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Aid for trade: Building productive and trade capacities in LDCs

by José Antonio Alonso

AID FOR TRADE: BUILDING PRODUCTIVE AND TRADE CAPACITIES IN LDCs*

José Antonio Alonso

1.- Origin and purpose

The origin of Aid for Trade (AfT) is relatively recent: it was formalized at the Hong Kong Ministerial Conference, in 2005. In article 57 the Declaration called for support for developing countries, particularly LDCs, to expand their trade capacity and to allow them to benefit from the various multilateral trade agreements. In 2005, the WTO created a Task Force for developing this initiative whose final report was presented in 2006. The Task Force stated that: "Aid for Trade is about assisting developing countries to increase exports of goods and services, to integrate into the multilateral trading system".

The AfT was created in the context of the Doha Round process, but the lack of progress made in the Doha Round has meant that AfT has become increasingly disconnected from its genesis. Now it is an autonomous component of development cooperation policy in which the WTO and the OECD are involved. As a consequence of the agreement on trade facilitation reached in the Ministerial Conference held in Bali in 2013, the AfT has gotten new impetus.

The purpose of the AfT initiative is to provide support (through ODA and other official funds) to developing countries to help them develop their capacity to trade. The objectives are for countries to reduce trade costs, improve rules and administrative procedures, build infrastructure and enhance the productivity of their companies. There may be other initiatives and mechanisms aimed at the same purpose (such as the EC Trade Related Assistance or the Enhanced Integrated Framework for trade-related technical assistance to LDCs), but this initiative was designed to address the trade-related problems facing developing countries through "visible, unconditional, coordinated and predictable" funding.

Helping developing countries to benefit from open global markets should be an important component of strategy to promote development and reduce poverty. Of all the assumptions underpinning the initiative, three seem particularly relevant:

- Firstly, empirical literature has demonstrated that trade can be a powerful engine for enhancing economic development (Winters et al., 2004; Wacziarg and Welch, 2008)), but that evidence is also consistent with the claim that poor countries have not benefited in an equitable way from globalization (Brun et al., 2005)
- Secondly, as direct border restrictions (such as tariffs) have fallen in recent decades, integration in the world economy increasingly depends on whether countries can reduce "behind the border" and "at the border" barriers (including infrastructure and administrative procedures, as well as on building productive and competitive capacities).

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- Thirdly, Least Developed Countries (LDCs) and some other low-income countries suffer from a lack of capacity to integrate and compete in global markets (in terms of information, policies, procedures, institutions and infrastructure).

In short, the creation of AfT is an implicit acknowledgement that, in the absence of sufficient supply-side investment and complementary policies, trade liberalization on its own is unlikely to benefit poor people and poor countries. Additionally, AfT assumes that those countries whose preferences have been eroded by the process of trade liberalization (particularly, through Free Trade Agreements) need compensation through adjustment measures. In terms of international aid policy, AfT confirms the need for a shift in ODA allocation priorities to give more relevance to economic sectors than previously and to rebalance social and economic aid purposes. Finally, AfT can be also considered as a potential mechanism that compensates the adverse effect of ODA on recipient countries' competitiveness (the "Dutch disease" generated by inflows of aid, Rajan and Subramanian, 2011).

It is important to underline the fact that AfT is not a new development fund nor a new aid category, but rather a way to put various aid components into a single framework. In fact, AfT is supplied through existing country-based allocation mechanisms from bilateral donors and multilateral agencies. Some consider this to be the correct approach since it is a way to focus official funds towards economic and transformative purposes in recipient countries without creating new structures and bureaucracies; however, others believe this to be just a reclassification of aid flows with limited added value.

The DAC identifies five types of activities to AfT that are linked to one or more specific codes in the Creditor Reporting System through which donors report on all their ODA (Box 1). In general terms, ODA is considered as AfT when projects and programs "have been identified as trade-related development priorities in the recipient country's national strategies". This is a very vague definition of AfT's remit, which is the subject of controversy: critics consider that with this criterion, almost all economic components of ODA could be deemed part of AfT; and others argue this is an advantage because it is a way to include some projects as AfT that do not seem to be related to trade but which really have an important impact on trade (particularly through non-tariff barriers, for example, some health regulations).

In order to overcome this problem a narrower concept has been defined named Trade-Related Assistance (TRA) that includes only those AfT components with clearer trade-related purposes. To make operational this criterion a trade development marker was defined by the DAC and applied to some AfT activities (again Box 1). Even though this procedure may be an improvement, a lot of ambiguities remain in the way donors identify and register these components.

BOX 1: AfT categories

The DAC identifies five types of activities to AfT:

- *Technical assistance for trade policy and regulations* (e.g. helping countries to develop trade strategies, negotiate trade agreements, and implement their outcomes)
- *Trade-related infrastructure* (e.g. building roads, storage, ports, and telecommunications networks)
- *Building productive capacity, including trade development* (e.g. supporting the private

sector to exploit its comparative advantages and to diversify exports)
- *Trade-related adjustment* (e.g. helping developing countries with the costs associated with trade liberalization: for example reduced tax collection); and
- *Other trade-related needs* (if identified as trade-related development priorities in partner countries' national development strategies).

On the other hand, TRA is composed of three categories: i) trade policy and regulation; ii) trade development, a sub-category of "building productive capacity"; and iii) other trade-related needs. The trade development category is defined through the application of a "marker" to activities recorded in the "building productive capacities" category. The trade development marker is applied when the initiative is designed to enable the recipient country to: i) formulate and implement a trade development strategy and create an enabling environment for trade; ii) stimulate the trade of domestic firms and encourage. Investment in trade-oriented industries.

Source: DAC (OECD) (2007)

2.- Resources allocation

ODA resources channeled as AfT have increased in the last decade, from 23 billion dollars in 2006/08, when the initiative was created, to more than 41 billion, in 2013; the share of these resources as a proportion of total allocated ODA has also increased from 28% to 35%[1]. Therefore, both the amount of resources mobilized and the relative ratio of these resources on ODA have increased[2]. Even so, the fact that there is not visible change in the 2002-2013 trend of AfT would support the opinion that the launch of this initiative (in 2006) has not implied a substantive modification in the pattern of disbursements followed by most of donors (figure 1).

Figure 1

In regional terms, most AfT resources during the period 2006-2013 were assigned to Asia and Africa (41 % and 38%, respectively). Both Latin America and Europe receive a similar share, around 9% of the total. If we look at country income levels, most AfT went to MICs: 44% to lower middle-income countries and 22% to upper middle-income countries. LDCs absorbed 31% of ODA-registered AfT. The share targeted at MICs is even higher (close to 96% of total resources) when we take into account Other Official Flows instead of ODA (that is, those official flows with low levels of concessionality).

Even though the DAC defines five categories, the bulk of AfT resources falls into two categories. Thus, economic infrastructure absorbs 53% of 2006-2013 disbursements, and building productive capacity concentrates 43% of those funds (figure 2). The share of trade policy and regulations was significantly lower, at no more than 3% of the total; and trade-related adjustments mobilized 0.06% of resources.

Figure 2

[1] This data refers to net disbursements; in terms of commitments the volume of resources is larger.
[2] The trend of this share would be flat if we consider the weight of AfT on total (allocable and not allocable) ODA.

Among the main bilateral providers of AfT, Japan, Germany and the United States were the top ranking providers in 2013, followed by France, Norway and the United Kingdom; and the European Union institutions and the World Bank are the main multilateral providers (figure 3). In general terms, the EU and its member states are by far the most prominent AfT donors in the world. It is worth underlining that some non-DAC donors are among the main providers. In any case, there are high levels of concentration among providers: the top five concentrate close to 65% of total disbursements.

In terms of recipient countries, Vietnam, Turkey, India, Egypt and Morocco, all of them middle income countries, receive the largest amounts (figure 4)

Figure 3 and Figure 4

3.- Trade costs and developmental levels

One of the main purposes of AfT is to facilitate trade through reducing the costs linked with international transactions. This kind of cost can be classified into three large categories: i) costs "behind the border", related to the production of goods to be exported; ii) costs "between borders", mainly linked with transportation and goods freightage; and iii) "at the border" costs related to tariffs and border procedures. AfT tries to reduce these three types of costs.

As expected, there is a negative correlation between trade costs and a country's income level. For example, the average costs per 20-foot container in low-income countries multiply by 2.5 the average costs in OECD countries; and the number of days required to export from the former are triple that in the latter[3] (figures 5 and 6). LDCs show slightly lower trade costs than LICs, but the averages are not entirely representative, because there are enormous differences among countries. For example, costs per container are lower than US$ 1000 (comparable to those in OECD countries) in Timor-Leste, Myanmar and Cambodia, but climb to more than US$ 5000 in Chad, Central African Republic, Afghanistan and Zambia. In terms of days needed to export products, the differences among LDCs are equally huge, with a range that goes from 86 days in Afghanistan and 56 in Niger to 12 in Senegal and 15 in Liberia.

Figure 5 and Figure 6

The pattern is the same if we adopt a more comprehensive approach to trade costs based on the estimates of an inverse gravity model (Arvis et al., 2013)[4]. In this case average trade costs in manufacturing in low-income countries multiplied by 2.8 those of high-income countries; and the ratio is close to 2 in the case of average trade costs in agriculture. Landlocked countries and some remote islands increase these ratios by almost 30%. Obviously, these averages hide differences among countries, but, in general terms, this confirms the existence of an inverse relation between the level of development and trade costs.

[3] See "Doing business costs to export", in World Development Indicators

[4] It isn't easy to calculate trade costs in a comprehensive way. They have been calculated for some countries through a laborious bottom-up process based on a sample of international transactions in each country (Anderson and van Wincoope, 2004). Alternatively, trade costs have been estimated through an inverse gravity model in which trade costs are worked out from trade and production information. Through this procedure, trade costs are registered in *ad valorem* equivalent terms for each bilateral country pair. UNESCAP and the World Bank have created a database that provides information about the results of this last procedure.

With this in mind, it is unsurprising that some analysts point to costs between borders as an important problem for poor countries' development (Arvis et al., 2014). For example, Amjadi and Yeats (1995) found that over 40% of the export earnings of some of Africa's landlocked countries were absorbed by freight and insurance payments (with a continent average of 15%, compared to 5.8% for all developing countries); and Limao and Venables (2001) found that infrastructure problems largely explain the relatively low levels of African trade. These results underline the importance of massive investment in infrastructure in poor development countries, particularly in Africa (a renewed big-push approach).

Alternatively, other studies have shed light on competition in "logistic markets" as a way to reduce trade costs. Those methods include fighting cartels among shipping companies (the "shipping conferences") (Wilmeister and Hoffman, 2008 or Hummels et al., 2009), promoting trucking deregulation (Teravaninthorn and Raballand, 2008) and liberalizing the aviation sector (Borchert et al, 2012). These studies suggest paying more attention to policy dialogue with recipient countries in order to improve regulatory frameworks.

An eclectic consideration of these studies would recommend making simultaneous progress in both areas.

4.- AfT towards LDCs

Even though in average LDCs have lower transport costs than LICs, they are particularly affected by several obstacles to trade (OECD, WTO, 2015). For example:

- Although trade costs are generally falling in developing countries, they seem to be falling more slowly in LDCs (Arvis et al., 2013).
- Trade costs can be particularly harmful for LDCs when they have small economies with limited export surpluses.
- Export concentration in LDCs (both in products and markets) is much higher than in developing countries.
- Some LDCs are affected by several natural barriers that add to their trade costs (some are LLDCs, others are remote islands); and some are highly vulnerable to climate change
- Finally, given that the size of the domestic market is correlated with the average size of firms, a large majority of LDC companies are SMEs (firms with more barriers to exporting)

For these reasons AfT could be particularly useful in promoting trade capacities in LDCs. However, the bulk of AfT resources go to MICs, while LDCs receive barely 31% of allocable disbursements. In addition, AfT resources seem to be highly concentrated in a small number of LDCs. For example, in 2013, the top 10 recipient LDCs absorbed more than 60% of total AfT, while the bottom 10 received only 2%.

Organizing LDCs into clusters gives us additional insights. Firstly, it confirms that trade costs (measured through cost-per-container or days to export) vary considerably between groups (figures 7 and 8). The "Small/SIDS/remote countries (SR)" is the group with lower trade costs,

followed by “Mostly agricultural economies: Biggish (MAEB)”, “Agricultural economies that are industrializing (AEI)” and “Mostly agricultural economies: smallish no landlocked (SNLL)”. On the other hand, “Mostly agricultural economies: smallish and landlocked (SLL)” is the group with higher trade costs, followed by “Countries at war (CW)” and “Oil/mining countries (MC)”.

Figure 7 and figure 8

AfT resources are distributed among these groups in an unequal way (Table 1). In terms of the total amount, MAEB, CW and AEI absorb close to two thirds of total AfT disbursements to LDCs. In contrast, SR, SNL and SLL receive clearly lower proportions of AfT funds. This distribution is highly affected by the size of the countries: if we take AfT per capita into account, the ranking would be very different. Now SR is the main recipient group with close to US$ 110 of AfT per capita, followed by AET with close to US$ 50 per capita. The rest of LDC groups receive similar AfT resources per capita, between $US 10 and 20 as an average in the two periods.

Table: 1: Distribution of AfT by LDCs groups

	Percentage of AfT received by LDCs groups (average in 2013 constant prices)		AfT over ODA received by LDCs groups (average in 2013 constant prices)		AfT per capita by LDCs groups (constant 2013 dollars)	
	2006-2009	2010-2013	2006-2009	2010-2013	2006-2009	2010-2013
Countries at war (CW)	24.85	24.15	24.3	28.3	14.7	18.4
Oil/mining countries (MC)	9.07	8.83	23.7	23.8	8.5	10.5
Small/remote (SR)	1.76	1.86	15.3	22.3	116.3	107.2
Mostly agricultural economies						
Biggish (MAEB)	28.13	26.95	39.5	45.1	8.9	10.5
Smallish no landlocked (SNL)	5.51	5.99	28.2	42.8	12.7	15.8
Smallish landlocked (SLL)	4.96	4.67	40.7	48.1	9.7	11.8
Agricultural economies that are industrializing (AEI)	17.14	15.14	36.8	32.7	16.2	24.3
Agricultural economies strongly tertiarized (AET)	8.55	12.37	26.2	37.8	25.4	50.2
TOTAL	100	100				

It is important to ascertain whether the allocation process of AfT resources takes into account reasonable criteria based on the severity of the trade costs faced by each country and, complementarily, on country’s capacities and resources, measured through its level of development.

In the first case, we should expect a positive relation between AfT per capita received and the level of costs that the country faces to export. As figures 9 and 10 show, the relation between these two variables is quite the opposite: AfT per capita is higher the lower the trade costs are (measured by cost per container or days to export).

Figure 9 and figure 10

Finally, we would expect a negative relation between countries' capacities and resources (measured by GDP per capita in PPP) and AfT per capita received. As figure 11 shows, that is the case, but the relationship is very weak. In other words, it does not look as if the allocation of AfT is based on clear and recognizable criteria.

Figure 11

5.- Effectiveness of AfT

AfT could impact on countries' development through diverse causal links (figure 11). AfT could: i) improve countries' soft and hard infrastructure, reducing trade costs and encouraging trade; ii) strengthen countries' productive capacity, promoting export diversification and increasing productivity; and iii) support export promotion activities. Even if there is not an unequivocal direction of causality between trade and economic growth, there are no cases of long-run growth without an increase in a country's capacity to export. Therefore, it is expectable that the expansion of trade would allow countries to increase their rates of growth and, through this process, to reduce poverty. More difficult and controversial is the direct relation between trade and poverty, because the evidence shows that, in some occasions, trade openness can negatively affect income distribution or gender inequality.

Box 2: AfT as a mechanism for correcting market and government failures

AfT could be an effective mechanism for tackling different types of market failures:

- Problems of coordination, enhancing linkages among activities, through productive capacity building;
- Problems of externalities, promoting training or technology adaptation, through assistance for trade policy and regulation;
- Problems of imperfect information, supporting the process of the arrival of new exporters through productive capacity building
- Problems of public goods through supporting economic infrastructure

AfT can also overcome some problems related to government failures, like those associated with regulation and border procedures, through providing assistance in trade policy and regulation.

Figure 11

However, one question remains to be answered: is AfT effective? Several empirical studies have tried to estimate the effect of AfT (or some of its components) on trade (basically, on exports)[5]. They use different approaches and econometric procedures: gravity models (Helble et al., 2012; Hühne et al., 2011; Portugal-Perez and Wilson, 2012); computable general equilibrium (CGE) models (Ivanic et al., 2006); cross-country analysis (OLS, 2LS), including those with instrumental variables (Vigil and Wagner, 2012; Ferro et al., 2014); panel data (Busse et al., 2011); dynamic panels through the generalized method of moments (GMM) (Cali and te Velde, 2011; Massa, 2013); or case studies (macro and micro) (Duval, 2006; Brenton and von Uexkull, 2009; Lederman et al., 2010; Volpe, 2011).

[5] A good survey of these studies can be found in Basnett et al., (2012) and Cadot et al., (2014)

Since these studies considered different AfT categories, country coverage and methodological approaches, it is difficult to compare their results. In general terms, more attention has been dedicated to analyzing the effect of AfT oriented to "trade policy and regulations" and to "trade-related infrastructure", while few studies consider the effect of aid targeted at "productive capacity building" or "trade-related adjustment". Although this literature is far from conclusive, five general conclusions can be drawn:

- Aid to trade-related infrastructure seems to be particularly effective in promoting recipient countries' exports
- Aid to trade policy and regulations shows more mixed evidence although most studies find positive and effective effects on recipient countries' exports
- AfT seems to have a larger impact on Sub-Saharan African countries (and lower income countries) than on the whole sample of developing countries, but the evidence is not unambiguous
- There is little evidence of the effect of AfT on productive capacity and export diversification although some tentative studies find a positive effect (Martinez-Zarzoso et al., 2014)
- Finally, AfT benefits both donor and recipient exports, but the latter effect is stronger than the former (Hühne et al., 2014a and 2014b).

Obviously, more evidence is needed for more robust conclusions, but empirical literature seems to leave room for optimism (Cadot and Melo, 2014; Hallaert, 2013)).

6.- Recommendations

1.- The absence of a precise remit for AfT has complicated the debates about its advantages and effectiveness. The taxonomy applied by the DAC (the Credit Reporting System) does not offer a good identification of the trade-related components of ODA. Even the definition of TRA, with a subset of activities more clearly connected with trade purposes, is not free of ambiguity. Given that the DAC is now in the process of redefining ODA (and other financing for development flows), it might be appropriate to demand a more precise definition of AfT and its remit.

2.- Most of AfT goes to middle-income countries (close to two-thirds of ODA and more than 95% of other official flows). A shift in this pattern of aid for trade allocation is needed, giving more attention to LDCs and, particularly, those (such as landlocked countries) with more difficulties in integrating in international markets. Given that some LDCs have difficulties in drawing up fundable projects, more technical assistance in the identification of trade constraints could be useful too.

3.- Limited AfT resources go to regional projects. However, some trade-related issues can only be tackled in a regional framework. That is the case, for example, of some transport corridors that affect a group of countries. Therefore, donors should dedicate more attention to these regional problems.

4.- The rationale for the AfT agenda is to support developing countries to overcome barriers to trade expansion while ensuring poor people benefit from trade. To achieve that, it is critical to understand how changes in trade affect households and what contextual factors influence

these effects. It is not enough to consider the change in total trade, but also how this change affects different groups (formal vs informal workers, male vs female workers, large vs small business etc). In that sense, the application of impact evaluation exercises to AfT projects could be very useful (Cadot et al., 2011).

5.- Studies suggest that AfT is more effective when it is highly targeted (Helble et al., 2012 and Cali and te Velde, 2011). To do that, more accurate country diagnostics on the main productive and trade restrictions is required (Hallaert, 2009). This information would allow donors to better allocate resources and to better design AfT interventions.

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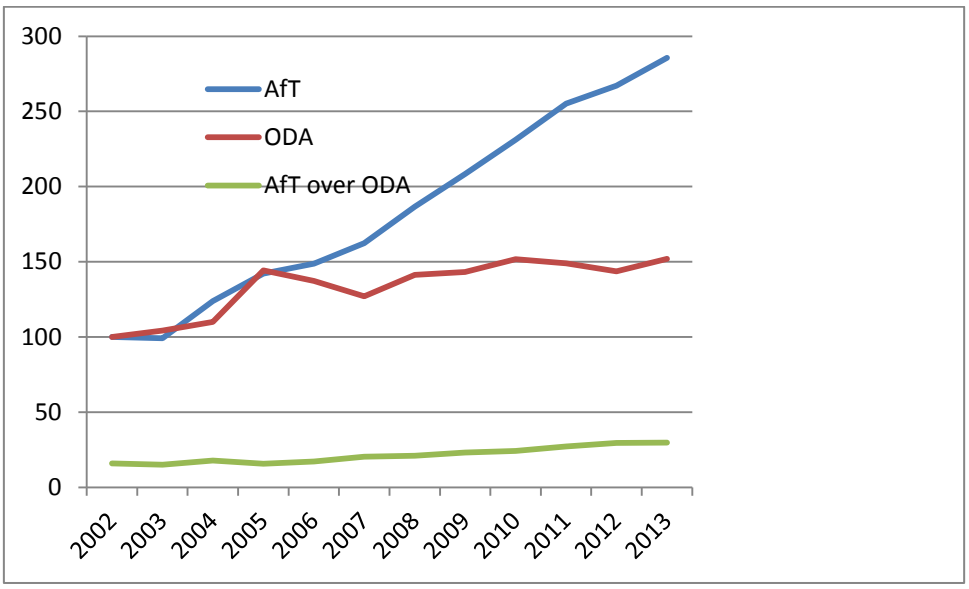
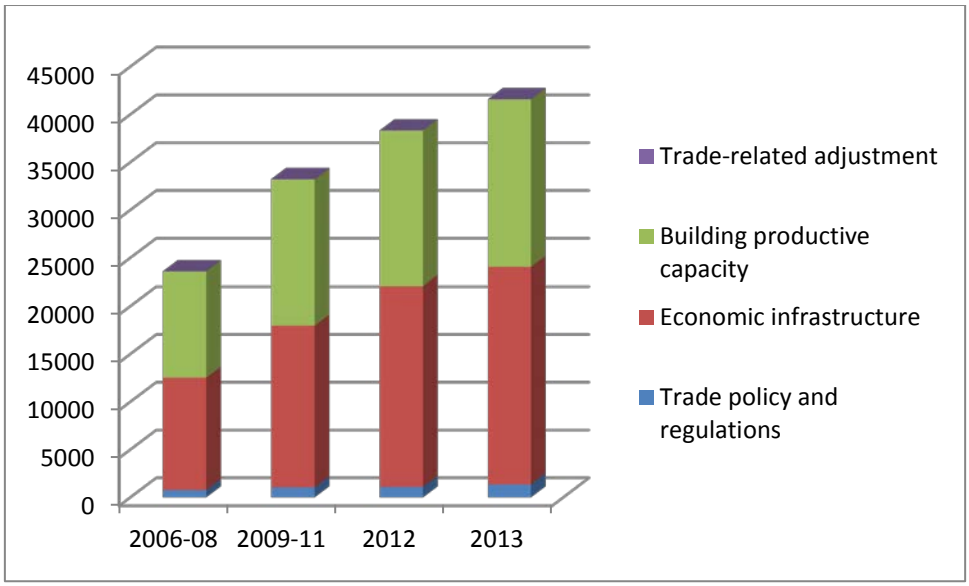
FIGURES

Figure 1: Evolution of ODA and AfT (1992-2013) (Indexes and %)



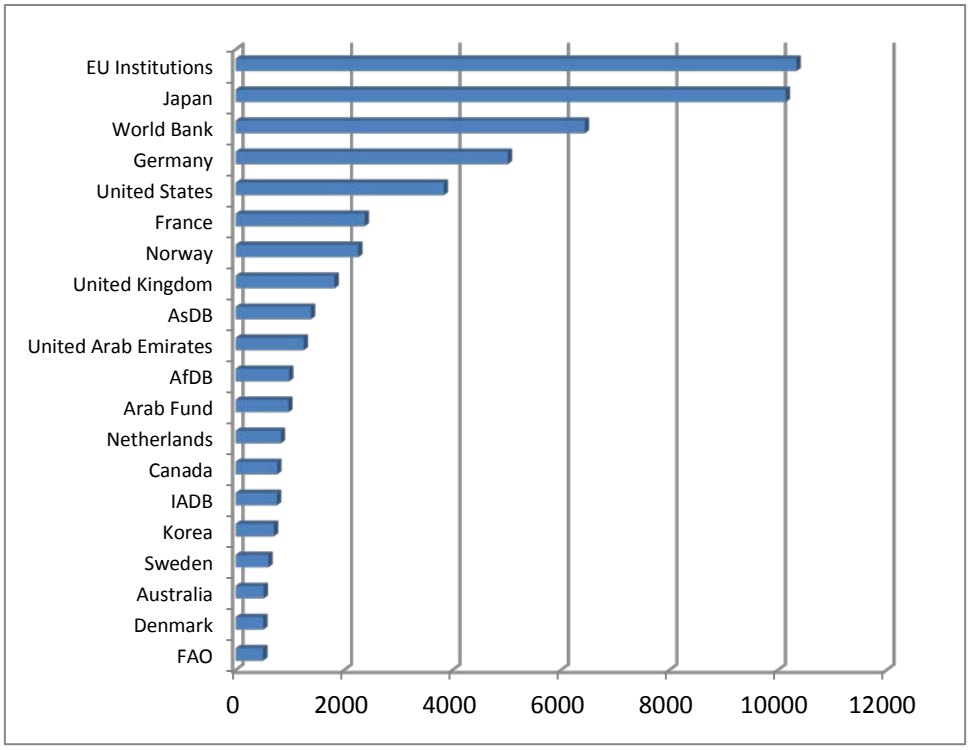
Source: DAC (OECD)

Figure 2: AfT by categories ($US million 2013 constant)



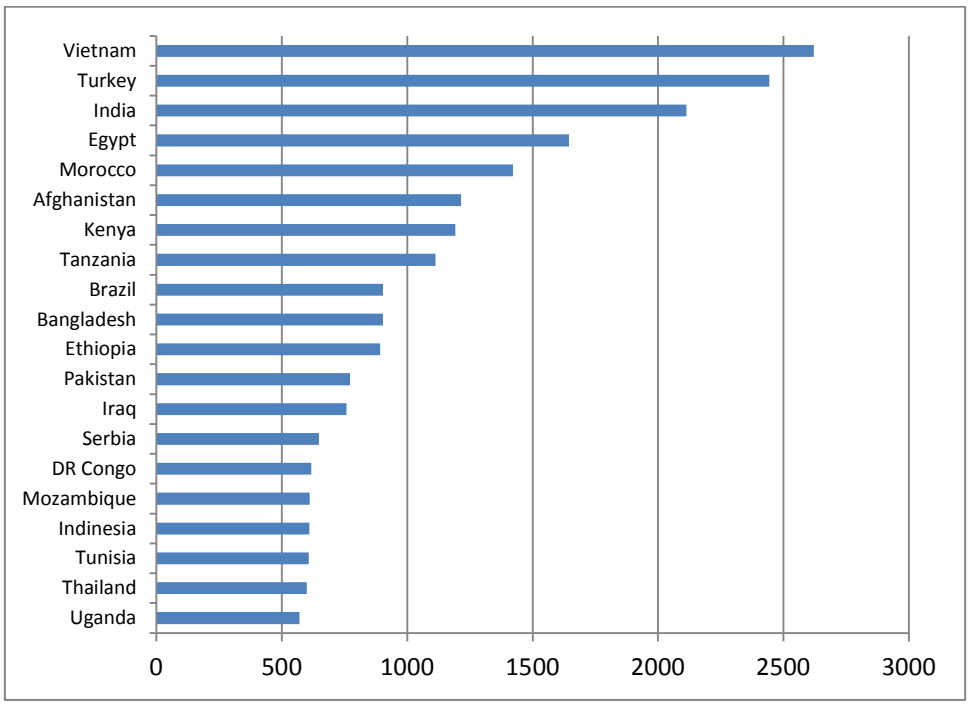
Source: DAC (OECD)

Figure 3: Main AfT providers, 2013 ($US million)



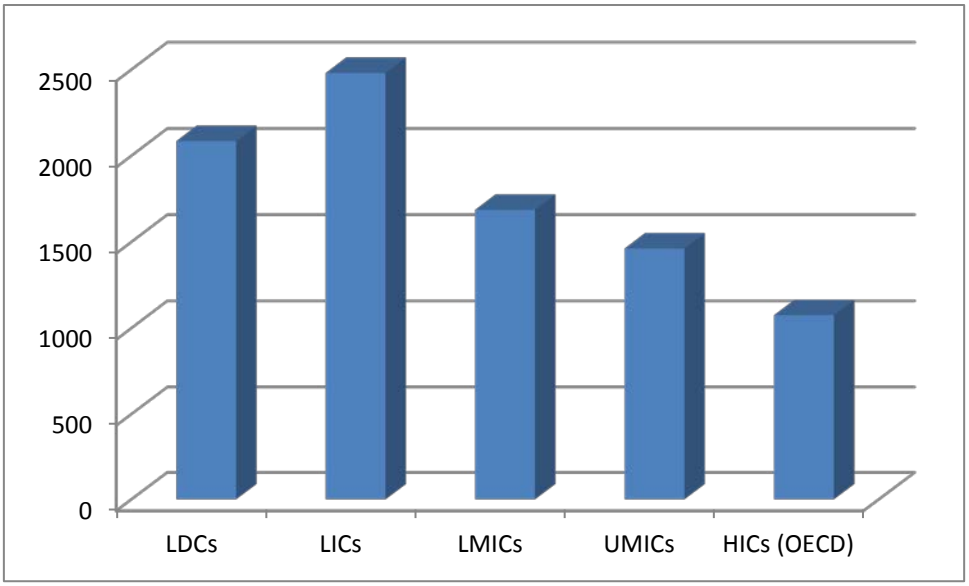
Source: DAC (OECD)

Figure 4: Main AfT recipients, 2013 ($US million)



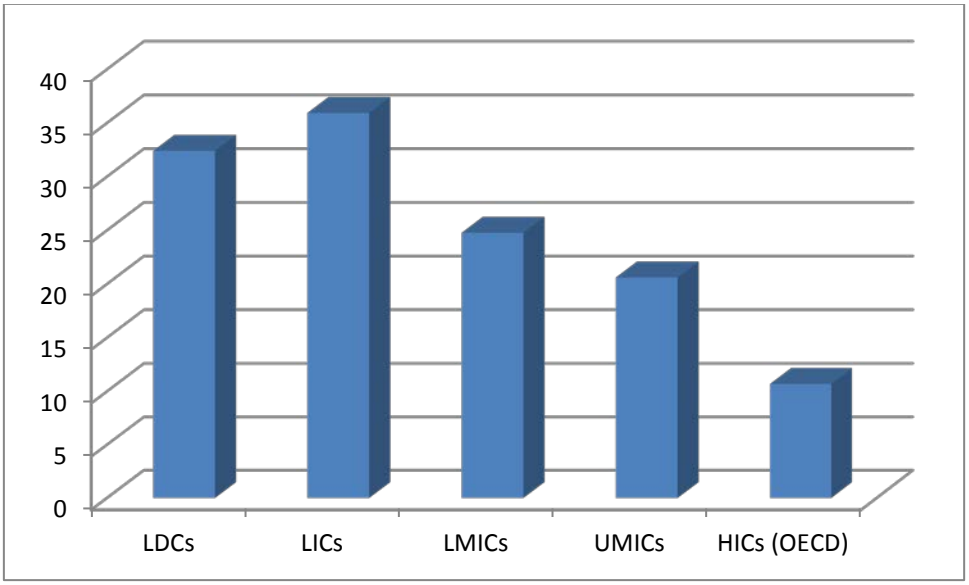
Source: DAC (OECD)

Figure 5: Average cost to export (US$ per container)



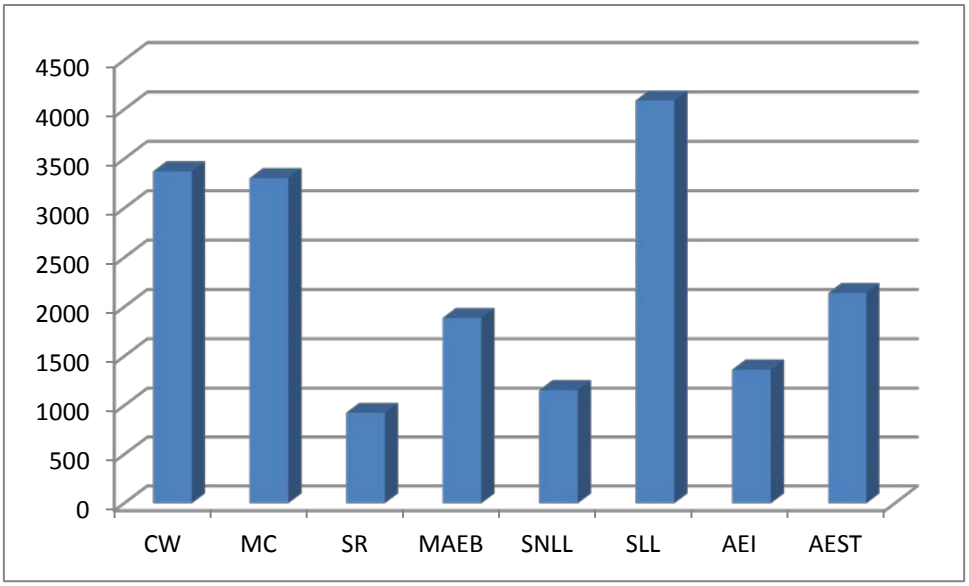
Source: World Development Indicators (World Bank)

Figure 6: Average time to export (days)



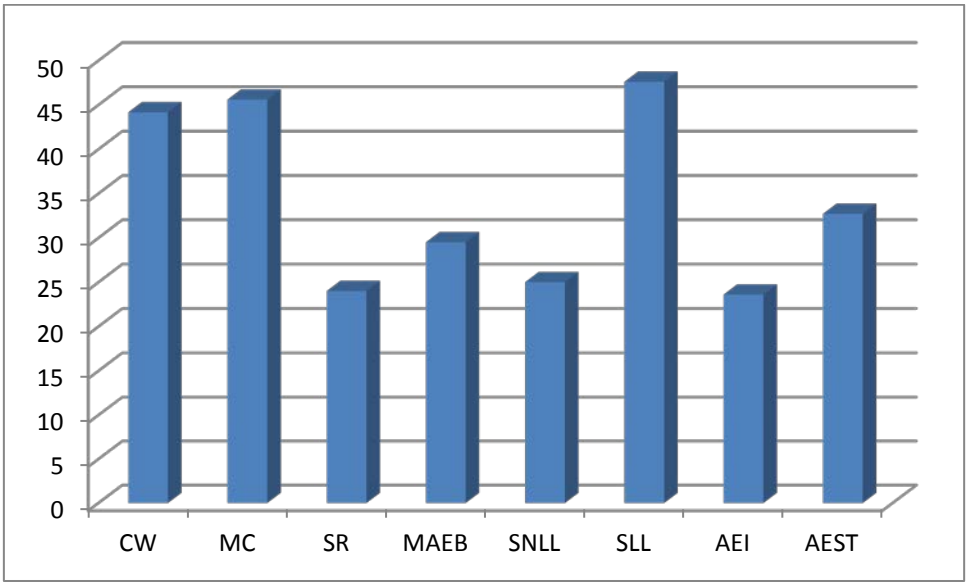
Source: World Development Indicators (World Bank)

Figure 7: Average cost to export in LDCs groups (US$ per container)



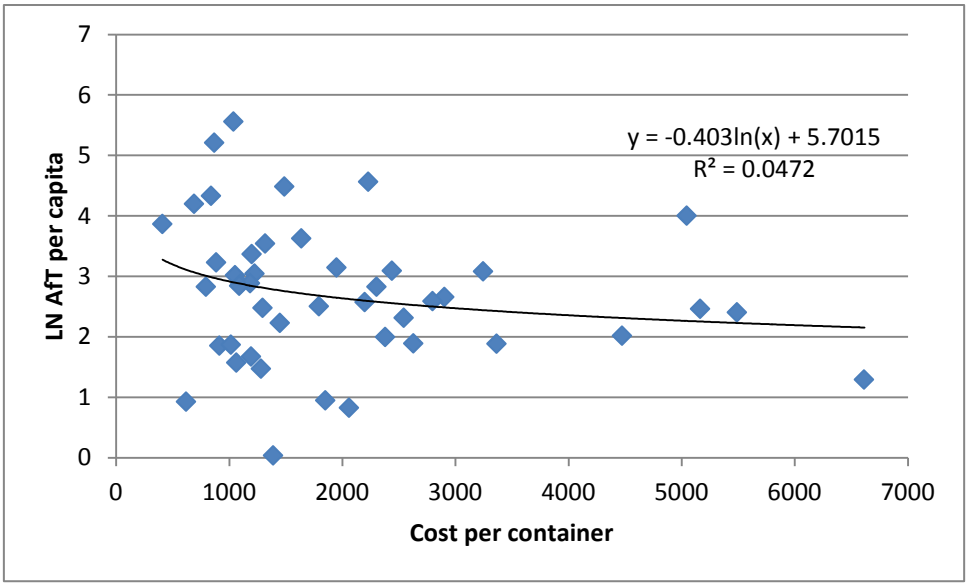
Source: World Development Indicators (World Bank)

Figure 8: Average time to export (days)



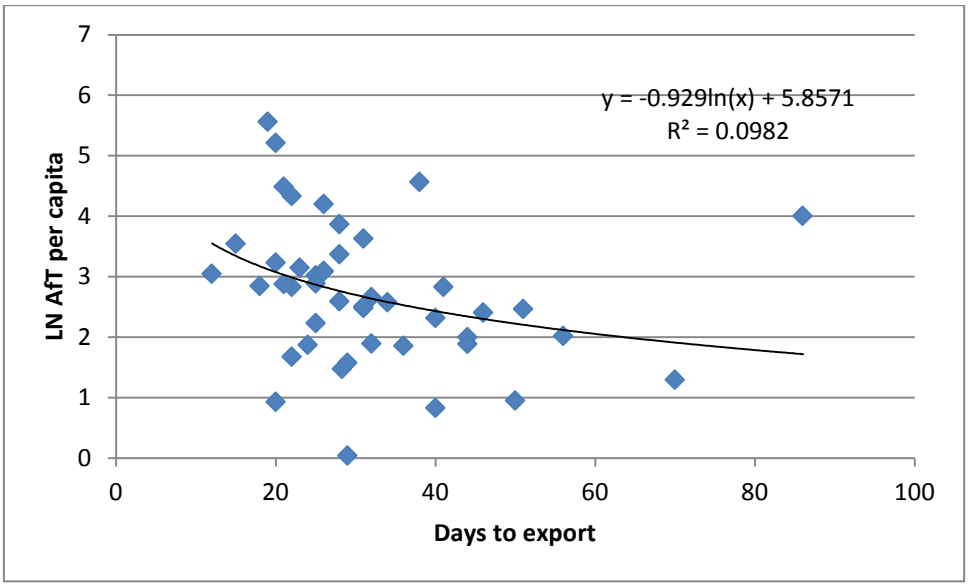
Source: World Development Indicators (World Bank)

Figure 9: Relation between costs to export and AfT per capita to LDCs (20010-2013)



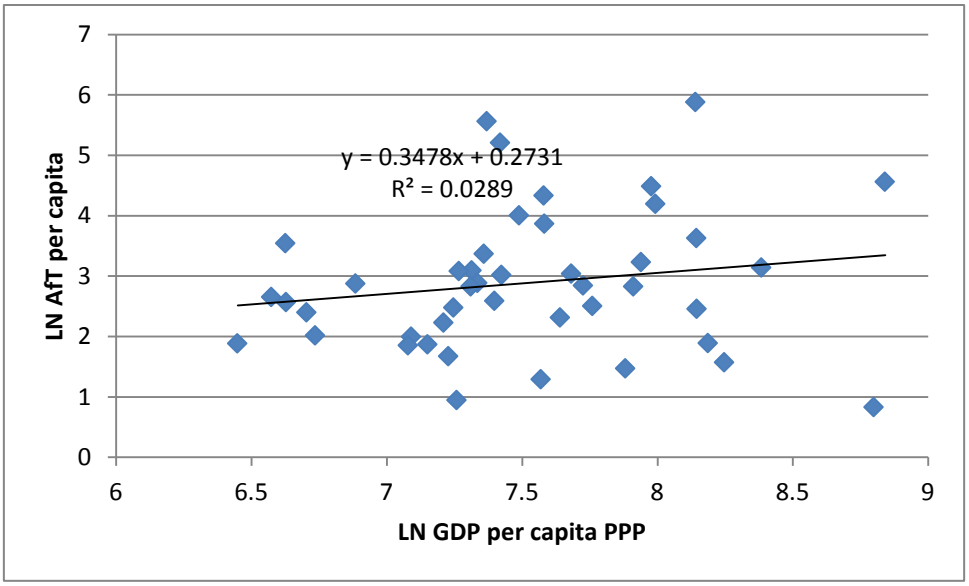
Source: DAC (OECD) and WDI (World Bank)

Figure 10: Relation between costs to export and AfT per capita to LDCs (2010-13)



Source: DAC (OECD) and WDI (World Bank)

Figure 11: Relation between GDP per capita (PPP) and AfT per capita to LDCs (2010-2013)



Source: DAC (OECD) and WDI (World Bank)

Figure 12: AfT: channels of intended impact