TRADE HOT TOPICS
Commonwealth

August 2008 Issue No.50

The effectiveness of aid for trade: Some empirical evidence

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Aid for Trade (AfT) has moved up both the aid and trade agendas. Several studies have emerged describing the rationale of aid for trade, but it is now time to move beyond the descriptive stage and into analysing the needs and designing the implementation process. This trade hot topic is based on a recent Commonwealth-ODI study that attempts to provide some empirical evidence on the effectiveness of Aid for Trade (Calì and te Velde, 2008). A key motivation of the study is a lack of good quantitative evidence on 1) actual aid for trade in-country flows and 2) the possible effects of aid for trade.

In the multilateral trade negotiations under the World Trade Organisation (WTO), Aid for Trade was incorporated as a new concept in the Hong Kong Ministerial Declaration, as special and committed assistance to developing countries aimed at fostering trade. A WTO Task Force was established which identified six categories of AfT, building on the definitions used in the WTO-Organisation for Economic Co-operation and Development (OECD) trade related and capacity building database: trade policy and regulations, trade development, trade-related infrastructure, building productive capacity (including private sector development), trade-related adjustment (including support for adjustment associated with changes in international trade regimes), and other trade-related needs.

While AfT has now become a widely used terminology at the WTO, arguing for additional and better aid towards trade, the categories of aid falling under the Task Force definition has existed for decades.[2] The OECD has been reporting data on the types of aid that are considered to be helping countries in promoting international trade. The Commonwealth-ODI makes use of this data in a novel way to examine the effects of these types of aid on trade-related outcomes.

How is aid for trade expected to affect trade?

Market and governance failures often limit the potential of trade. Table 1 below identifies potential failures and describes possible policy responses to address these failures. The Table identifies whether such a response may be assisted by an aid for trade package and what part of the package would be relevant to the task (on the basis of its current classification in the OECD CRS aid statistics).

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[1] This is based on a paper prepared for the Commonwealth Secretariat. We thank Gabriel Boc for the research assistance and Mohammed Razzaque and Sheila Page for extensive comments. The views expressed are those of the authors and do not necessarily reflect those of the Commonwealth Secretariat or its Members. [2] See for instance Calì (2008) for a statistical analysis of past trade-related assistance.

Table 1 suggests that if employed effectively aid for trade can:

- Improve trade policy co-ordination (AfT category: trade development)
- Develop standards to improve access for exports (trade facilitation)
- Improve skill formation (trade-related adjustment)
- Improve infrastructure (trade-related infrastructure)
- Overcome governance failures, such as weak institutions or weak administrative procedures (trade policy and rules)

Table 1: How aid for trade may address market and governance failures

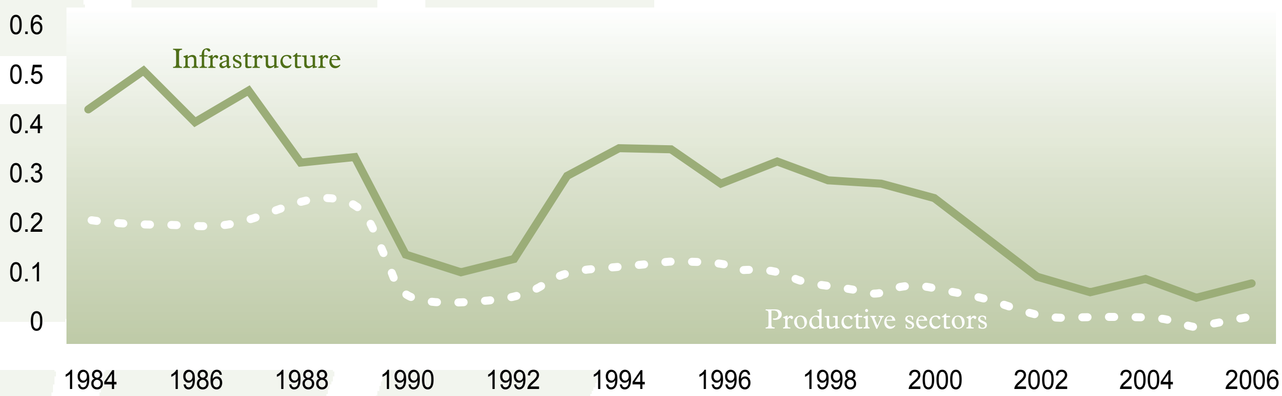
Broad source / area of failure	Examples of failures	Responses: policies and activities	Role for aid for trade?
Market failures			
Coordination	Public benefits from coordinating private activities ignored; Linkages not exploited; Complementarities not exploited	Capacity building for trade policy to identify linkages and externalities; National trade strategy	Yes, training and institutional development
Developing, adapting and adopting technology	Incomplete and imperfect information;	Facilitate technology transfer and adoption; Support for quality control to meet export standards	Yes, trade facilitation, Assisting co-ordination with the private sector
Skill formation	Under-investment in training due to inability to appropriate common benefits (in training workers) due to imperfect information	Better coordination and/or subsidies for training; Strengthen information flows	Mostly not included under aid for trade. Could be included in trade-related adjustment
Capital markets: Access to finance	Difficult access to credit High interest rates	Credit schemes; Formal sector subsidy based on improved information about borrowers.	Normally not included under aid for trade
Infrastructure	Lack of good quality infrastructure because lumpy investment gets postponed in times of uncertainty.	Provide incentives for public-private partnerships; Provide grants in the case of low financial return / high economic return.	Yes, aid to economic infrastructure, better co-ordination with development finance institutions/ private sector
Governance failure			
Regulatory and administrative structure	Burdensome administrative requirements	Streamline administrative procedures and regulation.	Yes, trade Policy and Regulations (especially trade facilitation)

Source: Adapted from te Velde (2008)

There are also a number of other more indirect effects of aid for trade. For example, the shift to giving trade priority in aid spending aims to put more emphasis on strengthening the productive sector and the supply side relative to the social sectors (e.g. health and education). The share of aid going to economic infrastructure fell dramatically after a mid-1990s donor consensus that social sectors had to be supported (figure 1) and has only recently picked up somewhat.

The Commonwealth Secretariat-ODI paper is built on the premise that there is not enough information to assess the relative importance of the various channels for trade-related outcomes. The hypothesis is that both the direct and indirect effects of aid for trade are potentially important to stimulate competitiveness and exports. These effects are the product of a complex causal chain running from aid flows to economic performance at the country level and mediated by domestic policy-makers, implementation agencies, policies and country conditions. Bourguignon and Sundberg (2007) define this chain as a "black-box", as analytical models usually are not able to capture the actual way in which the channels in the causal chain operate. This implies that it is often difficult to identify the specific reasons why a dollar of aid may produce little discernible change. These may include for instance an ill-defined objective, an inefficient service delivery, inadequate bureaucratic measures, or diversion of the money from the original allocation. This complexity may in part explain the inconclusiveness of the large literature in search for a relation between aid and growth. There is a large body of empirical literature on the macro relationships amongst aid, growth and investment. This literature tries to investigate the effects of aid on growth on the basis of a neoclassical model of growth, where aid provides a boost in capital accumulation and thus on growth.[3] The findings from such a literature have been at best mixed. The most extensive review of empirical studies on the impact of overall aid on growth suggests that this impact is indeed not significant (Doucouliagos and Paldam, 2007). However, the evidence of the effect of aid for trade (as a subset of all aid) on growth and trade is mostly lacking.

Figure 1 Share of total aid allocated to economic infrastructure and productive sectors[4]



By focussing the analysis on aid for trade, it is possible to depart from the aid-growth conundrum by isolating the impacts of specific types of aid on specific outcomes. The rationale and the objectives behind aid for trade are clearly narrower than those behind general aid and this should allow for a more precise identification strategy. The Commonwealth-ODI analytical paper, therefore, tests for effects of total trade-related aid and specific types of aid for trade on trade-related outcomes, including the costs of trading and the level of exports.

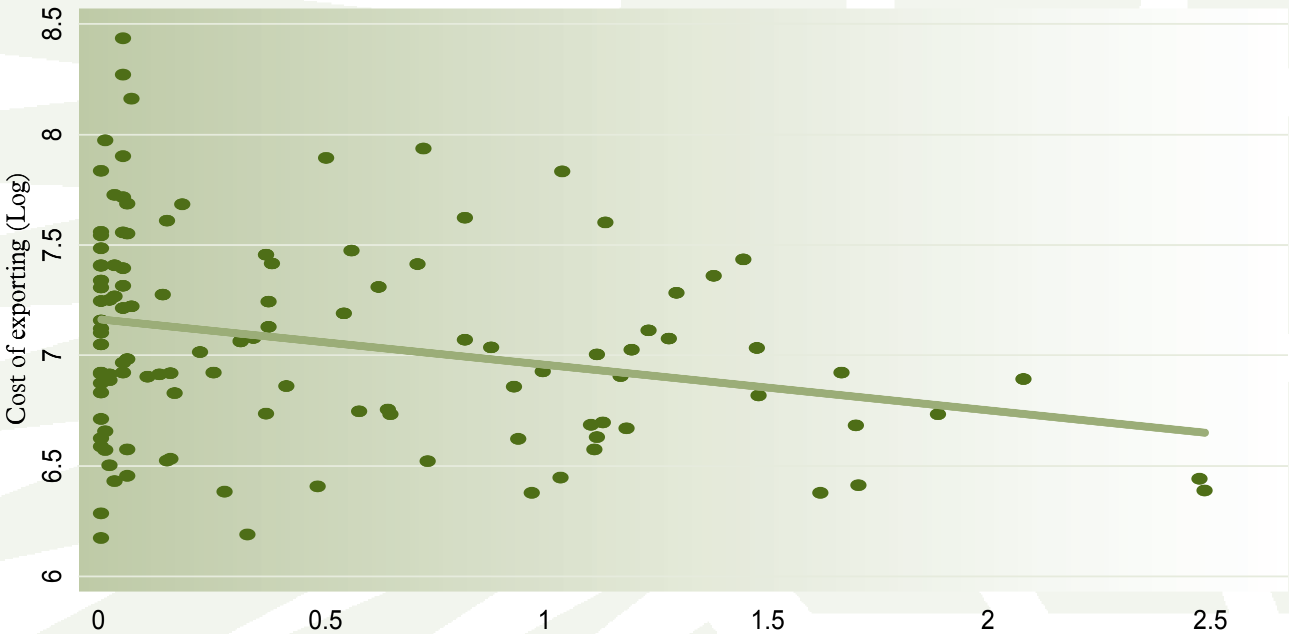
[3] See Burnside and Dollar (2000) and Rajan and Subramanian (2007) for illustrations.
[4] OECD DAC definition 300 "production sectors" which includes aid for agriculture, industry, tourism and trade policy and regulations.

AID FOR TRADE AND THE COSTS OF TRADING

The background analytical study first estimates the effects that aid to productive capacities exerts on the costs of trading, across countries and over time (after controlling for a number of other relevant variables). We measure the costs of trading by investment climate indicators from the World Bank's doing business database (World Bank, 2008), which, amongst others, provides information on the time taken by customs to clear imports and exports and the cost of exporting and importing goods. These variables measure separately the time and the costs (in U.S. dollars) of handling and transporting a 20-foot container to (from) the port of departure (entry)[5] and capture the efficiency with which exports and imports are handled within the country of interest. For instance, in the case of exports, procedures start after the goods are packed at the factory and include all official costs until the goods' departure from the point of exit.[6]

Our test is important as the costs of trading are significant determinants of a country's competitiveness. Djankov et al. (2006) finds that each additional day that a product is delayed prior to shipping reduces trade by at least 1 percent. It is also a direct and intuitive test because a substantial part of Aid for Trade Policy and Regulation is aimed at reducing the costs of trading across borders.[7] In particular, trade facilitation included in Aid for Trade Policy and Regulation specifically aims to reduce the costs of trading.[8]

The statistical analysis carried out in the paper involving a sample of 120 countries, for which usable information is available, suggests that a 10% increase in aid for trade (to trade policy and regulations) is associated with a 1.5% reduction in the trading costs. Figure 2 demonstrates this relationship visually. This cost-reducing impact of Aid for Trade is borne out even after controlling for other relevant factors. The effect of Aid for Trade Policy and Regulation in Africa is lower than for the whole sample, and it appears to be mainly driven by a single country.[9] This calls for a closer evaluation of the effects of this type of aid in African countries.



Note: The relationship is conditional on the effect of other variables on the cost of exporting, including landlockedness, level of economic development and governance

[5] In the case of costs, these include costs for documents, administrative fees for customs clearance and technical control, terminal handling charges and fees for in country transport. The cost measure does not include tariffs or trade taxes. Only official costs are recorded.

[6] For importing goods, procedures start when goods are unloaded from a vessel at port of entry or when the vehicle carrying them has crossed the border and go until delivery at the factory or warehouse.

[7] For instance, types of projects included in this category of aid include: Simplification and harmonisation of international import and export procedures (e.g. customs valuation, licensing procedures, transport formalities, payments, insurance); Support to customs departments.

[8] According to the data description by WTO/OECD, "trade facilitation relates to a wide range of activities such as import and export procedures (e.g. customs or licensing procedures); transport formalities; and payments, insurance, and other financial requirements [...] Cutting red tape at the point where goods enter a country and providing easier access to this kind of information are two ways of "facilitating" trade."

[9] This is due to Egypt. If Egypt is dropped from the sample, the variable, Aid for Trade Policy and Regulation, does not have a significant effect.

SECTORAL ANALYSIS OF AID FOR TRADE AND EXPORTS

The technical analysis also tests for the direct effects of aid for trade on export performance. In order to do so, the paper employs a novel empirical strategy based on sectoral data. We divide aid to productive capacities into aid to the different sectors and then relate sectoral aid to sector-specific exports. This represents a test of whether exports in sectors with more aid grow relatively faster than other sectoral exports within a country (between groups component), as well as whether exports in one sector grow faster in years in which that sector receives relatively higher levels of aid (within group component). The main advantage of this strategy is that it allows us to control for all time-varying country specific factors, which may influence exports. These may include effective demand, policies, size of the economy, economic fundamentals, country-level shocks, etc. The paper uses four large sectors of the economy for which export data (from the World Development Indicators) are available: food production, manufacturing, mineral extraction and tourism. These sectors account for all goods' exports and part of services exports of the countries in the panel. We match these sectors with their counterparts in the aid data: agriculture and fishing, industry, mining and tourism.

The results based on this new identification strategy are clear and show there is a robust and positive effect of aid to productive capacities on exports. In line with the results of others on the impact of aid on growth (e.g. Hansen and Tarp, 2001 and Clemens et al, 2004), this relationship has an inverted U shape. Aid has a positive impact on exports at a diminishing rate. These results are robust to a variety of specifications, control variables, and sampling strategies. They are robust to controlling for time varying country-specific and sector-specific factors. They are also robust to using different types of samples, e.g. including only observations with positive values of Aid for Productive Capacity. The power of the results holds also when including a lagged change in exports variable which can control for a potential source of endogeneity in aid allocation. Finally, Aid for Productive Capacity also has a positive impact on the rate of export growth.

There are a number of other interesting findings from the sectoral analysis. Aid to economic infrastructure promotes exports significantly. The effects of Aid for Productive Capacity are relatively more important supporting exports in mining and manufacturing compared to the effects in tourism and agriculture. This suggests that the more capital-intensive sectors (such as mining and manufacturing) are also the ones where the lack of domestic resources has been most penalising in developing countries. This is in line with the view that capital-intensive sectors in developing countries are often at a disadvantage due to the relatively small domestic market and lack of access to credit for those firms. Aid can thus play a role in helping firms in those countries to acquire capital to compete in these sectors. This may be an effective strategy to move the comparative advantage of (certain) developing countries away from non-capital intensive sectors.

Taken at their face value, these results suggest that aid for trade, and aid to strengthen productive capacity in particular, seems to have played a role in facilitating exports and in fostering exports. These results are amongst the first quantifiable studies of the impact of trade-related assistance on economic performance.

CONCLUSION

This Hot Topic addresses whether aid for trade has promoted countries to become more competitive and increase their trade. We highlight a number of pathways through which aid for trade can have a positive effect on trade by tackling both market and governance failures. Using data for 120 developing countries, we find that aid for trade reduces the costs of trading, an important investment climate indicator and one which is particularly relevant for importing and exporting. Using country and sector specific data over the period 1973-2006, we also find that aid for trade fosters exports, although the relationship is non-linear and the effect depends on a careful specification of the types of aid and exports. These findings enhance the literature on the impact of aid on growth and help to make the case for the importance of aid for trade and that more additional aid, as called for by the WTO Task Force under the Aid for Trade initiative, could indeed be effective in promoting development.

While specific types of aid are helpful, domestic policies and institutions are likely to be still more important determinants of trade. Good quality skills and infrastructure, appropriate technology and sector policies and a market friendly investment climate tend to be mostly domestically shaped and aid for trade may provide a helping hand. Aid is not a substitute rather a useful complement to appropriate domestic actions.

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