

BEYOND CASH: MORE THAN MONEY

An Analysis of the Contributions Made by the
Private Sector to the Success of the Global Fund

January 2014



**TROPED PHARMA
CONSULTING**

***Beyond Cash
More than Money***

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Abbreviations

ACT	Artemisinin-based Combination Therapy
AMFm	Affordable Medicines Facility – malaria
ARV	Antiretroviral (drug)
CCM	Country Co-ordinating Mechanism
CHAI	Clinton Health Access Initiative
FPM	Fund Portfolio Manager
GDF	Global Drug Facility
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
HSS	Health Systems Strengthening
LFA	Local Fund Agent
MDG	Millennium Development Goal
MSF	Médecins sans Frontières
PQR	Price and Quality Reporting
PR	Principal Recipient
R&D	Research and Development
SR	Sub-Recipient
TB	Tuberculosis
WHO	World Health Organization

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Summary

The Global Fund to Fight AIDS, Tuberculosis and Malaria was established in 2002. It is now the largest funder of health programs to combat the three target diseases of HIV/AIDS, tuberculosis, and malaria. The Private Sector is one of the members of the Donor Bloc on the Global Fund Board. The Donor Bloc is responsible for mobilizing and contributing the funds necessary for the Global Fund to do its work. These monetary resources are collected through a triennial replenishment mechanism. The Fourth Replenishment, to cover the period 2014–2016, is currently underway. An ambitious goal of collecting US\$15 billion has been set.

To provide input into the discussion regarding the replenishment, the Private Sector constituency has asked TropMed Pharma Consulting, in association with Abt Associates and GBCHealth (the Project Team), to investigate the entirety of the private sector's contributions to the success of the Global Fund and its programs, beyond the monetary donations to the Fund's resources, for the period 2010–2012.

The Project Team identified a range of ways in which the private sector contributes to the success of the Global Fund. These are:

- Financial Contributions
- Preferential Discounts and *Pro Bono* Services (Secretariat and In-Country Support)
- Direct Support to Grants
- Indirect Support /Health Systems Strengthening (HSS)
- Research and Development
- Commodity Supplies¹

Each type of contribution was examined and, as far as possible, a monetary value was associated with it. The methodology involved surveying private sector organizations, interviews with Global Fund Secretariat staff, and examination and analysis of publicly available information and data. Individual company data are not revealed so as to allow as many organizations as possible to participate – companies were assured that their individual information would be kept confidential and only appear aggregated with others.

¹ In this report, to be consistent with the terminology utilized by the Global Fund in the PQR system, the Project Team have adopted the term “commodities” to refer to the health products procured by the Global Fund. However use of this terminology in no way implies that the products and services procured by the Global Fund do not include both genericized and proprietary, innovator products.

Table S-1 details the contributions made by the private sector to support the success of the Global Fund and its grant-funded projects as valued in this project.

Table S–1: Private Sector Contributions to Support the Global Fund

(US\$ millions)	2010 Contributions	2011 Contributions	2012 Contributions	Total Contributions (2010–2012)
Direct Grant Support	4.7	6.0	7.4	18.1
Preferential Discounts/ <i>Pro Bono</i> :				
• Secretariat Support	1.6	0.9	0.0	2.5
• In-country Support	0.5	0.7	0.6	1.8
Indirect Support/HSS	62.8	59.6	57.5	179.9
Research and Development	327.9	308.3	294.3	930.5
Total	397.5	375.5	359.8	1,132.8
Financial Contributions	48.0	57.0	47.0	152.0

The largest contribution the private sector makes to the scope of the Global Fund’s work is the research and development targeted at the Fund’s three target diseases, specifically for the developing world. This contributes to maintaining and extending the supply of quality commodities and interventions needed to tackle the three target diseases.

Direct investment in Global Fund-supported projects is relatively small. This is partly due to the difficulties built into Global Fund systems for private sector involvement and the lack of awareness of the Global Fund among many private sector organizations, especially at the implementing-country level. Private sector organizations find that it is easier for them to invest in a range of health systems strengthening activities in-country that indirectly support the work of the Fund. The indirect support / health systems strengthening contributions were obtained through the survey of private sector organisations. The response rate and the inability of some organisations to put a monetary value to their support mean that this number probably significantly understates what the private sector actually contributes.

Commodity supplies are a major contribution made by the private sector to the success of the Global Fund. Over the past three years, the Global Fund has spent over \$2.5 Billion on health commodities for the prevention and treatment of HIV, TB, and malaria, as measured by the Fund’s PQR system. Access to a reliable supply of affordable, quality health commodities is a crucial input into the success of Global Fund projects. Based on inputs gathered from companies as part of preparing this report, innovator and generic producers have scaled up manufacturing capacity to meet the needs of programs supported by the Global Fund and other donors. Many have instituted initiatives to decrease prices specifically for donor and government programs in countries with disproportionate disease burden.² Discounts on health commodities provided by manufacturers to increase affordability are one way that the private sector has contributed to the success of the Fund.

However, since the Global Fund and its grant recipients buy from the manufacturers in the marketplace, usually by competitive tendering, it is difficult to separate out normal commercial discounting to win a tender from an amount of forgone profit because the order or tender is for the Fund. The Project Team sought to provide an estimate of the value of this “commodity contribution” through a detailed analysis of pricing data in the PQR to develop a range of estimates of the value of discounts provided by manufacturers. However, calculating a value for these discounts presents significant methodological and

² The Médecins Sans Frontières’ report *Untangling the Web of Antiretroviral Price Reductions* provides an overview of company access programs for HIV.

philosophical challenges. Given these considerations, the Project Team has chosen to take the most conservative approach and has excluded any estimate of the value of discounts from its overall calculation of the Private Sector Contribution (see Table S-1). Rather, it has included the estimates of the value of discounts provided by manufacturers in Annex 1.

This study has many limitations given the time and resources available to it. It certainly under-estimates the value of all the contributions made by the private sector. However, it shows how these contributions go beyond simply donating cash to the Global Fund, and that the private sector is active in a range of ways supporting Fund work, both directly and indirectly.

There is clearly much room for improvement in the engagement of the private sector by the Global Fund, and in many countries, for-profit organizations wish to become more involved with the Fund's work. The Global Fund is making efforts to engage more directly with the private sector, and the sector is looking forward with interest to see how well these efforts succeed.

Introduction

At the beginning of the 21st century, many parts of the developing world were afflicted by three diseases that threatened to decimate their populations and consign the survivors to many decades of poverty and suffering. These three diseases were HIV/AIDS, tuberculosis (TB), and malaria (“the target diseases”). As part of the increased and aligned focus of the world on the problems of poverty and disease in low- and middle-income countries, best exemplified by the Millennium Development Goals (MDGs), there has been a substantial increase in resources dedicated to the improvement of health in these countries. Much of this increase has come through development assistance from upper-income countries, although the existence of the MDGs has also acted as a stimulus for national governments in many countries to increase the domestic resourcing of their health systems.

In response to this perceived global emergency, the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund) was established in 2002. It has grown to be the largest and most important funder of health-related projects in low- and middle-income countries. A significant driver in the progress to tackle the three target diseases, the Global Fund invests in 151 countries around the world and channels 82% of the international financing for TB, 50% for malaria, and 21% for AIDS. It also funds health systems strengthening (HSS) because inadequate health systems are one of the main obstacles to scaling up interventions to secure better health outcomes for HIV, TB, and malaria [1].

The efforts channelled through the Global Fund were responsible at the end of 2012 for providing 1.7 million HIV-positive pregnant women with treatment to prevent transmission to their children, 250 million HIV testing and counselling sessions, the purchase and distribution of 4.2 billion condoms, and more than 19 million in basic care and support services. It has helped to accelerate case detection and successful treatment of TB in recent years, with 9.7 million cases of smear-positive TB cases detected and treated by Global Fund-supported programs between 2002 and the end of 2012. Finally, the Global Fund is a major supporter of efforts to control and eliminate malaria. By mid-2012, the programs it supports had distributed a cumulative total of 270 million insecticide-treated bednets and provided indoor residual spraying in dwellings 44 million times. Global Fund investments have played a critical role in introducing and expanding the coverage of artemisinin-based combination therapies (ACTs) in many countries where resistance to older drugs is high. In addition to financing treatment for 260 million cases (cumulatively) of malaria by mid-2012, the Global Fund piloted a pioneering financing mechanism to improve access to ACTs by making them more affordable: the Affordable Medicines Facility – malaria (AMFm). While these drugs are generally provided free-of-charge in public health clinics, more than 60% of malaria patients in sub-Saharan Africa buy their antimalarial treatment from the private sector. AMFm has been shown to help make these drugs more affordable and accessible through its innovative financing model.

Global Fund investments in HSS have included investments in human resources by funding both pre-service and in-service training, improving the utilization of existing health workers, and helping develop informal cadres of facility- and community-based workers. It has also invested in risk-pooling mechanisms (such as community-based health insurance) to alleviate the high costs that the poor face for health care. The Fund supports service delivery through, for example, funding community systems that mobilize demand for services, providing programs tailored to local needs, and delivering services to hard-to-reach, at-risk, and vulnerable populations.

Partnership lies at the core of the work of the Global Fund. The Fund was established as a unique public-private partnership, bringing together a wide range of implementing government bodies, international development partners (including United Nations agencies and donors), national civil society organizations (including local media, professional associations, and faith-based institutions), the private sector, and communities living with or affected by the target diseases. This diversity of partners is reflected in the composition of the Global Fund Board and its constituencies [2]. The constituencies are divided equally between Implementer and Donor Bloc constituencies.

The Private Sector is one of the 10 members of the Donor Bloc, along with Private Foundations³ and eight seats for Donor Governments.

³ In some Global Fund documentation, both the Private Foundations (which are large charitable foundations that support the work of the Global Fund) and the Private Sector (which primarily represents for-profit organisations with an interest in supporting the work of the Fund) are collectively referred to as “the private sector.” This can be confusing. In this report, “the Private Sector” only refers

To fund its grants to health-related projects that will combat the three target diseases, directly or indirectly, the Global Fund needs to raise money from the Donor Bloc. To do this, a periodic replenishment mechanism was established in 2003, with the First Replenishment providing funds for the period 2005 – 2007. Every three years, the Fund solicits contributions from potential donors at pledging conferences. In between these replenishments, there may be additional *ad hoc* contributions. The Fourth Replenishment (2014–2016) is due in the fourth quarter of 2013 and the Global Fund has set itself a target of raising US\$15 billion for this replenishment [3].

Purpose of the Report

The Private Sector, as part of the Donor Bloc, has an obligation to contribute to the success of the Global Fund. However, the constituency is a diverse and highly fragmented collection of for-profit organizations. These range from large multinational organizations that employ staff in countries affected by the three target diseases, through commodity suppliers (both multinational and regional, innovators and generic suppliers), to small companies operating in endemic countries. Often the only visible contribution of the private sector is through the cash or financial contributions made by large multinationals to the Global Fund, but this misses the large number of small financial contributions made at a country level as well as other non-financial contributions made by for-profit organizations.

As a contribution to the discussion on the Fourth Replenishment, the Private Sector constituency has asked TropMed Pharma Consulting, in collaboration with Abt Associates Inc. and GBCHealth (the Project Team), to investigate the range of the contributions made by the private sector to the work and success of the Global Fund, and to attempt to attach a monetary value to these contributions. This report summarizes the findings. It covers contributions made in the three-year period 2010–2012. It also includes a case study into the investment made by ACT manufacturers over a ten-year period to meet the huge increase in demand for these products. These contributions pre-date the introduction of the New Funding Model of the Global Fund.

to for-profit organisations, their professional or trade associations, and any other organisations that the Global Fund formally classifies as Private Sector. It excludes those organisations that the Fund formally classifies as Private Foundations.

Contributions of the Private Sector

The private sector contributes in many ways to the success of the Global Fund, beyond purely making financial contributions to its central pool of resources. These contributions range from very direct to more indirect contributions (*i.e.* not directly associated with a given Global Fund-supported project but which help to either create the right environment for the success of the project, or make available the interventions on which the project depends).

The Project Team identified different types of contributions that the private sector makes to the work of the Global Fund; they range from direct financial contributions to research and development (R&D) into new interventions and commodity supplies. The contribution types are the following:

- **Financial Contributions:** direct cash contributions made either to the Global Fund or the US Fund for the Global Fund.
- **Preferential Discounts and *Pro Bono* Services:** reductions in the charges made by for-profit organizations when supplying services to the Global Fund or its grant recipients. This in-kind support might include professional fees by accountants, banks, and management consultants, made either to the Global Fund Secretariat or directly to in-country Fund agents.
- **Direct Support to Grants:** usually at a country level, for-profit organizations may contribute directly to support a particular grant. This may be through contributing to the financial resources of the project – “co-investment” – or supplying human or technical resources to the project.
- **Indirect Support/Health Systems Strengthening:** private sector organizations that do not contribute directly to a grant-funded project may make contributions to the improvement of the environment in which a country-level Global Fund project operates. This may include the re-equipping of diagnostic testing laboratories or training of health care workers in disease knowledge or supply chain management. It would also include free or discounted supplies of commodities to the health care system, thereby reducing the amount of money needed by the country in question to meet its needs and so reduce the resources needed from a Global Fund grant, and possibly increasing the efficiency and impact of a country-level Global Fund project.
- **Research and Development:** there is a continuous need for improvements to the interventions that are used by Global Fund grant recipients. These innovations range from relatively straightforward developments of new formulations and presentations to meet the specific needs of the patients in the recipient countries, through to the long-term discovery, development, and deployment of new interventions to replace existing interventions which are no longer of value (*e.g.* because the infecting agent or vector developed resistance to an intervention).
- **Commodity Supplies:** manufacturing and distributing the essential commodities that are needed in the various disease control and elimination programs supported by the Global Fund. These include pharmaceuticals, bednets, vector control chemicals, diagnostic tests and reagents, and condoms.

These various types of contributions and their inter-relations are summarized in Figure 1.

Figure 1: Types of Contributions from the Private Sector Covered in This Analysis



Methodology

Data were gathered using several approaches depending on the type of contribution. These approaches are summarized below. In order to maintain confidentiality, information received from companies has been consolidated in the different types of contributions. There was no company-by-company analysis. Any comments made about an individual private sector organization's contributions came from information that is already in the public domain.

Financial Contributions

Private sector organizations contribute financially directly to the Global Fund in Geneva or through the US Fund for the Global Fund. In some cases, the contribution is channelled directly to a country grant and this amount of money replaces an equivalent amount in already committed funds. Contributions were sourced from the publicly available data on the Global Fund website [4]. The figures reported are actual contributions received, not pledged amounts.

Preferential Discounts and Pro Bono Services

In-kind support through preferential discounts or *pro bono* services in this context is support given to the Global Fund Secretariat in Geneva or directly to in-country Fund agents (Principal Recipients (PRs), Sub-Recipients (SRs), Country Co-ordinating Mechanisms (CCMs)). The data were obtained using two approaches:

- From the survey of GBCHealth contacts explained above
- From the valuations of the in-kind donations reported in the Global Fund Annual Reports (see <http://www.theglobalfund.org/en/library/publications/annualreports/>)

Direct Grant Co-investment

The Global Fund classifies additional contributions made by private sector organizations in-country to grant programs as “co-investments” in the grants. These contributions are in addition to funds committed through the actual grants. They do not replace money approved in the final grant agreement. This co-investment directly related to specific grants can be financial or in-kind / *pro bono* services.

Co-investments are encouraged by the Global Fund as part of its commitment to public-private partnership, but usually have not appeared in grant applications. According to Global Fund Secretariat staff, the private sector has usually joined in a grant project after it has been approved and signed. Therefore, the contribution is not picked up by the normal reporting systems. The approach used by the Project Team to pick up these co-investments is a dual track one:

- **Interviews with Fund Portfolio Managers:** 25 Fund Portfolio Managers (FPMs) were interviewed by the Project Team, facilitated through the Global Fund Secretariat (see Annex 3). The countries covered have received a total of 70% of Global Fund grant disbursements since the Fund was founded in 2002. Countries were also selected to cover a range of geographical, epidemiological, and economic circumstances in an attempt to be representative of the entire Global Fund portfolio. The FPMs used their knowledge of the grants active in the period of the project (2010–2012) to identify support from private sector organizations. Details of these co-investments were then clarified directly with the relevant organizations before inclusion in the project database.
- **Online survey of GBCHealth contacts:** An online survey was conducted of companies in the GBCHealth database (see below). Additional companies and organizations identified in the interviews with FPMs and from other sources during the study were also added to the survey recipients. From the responses to the survey, co-investments were picked up, cross-checked, and any duplication with those found from talking with the FPMs identified and removed.

Indirect In-Country/Health Systems Strengthening Contributions

In many cases, private sector organizations have not had any direct involvement in grant-funded projects, either as Global Fund recipients or through co-investment. However, they have made contributions to HSS

activities in countries that, while not directly connected to Global Fund projects, improve the systems in which the projects operate and so increase the impact or the chances of success of those projects.

To collect information on these contributions, GBCHealth used its list of contacts (augmented by companies suggested by the other consultants, Global Fund FPMs, and members of the Private Sector Advisory Group) to carry out an online survey (mentioned in the previous section). This survey asked for details of the contributions made by companies under the headings of financial contributions, discounts for services, *pro bono* services, direct grant support (co-investment), and HSS/ indirect support. Companies were asked to detail these activities and to state the cost of conducting them. Over 200 companies and private sector organizations were approached and 41 responded (20% response rate).

In order to obtain as much information as possible in the time available, the Project Team agreed with all the organizations that any information that they provided would only be presented in an aggregated form, so that no company's individual data could be deduced from the figures. For example, the information received on R&D from bednet manufacturers was omitted because it would be easy to identify the two companies concerned.

Research and Development

The most respected report on the scale of R&D activities in the field of neglected diseases is the G-Finder Report [5]. This is produced annually by Policy Cures⁴ and gathers data from companies engaged in R&D into a range of "neglected" diseases, including HIV, TB, and malaria.

All product-related R&D is covered by the survey, including:

- Drugs
- Vaccines (preventive and therapeutic)
- Diagnostics
- Microbicides
- Vector control products (pesticides, biological control agents, and vaccines targeting animal reservoirs)
- Platform technologies (adjuvants, diagnostic platforms, and delivery devices). These are technologies that can potentially be applied to a range of neglected diseases and products but which have not yet been attached to a specific product for a specific disease.

Respondents were asked to only report investments specifically targeted at developing-country R&D needs. This is important to prevent neglected disease data being crowded out by funding for activities not directly related to product development (*e.g.* advocacy, behavioural research); or by 'white noise' from overlapping commercial R&D investments (*e.g.* HIV/AIDS drugs and pneumonia vaccines targeting Western markets; and investments in platform technologies with shared applications for industrialized countries). As an example, eligible HIV/ AIDS drug investments are restricted to developing-country-relevant products such as fixed-dose combinations and paediatric formulations. Eligibility for inclusion is also tightly defined for platform technologies to ensure that only funding for platforms for developing world applications are included, as opposed to investment into platforms developed for commercial markets. 48 companies responded to the G-Finder survey for the 2013 Report. Excluded from the survey were cervical barriers, HSV-2 prevention, bednets, traps, and water sanitation tools. Full details of the survey methodology can be found in the latest report [6].

Commodity Supplies

Volumes and prices paid for commodities were sourced from the Global Fund's Price and Quality Reporting (PQR) system (see <http://www.theglobalfund.org/en/procurement/pqr/>), and the AMFm supply database (<http://portfolio.theglobalfund.org/ReportLibrary/AMFm/Summary.aspx>). While there are some timing delays with these data, they were the most comprehensive and consistent sources of information at the time of data collection for this report. Information is supplied by the grant recipients on an on-going basis online directly into the PQR system. The system provides the unit cost, quantity, and total sales cost

⁴ Funded by a grant from the Bill and Melinda Gates Foundation

of each purchase made by the Global Fund on behalf of its in-country grant recipients. Between 2010 and 2012, the Fund made many individual purchases from the same manufacturers for the same commodity. These purchases encompass a wide range of quantities and total costs, but more importantly, a wide variation in suppliers' unit prices, due to differences in market conditions over time and in procurement processes among countries. Therefore, manufacturing companies are not able to provide a set rate at which the products have been supplied to the Global Fund. This has to be reflected in the methodology adopted to assess any profit that a company forgoes when supplying to the Fund.

The Project Team undertook a literature review of the possible methods for valuing the contribution made by private sector organizations when supplying products to the Global Fund. Search terms included various combinations of the following key terms: donation, contribution, drugs, medicines, commodities, charitable, valuation. It was clear that there was virtually nothing in the literature that covered the particular circumstances of supplies to the Fund, and the closest methodology was the "Fair Market Value" approach used by US-based organizations to value donations of all kinds (*i.e.* free-of-charge). However, this does not cover situations where the commodities are still being sold but at possibly a lower profit margin than would be expected in a normal market situation.

Therefore assessing the "contribution" made by a manufacturer when supplying to the Global Fund over what it could make in other sales is a matter of perspective. It is standard practice for companies to charge different prices in different countries and to different customers, driven by the local market and regulatory conditions. Rather than try and take a position on what is the "best" comparison to make, this survey will present the difference in value between prices paid using Global Fund resources and those that might apply in a series of alternative scenarios (see Annex A). It will then be for the users of this report to decide on which is the most appropriate to indicate the contribution made by the commodity suppliers.

Findings

Financial Contributions

The contributions as reported by the Global Fund on its website are shown in Table 1 [7]. The figures reflect the amounts actually contributed to the Fund, not the amounts pledged (which may be higher but never actually realized).

Table 1: Contributions to the Global Fund (2010–2012)*

Contributions (\$ million) Donor	2010	2011	2012	Total	% Total
Countries	3,029	2,792	3,092	8,913	94
Private Foundations	101	152	153	406	4
Private Sector	48	57	47	152	2
Total	3,178	3,001	3,292	9,471	100

*Data Source: Global Fund website

(http://www.theglobalfund.org/Documents/core/financial/Core_PledgesContributions_List_en/)

The major private sector donors that have contributed either to the Global Fund or the US Fund for the Global Fund have been Anglo-American Corporation, Chevron Corporation, Debt2Health, Takeda Pharmaceuticals, and the (PRODUCT) RED partnership⁵.

Direct Project Involvement

The private sector can become involved directly in the work of the Global Fund at a country level in four ways:

- As a member of the CCM
- As the PR or an SR of a grant
- As a Local Fund Agent (LFA) for the Global Fund in a country
- Through “co-investment” in a grant

CCMs are central to the Global Fund's commitment to local ownership and participatory decision-making. These country-level multi-stakeholder partnerships develop and submit grant proposals to the Global Fund based on priority needs at the national level. After a grant is approved, they oversee implementation and progress toward grant objectives.

CCMs include representatives from both the public and private sectors, including governments, multilateral or bilateral agencies, non-governmental organizations, academic institutions, private businesses, and people living with the diseases.

Based upon the Project Team's interviews with the FPMs, the private sector's involvement in and contribution to CCMs varies greatly. In most cases, the private sector member of the CCM is drawn from a professional or trade body (*e.g.* a national employers federation). The person attending may change from meeting to meeting with little continuity of private sector contribution. The reasons for this vary from country to country, depending on the interest of the grant recipients and the other members of the CCM. Many countries have little history of involving the private sector in public health programs. In many cases, there have been concerns over conflicts of interest for for-profit organizations being involved in Global Fund projects.

⁵ (PRODUCT) RED Partners include: American Express, Apple, Bugaboo International, Converse, Dell + Windows, GAP, Giorgio Armani, Hallmark, Motorola, Starbucks Coffee (see <http://www.joinred.com/>)

However, in other cases, the private sector plays a significant and constructive role in the CCMs. In several cases, a representative from the private sector is Chair or Vice-Chair of the CCM, and it was reported that their contributions and advice is seen as very valuable. However, by its nature, this contribution is difficult to value.

Principal and Sub-Recipients

PRs sign a grant agreement with the Global Fund. They directly receive the funding approved by the Global Fund Board and manage its implementation on a day-to-day basis, on behalf of the CCM. PRs are nominated by CCMs and are accountable to them to achieve program objectives. Many PRs implement programs both directly and through SRs.

SRs receive grants from PRs to implement components of Global Fund-financed programs. They report to PRs and their performance is critical to program success.

Traditionally, PRs and SRs have come from the public or non-governmental sector. For-profit organizations associated with Global Fund-financed projects were more often suppliers of commodities or services that are paid for out of the grant. However, a growing number of for-profit organizations now function as PRs and SRs. To encourage private sector organizations to become PRs, the Global Fund recently published a series of case studies on the successful involvement of private sector organizations in these roles [8].

The value of companies' contributions to the Fund through their service as PRs or SRs is captured in part in the discussion of direct contributions below. However, companies often do not account separately for the time of their staff's involvement and so the value is under-stated in the report findings.

Local Fund Agents

Because the Global Fund does not maintain an in-country presence, LFAs act as the Fund's eyes and ears – they are contracted by the Global Fund Secretariat to assess implementation capacities and verify program results reported by PRs and SRs. LFAs are selected through a competitive bidding process and they report directly to the Fund. They are usually global accounting and consulting firms (*e.g.* PricewaterhouseCoopers, Deloitte).

Project Team discussions with the FPMs found no evidence that companies acting as LFAs go beyond the normal commercial processes in setting their rates for supplying services; that is, they do not use preferential pricing when setting rates for their work with the Fund. The competitive bidding process would be the most appropriate way for the Global Fund to obtain good value-for-money. There may be some discounting of rates beyond those for other clients but there is no transparency on whether this happens.

Direct Grant Support

In addition to the grant received from the Global Fund, CCMs are expected to mobilize additional funding to achieve the objective of the grant. This funding may come from domestic government resources, but the Global Fund hoped in the past that private sector organizations would contribute money and other resources to specific grants. Grant applications up to and including Round 10 included a section where such private sector co-investment could be recorded.

Based upon the information received from the online survey of companies, the level of direct grant support (co-investment) in Global Fund projects has been:

**Table 2: Direct Grant Support from Private Sector
(2010–2012)***

(US\$ millions)	2010	2011	2012	Total
	4.7	6.0	7.4	18.0

*Data source: Online company survey

These numbers do not include several major direct support projects where the private sector organization concerned does not have an agreed methodology that allows it to assign a monetary value to the contribution.

The level of direct support from the private sector in grant-funded projects appears to be quite small globally (although there are several examples of significant involvement). In discussions with the FPMs and other Global Fund Secretariat staff, it was noted that the Fund's systems and processes do not necessarily facilitate engagement with the private sector and this is a major disincentive for companies to become directly involved. It is often easier for the private sector to make indirect contributions (especially drug donations or HSS contributions) in countries receiving grants than engaging directly with the Global Fund. This is probably unintentional on the part of the Fund and hopefully will be addressed as part of the Fund expands its engagement with the private sector.

Another challenge to increasing private sector involvement in Global Fund-supported projects at the country level has been the Fund's low profile. The Fund has had a long-standing policy of not promoting its involvement in financing projects (for example by not requiring branding of its projects with its logo). Therefore, many private sector organizations that would like to be involved in global public health initiatives are not aware of the work of the Fund. The FPMs interviewed expressed the view that better promotion of the Global Fund would encourage more private sector organizations to get involved with projects. In association with the Fourth Replenishment campaign, one of its four key strategic pillars of the Global Fund Secretariat's strategy is an increase focus on the private sector (in particular at a country level).

Preferential Discounts and Pro Bono Services

Support to Secretariat

Over the survey period, there has been limited in-kind or *pro bono* support from the private sector to the Secretariat. This has been in the form of translation and communications services:

Table 3: In-kind and Pro Bono Support to the Global Fund Secretariat (2010-2012)*

(US\$ millions)	2010	2011	2012	Total
	1.6	0.9	nil	2.5

*Data Source: Global Fund Annual Reports

The Global Fund Secretariat has confirmed to the Project Team that all the support reported in the Annual Accounts has been to the Secretariat in Geneva and not to projects in-country.

Supply of accounting, legal, consultancy, and related services to the Global Fund are on the basis of competitive tendering by the firms concerned. The Project Team was not able to find any evidence in interviews with Global Fund staff or from the companies supplying the services that the Fund is given a preferential rate for these services beyond what might be expected by normal tendering and negotiating processes.

In-country Support

This support has been predominantly in the form of *pro bono* services or discounts made in certain countries to the Global Fund or its agents:

Table 4: In-country Direct Support to Global Fund Activities Outside of Grant Support (2010-2012)*

(US\$ millions)	2010	2011	2012	Total
	0.5	0.7	0.6	1.8

*Data Source: Online company survey

Again the fact that this amount is small may well be due to the low visibility of the Fund to private sector organizations and/or the difficulties from the Fund systems of becoming involved.

Indirect Support/Health Systems Strengthening Contributions

General Health Systems Strengthening

HSS refers to activities and initiatives that improve the underlying health systems of a country and/or manage interactions between the systems, so that health service delivery is more equitable and sustainable and better health outcomes are achieved. In this way, HSS is not limited to activities that relate only to the three target diseases; however, in the current context, they should have some application or relevance to HIV/AIDS, TB, and/or malaria.

Contributions that private sector organizations make to HSS cover a wide range of activities in many developing countries. These include funding treatment and health centres, donating drugs and diagnostic tests, funding and/or running training programs for health facility staff and other health providers, funding and/or running public awareness and behavioural change programs related to the three target diseases, supplying and supporting the installation and use of infrastructure (including data management and communications systems), and providing assistance and training to staff to develop more robust supply chain forecasting and management systems. While such private sector contributions may provide commercial benefit to an individual company by increasing health provider awareness of and preference for that company's products, the contributions also increase provider knowledge across all products and situations.

Health Systems Strengthening for the Target Diseases

Private sector organizations may also contribute to projects that strengthen the health systems directly related to the three target diseases, for example, training health care staff in HIV testing methods or a new TB diagnostic procedure.

Other Indirect Support

The "Other" Indirect Support section in the survey was intended to collect information about non-HSS services that private sector organizations provide at preferential rates or *pro bono* to support health care systems in Global Fund-supported countries. They include discounts for travel and accommodation, legal, and accounting services.

Total Indirect Support

Because it is often difficult to clearly distinguish between HSS and Other Indirect Support, the values collected from companies are reported together in Table 5.

Table 5: Indirect Private Sector In-country Support (2010–2012)*

(US\$ millions)	2010	2011	2012	Total
	62.8	59.6	57.5	179.9

*Data Source: Online company survey

These figures show that companies report a total indirect support (mostly HSS-related) with a monetary value that is similar in magnitude to the cash contributions they make to the Global Fund. However, these amounts are certainly underestimated as there are many contributions that the survey did not pick up, either because of non-response or because responders did not make the connection between their investments and the work of the Global Fund⁶.

Research and Development

The G-Finder Survey has found that R&D into HIV/AIDS, TB, and malaria has been as follows [6]:

⁶ Again, this may be due to the low visibility of the work of the Global Fund mentioned elsewhere in the report.

Table 6: R&D into Three Target Diseases for the Developing World (2009–2011)

(US\$ millions)	2010	2011	2012	Total
HIV/AIDS	31.2	25.4	22.2	78.8
Malaria	119.4	103.1	115.9	338.4
Tuberculosis	117.3	179.8	156.2	453.3
Total	327.9	308.3	294.3	930.5

These totals do not include the R&D amounts spent by the manufacturers of bednets or the other excluded interventions (as mentioned in the Methodology section).

The HIV/AIDS result may seem to be low compared to the other diseases, but the G-Finder survey asks companies only to report investments specifically targeted at developing-country R&D needs. The Global Fund would also benefit from the R&D into novel agents that will be used in both developed and developing countries (*e.g.* a new generation of ARVs) but which is not collected in G-Finder.

Commodity Supplies

One of the largest contributions that the private sector has made to the success of the Global Fund is the reliable supply of quality commodities to meet the needs of the grant-funded projects. In 2010, programs supported by the Global Fund provided nearly half of all ARV therapy delivered around the world and two-thirds of all TB treatment – as well as a third of all insecticide-treated nets distributed in Africa between 2008 and 2010 [9]. Manufacturers must have in place and maintain facilities capable of producing large quantities of commodities that meet the Global Fund’s quality standards and can respond in a timely fashion to the orders they receive. All of this has a cost, which is normally recovered by the manufacturer through its pricing policy.

Based upon the data in the PQR system, the total value (price multiplied by the quantity purchased) of commodities supplied to Global Fund-supported projects in 2010–2012 was as follows:

Table 7: Total Value of Commodities Sold to Global Fund-funded Projects (2010–2012)*

(US\$ millions)	2010	2011	2012	Total
ARVs	374.9	319.7	263.7	958.3
Antimalarials	0.8	0.7	1.4	2.9
ACTs	64.0	39.8	43.7	147.5
AMFm ACTs**	25.2	152.1	122.8	300.1
Bednets	453.8	188.0	91.4	733.2
Insecticides	0	0	0.7	0.7
TB Drugs	40.9	39.4	31.8	112.1
Antibiotics	11.1	17.8	9.6	38.5
Test Kits	60.7	69.6	31.2	161.5
Family Planning	18.1	15.9	14.7	48.7
Others	16.9	11.9	6.5	35.3
Total	1,066.4	854.9	617.5	2,538.8

*Data Source: Global Fund Price and Quality Reporting (PQR) database (<http://www.theglobalfund.org/en/procurement/pqr/>)

**Data Source: Total USD Committed by Global Fund, Global Fund AMFm database (<http://www.theglobalfund.org/en/amfm/>)

Two factors should be noted about the trend in the value of the commodities supplied. The 2010 figures are inflated due to the purchases of bednets to meet the target of universal coverage set for that year. In addition, the 2012 totals are all depressed due to the cancellation of the Global Fund Round 11 in November 2011.

Because the quantities required by the Global Fund are very large in comparison with all other customers, manufacturers contend that the prices they charge the Global Fund prevent them from fully recovering their costs in the same way that they would if they operated in markets with more than one buyer. This forgone profit can be equated to a non-monetary contribution to the success of the Global Fund. A number of innovator companies have also instituted access pricing programs to provide significant discounts in pricing (compared to their market-based prices) for their products in countries served by the Global Fund. As explained in the Methodology section, the Project Team looked at methods to estimate these contributions by comparing prices actually charged to several comparison prices in various alternative scenarios. They concluded that it would not be possible to present a generally agreed value for this foregone profit and so have adopted the conservative approach of excluding it entirely from the conclusions. However the details of the findings can be found in Annex A.

Case Study: Scaling Up of ACT Manufacture

In 2001, a World Health Organization (WHO) Technical Consultation recommended that first-line antimalarial treatment should be based on combination therapy, preferably artemisinin-based combinations (ACTs) [10]. However, this recommendation was not immediately adopted by all malaria-endemic countries, mainly on grounds of cost and pre-existing grant agreements with the Global Fund. In 2004, this recommendation was strengthened and the Global Fund permitted countries with malaria grants under Rounds 1–3 to reprogram funds so that ACTs could be used in place of ineffective monotherapies (like chloroquine and sulphadoxine/pyrimethamine) [11]. As a result, demand for ACTs started to take off, growing from 11 million treatments in 2005 to 278 million in 2011, an annual growth rate of >70% [12]. This growth in demand placed considerable strain on the supply chain, especially as the artemisinin derivatives that are central to the combination are plant-derived. The lead-time from planting of the *Artemisia annua* plant (from where artemisinin is extracted) to the release of finished product from the manufacturer's factory is around 18 months. This made the natural response of the supply chain very sluggish to the increased demand. In addition, the involvement of an agricultural component, where artemisinin must compete with other cash crops in countries where it can be grown (still principally China and Vietnam), greatly complicated the supply chain and made the price of artemisinin highly volatile. There was a need to increase greatly capacity in the growing of the *A. annua* plant, the extraction of artemisinin, and then the secondary production of the ACTs.

The ACTs currently being widely used by malaria control programs were all discovered and developed prior to 2004, although some novel formulations were developed and process improvement was carried out after that date. These innovators have not sought to recoup their investment in R&D but have absorbed it as a gesture of corporate social responsibility. Part of the investment in new formulations and combinations has also been supported since about 2004 by organizations like the Medicines for Malaria Venture (MMV) and Drugs for Neglected Diseases Initiative (DNDi), but with the innovators still absorbing a significant proportion of the costs (see section on R&D contributions). They have simply committed to supply ACTs to the public sector on a “no profit, no loss” basis whereby only the costs of manufacture are recovered in the price charged.

The ACT manufacturers responded to the dramatic increase in demand by rapidly building up their capacity to manufacture ACTs, including investing in the cultivation of the *A. annua* plant and extraction of artemisinin. In responding to the survey and in the conversations with the Project Team, they expressed the view that simply looking at their commodity supplies in 2010–2012 does not recognize the considerable investment they have made in scaling up production to meet the world's ACT needs. The bulk of this investment took place between 2004 and 2010. Given the pricing constraints that existed because of the “no profit, no loss” commitment, several companies have said that the investment they made will not be recouped through sales of ACTs. The volumes of ACTs needed make them by far the largest products by volume for some of the manufacturers, and this manufacturing capacity cannot be used for other products.

The Project Team asked the eight WHO Prequalified ACT manufacturers (who are eligible to supply to Global Fund grant recipients) to provide their total investment in scaling up production to meet demand between 2003 and 2012.

Four companies responded and their total reported investment was **US\$ 150 million**. This investment involved the expansion of manufacturing facilities to meet demand as well as investment in active pharmaceutical ingredient manufacture, supply chain development, and appropriate packaging, formulation, and presentation development.

Limitations of the Study

Inevitably, a study of this type will have limitations due to the complexity of the situation being addressed as well as the difficulties in obtaining a comprehensive data set on which to base any conclusions.

The questionnaire was sent out to over 200 companies and private sector organizations. However, these will not have incorporated all the organizations that are involved with the Global Fund or that contribute indirectly through HSS and other indirect support. The response rate was high for a survey of this type (20%), but several large contributors to the work of the Global Fund did not feel able to respond. This was mainly because they do not have robust systems for valuing their contributions and so could not give the requested financial information. There were also likely to be many private sector organizations (especially at an implementing-country level) supporting the work of the Global Fund (directly and indirectly) that could not be included in the survey or did not respond. Therefore, the size of the direct and indirect contributions is likely to be significantly understated.

The Project Team relied on the value that private sector organizations have put on their contributions to the work of the Global Fund, and made no attempt to validate this information. This was necessary given the wide range and number of organizations that supplied information. It would not have been practical for the Project Team to undertake this validation with the time and resources available to them. At present the Global Fund does not have reporting systems and does not require the PRs to report on the contributions from the private sector.

The quantity and value of the commodities purchased with grants from the Global Fund was taken from the Fund's PQR system. This is a self-reporting system by the PRs and so the data are subject to delays in submission. It also does not cover all commodities purchased: the major omission being diagnostic testing machines and reagents (data on rapid diagnostic tests (RDTs) are collected), which leaves a major gap in the data available on commodity procurements.

The value of the R&D contributions relied on the G-Finder Surveys. These have a major limitation in that they do not include R&D into bednets, a major component of malaria control efforts. The bednet manufacturers only supply to the public sector in malaria endemic countries and their R&D is targeted almost exclusively at meeting the needs of the global malaria control programs. The Project Team was not able to obtain information on R&D spent directly from enough companies to enable it to be assured of maintaining confidentiality of the information and so this information was omitted. The Project Team estimates that this omission leaves out several tens-of-millions of dollars of investment.

Summary and Conclusions

The private sector contributes to the success of the Global Fund in many ways beyond simply making financial contributions to its cash reserves. These contributions can be categorized as follows:

- Financial Contributions
- Preferential Discounts and *Pro Bono* Services
- Direct Support to Grants
- Indirect Support/Health Systems Strengthening
- Research and Development
- Commodity Supplies

This report has attempted to value the contributions in order to show how important they are relative to each other (Table 8), and compared with the easy-to-measure direct financial contributions to the Global Fund's central resources. The limitations of this approach were outlined in the previous section.

Table 8: Private Sector Contributions to the Global Fund (Conservative Estimate)

(US\$ millions)	2010 Contributions	2011 Contributions	2012 Contributions	Total Contributions (2010–2012)
Direct Grant Support	4.7	6.0	7.4	18.1
Preferential Discounts/ <i>Pro Bono</i> :				
• Secretariat Support	1.6	0.9	0.0	2.5
• In-country Support	0.5	0.7	0.6	1.8
Indirect Support/HSS	62.8	59.6	57.5	179.9
Research and Development	327.9	308.3	294.3	930.5
Total	397.5	375.5	359.8	1,132.8
Financial Contributions	48.0	57.0	47.0	152.0

Clearly, the most significant contribution of the private sector is the R&D it does to ensure a continuous stream of the effective, safe, and high-quality interventions needed to tackle the three target diseases.

As noted in the meetings with FPMs, it has often been difficult for the private sector to engage directly with the work of the Global Fund and its grant recipients. Therefore, Direct Grant Support is relatively small. It has been easier for the private sector to provide indirect support through its contributions to HSS projects and activities and to local health care systems. This support is at least as valuable as the direct financial contributions, and the numbers shown are almost certainly a significant understatement.

The supply of commodities is yet another major private sector contribution. However, since the Global Fund and its grant recipients buy from the manufacturers in the marketplace, usually through competitive tendering, it is difficult to separate out normal commercial discounting to win a tender from forgone profit because the order or tender is for the Fund. The Project Team has made several estimates of the scale of the contribution represented by additional pricing discounts provided to the Fund, but it recognizes that the choice of approach is subjective and users of this report may disagree with any of the approaches used. Therefore, the most conservative approach has been adopted in Table 8 by excluding commodities completely.

There is clearly much room for improvement in the engagement of the private sector by the Global Fund, and in many countries for-profit organizations do wish to become more involved with its work. To that end, the Global Fund is making efforts to engage more directly with the private sector, and the Private Sector is looking forward with interest to see how well these efforts succeed.

Annex A: Detailed Contribution Analysis of Purchased Commodities (tracked by the PQR System)

Methodology

In order to try to estimate the contributions made by manufacturers across commodities, the team obtained Global Fund procurement price and volume data, selected appropriate comparison prices, and then estimated the difference between the cost of supplies made at procurement prices and the comparator prices.

The method adopted was as follows:

1. The PQR database was accessed and downloaded on August 2, 2013, to obtain this information for use in the analysis. For ACTs procured through the AMFm and not included in the PQR database, the AMFm database was downloaded on August 1, 2013. The AMFm ACTs are captured and analysed separately from the PQR commodities.
2. Using the information obtained through the PQR and AMFm databases, a weighted average price has been calculated for each drug, presentation, and pack size supplied by a particular manufacturer, *i.e.* larger volume purchases carry more weight than smaller ones.
3. For comparative prices for each drug presentation, several third-party databases (not manufacturer-recommended retail prices), as far as possible, have been considered. These were as follows:
 - a. *US Market Prices*: the prices have been sourced from Prime Therapeutics LLC (<http://www.primetherapeutics.com>), a leading US Pharmacy Benefits Manager.
 - b. *Indian Market Prices*: these prices have been sourced from Medindia4u.com Pvt. Ltd., a leading Indian medical news and information website (<http://www.medindia.net>).
 - c. *External International Donor Market Prices*: several organizations publish international price lists to guide organizations when buying drugs in different categories. We have identified the following for the purposes of this project:
 - Clinton Health Action Initiative (CHAI) – antiretroviral drugs (ARVs)
 - Médecins sans Frontières (MSF) – ARVs
 - Global Fund AMFm Price List – the Global Fund has published a Maximum Price, or a price cap, for ACTs sold through the AMFm
 - Global Drug Facility (GDF) – anti-TB drugs

All of the above comparison prices were used in the initial analysis. Estimated commodity contributions compared to these prices are shown below.

- d. *Internal Global Fund “Market Comparison”*: this price assumes the Global Fund purchases are a standalone market
 - Maximum Supplier Price: the comparison price is the highest (most expensive) supplier’s weighted average price paid by the Global Fund for each commodity and presentation
 - Median Supplier Price: the comparison price is the median supplier’s weighted average price paid by the Global Fund for each commodity and presentation
4. The weighted average price for a particular company was then subtracted from each of these comparator prices (a-d above) and the difference multiplied by the volume of units in question. This gave various total levels of contribution to the Global Fund depending on the perspective adopted.

The rationale for including both the maximum and median supplier price for the internal Global Fund “Market Comparison” is that, from a supplier’s point of view, it may be reasonable to determine that the maximum price is what the Global Fund is willing and able to pay. Therefore, any supplier price below that maximum price is forgone profit. However, from the Global Fund’s point of view, it is also important to consider that frequently, the maximum price is paid in non-routine circumstances such as emergency

procurements and therefore these may be considered to be outlier prices, hence the median price paid is a more appropriate comparison price. Both viewpoints are presented in the results of this report.

An example to illustrate this process is presented below.

1. A particular presentation of a product (*e.g.* an ARV) has been supplied to the Global Fund by a series of manufacturers at a variety of prices – hence the need to calculate the weighted average unit prices of each presentation:

Table 9: Example of Unit Price Range and Weighted Average: Differences Between Suppliers

	Minimum Unit Price (\$)	Maximum Unit Price (\$)	Weighted Average Unit Price (\$)
Supplier "A"	25.51	208.75	49.88
Supplier "B"	23.80	50.45	32.41
Supplier "C"	34.50	54.50	41.06

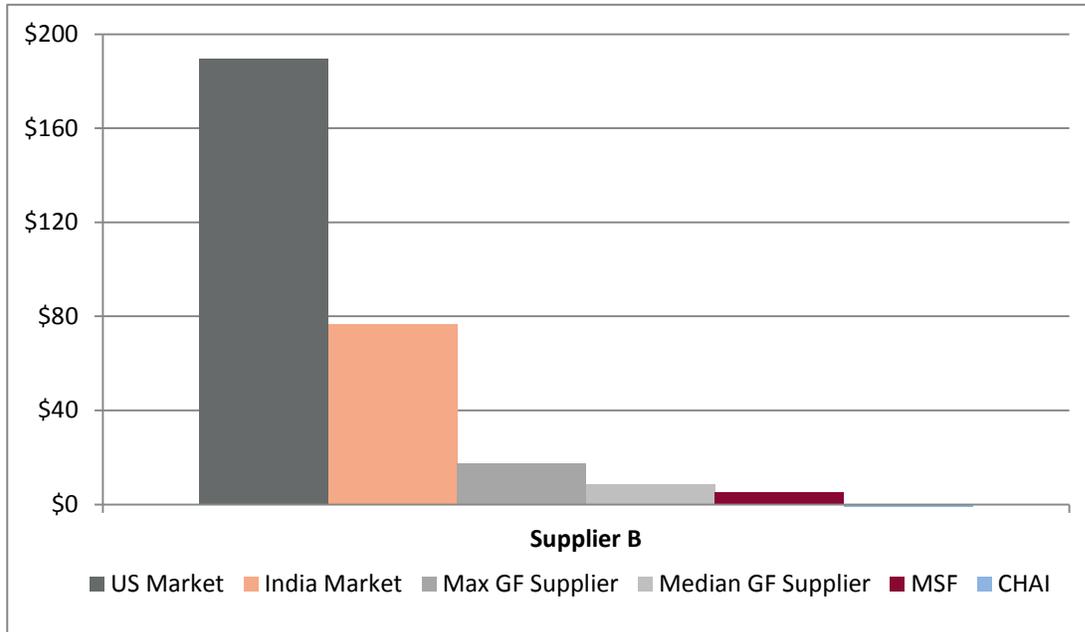
2. Now consider Supplier "B" and compare the weighted average price with the various comparator prices:

Table 10: Example of Estimated Contribution Value for Supplier "B"

Price Comparison Scenarios	Weighted Average Unit Price (\$)	Comparator Unit Price (\$)	Contribution Estimate per Unit (\$)
Supplier "B"	32.41		
US Market		221.96	189.55
Indian Market		109.00	76.59
Max Global Fund Supplier ("A")		49.88	17.47
Median Global Fund Supplier ("C")		41.06	8.65
MSF		37.68	5.27
CHAI		31.50	(0.91)

3. The contribution per unit was then multiplied by the total number of units supplied to the Global Fund to give the total value of the contribution. This is illustrated in Figure 2:

Figure 2: The Variation in Estimates of Contribution across a Range of Comparator Prices



Finally, all the estimated contributions across units and manufacturers were summed together to give the overall contribution for each of the commodity types.

Results

Using the methodology described above, the possible value of contributions made from commodity supplies were estimated as shown in Table 11 below. Not all products are available in the US market (*e.g.* TB drug kits) as there is no demand for them. In addition, the quantities of all of the commodities (with the exception of some ARVs and anti-TB drugs) required in the United States are small in comparison with the demand in the developing world. Therefore, it is to be expected that prices for small volumes of these commodities in the United States would be significantly higher than those that can be charged for supplies to the Global Fund and its grant recipients. Furthermore, given that Global Fund suppliers operate in a wide range of country markets, the Project Team concluded that it would be inappropriate to use US prices as a benchmark for contributions from commodities in this analysis. Similarly, the availability of data on CHAI and MSF prices was limited mostly to ARVs. For these reasons the summary Tables 11 & 12 excluded them.

Using the comparisons of prices in three scenarios (India market price, the maximum Global Fund supplier price, and the median Global Fund supplier price) to estimate commodity suppliers' contribution, and presenting this only for the total amounts supplied (for simplicity), the contribution to the work of the Global Fund has been itemized in Table 11.:-

**Table 11: Estimated Value of Contribution from Commodities Purchased by Year
(Scenarios: India market price, maximum, and median Global Fund supplier sales prices)**

(US\$ millions)	2010 Contributions			2011 Contributions			2012 Contributions			Total (2010–2012) Contributions		
	India market price*	Max GF supplier price**	Median GF supplier price***	India market price	Max GF supplier price	Median GF supplier price	India market price	Max GF supplier price	Median GF supplier price	India market price	Max GF supplier price	Median GF supplier price
ARVs	984.9	626.0	28.8	1,062.8	272.1	18.2	788.3	275.4	11.4	2,836.0	1,173.5	58.4
Antimalarials	0.8	17.1	0.2	0.7	0.3	0.1	0.8	19.1	0.5	2.3	36.5	0.8
ACTs	63.7	43.4	2.3	70.9	48.8	22.0	43.7	13.1	4.5	178.3	105.3	28.8
Bednets	N/A	174.3	9.2	N/A	91.8	5.2	N/A	27.8	6.6	N/A	293.9	21.0
Insecticides	No sales	No sales	No sales	No sales	No sales	No sales	N/A	0.0	0.0	N/A	0.0	0.0
TB Drugs	49.5	32.4	5.2	31.4	1.9	1.0	32.9	2.3	0.9	113.8	36.6	7.1
Antibiotics	2.7	6.3	3.6	2.8	4.8	1.5	1.3	6.4	0.3	6.8	17.5	5.4
Test Kits	511.4	2,647.6	32.8	569.1	975.9	23.1	174.7	467.6	11.7	1,255.1	4,091.1 †	67.6
Family Planning	289.3	86.3	3.2	180.1	53.3	1.9	172.6	23.3	1.9	642.0	162.9	7.0
Others	N/A	25.7	4.0	N/A	0.2	0.0	N/A	0.2	0.0	N/A	26.1	4.0
Total	1,902.3	3,659.1	89.3	1,917.8	4,449.1	73.0	1,214.3	835.2	37.8	5,034.3	5,943.4	200.1

(US\$ millions)	2010 Contributions			2011 Contributions			2012 Contributions			Total (2010–2012) Contributions		
	India market price*	Max GF supplier price**	Median GF supplier price***	India market price	Max GF supplier price	Median GF supplier price	India market price	Max GF supplier price	Median GF supplier price	India market price	Max GF supplier price	Median GF supplier price

Note: GF=Global Fund

* Comparison price data sourced from www.medindia.net

** Comparison price is the highest supplier's weighted average unit cost price paid by the Global Fund for each drug type and presentation

*** Comparison price is the median supplier's average weighted unit cost price paid by the Global Fund for each drug type and presentation

† The high estimates of contributions from test kit supplies is the result of the large number of test kits procured and the wide range of unit costs at which these were procured. The price range for test kits was between \$0.25 per unit and \$63.33 per unit.

While the methodology for valuing contributions of price discounts for ACTs purchased through AMFm was the same, one of the comparison scenarios used was slightly different. As shown in Table 12, the first scenario was using the comparison price of the maximum price as set by the Global Fund. The second scenario is the same approach as used for valuing contributions of commodities in the PQR database - using the maximum supplier price within the AMFm database as the comparison point.

**Table 12: Estimated Contributions of AMFm ACTs, by Year
(Scenarios: Global Fund published maximum price,
maximum and median supplier sales price in AMFm)**

AMFm Contributions (US\$ Millions)	2010 Contributions	2011 Contributions	2012 Contributions	Total (2010–2012) Contributions
Global Fund–published maximum price	2.1	12.9	2.9	17.9
Maximum supplier price	1.7	11.1	5.3	18.1
Median supplier price	0.9	3.7	1.3	5.9

The competitive tendering for most of the supplies would, in normal commercial circumstances, drive prices and margins down. In these circumstances, the amount of voluntary contributions being made by commodity manufacturers (above and beyond normal commercial practice in competing for Global Fund business) would be expected to be small. Some manufacturers however contend that they are making a contribution above and beyond normal commercial practice when they sell to the Global Fund. Others would argue that companies will only supply to the Global Fund if they are making a commercial return (albeit small on a *per* pack basis). The value of the contribution from commodity suppliers is therefore as much a question of perspective as it is of objective fact.

A few companies, primarily the ACT manufacturers, have announced that they will supply to the Global Fund on a “no profit, no loss” basis. In this case, they are voluntarily forgoing profits beyond what would be normal commercial practice. However, it is not possible (for commercial confidentiality reasons) to find out how much profit they think they have forgone. Also, by setting this policy in the early days of the use of ACTs (in the early 2000s), they created an artificial pricing situation before normal market competition had a chance to determine a market price. Some ARV manufacturers have also established tiered pricing models to provide their products at discounted levels from developed world prices. The amount of purchases affected by this approach is small in comparison with the overall purchases made by the Global Fund. Tiered pricing mainly affects direct purchases by country programs from the manufacturers.

However one views the basis on which Tables 11, and 12 were developed, it is clear that the private sector is responsible for the supply of commodities at significantly lower prices than those they might achieve if they could charge “normal” commercial or list prices (even from a developing market like India). In addition, the commodity manufacturers are supplying at significantly lower prices even than those that have been charged at other times to the Fund. This serves to illustrate the level of commitment of the private sector commodity suppliers in meeting the demand and requirements of the Global Fund and its grant recipients.

The tables on the following pages give the full details of the individual product calculations summarised in Tables 11 & 12.

DRUG	2010 Contributions, compared to:					
	USA	India	CHAI	MSF	GF Max	GF Median
GRAND TOTAL	12,883,291,509	1,902,291,360	45,070,976	30,308,381	3,659,195,010	89,330,671
ARVs	8,739,602,347	984,867,371	45,070,823	30,308,381	626,071,604	28,791,241
Abacavir	20,884,031	29,129,434	23,101	492,488	15,095,483	222,608
Abacavir + Lamivudine	275,453	-	-	-	396,075	198,038
Abacavir + Lamivudine + Zidovudine	636,280	N/A	N/A	N/A	7,410	3,705
Atazanavir (ATV)	6,724,909	611	-	-	2,535	1,267
Atazanavir + Ritonavir	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
Darunavir (TCM)	933,442	18,081	N/A	-	182,435	135,955
Didanosine (ddl)	16,218,602	519,473	N/A	255,884	1,300,838	319,973
Efavirenz (EFV)	3,244,369,144	291,916,383	724,355	7,027,483	52,296,280	6,835,121
Efavirenz + Lamivudine + Zidovudine	N/A	11,774,868	N/A	2,445,756	126,953	63,476
Efavirenz + Emtricitabine + Tenofovir	405,592,507	10,498,904	-	N/A	5,481,572	1,466,930
Efavirenz + Lamivudine + Tenofovir	N/A	N/A	-	-	-	-
Emtricitabine + Tenofovir	1,303,523,633	25,557,518	-	4,683,011	30,476,465	4,418,795
Emtricitabine (FTC)	1,245	N/A	N/A	-	-	-
Enfuvirtide	196,337	N/A	N/A	N/A	-	-
Etravirine (ETV)	175,871	N/A	N/A	-	-	-
Fosamprevavir (FPV)	846,434	N/A	N/A	-	-	-
Indinavir (IDV)	4,909,728	455,857	N/A	-	1,468,257	256,914
Lamivudine (3TC)	274,837,378	12,752,646	59,875	402,537	31,353,094	125,284
Lamivudine + Nevirapine + Stavudine	N/A	204,828,188	30,737,611	596,333	121,697,596	4,485,641
Lamivudine + Nevirapine + Zidovudine	N/A	209,315,417	8,710,044	N/A	67,473,138	2,687,889
Lamivudine + Stavudine	N/A	13,578,804	627,621	292	1,789,328	708,774
Lamivudine + Tenofovir	N/A	N/A	-	N/A	5,919,133	279,544
Lamivudine + Zidovudine	2,584,107,926	79,846,775	2,004,651	N/A	128,863,508	2,498,759
Lopinavir (LPV) + Ritonavir (RTV)	309,781,925	23,428,264	44,942	168,039	5,667,998	501,369
Nelfinavir (NFV)	3,981,422	-	N/A	N/A	-	-
Nevirapine (NVP)	78,131,175	41,362,118	1,443,691	12,367,409	109,442,486	1,232,175
Raltegravir	-	-	N/A	-	-	-
Ritonavir (RTV)	17,844,708	406,754	53,503	-	1,401,145	320,535
Saquinavir (SQV)	3,244,950	-	N/A	16,280	-	-
Stavudine (d4T)	37,479,533	699,908	308,380	594,141	14,826,159	1,028,374
Tenofovir (TDF)	224,984,508	11,411,544	-	384,935	5,649,807	81,347
Tipranavir (TPV)	66,711	N/A	N/A	N/A	-	-
Zidovudine (ZDV)	199,854,497	17,365,824	333,048	873,793	25,153,909	918,768
ACTs	871,281,595	63,696,933	-	-	43,424,698	2,316,201
Artemether + Lumenfantrine	871,281,595	60,817,155	N/A	N/A	37,753,054	1,421,742
Artesunate + Sulfadoxine + Pyrimethamine	N/A	2,879,777	N/A	N/A	1,068,070	36,856
Artesunate + Amodiaquine	N/A	N/A	N/A	N/A	4,603,574	857,603
Artesunate + Mefloquine	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
Dihydroartemisinin + Piperaquine	N/A	N/A	N/A	N/A	-	-
Antibiotics	223,763,818	2,732,204	-	-	6,256,634	3,563,436
Amikacin	429,219	315,576	N/A	N/A	66,607	33,304
Amoxicillin + Clavulanate	-	206,081	N/A	N/A	4,594	2,297
Capreomycin	187,486,087	1,353,905	N/A	N/A	4,978,548	2,489,274
Clarithromycin	1,347,968	141,661	N/A	N/A	0.00	0.00
Kanamycin	N/A	-	N/A	N/A	0	0
Levofloxacin	11,169,325	714,981	N/A	N/A	114,358	38,607
Moxifloxacin	10,244,000	-	N/A	N/A	1,084,171	997,277
Ofloxacin	13,082,033	-	N/A	N/A	5,357	1,178
Rifampicin	5,186	-	N/A	N/A	2,998	1,499

DRUG	2010 Contributions, continued					
	USA	India	CHAI	MSF	GF Max	GF Median
Antimalarials	22,860,450	752,828	-	-	17,118,902	172,036
Artemether	N/A	198,700	N/A	N/A	78,263	39,132
Artesunate	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
Chloroquine/Chloroquine Phosphate	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
Mefloquine	808,799	54,397	N/A	N/A	38,327	19,163
Primaquine	97,568	-	N/A	N/A	-	-
Quinine	21,954,084	83,130	N/A	N/A	179,972	10,651
Quinine-Resorcine	N/A	N/A	N/A	N/A	35,447	17,723
Sufadoxine + Pyrimethamine	N/A	416,600	N/A	N/A	16,786,893	85,366
Bednets	-	-	-	-	174,330,068	9,226,050
Bednets	N/A	N/A	N/A	N/A	174,330,068	9,226,050
Family Planning	228,853,908	289,278,494	-	-	86,283,130	3,248,151
Female Condom	4,431,791	-	N/A	N/A	816,872	394,411
Male Condom	224,422,117	289,278,494	N/A	N/A	85,466,258	2,853,740
TB Antibiotics	547,947,374	49,540,237	153	-	32,435,024	5,209,482
Cycloserine	2,720,354	479,377	-	-	1,240,128	280,964
Ethambutol	20,835,467	-	N/A	N/A	244,672	85,039
Ethambutol + Isoniazid	37,271,085	1,275,410	N/A	N/A	6,397	3,198
Ethambutol + Isoniazid + Pyrazinamide	N/A	37,360,365	N/A	N/A	2,792,267	553,050
Ethambutol + Isoniazid + Rifampin	N/A	500,071	N/A	N/A	44,285	22,142
Ethionamide	26,574,135	N/A	N/A	N/A	-	-
Isoniazid	1,609,462	N/A	N/A	N/A	23,329,809	3,457,554
Isoniazid + Pyrazinamide + Rifampin	13,751,923	307,579	N/A	N/A	8,255	4,128
Isoniazid + Rifampicin	198,107,978	7,884,747	N/A	N/A	1,992,633	448,309
Prothionamide	N/A	1,073,342	N/A	N/A	-	-
Pyrazinamide	16,491,699	633,421	N/A	N/A	20,193	4,183
Streptomycin	230,585,271	25,926	N/A	N/A	2,756,381	350,912
TB Kits	N/A	N/A	153	N/A	4	4
Tests	2,248,982,016	511,423,293	-	-	2,647,574,054	32,782,276
HIV RDT	2,124,992,082	503,243,982	-	-	2,402,397,101	20,403,928
Malaria RDT	123,989,934	8,179,311	N/A	N/A	245,176,953	12,378,348
TB RDT	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
Insecticide	-	-	-	-	-	-
IRS-Bendiocarb-WP	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
IRS-Deltamethrin-WG	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
IRS-Deltamethrin-WP	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
Other	-	-	-	-	25,700,897	4,021,798
PAS Sodium	N/A	N/A	N/A	N/A	23,864,933	2,953,681
Water for Injection	N/A	N/A	N/A	N/A	1,835,964	1,068,117

DRUG	2011 Contributions, compared to:					
	USA	India	CHAI	MSF	GF Max	GF Median
GRAND TOTAL	14,406,455,311	1,917,852,673	107,800,369	44,882,382	1,449,028,843	73,036,454
ARVs	10,544,618,022	1,062,845,873	107,800,289	44,882,382	272,051,841	18,241,597
Abacavir	30,325,138	41,860,802	290,991	1,221,414	3,788,292	960,339
Abacavir + Lamivudine	12,292,834	-	-	21,799	7,212,435	31,578
Abacavir + Lamivudine + Zidovudine	5,245,976	N/A	N/A	N/A	199,380	148
Atazanavir (ATV)	77,338,531	1,531,262	145,492	65,067	109,860	54,930
Atazanavir + Ritonavir	N/A	11,613	-	-	-	-
Darunavir (TCM)	2,071,265	121,470	N/A	-	561,839	47,483
Didanosine (ddI)	20,382,539	383,865	N/A	350,750	714,855	363,592
Efavirenz (EFV)	3,710,460,871	354,798,285	1,928,211	10,097,907	108,853,026	1,999,451
Efavirenz + Lamivudine + Zidovudine	N/A	3,249,024	N/A	657,704	1,781,040	948,986
Efavirenz + Emtricitabine + Tenofovir	1,448,351,170	41,417,137	-	N/A	4,068,913	954
Efavirenz + Lamivudine + Tenofovir	N/A	N/A	-	-	2,615	1,308
Emtricitabine + Tenofovir	1,013,075,839	21,637,446	-	5,448,163	29,215,409	292,347
Emtricitabine (FTC)	14,844	N/A	N/A	-	-	-
Enfuvirtide	469,240	N/A	N/A	N/A	-	-
Etravirine (ETV)	41,946	N/A	N/A	-	-	-
Fosamprevavir (FPV)	4,982,332	N/A	N/A	-	-	-
Indinavir (IDV)	2,841,983	268,192	N/A	-	39	19
Lamivudine (3TC)	135,930,500	15,828,078	91,379	598,698	9,176,350	138,629
Lamivudine + Nevirapine + Stavudine	N/A	171,304,836	78,872,305	4,061,150	22,281,157	4,002,867
Lamivudine + Nevirapine + Zidovudine	N/A	163,640,463	18,516,467	N/A	11,141,590	3,920,574
Lamivudine + Stavudine	N/A	10,265,690	742,237	279,254	846,439	383,049
Lamivudine + Tenofovir	N/A	N/A	9,228	N/A	2,948,920	247,481
Lamivudine + Zidovudine	2,676,842,152	86,868,649	4,422,624	N/A	4,315,570	2,144,968
Lopinavir (LPV) + Ritonavir (RTV)	600,498,293	55,348,979	425,414	2,060,161	7,817,613	718,480
Nelfinavir (NFV)	1,414,823	-	N/A	N/A	-	-
Nevirapine (NVP)	118,936,683	55,318,662	2,108,105	17,146,701	8,823,998	1,227,236
Raltegravir	395,082	162,744	N/A	-	-	-
Ritonavir (RTV)	25,134,382	972,648	186,838	55,735	2,562,320	33,625
Saquinavir (SQV)	7,002,126	-	N/A	-	-	-
Stavudine (d4T)	5,994,019	97,847	18,206	56,653	137,068	12,459
Tenofovir (TDF)	573,405,647	32,099,234	2,974	2,268,852	14,717,944	62,078
Tipranavir (TPV)	-	-	-	-	-	-
Zidovudine (ZDV)	71,169,806	5,658,949	39,816	492,375	30,775,167	649,016
ACTs	753,157,481	70,897,941	-	-	48,760,288	21,966,918
Artemether + Lumenfantrine	753,157,481	60,925,074	N/A	N/A	36,594,947	16,852,886
Artesunate + Sulfadoxine + Pyrimethamine	N/A	1,576,226	N/A	N/A	20,929	10,464
Artesunate + Amodiaquine	N/A	N/A	N/A	N/A	12,063,415	5,075,562
Artesunate + Mefloquine	N/A	8,396,641	N/A	N/A	80,997	28,006
Dihydroartemisinin + Piperaquine	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
Antibiotics	201,183,631	2,836,363	-	-	4,801,179	1,443,938
Amikacin	1,968,577	1,500,600	N/A	N/A	-	-
Amoxicillin + Clavulanate	-	99,160	N/A	N/A	-	-
Capreomycin	169,339,748	231,229	N/A	N/A	1,164,316	322,958
Clarithromycin	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
Kanamycin	N/A	-	N/A	N/A	48	24
Levofloxacin	12,467,120	1,003,262	N/A	N/A	198,432	35,139
Moxifloxacin	12,541,007	-	N/A	N/A	3,423,858	1,078,555
Ofloxacin	4,867,178	2,111	N/A	N/A	14,525	7,262
Rifampicin	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES

DRUG	2011 Contributions, continued					
	USA	India	CHAI	MSF	GF Max	GF Median
Antimalarials	67,988,655	703,911	-	-	327,582	59,534
Artemether	N/A	245,093	N/A	N/A	-	-
Artesunate	N/A	-	N/A	N/A	4,260	2,130
Chloroquine/Chloroquine Phosphate	13,587,619	-	N/A	N/A	-	-
Mefloquine	47,469	680	N/A	N/A	2,160	853
Primaquine	583,354	6,294	N/A	N/A	24,451	12,226
Quinine	53,770,214	351,114	N/A	N/A	121,120	21,009
Quinine-Resorcine	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
Sufadoxine + Pyrimethamine	N/A	100,731	N/A	N/A	175,591	23,316
Bednets	-	-	-	-	91,828,051	5,227,385
Bednets	N/A	N/A	N/A	N/A	91,828,051	5,227,385
Family Planning	140,810,560	180,098,042	-	-	53,273,138	1,915,698
Female Condom	2,147,943	3,349	N/A	N/A	18,360	3,746
Male Condom	138,662,617	180,094,693	N/A	N/A	53,254,778	1,911,952
TB Antibiotics	257,691,394	31,392,607	80	-	1,895,711	1,033,987
Cycloserine	2,549,969	-	N/A	N/A	0	0
Ethambutol	17,203,112	-	N/A	N/A	60,775	8,654
Ethambutol + Isoniazid	3,422,701	111,350	N/A	N/A	-	-
Ethambutol + Isoniazid + Pyrazinamide	N/A	23,491,131	N/A	N/A	946,900	855,640
Ethambutol + Isoniazid + Rifampicin	N/A	271,859	N/A	N/A	259,865	55,059
Ethionamide	16,376,349	N/A	N/A	N/A	79,311	39,656
Isoniazid	1,508,729	N/A	N/A	N/A	19,987	9,063
Isoniazid + Pyrazinamide + Rifampicin	7,461,099	164,222	N/A	N/A	58,706	321
Isoniazid + Rifampicin	140,784,855	4,749,262	N/A	N/A	201,904	51,697
Prothionamide	N/A	1,589,810	N/A	N/A	-	-
Pyrazinamide	26,937,224	1,014,972	N/A	N/A	57,540	13,738
Stretomyacin	41,447,355	-	N/A	N/A	210,720	157
TB Kits	N/A	N/A	80	N/A	2	2
Tests	2,441,005,569	569,077,936	-	-	975,932,779	23,147,134
HIV RDT	2,399,503,468	564,799,376	N/A	N/A	894,406,799	16,381,984
Malaria RDT	41,483,437	4,211,154	N/A	N/A	81,525,981	6,765,150
TB RDT	18,665	67,406	N/A	N/A	-	-
Insecticide	-	-	-	-	-	-
IRS-Bendiocarb-WP	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
IRS-Deltamethrin-WG	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
IRS-Deltamethrin-WP	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
Other	-	-	-	-	158,273	263
PAS Sodium	N/A	N/A	N/A	N/A	82,058	-
Water for Injection	N/A	N/A	N/A	N/A	76,215	263

DRUG	2012 Contributions, compared to:					
	USA	India	CHAI	MSF	GF Max	GF Median
GRAND TOTAL	9,991,594,693	1,214,256,579	88,955,442	51,079,444	835,134,108	37,836,680
ARVs	7,930,399,297	788,320,434	88,955,425	51,079,444	275,398,440	11,357,022
Abacavir	21,502,957	30,113,182	446,545	1,026,097	6,140,621	89,958
Abacavir + Lamivudine	7,463,416	-	-	56,350	82,007	551
Abacavir + Lamivudine + Zidovudine	1,233,617	N/A	N/A	N/A	9,375	6,305
Atazanavir (ATV)	5,900,242	122,696	17,917	15,459	759,092	21,831
Atazanavir + Ritonavir	N/A	3,951,082	-	210,506	-	-
Darunavir (TCM)	2,774,548	181,679	N/A	-	410,380	7,977
Didanosine (ddI)	12,201,606	191,576	N/A	157,804	5,128	1,548
Efavirenz (EFV)	3,317,291,448	306,248,877	-	12,191,559	69,620,857	991,802
Efavirenz + Lamivudine + Zidovudine	N/A	3,124,258	N/A	665,086	54	27
Efavirenz + Emtricitabine + Tenofovir	876,734,222	26,101,142	95,576	N/A	208,629	84,266
Efavirenz + Lamivudine + Tenofovir	N/A	N/A	1,666,173	-	4,637,790	2,318,895
Emtricitabine + Tenofovir	412,982,680	9,224,085	252,416	2,575,851	14,209,023	243,041
Emtricitabine (FTC)	3,598	N/A	N/A	-	-	-
Enfuvirtide	148,955	N/A	N/A	N/A	-	-
Etravirine (ETV)	235,489	N/A	N/A	-	-	-
Fosamprevavir (FPV)	2,934,144	N/A	N/A	-	-	-
Indinavir (IDV)	670,630	60,605	N/A	-	451	226
Lamivudine (3TC)	285,590,530	19,654,913	253,163	904,029	15,145,460	182,842
Lamivudine + Nevirapine + Stavudine	N/A	58,319,757	59,193,643	1,730,586	4,689,055	778,545
Lamivudine + Nevirapine + Zidovudine	N/A	88,203,576	11,897,748	N/A	1,478,882	1,080,511
Lamivudine + Stavudine	N/A	6,354,053	653,590	336,277	1,170,659	4,797
Lamivudine + Tenofovir	N/A	N/A	5,178,842	N/A	2,345,429	343,013
Lamivudine + Zidovudine	1,205,620,851	39,944,536	2,909,553	N/A	2,602,693	500,367
Lopinavir (LPV) + Ritonavir (RTV)	493,808,193	47,746,057	1,953,357	3,956,548	7,057,979	617,658
Nelfinavir (NFV)	2,566,599	-	N/A	N/A	-	-
Nevirapine (NVP)	122,749,989	78,888,406	3,605,861	23,362,671	4,808,908	1,850,872
Raltegravir	806,007	322,373	N/A	-	-	-
Ritonavir (RTV)	51,164,802	1,634,040	151,139	41,537	875,339	189,448
Saquinavir (SQV)	1,664,705	-	N/A	-	-	-
Stavudine (d4T)	22,042,234	471,536	36,190	273,565	842,764	418,423
Tenofovir (TDF)	718,281,573	35,917,050	58,661	1,866,410	6,517,500	103,840
Tipranavir (TPV)	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
Zidovudine (ZDV)	364,026,259	31,544,957	585,051	1,709,109	131,780,367	1,520,280
ACTs	603,009,265	43,670,062	-	-	13,094,199	4,471,789
Artemether + Lumenfantrine	603,009,265	40,344,798	N/A	N/A	10,489,668	3,578,885
Artesunate + Sulfadoxine + Pyrimethamine	N/A	2,923,098	N/A	N/A	192,835	24,475
Artesunate + Amodiaquine	N/A	N/A	N/A	N/A	2,411,696	868,429
Artesunate + Mefloquine	N/A	402,166	N/A	N/A	-	-
Dihydroartemisinin + Piperaquine	N/A	N/A	N/A	N/A	-	-
Antibiotics	164,807,379	1,268,139	-	-	6,360,806	317,865
Amikacin	787,766	623,992	N/A	N/A	-	-
Amoxicillin + Clavulanate	-	125,811	N/A	N/A	6,057	3,029
Capreomycin	146,753,889	-	N/A	N/A	2,021,043	33,693
Clarithromycin	59,753	6,916	N/A	N/A	-	-
Kanamycin	N/A	-	N/A	N/A	553,820	276,910
Levofloxacin	5,631,849	480,885	N/A	N/A	3,684,058	4,233
Moxifloxacin	7,861,101	30,534	N/A	N/A	95,828	-
Ofloxacin	3,093,568	-	N/A	N/A	-	-
Rifampicin	619,454	-	N/A	N/A	-	-

DRUG	2012 Contributions, continued					
	USA	India	CHAI	MSF	GF Max	GF Median
Antimalarials	76,842,049	801,437	-	-	19,134,131	494,641
Artemether	N/A	5,679	N/A	N/A	-	-
Artesunate	N/A	-	N/A	N/A	353,115	176,557
Chloroquine/Chloroquine Phosphate	18,724,421	-	N/A	N/A	-	-
Mefloquine	31,217	600	N/A	N/A	-	-
Primaquine	14,122,368	412,093	N/A	N/A	500,097	250,049
Quinine	43,964,043	282,824	N/A	N/A	1,011,360	43,075
Quinine-Resorcine	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES	NO SALES
Sufadoxine + Pyrimethamine	N/A	100,240	N/A	N/A	17,269,559	24,960
Bednets	-	-	-	-	27,820,982	6,624,638
Bednets	N/A	N/A	N/A	N/A	27,820,982	6,624,638
Family Planning	134,439,712	172,604,048	-	-	23,251,321	1,941,459
Female Condom	1,414,015	-	N/A	N/A	744,680	315
Male Condom	133,025,697	172,604,048	N/A	N/A	22,506,641	1,941,144
TB Antibiotics	307,685,457	32,855,586	17	-	2,237,181	882,273
Cycloserine	1,127,504	-	N/A	N/A	-	-
Ethambutol	14,041,453	-	N/A	N/A	49,864	24,932
Ethambutol + Isoniazid	24,535,046	812,872	N/A	N/A	-	-
Ethambutol + Isoniazid + Pyrazinamide	N/A	24,428,009	N/A	N/A	177,330	99,690
Ethambutol + Isoniazid + Rifampin	N/A	122,179	N/A	N/A	182,170	91,085
Ethionamide	13,839,034	N/A	N/A	N/A	873,502	436,751
Isoniazid	2,246,574	N/A	N/A	N/A	160,590	5,492
Isoniazid + Pyrazinamide + Rifampin	26,769,167	429,492	N/A	N/A	91,275	49,279
Isoniazid + Rifampicin	194,927,710	6,256,483	N/A	N/A	463,747	143,814
Prothionamide	N/A	442,846	N/A	N/A	-	-
Pyrazinamide	10,197,350	363,705	N/A	N/A	238,690	31,217
Streptomycin	20,001,618	-	N/A	N/A	-	-
TB Kits	N/A	N/A	17	N/A	13	13
Tests	774,411,533	174,736,873	-	-	467,653,945	11,681,971
HIV RDT	730,035,722	170,504,623	N/A	N/A	357,241,107	7,613,232
Malaria RDT	44,321,928	4,068,479	N/A	N/A	110,361,633	4,063,983
TB RDT	53,883	163,771	N/A	N/A	51,205	4,757
Insecticide	-	-	-	-	-	-
IRS-Bendiocarb-WP	N/A	N/A	N/A	N/A	-	-
IRS-Deltamethrin-WG	N/A	N/A	N/A	N/A	-	-
IRS-Deltamethrin-WP	N/A	N/A	N/A	N/A	-	-
Other	-	-	-	-	183,103	65,021
PAS Sodium	N/A	N/A	N/A	N/A	76,575	11,757
Water for Injection	N/A	N/A	N/A	N/A	106,528	53,264

Detailed Contributions Analysis of ACTs Purchased through the AMFm Mechanism

International Non-proprietary Name (INN)	Dosage Strength	Treatment Unit	Type of Pack	Sum of Qty of Units Ordered	Weighted Average of MSP unit	2010 Contributions			
						2011 Published Maximum Price	Supplier Max	Supplier Median	
Artemether/Lumefantrine	20 mg/120 mg	6x1	1 - Individual	452,560	.40	65	65	-	
				35,000	.37	1,050	1,050	1,045	
				1,623,980	.40	-	-	(233)	
			30 - Hospital	1,494,360	.37	-	-	(7,472)	
				922,320	.36	9,223	9,223	4,612	
		6x2	1 - Individual	438,240	.77	27	27	-	
				120,000	.76	1,500	1,500	1,493	
				950,950	.77	-	-	(59)	
			30 - Hospital	30,000	.74	-	-	(600)	
				161,340	.71	5,250	5,250	2,023	
				466,110	.72	9,322	9,322	-	
	6x3	1 - Individual	438,240	1.14	27	27	-		
			40,000	1.07	2,800	2,800	2,798		
			1,122,250	1.14	-	-	(69)		
		30 - Hospital	32,200	1.11	(0)	-	(545)		
			250,560	1.08	8,477	8,477	4,238		
	6x4	1 - Individual	3,207,560	1.43	130	130	130		
			3,245,000	1.43	-	-	-		
			1,255,940	1.43	-	-	-		
30 - Hospital		180,000	1.40	-	-	(19,825)			
		5,068,740	1.10	1,513,050	1,513,050	954,777			
		1,597,560	1.29	175,956	175,956	-			
Artesunate/Amodiaquine	100mg/270 mg	3x1	1 - Individual	383,000	.61	26,270	-	-	
			25 - Hospital	181,275	.54	8,451	-	-	
		3x2	1 - Individual	986,000	.98	105,140	-	-	
			25 - Hospital	275,000	.92	21,900	-	-	
		25 mg/67.5 mg	3x1	1 - Individual	326,000	.33	14,775	-	-
				25 - Hospital	130,000	.28	2,700	-	-
	50 mg/135 mg	3x1	1 - Individual	645,000	.42	34,625	-	-	
			25 - Hospital	270,000	.36	9,100	-	-	
	50 mg/150 mg	12+12	1 - Individual	460,000	.72	41,400	-	-	
		3+3	1 - Individual	20,000	.25	400	-	-	
		6+6	1 - Individual	120,000	.41	4,800	-	-	
	Artesunate+ Amodiaquine	50 mg/150 mg	12+12	1 - Individual	522,000	.72	45,980	-	-
			3+3	1 - Individual	165,000	.25	3,300	-	-
			6+6	1 - Individual	212,000	.41	8,480	-	-
							\$ 2,054,198	\$ 1,726,877	\$ 971,115

International Non-proprietary Name (INN)	Dosage Strength	Treatment Unit	Type of Pack	Sum of Qty of Units Ordered	Weighted Average of MSP unit	2011 Contributions				
						2011 Published	Supplier Max	Supplier Median		
Artemether/ Lumefantrine	20 mg/120 mg	6x1	1 - Individual	4,638,300	.45	6,698	6,698	1,570		
				2,487,560	.45	2,750	2,750	-		
				792,000	.45	-	-	(876)		
			30 - Hospital	3,992,950	.42	375	-	(36,852)		
				15,042,180	.41	140,242	138,829	-		
				12,621,480	.37	644,815	643,630	527,142		
			6x2	1 - Individual	2,776,780	.87	5,015	22,370	-	
					3,472,120	.86	22,750	44,451	16,479	
					432,000	.88	(2,700)	-	(3,480)	
		30 - Hospital		1,696,200	.83	23,814	-	(9,434)		
				5,708,402	.82	111,892	31,749	-		
				5,565,240	.73	639,470	561,336	530,384		
		6x3	1 - Individual	1,139,020	1.27	14,593	14,593	-		
				1,484,120	1.27	20,550	20,550	1,535		
				29,800	1.28	-	-	(382)		
			30 - Hospital	1,243,260	.95	372,978	370,566	242,445		
				2,164,790	1.25	4,200	-	(223,087)		
				5,107,398	1.19	297,132	287,223	(239,108)		
				1,940,880	1.10	294,643	290,877	90,864		
				6x4	1 - Individual	9,466,340	1.51	1,074,737	1,074,737	61,508
						18,019,352	1.51	1,928,700	1,928,700	-
		1,354,320	1.62			(0)	-	(144,960)		
		10 - Hospital	300,000	1.52	21,000	-	-			
			30 - Hospital	6,498,030	1.22	2,404,271	2,395,126	1,535,996		
4,050,000	1.59			5,700	-	(535,466)				
15,655,570	1.52			1,090,147	1,068,113	(1,001,771)				
10,966,320	1.39			2,167,049	2,151,614	701,714				
Artesunate/ Amodiaquine	100mg/270 mg		3x1	1 - Individual	2,025,938	.66	50,558	-	-	
		25 - Hospital		1,674,650	.55	74,430	-	-		
		3x2	1 - Individual	3,120,742	1.05	113,566	-	(83,651)		
				20,000	1.00	1,800	1,072	536		
			25 - Hospital	3,453,575	.94	221,008	-	-		
	25 mg/ 67.5 mg	3x1	1 - Individual	1,429,082	.36	34,736	-	(11,214)		
				4,000	.34	160	63	31		
			25 - Hospital	819,900	.27	26,924	-	-		
	50 mg/135 mg	3x1	1 - Individual	3,161,030	.44	91,764	-	(33,144)		
				165,000	.42	8,250	3,460	1,730		
			25 - Hospital	2,682,063	.35	111,730	-	-		
Artesunate+ Amodiaquine	50 mg/150 mg	12+12	1 - Individual	4,790,000	.66	718,500	-	-		
		3+3	1 - Individual	2,815,000	.21	156,300	-	-		
			25 - Hospital	100,000	.22	2,000	-	-		
		6+6	1 - Individual	745,000	.39	44,800	-	-		
			25 - Hospital	100,000	.38	4,000	-	-		
						\$ 12,954,045	\$ 11,058,505	\$ 3,711,935		

International Non-proprietary Name (INN)	Dosage Strength	Treatment Unit	Type of Pack	Sum of Qty of Units Ordered	Weighted Average of MSP unit	2012 Contributions			
						2011 Published Maximum Price	Supplier Max	Supplier Median	
Artemether/ Lumefantrine	20 mg/120	6x1	1 - Individual	12,420	.45	-	-	(0)	
				10,154,860	.45	7,400	7,400	7,264	
				8,251,440	.45	-	-	(111)	
				7,500,801	.45	202	202	101	
			10 - Hospital	403,200	.32	42,336	-	-	
			30 - Hospital	128,000	.42	-	31,838	0	
				1,204,980	.42	-	299,721	0	
				2,038,080	.42	(0)	506,942	-	
				12,503,430	.67	(3,110,040)	-	(3,110,040)	
			6x2	1 - Individual	8,640	.87	-	-	(0)
					6,099,870	.86	37,150	37,150	37,024
					8,959,420	.87	-	-	(185)
		3,828,180			.87	158	158	79	
		10 - Hospital		472,740	.84	-	-	-	
		30 - Hospital		94,000	.84	-	64,643	-	
				652,020	.82	12,660	461,052	12,660	
				3,118,080	.84	(0)	2,144,292	(0)	
				8,826,480	1.53	(6,069,936)	-	(6,069,936)	
		300,000		.84	-	206,309	-		
		6x3		1 - Individual	8,640	1.28	-	-	(16)
					2,752,850	1.28	9,750	9,750	4,662
			2,100,180		1.28	9,250	9,250	5,368	
			1,362,080		1.28	211	211	(2,306)	
			10 - Hospital	193,200	1.25	-	-	-	
			30 - Hospital	97,000	1.25	-	-	(3,967)	
				291,000	1.18	19,845	19,845	7,945	
				1,831,680	1.24	26,082	26,082	(48,822)	
				2,668,620	1.18	180,259	180,259	71,130	
			6x4	1 - Individual	15,660	1.62	-	-	(104)
					5,214,690	1.61	46,200	46,200	11,562
9,490,780	1.62				42,000	42,000	(21,042)		
4,756,760	1.60	77,498			77,498	45,902			
10 - Hospital	702,750	1.59		-	-	-			
30 - Hospital	333,000	1.59		-	-	-			
	1,071,240	1.59		-	-	-			
	2,099,080	1.59		-	-	-			
	10,577,640	1.51		827,021	827,021	827,021			
3,878,900	1.51	302,130		302,130	302,130				
Artesunate/ Amodiaquine	100mg/270	3x1		1 - Individual	2,100,500	.60	167,560	-	-
				25 - Hospital	841,375	.53	48,407	-	-
		3x2	1 - Individual	3,994,950	.96	518,248	-	-	
			25 - Hospital	1,097,625	.89	120,073	-	-	
		25 mg/67.5	3x1	1 - Individual	1,856,880	.33	97,464	-	-
				25 - Hospital	1,022,675	.27	27,409	-	-
	50 mg/135	3x1	1 - Individual	3,318,740	.41	212,345	-	-	
			25 - Hospital	1,098,825	.34	50,946	-	-	
	Dihydroartemisinin / Piperaquine	40 mg/320	3x1	1 - Individual	36,900	.93	-	-	-
				3x2	1 - Individual	25,488	1.46	-	-
			3x3	1 - Individual	335,084	1.98	-	-	-
								\$ 2,882,604	\$ 5,299,953

Annex B: FPM Interviews

Countries Covered in the Interviews with FPMs	Total Disbursements 2002–2013 (\$ million) [13]	% Total
Angola	182	0.9
Argentina	29	0.1
Botswana	16	0.1
China	763	3.7
Comoros	14	0.1
Democratic People's Republic of Korea	51	0.3
Democratic Republic of Congo	635	3.1
Ghana	411	2.0
India	1,032	5.0
Indonesia	493	2.4
Jamaica	62	0.3
Kenya	477	2.3
Lesotho	133	0.6
Malawi	609	2.9
Mozambique	325	1.6
Nigeria	940	4.5
Papua New Guinea	131	0.6
Peru	136	0.7
Philippines	191	0.9
Rwanda	759	3.7
South Africa	422	2.0
Swaziland	157	0.8
Tanzania	930	4.5
Thailand	344	1.7
Ukraine	328	1.6
Zambia	629	3.0
Others (Not interviewed)	6,330	30.6
TOTAL	20,686	100.0

References

1. <http://www.theglobalfund.org/en/about/diseases/>
2. <http://www.theglobalfund.org/en/board/constituencies/>
3. Global Fund to fight AIDS, Tuberculosis and Malaria: *Global Fund Targets \$15 Billion to Effectively Fight AIDS, TB and Malaria*. Geneva: Global Fund to fight AIDS TB and Malaria; 2013. [http://www.theglobalfund.org/en/mediacenter/newsreleases/2013-04-08_Global_Fund_Targets_USD_15_Billion_to_Effectively_Fight_AIDS_TB_and_Malaria/]
4. [http://www.theglobalfund.org/Documents/core/financial/Core_Pledges Contributions_List_en/](http://www.theglobalfund.org/Documents/core/financial/Core_Pledges_Contributions_List_en/)
5. G-FINDER Public Search Tool [https://g-finder.policycures.org/gfinder_report/]
6. Moran M, Guzman J, Chapman N, Abela-Oversteegen L, Farrell P, Luxford J: *G-Finder 2013: Neglected Disease Research and Development: the Public Divide*. In *G-Finder*. Sydney: Policy Cures; 2013.
7. [http://www.theglobalfund.org/Documents/core/financial/Core_Pledges Contributions_List_en/](http://www.theglobalfund.org/Documents/core/financial/Core_Pledges_Contributions_List_en/)
8. <http://www.theglobalfund.org/en/partners/privatesector/>
9. The Global Fund to Fight AIDS, Tuberculosis and Malaria: *Strategic Investments for Impact – Global Fund Results Report 2012*. Geneva: Global Fund; 2012
10. WHO: Antimalarial Drug Combination Therapy: Report of a WHO Technical Consultation. Geneva: World Health Organization; 2001.
11. Rational Pharmaceutical Management Plus Program: *Changing Malaria Treatment Policy to Artemisinin-Based Combinations: An Implementation Guide*. Arlington, VA: Management Sciences for Health; 2005.
12. WHO Global Malaria Programme: *World Malaria Report 2012*. Geneva: World Health Organization; 2012.
13. <http://portfolio.theglobalfund.org/en/Mapping/Index>