensities. However, subsequent case studies of the Japanese, the UK and the US aid agencies revealed a number of factors – namely (i) the exclusion of part-time and full-time contract workers from official staffing estimates; (ii) the channelling of funds through other national and international funding entities; and (iii) other national and international work unrelated to ODA that the agencies carry out – enabled us to narrow the range considerably. The adjusted data suggest that realistic staffing needs are on the order of 25-40 new staff for each 100 USD million an agency manages. We found no “economy of scale” for larger agencies. This is *not* necessarily an indication of inefficiency, but of the simple fact that if one wishes to have *properly managed funding* (with evaluations, auditing, monitoring, etc.), then one will have to *hire people to carry out this management*.



Therefore, if – as illustrated in the Figure above – the climate regime is to process **USD 30 billion** of new and additional funds annually, we estimate it would need between **7,500 and 12,000 new and additional administrators**. For **USD 50 billion**, the figure rises to between **12,500 and 20,000**, and for a throughput of **USD 100 billion**, **25,000 to 40,000 people** would be needed.

These estimates raise crucial questions about what institutional arrangements would be most effective and where new and additional administrators should be located: in wealthy nations or those receiving the funding. Given the expense of hiring development agency staff in wealthy nations, considerations of cost-effectiveness suggest that the administration of these funds should be delegated as much as possible to *funding entities in the countries that receive the funds* for climate mitigation and adaptation projects and programmes. Apart from considerations of cost-effectiveness, such a *devolution of funding decisions* and management would also result in greater country “ownership” and thus facilitate the mainstreaming of climate finance into their national development planning.

I. Introduction

The Copenhagen Accord of December 2009 contains the collective commitment by developed countries to provide “new and additional” resources to address the climate-related needs of developing countries—the promise sums to USD 30 billion “fast start finance” over 2010 to 2012 and funds are to “scale up” to USD 100 billion a year by 2020. Draft texts for the 2010 Cancun UNFCCC negotiations include similar numbers. Since the total volume of development assistance of all types on all issues (education, poverty reduction, health, infrastructure, etc.) is only around USD 150 billion per year, the volume of funds promised at Copenhagen will have vast implications for developing nations, and for the agencies that administer the flows. This moment therefore presents an historic opportunity to revisit the extent to which existing development policy and practices are equitable, effective and efficient, and how they might be reformed.

This policy brief seeks to raise a small but nearly unaddressed question in the larger debate about the governance of climate change-related funds. The influx of these funds *will require additional staff capacity* to make crucial decisions about, disburse, manage, monitor and evaluate. Who will do this work? A number of different proposals have been made about who will control and disburse climate funding after Copenhagen. These are important questions: obviously each proposal has implications for who will receive climate funding, and how equitable and efficient this funding is. Not discussed, however, have been the implications these competing proposals will have for how many staff will be needed, and where and how they will work.¹ This raises some basic questions: Where will these new and additional administrators be employed? How much money will they cost to employ? What roles will they take on?

To get a very rough picture of what level of staffing is going to be needed to administer the “new and additional” climate finance promised at Copenhagen, we investigate the current levels of full-time equivalent staff² in twelve major international development agencies. What staffing needs would be required to administer and disburse climate funds if we were to simply inject these funds into existing development agencies? Specifically, we ask, *for the current way of managing programs in international funding agencies, what is the additional number of full-time equivalent staff that will be required to manage an additional USD 30 billion / USD 100 billion in disbursements a year?* Knowing the likely number of staff needed to manage these new funds, we hope, will help stakeholders and decision-makers assess the design and implementation of institutional arrangements for the purpose of equitably and efficiently disbursing climate change funds. With the high expense of administering development assistance in developed countries, it should be considered that decision-making and administrative capacity be delegated to agencies in recipient nations—who may be closer to the needs that climate assistance is designed to meet.

¹ We address the question of what staffing needs would be required to manage new and additional climate finance in *existing* international development agencies. The question of how staffing needs for new and alternative funding arrangements would compare to existing funding channels is outside the scope of this policy brief. Such research would be a valuable contribution.

² A full-time equivalent staff position refers to full-time work at 40 hours a week for the year *or* any combination of part-time staffing that together equals the total hours of a full-time staff position. Any time that we refer to “full-time staff” or “staff” in this brief, we mean full-time equivalent staff.

2. Methodology

To address our research question, we employed three methods. First, we conducted a survey of twelve major international funding entities to determine the average ratio of disbursement dollars to funding entity full-time staff. We sought to estimate the *staffing intensity* for a given funding entity by calculating the amount of full-time equivalent staff per USD 100 million³ disbursed. Second, we conducted a time-series analysis for seven of the agencies. Specifically, we assessed the average annual change in staff per USD 100 million increase in annual disbursements for the seven agencies over the course of four consecutive years.⁴ Third, we conducted a more in-depth analysis of three bilateral funding agencies, JICA (Japan), DFID (UK), and USAID (USA) in order to assess and discuss ways in which staffing figures may be both overrepresented and/or underrepresented by official agency figures.

We use these methods to determine an approximate range for how many staff would be needed in a typical funding entity to manage an additional USD 30 billion / USD 100 billion per year in disbursements. Specifically, for the “lower-bound” staffing intensity figure we use the uncorrected average staffing intensity across the twelve agencies (found in Table 1). For the “higher-bound” staffing intensity figure we use the upper end of the corrected ranges for the agencies JICA, DFID and USAID. We review the three methods below.

2.1. Survey of international funding entities

To determine the staffing intensity of different development agencies, we collected data by reviewing annual reports, agency documents and relevant publications. We researched disbursement and full time staff figures for 6 bilateral (national) funding entities and 6 international (multilateral) funding entities. We selected funding entities based on the criteria that as a group they would be representative of a diverse sample of agency sizes, locations, entity structures and funding priorities. We also sought in these twelve agencies to capture the majority of development finance. The bilateral agencies sampled were:

- United States Agency for International Development (USAID),
- UK Department for International Development (DFID),
- Canadian International Development Agency (CIDA),
- Agence Française de Développement (AFD),
- German Federal Ministry of Economic Cooperation and Development (BMZ) and
- Japan International Cooperation Agency (JICA).

Multilateral agencies researched were:

- World Bank,
- Inter American Development Bank (IDB),
- African Development Bank Group (ADB),

³ Currency is in US dollars unless otherwise noted.

⁴ For Agence Française de Développement we included data for three consecutive years, FY 2007-2009 due to limitations in finding data for a fourth year. We did not find data for IDB for FY 2008. As a result, we have data for four non-consecutive years: 2005, 2006, 2007 and 2009.

- Asian Development Bank (ADB),
- Montreal Protocol Multilateral Fund (MPMF) and
- The Global Fund.

In terms of the overall amount of funds that are disbursed and the size of the staff, the funding entities researched range from some that are quite small to several of the very largest agencies. This enabled us to determine if there is in fact a similar ratio of staff-to-disbursement dollars (‘staffing intensity’) for funding entities with quite different characteristics. We specifically sought to understand if the larger funding entities have a more efficient staffing intensity than smaller entities due to economies of scale.

To compare staffing intensities across agencies, we used two approaches. First, we used the most recent year’s data available for each agency.⁵ Using this single year data we have calculated staffing intensities for each funding entity and an average staffing intensity across agencies. Second, where data was available, we also compiled disbursement and staffing data for multiple years of operation and generated an average staffing intensity for each agency for the duration of that period.⁶ We did this in order to provide a more robust representation of the staffing intensity for a given agency due to the fact that analysis of a single year may not capture larger trends.

We use the term *disbursements* to refer to the gross amount of official development assistance (ODA) that is managed in some capacity by a given agency. Thus, disbursements may include either a transfer of funds from an official agency to other national or multilateral funding agencies, or the transfer of funds from an official agency to a recipient entity for a targeted project or program. ODA, in accordance with the Organisation for Economic Co-operation and Development (OECD) definition, includes funding flows to countries and territories on the Development Assistance Committee List of ODA recipients and to multilateral development agencies which:

- a) is administered with the promotion of economic development and welfare of developing countries as its main objective; and
- b) is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent).⁷

ODA excludes military aid, peacekeeping, civil police work, social and cultural programs, anti-terrorism activities and a few other activities. We chose to include only ODA figures in our analysis because it was our opinion that official climate funding also would not include military and other non-concessional expenditures. ODA figures are also usually made readily available by bilateral funding agencies.⁸ ODA figures include

⁵ For CIDA, BMZ and JICA we use 2008 data. For all other agencies we use 2009 data.

⁶ Due to differences in availability of data, the number of years for which we collected data for each funding entity varies. CIDA, ADBG, IDB, DFID, ADB and WB include averages for four years of operations, FY 2005-2008 or FY 2006-2009. AFD includes averages for three years of operations, FY 2007-2009. USAID, JICA, BMZ, Global Fund include only one year of operations.

⁷ <http://www.oecd.org/dataoecd/21/21/34086975.pdf>

⁸ ODA only refers to funding from the bilateral agencies investigated; multilateral agencies don’t distinguish between ODA and non-ODA disbursements. In most cases, ODA refers to loans and grants. In cases where disbursements have been listed in another currency and when a conversion rate has not been provided by the agency, we have used the average conversion rate of that currency to US dollars over the course of the related fiscal year. We used: <http://www.oanda.com/currency/historical-rates>. The overall

mainly loans and grants, but also include technical assistance activities and operational expenses, as future climate change finance certainly will.



Figure 1. Lifecycle of Development Project Activities⁹

Strategies to address climate change adaptation and mitigation will involve funding crosscutting and diverse issues from a range of sectors—from agriculture to education to health to renewable energy. As a result, we did not limit our analysis to

disbursements listed for a given funding entity are representative of disbursements from only that entity, and not the entirety of ODA from the host country.

⁹ Based on figures and information provided in CIDA’s Business Process Roadmap, December 2009. This provides an example of activities conducted in one development agency (CIDA), but is not necessarily representative of all international development agencies.

funding allocated only to climatic or environmental issues. For the funding entity staff information, we relied on agency data for statistics on full-time equivalent employees.

As Figure 1 shows, staff activities are numerous, but include roles such as project identification, screening, research, selection, appraisal, project feasibility and design, approval, operationalization, monitoring and control, technical assistance, implementation and evaluation, among other activities.

2.2. Time-series analysis

Seven of the twelve funding entities that we researched had data available to conduct a time series analysis.¹⁰ This data enabled us to investigate the extent to which funding entities increase full-time equivalent staff in proportion to annual increases in funding disbursements. Specifically, we calculated for each funding entity the average change in the number of full-time equivalent staff employed for each annual increase in USD 100 million in disbursements. We then found the average change in the number of full-time equivalent staff employed across the seven funding entities per the addition of USD 100 million in disbursements.

2.3. Case study analysis

As discussed below, differences in funding entity structures and methodology for reporting full-time equivalent staff data creates challenges in producing reliable calculations and comparing different funding entities. We looked closely at three bilateral international funding agencies, JICA, DFID and USAID in order to assess and discuss the potential ways in which official full-time staff equivalent statistics may underestimate or overestimate the actual number of staff utilized to disburse funds. We consider the following issues to provide adjusted staff intensity ranges for the three agencies: (1) part-time and full-time contract workers not included in official staffing estimates; (2) the channelling of funds through other national and international funding entities; and (3) other national and international work unrelated to ODA that the agencies carry out. Data was collected for this analysis by reviewing agency documents and correspondence with agency staff.

2.4. Shortcomings, challenges and limitations

One major shortcoming of this study is related to the full-time equivalent staff statistics available. Most agencies do not provide detailed public information about their staff, so we have been unable to decipher exactly how several agencies determine their overall staffing numbers. It seems likely that data on the number of staff provided by each agency varies in whether or not they have included contractual staff and associated staff housed in other agencies. Another shortcoming in our data is the fact that funding entities differ in the work that they carry out in addition to providing ODA, thereby influencing their overall staffing intensity. For example, while 100% of JICA's overall budget is related to ODA, only 48.8% of USAID's overall budget is related to ODA. Funding entities also vary in the extent to which they outsource disbursement activities to other agencies, consultants, and non-profit organizations.

¹⁰ For six of the funding entities we collected data on full time employees and disbursements for four consecutive fiscal years, 2005-2008 or 2006-2009. For one of the funding entities, Agence Française de Développement, we were only able to find data for the three fiscal years 2007-2009. Official dates for fiscal years vary depending on the country.

A shortcoming of our case study analysis is that we were unable to obtain data on part-time or full-time contract staff that are not included in official staffing figures for the agencies DFID and USAID. As a result, the adjusted staff intensity ranges that we have provided for DFID and USAID may be overly conservative estimates. And while we were able to find overall contract staffing figures for JICA, we were unable to obtain these figures as full-time equivalents. As a result, we provide a range for JICA between what we consider to be a conservative and less-conservative estimate.

In addition, we have relied on analysis of only the three agencies JICA, DFID and USAID to determine our “upper-bound” figure for staffing intensity. Thus, our conclusion that this represents a valid upper-bound estimate is based on the assumption that the issues that we have identified in official staffing figures in these agencies similarly apply to other agencies. A more precise study would investigate the issues that we have identified in official staffing figures for all twelve agencies studied.

The differences in funding entity structures and official agency staffing methods likely influence our findings. As a result, the findings in this report should be viewed as approximate estimates rather than as precise figures. While we feel confident that our methods have enabled us to capture larger trends across agencies with reasonable accuracy, this analysis does not lend itself to precisely comparing the staffing intensities of individual agencies. **The shortcomings of our methods lead us to recommend that this policy brief *not* be used for comparing the staffing intensity of different development agencies.** More precise analysis would likely require in-depth qualitative research within specific funding entities.

There are also important questions that we have not addressed. We have not looked at the influence of overall project *numbers* or use of different technologies and development practices on staffing intensities. We feel that it is likely that the average size of projects in a given agency influence the staffing intensity of that agency. Specifically, it is likely that an agency with mostly very large projects will require less staff per dollar of disbursements than an agency with very small average project sizes. Much also likely depends on how the projects are structured, and how much decision-making power and responsibility is delegated to the recipient country. Finally, we recognize that different proposals for climate-related funding mechanisms may have different implications for staffing intensity. We have not addressed the question of how competing proposals for new and alternative funding mechanism arrangements would compare to existing funding channels in staffing intensity. Further research on these questions would be a valuable contribution.

3. Findings

To estimate staffing needs to disperse new and additional climate finance, in this section we discuss our overall findings including: (a) the number of full-time equivalent staff it takes the funding entities researched to administer USD 100 million; (b) the extent to which staffing intensities are consistent across funding entities; (c) how large and small agencies compare in terms of staffing intensities; (d) the extent to which funding entities adjust their staff capacity annually in proportion to changes in disbursement levels; (e) analysis of JICA, DFID and USAID to determine how actual staffing intensities may vary from our overall findings; and (f) an estimate of the amount of full-time equivalent staff it

would likely take a typical funding entity to administer an additional USD 30 billion / USD 100 billion a year.

The differences in staffing intensities that exist between funding entities are not necessarily a reflection of how efficiently each agency staff disburses its funds; rather, these differences likely reflect different ways that agencies are structured, whether they distribute large infrastructure loans or small grants, the sectors in which they focus their projects and programmes, and how they calculate official full-time staff statistics.

3.1. Full-time equivalent staff-to-disbursements ratio

As Table 1 shows, for fiscal year 2009 (or fiscal year 2008 where 2009 data was not available) full-time equivalent staff in funding entities per USD 100 million in disbursements range from 9.5 (JICA) to 58 (CIDA). On average, the funding entities researched employ 25.4 official full time staff per USD 100 million in disbursements.

Table 1. Full-time staffing intensities (2008 or 2009)			
Funding entity	Gross disbursements	Full-time staff	Full-time staff per USD 100 million in disbursements
Canadian International Development Agency (CIDA)	3,225,114,000	1,870	58.0
World Bank (WB)	27,783,000,000	10,000	36.0
Agence Française de Développement (AFD)	8,654,557,000	2,355	27.2
United States Agency for International Development (USAID)	28,831,783,000	7,762	26.9
African Development Bank Group (ADBG)	6,401,800,000	1,654	25.8
UK Department for International Development (DFID)	10,265,600,000	2,500	24.4
German Federal Ministry of Economic Cooperation and Development (BMZ)	14,248,563,000	3,348	23.5
The Global Fund	2,755,000,000	600	22.0
Montreal Protocol Multilateral Fund (MPMF)	150,000,000	28	19.0
Inter American Development Bank (IDB)	11,838,000,000	2000	16.9
Asian Development Bank (ADB)	16,078,000,000	2,602	16.2
Japan International Cooperation Agency (JICA)	17,597,101,449	1,664	9.5
Average across funding entities	12,319,043,204	3,031.9	25.4

As table 2 shows, the average figure for funding entities for multiple years of operations yielded a slightly larger full-time staffing intensity of 28.3 staff per USD 100 million in disbursements.

Table 2. Average full-time staffing intensities (multiple years)			
Funding entity	Average gross disbursements	Average full-time staff	Average full-time staff per USD 100 million in disbursements
Canadian International Development Agency (CIDA)	2,825,963,026	1,735	61.4
World Bank (WB)	27,783,000,000	8,900	40.8
Agence Française de Développement (AFD)	6,700,894,667	1,824	27.2
United States Agency for International Development (USAID)	28,831,783,000	7,762	26.9
African Development Bank Group (ADBG)	3,421,325,000	1,333	39
UK Department for International Development (DFID)	9,740,194,180	2,472	25.4
German Federal Ministry of Economic Cooperation and Development (BMZ)	14,248,563,000	3,348	23.5
The Global Fund	2,755,000,000	600	22.0
Montreal Protocol Multilateral Fund (MPMF)	150,000,000	28	19.0
Inter American Development Bank (IDB)	7,691,250,000	1,855	24.1
Asian Development Bank (ADB)	11,641,500,000	2487	21.4
Japan International Cooperation Agency (JICA)	17,597,101,449	1,664	9.5
Average across funding entities	10,629,672,860	2,834	28.3

3.2. The extent to which staffing intensities are consistent across funding entities.

We find a strong statistical association between staff size and disbursement size across the twelve funding entities researched.¹¹ This suggests that perhaps funding entities use similar methods for calculating full-time equivalent staff and that staffing needs for administering disbursements are relatively similar across agencies. As Figure 2 shows, a few funding entities are outliers, deviating significantly from the fitted value line.

¹¹ Using ordinary least squares regression analysis, we find an r-squared value of .78 between the variables staff size and disbursement levels, which is statistically significant at the $p < .001$ level (99.9% confidence).

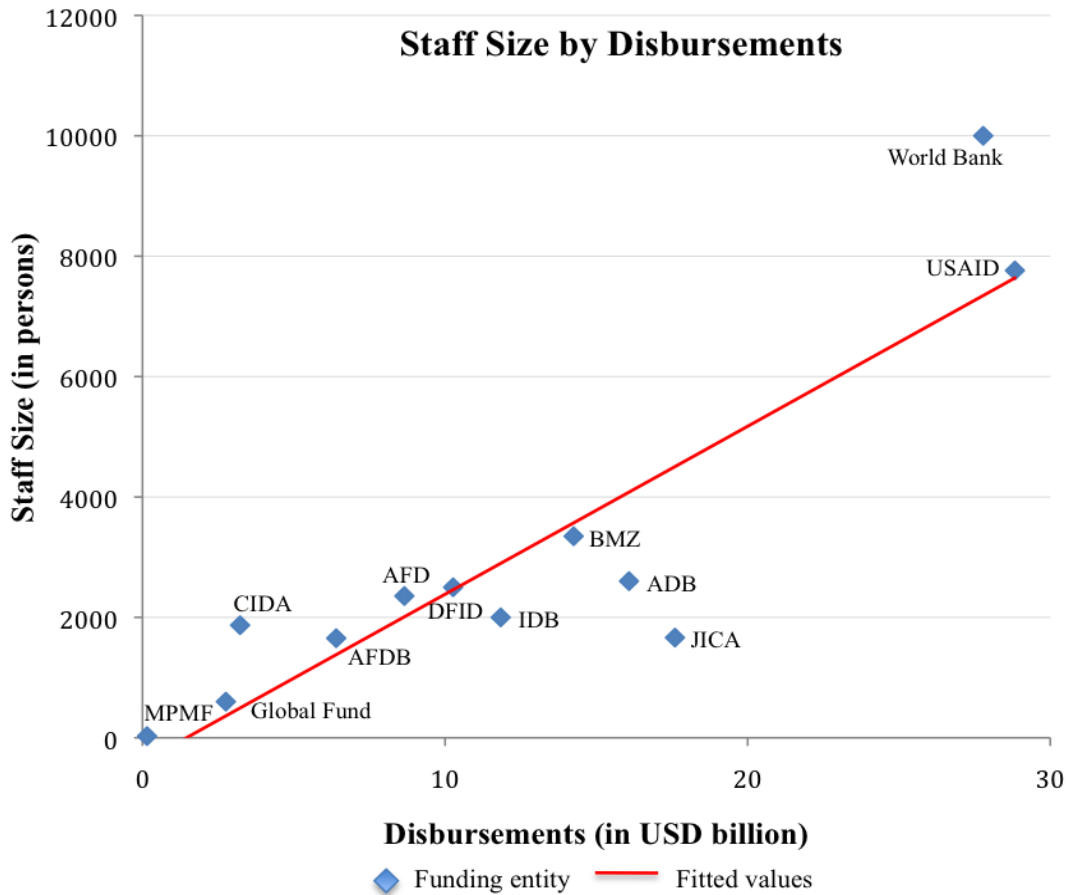


Figure 2. Staff Sizes and Disbursement Volumes

3.3. The extent to which larger funding entities require less full-time equivalent staff to administer each USD 100 million in disbursements.

Our statistical analysis reveals that there is no relationship between the volume of disbursements that are made by a funding entity and funding entity staffing intensity.¹² In other words, we find no evidence to support the argument that larger funding entities have economy of scale benefits that enable them to utilize less staff capacity to administer disbursements than smaller funding entities.

3.4. The extent to which funding entities adjust their full-time equivalent staff capacity over time in proportion to changes in disbursement levels.

This question is particularly salient because it investigates how funding entities have responded with administrative capacity to increases in disbursement levels. We ask, are funding entities elastic in their ability to disburse more funds over time without proportionally increasing full-time equivalent staff? Indeed, over the course of the four years that we compiled data for each funding entity, we found that on average funding entities only increased staff by a ratio of 13.4 full-time staff equivalent for every increase

¹² Using ordinary least squares linear regression to assess the relationship between the variables disbursement size and efficiency, we found an r-squared value of .009 (p= .77, not significant statistically) and thus accept the null hypothesis that there is no statistical relationship between the two variables.

in USD 100 million in disbursements. This figure is much lower than the average staffing intensity we found of 25.4 full-time staff (in Table 1). Thus, it appears that funding entities, at least in the short term, have been able to incrementally increase disbursement levels without proportionally increasing their official full-time equivalent staff capacity.

As Table 3 shows, we found that average annual change in full-time staff equivalent per USD 100 million increase in disbursements ranges from *decreasing* full-time equivalent staff by 10.3 individuals (DFID) to *increasing* full-time equivalent staff by 38 individuals (CIDA).

Table 3. Time Series Analysis: Average* change in staff per USD 100 million increase in disbursements			
Funding entity	Average annual change in disbursements (USD)	Average annual change in full time staff	Average change in full time staff per USD 100 million increase in disbursements (per funding entity)
CIDA	230,686,800	88	38.0
AFD	1,887,856,500	525	27.8
WB	2,346,666,667	133	19.9
ADBG	1,512,600,000	203	13.4
ADB	2,563,000,000	66	2.6
IDB	2,171,666,667	49	2.3
DFID	272,970,427	-28	-10.3
Average annual change in full time staff per USD 100 million increase in disbursements (overall across funding entities)			13.4

*Includes data for 4 years of operations, FY 2005-2008 or FY 2006-2009. AFD only includes three years of operations, FY 2007-2009.

It is possible that development agencies have been able to adjust to growing disbursement budgets by improving efficiency practices such as choice of aid technology rather than hiring more staff.¹³ Indeed, we in no way suggest that efficiency practices in development agencies are at an optimum, and it is possible that these practices have improved over time. Further research to identify the extent to which decreases in staff to disbursement ratios in certain agencies is due to improvements in efficiency practices would be useful.

However, as we will discuss, the ability of funding entities such as DFID to achieve a more efficient staffing intensity over time may have been most strongly influenced by the practice of increasingly outsourcing disbursement activities to other agency staffs. Thus, staffing needs may have been simply transferred elsewhere rather than mitigated. We also view it as likely that agencies have met their increased capacity needs in the short-term by hiring more contract workers rather than official full-time

¹³ For example, DFID has reportedly been a leader in a funding practice called “budget-support”, which means not specifying individual projects, but rather devolving to recipient countries which activities to undertake in a sector which is funded.

equivalent staff. As we discuss with the JICA analysis, we believe that some agencies do not include contract workers in their official staff estimates.

Still, these figures indicate that there is likely some elasticity in the ability of funding entities to increase disbursements without proportionally expanding their administrative capacity. But we view it as likely that this elasticity is possible due to relatively small incremental increases in disbursements in each funding entity. It seems unlikely that a funding entity could maintain this level of elasticity if its overall disbursements increased by a figure as large as USD 30 billion (or even half this much).

While one can imagine that the influx of USD 30 billion dollars of climate funds into an agency would encourage a shift in some efficiency practices, we feel that this is likely counterbalanced by the fact that climate change will present new challenges to development agencies that may simultaneously require increased staffing intensity in some areas.

As a result of all of these factors, we believe that the staffing intensity of 13.4 individuals per USD million in disbursements found in the time-series analysis is an artificially low figure for predicting the staffing intensity in a typical funding entity with the influx of climate funds.

3.5. Case study analysis of JICA, DFID and USAID to determine how actual staffing intensities may vary.

We looked more closely at three bilateral international funding agencies, JICA, DFID and USAID, in order to assess and discuss some of the potential ways in which official full-time equivalent staff statistics may underestimate or overestimate the actual number of staff needed to disburse funds. Specifically, we identify three issues that likely impact staffing intensity figures: (1) part-time and full-time contract workers not included in official staffing estimates; (2) the channelling of funds through other national and international funding entities; and (3) other national and international work unrelated to ODA that the agencies carry out. We provide adjusted staff intensity ranges for each of the three agencies with these issues in mind.¹⁴ We use the upper end of these ranges to establish a “higher-bound” adjusted value in Figure 3 and Figure 4.

3.5.1. THE JAPAN INTERNATIONAL COOPERATION AGENCY (JICA):

The “new JICA” was officially inaugurated in October 2008 with the merger of the existing Japan International Cooperation Agency and the overseas economic cooperation section of the Japan Bank for International Cooperation (JBIC). JICA bills itself as “the one stop shop of Japan’s ODA”, and integrates three schemes of Japan’s development assistance: technical assistance, concessionary loans, and grant aid. JICA has 17 domestic offices and 96 overseas bureaus.

¹⁴ As we have discussed in our methods section, we were unable to find data on part-time or full time contract workers not included in official staffing estimates for DFID and USAID. As a result, the adjusted staff intensity ranges that we have provided for DFID and USAID may be overly conservative estimates.

Table 4. JICA full-time and part-time contract staff by position			
“Experts”	Contract staff	“Members of study teams”	Contract staff
Individual Technical Cooperation (long / short-term)	167	Acceptance of Technical Participants	52
Third-country Experts (short-term)	61	Technical Cooperation Projects	1,536
Overseas Technical Training (short-term)	66	Development Study	787
International Organizations (long-term)	0	Preparatory Survey	111
Grant Aid Projects (long-term)	1	Overseas Development Study	499
Disaster Relief Activities (short-term)	106	Aid-personnel Recruitment and Training	1
Program Formulation (long / short-term)	88	Grant Aid Projects	48
Experts Related to Japanese ODA Loan (long / short-term)	156	Study Team Related to ODA Japanese LOAN	5
Project Formulation Advisor (long / short-term)	40	Disaster Relief Activities	14
Technical Cooperation Projects (long / short-term)	3,178	Program Formulation	1,218
JICA Partnership Program (long / short-term)	734	Project/Program Evaluation	106
		Public Participation-Based Cooperation	18
		Follow-up Study Team	111
		Research Investigation Team	28
TOTAL	4,597	TOTAL	4,534
GRAND TOTAL JICA CONTRACTORS			9,131

There are two reasons JICA provides a useful case to examine more closely. First, if we rely on agency staff numbers, JICA exists as an outlier due to its low staffing intensity. Thus, JICA provides a useful case to investigate in order to assess if indeed official agency full-time staff equivalent numbers accurately portray the staff capacity utilized to administer ODA disbursements. Second, JICA is unique among the bilateral agencies researched in that it disburses all of its ODA directly to recipients rather than through intermediary national or international multilateral agencies. In addition, its sole function is to carry out Japan’s ODA activities. As a result, all of its staff are related to this work. Thus, of the three issues that we consider in these case studies as described above, only the first issue, part-time and full-time contract workers not included in official staffing estimates, is relevant to JICA.

A closer look at JICA’s employment numbers reveals that it employs thousands of short-term and long-term consultants who are not included in its official full-time equivalent staff estimates. Specifically, in its 2009 annual report, in addition to the official 1,664 employees that are considered as full-time employees, JICA identifies

4,597 experts who are dispatched to assist with projects and *another* 4,534 members of study teams who are dispatched to assist with projects on short-term and long-term contracts. The types of activities carried out by these contract workers are outlined in Table 3. JICA therefore has nearly five and a half times as many contractors as core staffers.

The difficulty is calculating full time equivalent staff that would be required to do the work of these legions of contractors. If we assume a conservative estimate that these 9,131 contract workers work an average of one-third time for JICA, they represent annual full-time equivalent paid staff (excluding volunteers) in any of JICA's domestic or overseas offices of about 3,275. Adding these workers to JICA's core staff, the agency's staff-to-disbursements ratio increases from 9.5 staff per USD 100 million in disbursements to 26.8 staff per USD 100 million in disbursements. If instead we assume that half of the total contract workers represent annual full-time equivalent paid staff (excluding volunteers) the agency's staffing intensity increases to 40.6 staff per USD 100 million in disbursements. In Table 4, we have included the types of positions and number of staff for activities that are not accounted for in JICA's official full-time equivalent staff figure. We include this information, because we believe that it is likely that other funding entities also use contractors for some of these functions, and therefore also exclude some of these contract activities from their official staff figures.

The analysis of JICA leads to three conclusions. First, if we consider contract staff, JICA likely has a significantly *higher* staffing intensity than the 9.5 staff per 100 million disbursements figure that we find in Table 1. We believe that the staffing intensity is likely at least as high as the 26.8 figure estimated above. Second, the issue of not including contract staff in official full-time equivalent employee statistics is likely not unique to JICA; rather, we feel that this is likely common practice among funding entities. For example, an employee with whom we talked at the World Bank estimated that for every official full-time equivalent employee, the World Bank employs 2-3 contracted workers. Third, we believe that because its activities are solely related to ODA and because it does not channel funds through other development agencies, JICA represents a strong indicator among the funding entities researched of the number of staff it actually takes to administer ODA. We believe that the actual number of full-time staff equivalent necessary to administer USD 100 million in disbursements is somewhere *between 26.8 and 40.6* individuals. As a result, in Figure 3 we include a staff range for JICA of between 26.8 and 40.6 individuals per USD 100 million in disbursements.

3.5.2. THE UK DEPARTMENT FOR INTERNATIONAL DEVELOPMENT (DFID):

In our time-series analysis, we found that DFID actually has decreased its staff size over the past four years by 10.3 individuals for each USD 100 million increase in disbursements. As the only funding entity researched that behaved in this fashion, DFID provides an interesting case to look at more closely.

Almost all of the UK public expenditure to which DFID is responsible is ODA.¹⁵ As a result, the issue of carrying out other national and international work unrelated to ODA does not seem to affect DFID staffing intensity figures. And as mentioned, we have been unable to obtain data for DFID on contract workers not included in official

¹⁵ DFID 2009-2010 Annual Report

staffing figures. However, we do find that our second issue identified above – the channelling of funds through other international agencies – likely influences staffing intensity and the time-series figures.

While the time-series analysis indicates that DFID has achieved a more efficient staffing intensity from 2006 to 2009, a closer look at DFID’s operations reveals that this is likely not the case. Specifically, as Table 5 shows, between 2006 and 2009, DFID steadily increased the percentage of disbursements that it channels through multilateral institutions from 38% of total disbursements in 2006 to 62% of total disbursements in 2009.¹⁶ For example, in fiscal year 2009, DFID channeled 38% of its overall disbursements to central or core funding of multilateral institutions and an additional 38% of its bilateral disbursements through the multilateral institutions. The main multilateral recipients of DFID funds were the European Commission, World Bank, United Nations and Regional Development Banks (including African, Asian, Caribbean and Latin American Development Banks).¹⁷

It seems reasonable to assume that it requires far less staff capacity to transfer funds to multilateral institutions than to engage in targeted and direct bilateral project and program development assistance. In Table 5, under the column heading “adjusted ratio”, we have omitted the funding that has been channeled through the multilateral institutions. When we do this, we find that the staffing intensity per USD 100 million disbursements increases dramatically when compared to the non-adjusted ratios. And rather than a decrease in the staffing intensity over the four years, we find an increase from 44.1 staff per USD 100 million disbursements in 2006 to 64.1 staff per USD 100 million disbursements in 2009. However, this calculation does not account for the staff needed to channel funds to the multilateral institutions. It seems more likely that the actual staffing intensity for DFID exists somewhere between the “non-adjusted staffing intensity” and the “adjusted staffing intensity”. Midway is our estimate in the final column labeled “middle range staffing intensity”.

Table 5. DFID “adjusted”, “non-adjusted” and “middle-range” disbursement ratio						
1	2	3	4	5	6	7
<i>Fiscal Year</i>	<i>Official full-time employees</i>	<i>Overall disbursement (in USD billions)</i>	<i>Percentage of disbursements that are channelled through multilateral development agencies</i>	<i>Non-adjusted staffing intensity per USD 100 million*</i>	<i>Adjusted staffing intensity per USD 100 million**</i>	<i>Middle range staffing intensity per USD 100 million (avg. of columns 5 and 6)</i>
2009	2500	10.3	62%	24.4	64.1	44.3
2008	2359	9.4	55%	25.2	56.0	40.6
2007	2446	9.9	43%	24.7	43.4	34.1
2006	2584	9.4	38%	27.4	44.1	35.8

* including funds disbursed to multilateral institutions. ** omitting funds disbursed to multilateral institutions

¹⁶ This includes core or central funding to multilateral organizations and bilateral funding that is channelled through multilateral institutions (known as “mult-bi”).

¹⁷ DFID 2009-2010 Annual Report, p. 75.

This brief analysis of DFID’s staffing levels leads us to two conclusions. First, if we adjust for the funds channeled through multilateral institutions, DFID likely has a higher staffing intensity than the 24.4 staff per USD 100 million in disbursements figure that we find in Table 1. We believe that the DFID 2009 staffing intensity is likely closer to the 44.3 figure estimated in the far right column of Table 5. Second, the time series analysis in Table 3 does not account for the extent to which bilateral funding entities have channeled an increasing percentage of disbursements through multilateral institutions over time. We feel that it is likely that if this were taken into account, the average increase in staff across funding entities per USD 100 million increase in disbursements would be significantly larger. As a result, in Figure 3 we include a staff range for DFID of between 24.4 and 44.3 individuals per USD 100 million in disbursements.

3.5.3. UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID)

USAID’s USD 28 billion a year in disbursements makes it the largest bilateral agency worldwide; in spite of its vast size, its staffing intensity was just above our average trend at 26.9 persons per USD 100 million dispersed. A closer examination of its activities raises two important issues with USAID’s operations that may influence its ratio.

First, in Table 6 we find that 51.2% of USAID’s budget related activities are not related to ODA. Thus we can assume that a proportion of USAID full-time equivalent staff do not work on ODA-related activities. However, when we take a closer look in Table 6 we find that the vast majority of these funds are channelled to other non-USAID agencies. As a result, it does not seem likely that a large proportion of USAID full-time equivalent staff positions are devoted to managing these activities.

Table 6. USAID budget activities not related to Official Development Assistance	
Activity	FY 2009 (Amount USD 000)
Diplomatic and Consular Programs*	7,153,108
Embassy Security, Construction and Maintenance*	2,669,369
Other Administration of Foreign Affairs	787,304
International Organizations (such as Contributions for International Peacekeeping)*	3,992,900
International Commissions	337,080
Related Programs*	153,552
Broadcasting Board of Governors*	715,483
United States Institute for Peace*	31,000
Department of Treasury*	85,000
International Security Assistance*	7,554,700
International Narcotics Control and Law Enforcement*	1,876,500
Nonproliferation, Antiterrorism, Demining and Related Programs*	631,500
Total	25,987,496
Total Percentage of USAID budget not devoted to ODA	51.2%

*Indicates channelling of USAID funding to another agency

Table 7. USAID channelling of Official Development Assistance to other agencies	
Agency	FY 2009 (Amount USD 000)
Global Health and Child Survival (State Department)	5,159,000
Democracy Fund (United Nations)	116,000
Assistance for Europe, Eurasia and Central Asia (State Department)	922,000
Migration and Refugee Assistance (MRA) (State Department)	1,674,500
U.S. Emergency Refugee and Migration Assistance (ERMA) (State Department)	40,000
Peace Corps	340,000
Millennium Challenge Corporation	875,000
Inter-American Foundation	22,500
African Development Foundation	32,500
Department of Treasury	85,000
Multilateral Economic Assistance	1,845,000
Global Environment Facility (GEF)	80,000
International Development Association (World Bank)	1,115,000
Enterprise for the Americas Multilateral Investment Fund	25,000
Asian Development Fund	105,000
African Development Fund	150,000
International Fund for Agricultural Development	18,000
Export-Import Bank	177,000
Overseas Private Investment Corporation (OPIC)	173,000
Trade and Development Agency	50,800
International Trade Commission	75,000
Foreign Claims Settlement Commission	1,823
Department of Agriculture	2,420,900
Total	15,503,023
Total percentage of USAID ODA channeled to other agencies	53.8%

Second, we find in Table 7 that of the USAID funds related to ODA, more than half (53.8%) of funds are channelled to other national and international agencies. As discussed with our DFID analysis, it seems reasonable to assume that it requires far less staff capacity to transfer funds to national and international institutions than to engage in targeted and direct bilateral project and program development assistance.

Table 8. USAID "adjusted", "non-adjusted" and "middle range" disbursement ratio		
<i>1. Non-adjusted staffing intensity per USD 100 million (including funds disbursed to multilateral institutions)</i>	<i>2. Adjusted staffing intensity per USD 100 million (omitting funds disbursed to multilateral institutions)</i>	<i>3. Middle range staffing intensity per USD 100 million (avg. of columns 1 and 2)</i>
26.9	58	42.6

As mentioned, a potential third issue that we have not accounted for with USAID due to lack of data is contract workers not included in official staffing figures. Again, our job here is to roughly adjust what appear to be unrealistic staffing intensities to create realistic estimates of personnel needed to administer new and additional climate finance. In Table 8, under the column heading “adjusted ratio”, we have omitted the ODA funding that has been channeled through the other national and international agencies. When we do this, we find that the staffing intensity per USD 100 million in disbursements increases dramatically when compared to the non-adjusted ratios. However, this calculation does not account for the staff needed to channel funds to other national and international agencies. It seems more likely that the actual staffing intensity for USAID exists somewhere between the “non-adjusted staffing intensity” and the “adjusted staffing intensity”. This estimate—a straight average of the two—is found in the final column labeled “middle range staffing intensity”.

This initial analysis of USAID leads us to two conclusions. First, while more than half of the USAID budget is directed to activities not related to ODA, we do not think that this has a significant negative influence on USAID’s overall staff-to-disbursements ratio. This is because of the vast majority of funds not related to ODA are channelled to other national and international agencies. Second, with more than half of budgeted items of USAID ODA channelled to other national and international agencies, USAID likely has a significantly higher staff-to-disbursements ratio than the 26.9 staff per USD 100 million in disbursements figure that we find in Table 1. We believe that the USAID 2009 staffing intensity is likely closer to the 42.6 figure estimated in the far right column of Table 8. As a result, in Figure 3 we include a staff range for USAID of between 26.9 and 42.6 individuals per USD 100 million in disbursements.

3.6. Estimate of the amount of full-time equivalent staff it would take a typical funding entity to administer an additional USD 30 billion / USD 100 billion a year.

Looking ahead to nations meeting their promises under the Copenhagen Accord of new and additional climate finance, we have estimated what we believe to be a *conservative* range for the additional number of full time staff that will be required for a typical funding entity to manage an additional USD 30 billion / USD 100 billion a year. This exercise takes into account all three of our methods (survey of agencies, time-series analysis and in-depth analysis of select funding entities).

Specifically, we have identified two issues that lead us to believe that official full-time equivalent staff figures provided by agencies under-represent the staff needed to disburse funds. First, we have identified the issue of part-time and full-time contract workers. As we have discussed in our analysis of JICA, we feel that it is likely that

several agencies do not include contract workers that carry out important roles related to disbursement in their official full-time equivalent staff figures. Unfortunately, we were unable to find data for contract workers for DFID and USAID, leading us to believe that our adjusted staffing intensity estimates for the two agencies may be lower than in reality. We feel that the under-reporting of contract staff has likely influenced both our average staffing intensity and our time-series analysis.

Second, we have identified the issue of channelling funds through other national and international funding entities. As discussed in the DFID and USAID analyses (but not considered relevant for JICA), agency staff figures do not account for the fact that channelling funds through other agencies transfers some of the staffing responsibilities related to the disbursement of those funds. Thus, a more precise staffing intensity study would consider the actual amount of staff necessary to administer funds across the various agencies that play a role in its disbursement. An in-depth study of the staffing needs across the full administrative network of agencies would be a valuable contribution. For our purposes, we feel that it is safe to assume that simply looking at the staffing intensity in one agency without considering related staff in other agencies that play a role in disbursements likely under-represents the staffing intensity. We feel that this issue has likely influenced both our average staffing intensity and our time-series analysis.

A third issue that we believe potentially contributes to the overrepresentation of staffing intensities in funding entities is the fact that funding entities also carry out other national and international work unrelated to ODA. As discussed, our analysis of USAID provides a strong example of this. However, we found that this was not an issue for both JICA and DFID, and not influential in the case of USAID. A more thorough analysis would investigate the extent to which each funding entity devotes staff to activities unrelated to ODA.

Overall, our case studies lead us to believe that *Table 1 likely underestimates the total number of staff in each agency leading to artificially low staffing intensities*. As a result, we feel that we can conservatively use the figure of 25.4 found in Table 1 as a lower-bound estimate for staffing intensity.

We believe that JICA in particular provides a useful ideal case for studying a funding entity that solely conducts work directly related to ODA and does not channel funds through other agencies. Because of this, we believe that the range that we have estimated for JICA between 26.8 to 40.6 full-time equivalent staff per USD 100 million in disbursements is a valid rough estimate for how many staff a typical funding entity would have to devote to administering ODA. We also feel that our estimated ranges for DFID (between 24.4 and 44.3 full-time equivalent staff per USD 100 million in disbursements) and USAID (between 26.9 and 42.6 full-time equivalent staff per USD 100 million in disbursements) are valid estimates. However, we believe that these figures are potentially lower than the number of staff utilized by these agencies in reality because of additional contract staff that may not have been accounted for.

Thus, with consideration of the three cases and the average staffing intensity found in Table 1, we feel that 25 staff per USD million in disbursements provides a conservative lower-bound estimate and 40 staff per USD million in disbursements

provides a conservative upper-bound estimate. As we will discuss in the concluding section, if the climate regime is to process USD 30 billion of new and additional funds a year, it will need between approximately 7,500 and 12,000 of new and additional administrators. To administer USD 100 billion, approximately 25,000 to 40,000 new and additional administrators will be needed.

4. Conclusions

With consideration of the three issues discussed above and the three methods that we employed, we believe that our initial staffing intensity of 25.4 (Table 1) is a *conservative lower-bound estimate* in response to our research question (see Figures 3 and 4), and that 400 staff per USD 1 billion in disbursements (as determined using the upper-bound figures of the corrected ranges for the agencies JICA, DFID and USAID) is a *conservative upper-bound estimate*. Thus, realistically, the range could be anywhere between 250 and 400 full-time equivalent staff per USD 1 billion in disbursements.

If the climate regime is to process USD 30 billion of new and additional funds annually, it will need between 7,500 and 12,000 of new and additional administrators, for USD 50 billion the figure rises to between 12,500 and 20,000, and for a throughput of USD 100 billion, one would need 25,000 to 40,000 agency staff (see Figure 4).

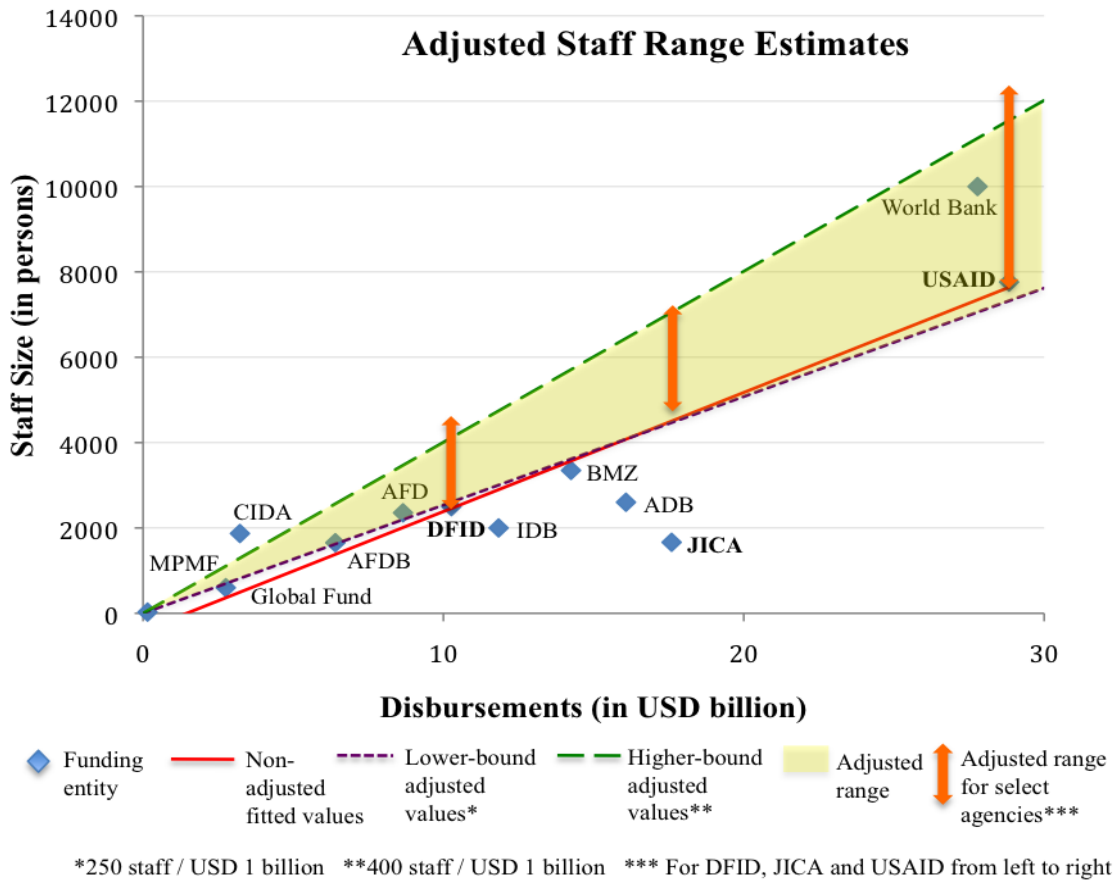


Figure 3. Adjusted Staff Range Estimates

This, we believe, is not necessarily an indication of inefficiency, but of the simple fact that if one wishes to have properly managed funding (with evaluations, auditing, monitoring, etc.), then one will have to hire people to carry out this management. And the figures required are not dependent of whether we are dealing with fragmented bilateral or consolidated multilateral funding. The job of managing the funds has to be done in either case, and likely requires more or less the same number of people per unit of throughput.

As argued elsewhere¹⁸ by one of the authors of this report, while there may not be a lot that can be done about the number of people needed to administer (climate) funds, the questions of *what institutional arrangements* are utilized and *where* they should be located is of huge importance both for the cost-effectiveness and indeed the general effectiveness and equity of the regime.

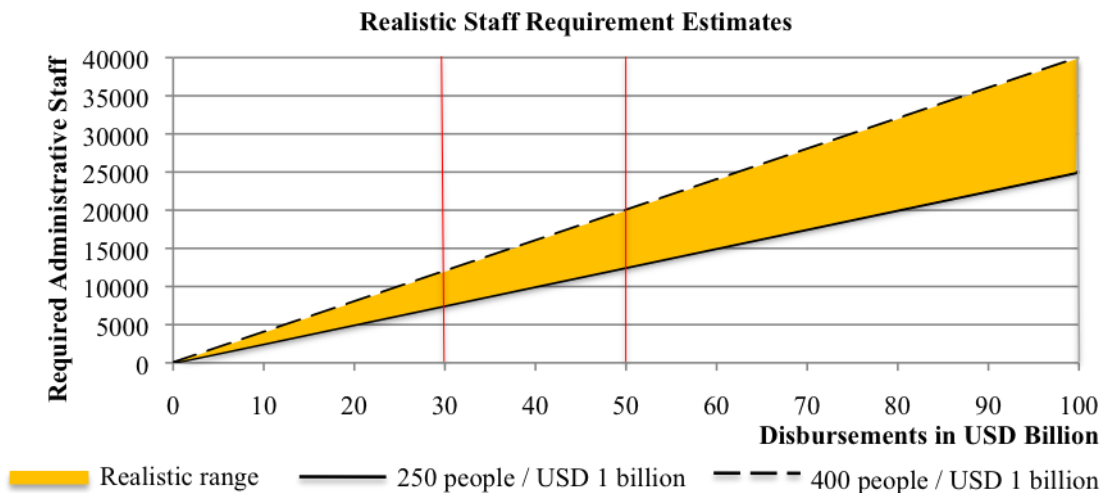


Figure 4. Realistic Staff Requirement Estimates

For one, there is in the current economic climate very little appetite among Annex I (wealthy nations who took emissions reductions commitments under the Kyoto Protocol) country governments to substantially increase their civil service. Tens of thousands of additional ‘bureaucrats’ at an international agency may not be a particularly appealing thought for many of them either.

Given the general salary-levels at donor and multilateral agencies, the most cost-effective solution must be to use local staff in recipient countries for the job. Indeed, from a general effectiveness and equity point of view, it was argued in the same piece that for country “ownership” of climate mitigation and adaptation projects and programmes, funding decisions should be delegated to national funding entities in the recipient countries, which would be the natural locus for these administrative duties to be carried out. For trust building on both sides, new systems for tracking these funds will be needed.

¹⁸ “The Case for Devolution of Funding Decisions” in *The Reformed Financial Mechanism of the UNFCCC – Part II: The Question of Oversight* (Post Copenhagen Synthesis Report) by Benito Müller, published as an OIES Background Paper (April 2010)

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