

CHAPTER 5: EVALUATING THE EFFECTIVENESS OF AID FOR TRADE

This chapter explores the effectiveness of aid for trade in promoting trade – both exports and imports – and conditions which tend to make it most effective. The review provides abundant evidence to suggest that aid for trade is indeed broadly correlated with increases in trade. Aid for trade works best when it is focused on reducing the costs of trading through improvements in infrastructure, trade facilitation, trade-related public institutions (such as customs, standards administration, and export promotion), and policies (including eliminating policy barriers to competition). Aid for trade – in varying forms – directed to low income countries is particularly helpful in promoting trade. Analysis in this chapter suggests that aid for trade destined to low and lower-middle income countries is likely to have a high pay-off. Typically, one dollar invested in aid for trade is associated with an increase of nearly USD 8 of exports from all developing countries – while one dollar of aid for trade to International Development Association (IDA)-eligible poorest countries amounted to US 20 in new exports and to USD 9 for all low and lower-middle income countries.

INTRODUCTION

Aid for trade, always an important component of development assistance, has risen substantially since the WTO ministerial in Hong Kong in December 2005. Aid-for-trade commitments increased from USD 19 billion in 1995 to USD 23 billion in 2005 and stood at USD 41.7 billion in 2011. The acceleration evident in the period 2006-10 seems to have tailed off somewhat from a peak of USD 44.9 billion in 2010 under the pressure of the global economic crisis. However, there can be little doubt that donor governments have invested heavily in building trade capacity (see Chapter 2). Concomitantly, trade from developing countries grew substantially and in an accelerating pattern not dissimilar to aid for trade over this same 1995-2011 period. Exports of developing countries rose from about USD 4 trillion to surpass USD 15 trillion.

Since the onset of the economic crisis in 2008, donor budgets have come under increasing strain. This has raised the level of scrutiny of all expenditures, including development assistance, to show results. The OECD and WTO have worked intensively to analyse evidence on ways aid for trade has affected trade performance as a stimulus to economic growth and poverty reduction (OECD, 2011c). This chapter explores the evidence of links between aid for trade and growth of trade in developing country recipients. It reviews studies that speak to three questions:

- Is aid for trade effective in increasing trade, thus fostering more rapid economic growth and sharper reductions in poverty, and if so, under what circumstances is aid most effective?

- As global and regional value chains become a central feature of the trade landscape, what changes does this imply for aid for trade, and has past aid for trade contributed to effective participation in global and regional production chains?
- Do management systems of governments, in partnership with donors, improve the effectiveness of aid for trade?

To answer these questions, the chapter argues that a full picture of the effect of aid on trade only emerges by looking at this relationship through various methodological prisms – including aggregate cross-country studies, programme reviews and project evaluation. The first section reviews the general findings about the relationship of aid for trade and trade creation. The second updates some of the past empirical findings and pushes the cross-country analysis into new areas, looking at the impacts of different types of aid for trade on particular categories of developing countries. The third section highlights the emerging role of value chains and works through the implications for aid for trade. The penultimate section looks at the role of government management systems, and charts how they interact with aid-for-trade donors, to understand which models seem to work best. From this analysis, the final section draws some conclusions and policy lessons.

WHAT IS SUCCESS IN AID FOR TRADE?

Much like all development assistance, aid for trade has as its ultimate objective raising standards of living and reducing poverty through its effects on economic growth. As described by the OECD (2011b), three generalised propositions link the transmission of aid for trade to growth and poverty reduction: aid for trade leads to more rapid growth of exports and imports; more rapid growth of trade raises productivity and income growth; and incomes rising with growth lift people out of poverty. This chain of causation, while arguably robust as cross-country generalisations over long periods,¹ does not necessarily hold for every country at any given time. For example, many factors affect the link between trade growth and income growth: conflict, indebtedness, governance, or the absence of complementary policies in finance, education, and/or investment. Similarly, in the last link of the chain, from growth to poverty reduction, the basic structure of the economy – initial distribution of income, land or natural resource ownership, the skill of the labour force, or the labour-intensity of production – strongly affects the pace of poverty reduction and the distribution of the benefits from income growth.

In exploring the literature on the effectiveness of aid for trade, this section concentrates on the evidence that aid for trade promotes more rapid growth of exports and imports. The objective is to identify the types of trade-related projects and country situations where aid for trade has the highest probability of success.

Expanding trade outcomes

For trade negotiators from developing countries at the 2005 WTO Ministerial Conference in Hong Kong, the measure of success of aid for trade was to expand exports, and to create the domestic productive capacity to take advantage of new market access to be achieved under the Doha round. The 2006 WTO Task Force on Aid for Trade that resulted from the Hong Kong ministerial summarised the objectives this way:

Aid for Trade is about assisting developing countries to increase exports of goods and services, to integrate into the multilateral trading system, and to benefit from liberalised trade and increased market access. Effective Aid for Trade will enhance growth prospects and reduce poverty in developing countries, as well as complement multilateral trade reforms and distribute the global benefits more equitably across and within developing countries.²

Beyond expanding exports to propel growth, other goals, although largely unmentioned in the Task Force report, emphasised progressively changing the composition of trade. This includes diversifying exports away from reliance on a few raw material commodities with volatile prices, increasing the domestic value-added in exports, and expanding intra-regional and South-South trade.

Other success indicators: reducing trade costs

In this context, negotiators realised that expanding and diversifying exports required aid for trade with the specific purpose of *creating greater capacity to trade*. This has two conceptually overlapping dimensions. One is augmenting investment in expanding the supply of exports through investment in new productive capacity and the new infrastructure necessary to support it. The second element is lowering trade costs through enhancing the efficiency of modern infrastructure use and adopting new technologies to achieve productivity gains and improvements in trade-related institutions, regulations and policies.³

OECD analysis (e.g. OECD, 2012; Moisé and Le Bris, 2013) shows that poor *infrastructure* is a major contributor to high costs that impede trade, including developing countries' agricultural exports (Moisé, *et al.*, 2013), and is therefore an appropriate target for aid for trade. Limão and Venables (2001) were among the first to study the relationship between roads and telecommunications and shipping costs, and then the relations between shipping costs and trade volumes. Landlocked countries face higher transport costs since their ability to trade depends on the infrastructure of the neighbouring transit countries. For example, in East Africa goods bound for landlocked countries faced the time equivalent of at least three clearance processes of coastal countries. The authors' conclusion: "Poor infrastructure accounts for 40 percent of predicted transport costs for coastal countries and up to 60 percent for landlocked countries" (Limao and Venables, 2011). Several subsequent studies have confirmed this view of infrastructure as an underlying cause of high trade costs.

Similarly, *trade-related institutions and policies and regulations* (e.g. port operations, customs authorities, exchange rate policies, export taxes, or policy barriers to entry into key service sectors) also have a substantial impact on trade costs and undermine the effectiveness of aid for trade. Hummels and Schaur (2012), for example, have shown (using United States import data for air cargo) that each day of delay in transit is equivalent to a tariff increase of 0.6 - 2.3 percent. The welfare losses from delays can be large. The OECD has shown that in some African countries revenue losses from inefficient border procedures are estimated to exceed 5 percent of GDP (Moisé and Sorescu, 2013).

All this points to the fact that aid-for-trade programmes and projects which centre on infrastructure, institutions and policies as a way of increasing investment in trade capacity and lowering trade costs are, if properly designed and implemented, likely to pay high dividends in the form of more rapid growth of trade. Regulations that restrict competition in the trade logistics chain can result in high mark-ups and inefficient service; the process can be self-reinforcing, as incumbents can lobby for continued restrictions on entry or technical regulations that become barriers to entry (Portugal and Wilson, 2009). Raballand, *et al.* (2010) find that prices of trucking services have been inflated because of competition-restricting market regulations. These policy problems are particularly acute for landlocked countries. Arvi, *et al.* (2010) underscore that for landlocked countries regulation has been important not only in the exporting country but also in the transit countries. Teravaninthorn and Raballand (2008) show that market restrictions in West and Central Africa have kept prices high, while competition in East Africa has produced lower costs to users. The Southern corridors are the most efficient in Africa, in large measure because they are the most unregulated and competitive.

In addition, trade economists and development organisations have long emphasised the need for complementary policies to offset any negative by-products of trade adjustment or trade-led growth. Policies of particular importance include those to improve the investment climate to attract new investment through more secure property rights and macroeconomic stability, and policies to increase public investments in education and other public goods that would improve competitiveness (OECD, 2011b). Policies that at the same time embed trade reforms in a context of a sound investment climate and protection for workers, maintenance of high-quality working conditions and facilitation of labour transitions can play an important role in realising the potential wage, employment and income gains associated with trade (Newfarmer and Sztajerowska, 2012).

This suggests an important corollary to evaluation of aid for trade: since complementary policies can support or detract from the effectiveness of a particular aid-for-trade programme, an analysis of the policy context should be central to any final assessment of aid for trade.

RESULTS THROUGH THE EVALUATION PRISM

The most difficult problem associated with assessing the impact of aid for trade is establishing the causal attribution of aid-for-trade inputs to impacts in terms of rising income and poverty reduction. Because of the diversity of trade objectives, intermediate objectives, instruments, sectors and activities (to say nothing of a country's initial conditions), firm conclusions about aid-for-trade outcomes and impacts cannot be drawn solely from one method.⁴ A comprehensive assessment of the effectiveness of aid for trade therefore requires using multiple lenses to look at the effects on trade – in effect, a prism of evaluation approaches (Cadot and Newfarmer, 2011). This section briefly reviews recent findings about the effects of aid for trade, organised into three categories: aggregate cross-country approaches, sectoral reviews, and project level evaluations. The discussion centres mainly on the WTO Task Force's stated objective of expanding developing country exports.

Aggregate cross-country evaluations

One way to approach the analysis of the effect of aid for trade on trade growth is to apply econometric techniques to multi-country panel data.⁵ These typically attempt to solve the attribution problem by isolating aid for trade from other probable determinants of trade (or trade costs) performance.

Cali and te Velde (2010) look at the synergistic effects of aid for trade on both the exporter and its bilateral importing trading partner using a gravity model. They show that aid for trade has an overall positive and significant impact on exports – an effect almost entirely driven by economic infrastructure. They also demonstrate that aid for trade allocated to infrastructure results in an expansion of exports, especially in the mining and manufacturing sectors, with effects being the greatest in Africa. Aid for trade allocated to productive capacity (as opposed to infrastructure or trade facilitation) has no statistically significant effect on exports.

Three of the case stories presented to the OECD and WTO in 2011 also reported econometric findings. The Commonwealth Secretariat reports suggest that a doubling of aid for trade to economic infrastructure would raise merchandise exports by 3.5 percent, while a doubling of aid to trade facilitation would lower import costs by 5 percent. Similarly, econometric studies of Africa by the UN Economic Commission for Africa (UNECA) show that a 10 percent rise in aid for trade correlates with a 0.4 percent increase in an index of economic diversification (OECD, 2011a: 144-145). The evaluation by the United States of its aid-for-trade programme, a review comprising 265 projects over 2002-06, concluded that "each USD 1 invested yielded a return of USD 42 in developing country exports two years later" (USAID, 2010).

Other aggregate studies focus on aid aimed at reducing trade costs. Development assistance to *trade facilitation* has been widely studied, if with widely differing definitions. The general finding is that improvements in trade facilitation measures are associated with increases in trade flows (Basnett, *et al.*, 2012). Reforming customs to increase efficiency, reducing transaction costs at the border, eliminating bureaucratic interventions that create opportunities for corruption, and adopting procedures to speed goods across borders can lower trade costs for importers and exporters alike. Helble, *et al.* (2012) undertake an analysis of these potential benefits, using gravity estimates from cross-country regressions, with a focus on aid for trade. In particular, they compare the effects on bilateral trade flows of trade-related development assistance (*i.e.* productive capacity building), trade policy assistance, and infrastructure support. They conclude that aid for trade targeted at trade policy and regulatory reform projects produces a high rate of return. They estimate that USD 1 of aid for trade targeted at trade policy and regulatory reform could lead to about USD 1.3 of additional trade.⁶ Cali and te Velde (2010) also find strong relationships between aid and reductions in trade costs: a USD 1 million increase in aid-for-trade facilitation is associated with a 6 percent reduction in the cost of packing goods, loading them into a container, transporting the consignment to the port of departure, and loading it on a vessel or truck.

Aggregate cross-country econometric approaches have the advantage of neatly establishing a statistically significant general relationship between aid for trade and trade flows or reductions in trade costs, while controlling for other factors that might explain trade performance. The results are also, in principle, generalised across a variety of contexts since they identify *average* relationships, controlling for several other economic factors. However, this approach has three limitations. First, the identification of causal linkages has to be tempered with the understanding that even the cleverest econometrics cannot always filter out many confounding influences, account for all omitted variables, or control adequately for possible reverse causality. Second, these econometric studies, simply on grounds of parsimony, have difficulty incorporating effects on subsequent links in the results chain, or on simultaneous effects on cross-cutting issues such as gender, income distribution and environment. For these, the analyst is compelled to rely on the literature. Finally, country averages rarely help in providing specific policy direction for a particular country. To get a more complete picture of aid for trade, we need to look through the next lens in the evaluation prism.

Sectoral and programme evaluations

Several donors have conducted evaluations of their aid-for-trade programmes. These evaluations typically involve extensive review of a collection of projects over time to assess their aggregate impact on trade, growth and poverty, often looking at effects on cross-cutting issues. The OECD undertook a review of the first generation of trade-related evaluations in 2006.⁷ It emphasised that “determining the effectiveness and longer term impact of trade-related donor assistance is often challenging” and noted that “a number of ‘trade development programmes’ have... been assessed as ‘improving the enabling environment’” (OECD, 2006: 10). Half the reviewed evaluations found trade-related assistance to have increased partner country understanding of the importance of trade for growth and poverty reduction. The report eschewed drawing firm conclusions from donor evaluations of the effects of aid for trade on trade growth, trade costs or trade composition. Rather, it highlighted several challenges that at times impeded the effectiveness of aid for trade.

There has undoubtedly been some improvement with regard to some of these challenges in the years since the 2006 OECD review. For example, the finding that “needs assessments were unsystematic or incomplete” has been at least partially remedied with the dozens of Diagnostic Trade Integration Studies (DTIS) that have been undertaken since 2003, as well as numerous sector studies for more advanced developing countries. (These studies are themselves

an invaluable form of aid for trade). Moreover, the discussion on aid for trade launched in Hong Kong in late 2005 and operationalised through OECD and WTO work since, has raised the visibility of trade and trade-related assistance – not only affecting the amount of aid for trade but also its “mainstreaming” into policy. One simple example from Uganda conveys the point: an analysis of annual budget speeches made since 2000 by the Ugandan Minister of Finance, as well as the national planning documents, indicates a steady and sharp rise in attention to trade as measured by trade-related word count totals (World Bank, 2013). Similarly, Cossack’s (2008) analysis of Poverty Reduction Strategy Papers (PRSPs) undertaken for the UN Development Programme (UNDP) found a rather steady increase in the inclusion of trade in government-supported programmes. The case studies prepared for the OECD’s January 2013 Policy Dialogue on Aid for Trade confirm that in most countries trade now figures more prominently among policy concerns than in the past. Moreover, systems of managing for results, a key recommendation of the 2006 OECD study, have proliferated and so project management has probably improved (although it is still likely to be a continuing problem in several low income countries). Similarly, donor co-ordination, while still sub-optimal in some countries, has improved with the establishment of in-country working groups, some in least developed countries (LDCs), prompted by the Enhanced Integrated Framework (EIF).

Since 2006, additional post-Hong Kong evaluations have been undertaken, including by Sweden (Goppers and Lindahl, 2009), Finland (Bird *et al.*, 2011), the EU, USAID (2011), the World Bank (2009), and Japan (Mizuho, 2012) as well as the United Kingdom (Basnett, *et al.*, 2012). The OECD undertook a meta-evaluation of 162 trade-related aid programmes in Ghana, Viet Nam, and in the transport and storage sector (OECD, 2011a). These reviews present a generally more sanguine view of the effectiveness of aid for trade, if clothed in qualifications. For example, the UK evaluation concludes:

Taken together, the existing empirical literature tends to confirm that aid for trade can be effective at both the macro and micro level. However, its impacts may vary considerably depending on the type of aid-for-trade intervention, the income level and geographical region of the recipient country, and the sector to which the aid flows are directed (Basnett, *et al.*, 2012: 25).

The more specific conclusions are:

- While evidence is mixed for different types of aid flows, it appears that those targeted to specific trade-related activities – such as trade facilitation and infrastructure – are most effective in promoting exports.
- Some evidence suggests that aid to infrastructure, particularly transport infrastructure, is more effective in low income countries, while aid flows to the business sectors are more effective in higher income developing countries.
- Evidence suggests that Sub-Saharan Africa is one of the regions most likely to benefit from aid for trade (Basnett, *et al.*, 2012: 24).

The Japan review concurs with the general view that aid for trade promotes trade: “Based on the apparent improvements in economic performance (economic and export growth) in the main countries receiving aid for trade from Japan, positive conclusions could be reached regarding the ‘effectiveness of results’...” (Mizuho, 2012).

The Swedish review broadly concurs, but laments the inability of evaluation to work systematically through the results chain to final impacts:

In general the projects appear to be well-implemented in terms of delivering inputs and planned outputs. Trade education of good quality has been delivered, standards and certification systems established, accreditation institutions set up, market systems developed, etc. Beyond this, the outcomes of the trade-related technical assistance projects in terms of reaching their development objectives, such as influence on trade policy, provision of services to the trade sector, improved competitiveness and increased trade, are much less clear based on available results reporting (Goppers and Lindahl, 2009: 9).

Early reports from the International Centre for Trade and Sustainable Development (ICTSD) country case studies also give weight to the effectiveness of aid for trade with regard to trade performance, if with somewhat different conclusions for each of four countries studied (Cambodia, Malawi, Mauritius, and Nepal) (ICTSD, 2012:4).

These recent evaluations point to the persistence of some challenges and the existence of a few new ones, including:

- While virtually all the programmes have found that aid for trade has been effective for the most part in helping developing countries to take advantage of opportunities in international trade, tracing the complex link from donor funds as inputs through the results chain to greater trade and greater trade-led growth, much less poverty reduction, remains a persistent challenge.
- Some evaluations have highlighted the inadequate attention of donors to the complementary policies needed to ensure that trade and liberalising trade reforms do not have a negative effect in creating losers (see, for example, World Bank, 2006).
- Attention needs to be given to establishing measurable objectives, quantitative baselines, and reasonable comparator groups against which to evaluate success remains a common failing.⁸
- Donors too frequently pay attention to an issue in one country or sector evaluation, but then ignore the same issue in another country or sector, a shortcoming noted in the OECD's (2011c) review of Ghana, Viet Nam, and transport and storage projects.
- Moreover, donor evaluations have paid too little attention to the overall policy context and how it might affect a programme or project. For example, high tariffs and/or other trade restrictions could affect the social rate of return of many projects (either positively or negatively) but have rarely been discussed in the evaluations – and indeed rarely mentioned (OECD, 2011c: 49).
- Inadequate donor expertise on trade-related matters, especially in the case of field missions, continues to short change a robust dialogue on trade-related issues.
- Insufficient donor co-ordination between headquarters and field level staff continues to cause a disconnect, a problem noted in the recent Japanese and Finnish reviews (Bird, *et al.*, 2011; Mizuho, 2012).
- The Paris and Geneva-based aid-for-trade discussions do not necessarily resonate with in-country processes, many of which are organised around private sector development, infrastructure development or agriculture. Some country case studies⁹ have shown that private sector development working groups, commonly comprising donors and government officials, have often concentrated on World Bank Doing Business indicators as measures of success even if only some of them pertain to trade.

The breadth of the aid-for-trade definition suggests another fertile area for inclusion in the evaluation prism, namely, sectoral evaluations of donor programmes in what might be called the “aid-for-trade sectors” such as transportation, agriculture and energy infrastructure as well as private sector development. These do not normally feature trade centrally, if at all, in their analysis – nor should they, because non-trade factors may figure more prominently in determining outcomes. One example of trade being mentioned, although in passing, is the World Bank’s (starkly critical) evaluation of its efforts in agriculture in Africa:

One of the strongest areas of analysis at present ...in this area has been produced to back the Bank’s efforts in lobbying for a genuinely pro-development Doha Round and for eliminating OECD agricultural subsidies. Even so, the Bank’s most recent trade-related analytical work has not had much influence on lending or country dialogue.¹⁰

On the other hand, more typical is the World Bank’s study of transport activities, in which trade goes unmentioned except by inference of the reader, in the following:

... past performance has been ... effective, especially for intercity highway construction and rehabilitation, and the Bank’s approach to transport contributed to private sector development. ... However, transport must now focus more attention on confronting cross-cutting issues such as traffic congestion, environmental damages, safety, and efficiency.¹¹

In summary, these evaluations offer the opposite mirror image of the strengths and weaknesses of the cross-country studies. They are enormously helpful in providing a rich country context and associated lessons, but they tend to be only loosely quantitative, and generalisations often rely on qualitative inferences. Where the cross-country studies typically have a narrow focus (e.g. expansion of exports), evaluations undertaken by donors often have such a wide focus – on various countries, sectors, instruments and dependent variables – that at times clear conclusions that would promote learning are lost.

Project-level evaluations – and the potential of impact evaluations

Project-level evaluations are common for trade-related interventions. Most development agencies conduct elementary *ex post* evaluations at the end of each project, but there are many types of evaluations for projects (OECD, 2011a). For example, the World Bank undertakes several forms: a quality assurance exercise at different stages of the project cycle applied to a subset of projects; a project implementation completion report, undertaken jointly with beneficiary governments, that assesses the project’s development outcomes and financial effectiveness; formal independent evaluations for selected projects as well as for selected programmes (such as trade); and impact evaluations conducted by the relatively recent Development Impact Evaluation (the DIME Initiative) for selected projects (if for relatively few trade projects to date). Despite these efforts, integrating necessary information to evaluate projects quantitatively has yet to become ingrained in the culture of the trade community. One indication is that in the 269 case stories submitted to the OECD/WTO in 2011, only 44 percent included *any* quantitative measure of successful outputs while only 22 percent included even a partial quantitative measure of outcomes, and the great majority of these were at best rudimentary and limited in scope.¹²

The sparse evidence that exists suggests rather positive performance of aid-for-trade projects. The World Bank in its review of trade-related projects that had closed in 2002-08 found that 83 percent were rated satisfactory. Trade-related projects had an average economic rate of return of 32.4 percent compared to non-trade projects’

return of 23.7 percent (World Bank, 2009). But a deeper examination of these projects gives pause before accepting a completely sanguine view. Cadot, *et al.* (2011) examined 85 World Bank trade-related investment projects in 1995-05 and found that too frequently evaluations were partial or absent altogether. Most projects used simple economic rates of returns calculations (31 percent), sometimes combined with stakeholder workshops and/or surveys to assess qualitative elements (an additional 26 percent), while 10 percent of surveyed projects had no evaluation at all. Even when quantitative, many *ex post* assessments did not control for outside influences and attributed to projects benefits associated with favourable conditions; inversely, when project outcomes fell short, these were at times ascribed to external conditions.

Project-level evaluation and sorting out attribution might be made much more informative by adopting techniques from formal impact-evaluation methods. These generally compare the before and after performance of a policy-affected group (the “treatment group”) with a comparator group that has not benefitted from the policy intervention (the “control group”), both randomly selected from the larger respective subpopulations. These techniques are widely used in health, education and other areas of development work.¹³ By construction, such methods are applicable only to policy interventions that affect selected firms or groups differentially, such as export promotion, technical assistance or geographically limited interventions.

These techniques are more difficult to undertake for trade-related projects for several reasons, and have led the OECD (2011a) to caution against their adoption. One problem is that trade policies or many infrastructure programmes affect the country as a whole, and so it is virtually impossible to distinguish beneficiaries from non-beneficiaries, which is necessary to set up a randomised control/treatment group test. Moreover, it would be time consuming and difficult – and enormously costly – to undertake pilots in a controlled experiment, wait the necessary year or two for definitive results, and then act. Costs are nontrivial. For many small-scale technical assistance projects, impact evaluations could readily cost as much as the activity itself. Finally, where impact evaluations can identify causal mechanisms precisely, quantify results and provide highly relevant lessons on the ground, it is often not clear how those lessons would carry over to different settings.

Still, much more could be done. Cadot *et al.* (2011) suggest ways of conducting “quasi-experiments” circumventing the strictures of more classical randomised approaches through the use of so-called “matching” and “difference-in-differences” methods. One example of a quasi-experimental design is that of Estevadeordal and Taylor (2009), who used the wave of trade liberalisations after 1990 to set up a natural experiment by dividing countries into a “treatment group” (“liberalisers”) and a control group (“non liberalisers”). They find strong evidence that liberalising tariffs on imported capital and intermediate goods raised growth rates by about one percentage point annually in the liberalising countries. Changes to tariffs on consumption goods were only weakly correlated with growth outcomes.

Project level examples that quantify the benefits of aid for trade are too few to make generalisations about aid-for-trade outcomes. Brenton and Von Uexkull (2009) used a difference-in-differences method to examine the effects of 88 export development programmes in 48 different countries. They found that, on average, export development programmes had coincided with or predated stronger export performance. Volpe and Carballo’s (2008) evaluation of export promotion programmes in six Latin American countries also found positive impacts on exports.

NEW EVIDENCE: UPDATING THE AID FOR TRADE AND TRADE RELATIONSHIP

Since the early aggregate studies looking at the relation of aid for trade to trade growth were undertaken, the trade growth of developing countries has continued to outpace growth of world exports and their own growth of GDP. Moreover, the composition of trade is shifting in favour of global value chains. It is therefore timely to revisit some of these early findings and explore further the broad link between aid-for-trade flows and trade growth.

Building on an empirical framework similar to Helble, *et al.* (2012), Cali and te Velde (2010) and Vijil (2012),¹⁴ research for this chapter uses a gravity model of trade to estimate the impact of bilateral aid-for-trade commitments over 16 years (1995–2011) in a group of developing countries, the period for which disaggregated OECD data on commitments are available and for which trade numbers of many small low income countries are reported. The sample included trade of all non-oil exporting developing countries that were classified as developing in 1995 (since the analysis is intended to capture all historical effects); this resulted in the analysis comprising 110 exporters from developing countries and more than 200 of their bilateral importing countries (which included trading partners in rich countries), with 140 000 positive observations of bilateral pairs of trade flows over the period.¹⁵

To ascertain the effectiveness of aid for trade on increasing non-mineral non-oil exports, the impact of DAC-reported bilateral aid-for-trade commitments in a given year on non-mineral exports three years later was estimated using a gravity model. Lagging the expected export results is to account for the fact that commitments take some time to produce real investments and exports. Employing lags also provides some credence to the hypothesis that the direction of causality runs from aid to trade rather than the reverse. To determine the role of aid for trade as opposed to other possible explanations, estimates controlled for 11 other conventional determinants of trade levels in gravity models, including, for example, country characteristics of both exporters and importers (such as size), distance from trading partners and membership in trading agreements, as well as factors that might reduce trade such as social conflict and being landlocked. Idiosyncrasies affecting trade were controlled through introducing country and year fixed effects. (See Annex E for the regression estimates and Annex F for a detailed explanation of the methodology used in this chapter's regressions.)

Aid for trade is positively associated with greater exports...

Aid for trade does have a significant and positive association with greater exports. The results suggest that a 10 percent increase in the amount of bilateral aid for trade committed to developing countries would increase their exports by about 0.3 percent. While these amounts may appear small, they indicate that an increase in aid for trade of 10 percent (or about USD 1 billion) would increase exports of developing countries by about USD 9 billion in recent years (Table 5.1).

The impact of aid for trade is not only constrained by export flows of the recipient country. Aid for trade provided to a bilateral trading partner has an additional effect of promoting more imports from the exporter. For example, if in a given period Rwanda exports to Kenya, aid for trade would not only help Rwanda export more than non-recipients; but if Kenya also receives aid for trade, this will lead to even greater exports from Rwanda. That reflects the fact that aid to Kenya's transport infrastructure or border posts will also benefit exporters from Rwanda. In fact, for bilateral flows between two recipient countries, the increase in aid for trade to both partners increases the size of the twin coefficients to approach 0.4 percent.¹⁶

...especially in the case of low income countries...

Aid for trade is particularly powerful for the International Development Association (IDA)-eligible poorest countries. To arrive at this conclusion, the analysis separated the sample into three groups based on their 1995 incomes in the World Bank classification categories.¹⁷ These roughly comprise LDCs for which data were available and other low income countries. Developing countries that had reached upper middle income status by 1995 are therefore excluded. The 53 countries that were IDA-eligible in 1995 (with published trade data) recorded particularly high benefits from aid for trade, *i.e.* one dollar invested in aid for trade is associated with a nearly USD 20 return (Table 5.1). Based on their average export earnings in 2009-11, a 10 percent increase would imply a nearly USD 8 billion increase in their collective exports. A 25 percent increase would be associated with a USD 20 billion increase in trade. For very low income countries, the effects are much lower – no doubt because of the more numerous obstacles they face in ramping up exports in volume. A 10 percent increase is associated with a USD 1.4 billion increase in exports, in part because of the much lower base of export volume.

Table 5.1 Expected increase in total exports associated with increases in aid for trade

(USD million)	Aid for trade increases of:					
	Return rate	5%	10%	15%	20%	25%
Low income	2.7	720.5	1 441.0	2 161.4	2 881.9	3 602.3
Lower middle income	9.1	2 109.4	4 218.8	6 328.1	8 437.5	10 546.8
IDA	19.5	3 986.2	7 972.4	11 958.6	15 944.8	19 931.0
Developing countries	8.1	4 554.1	9 108.1	13 662.2	18 216.2	22 770.2

Source: Calculated from the regressions in Annex E, Table E.2. Country groupings based on 1995 World Bank calculations. IDA countries comprise some low income and a few lower middle income countries also included in the first and second rows. Trade volume increases are calculated on the basis of average annual trade in 2009-11, aggregated for each income category in the sample.

The results also confirm the enormous disadvantages that countries in conflict face in trying to expand exports. The coefficients for conflict countries are significantly negative and strongly so (Annex E, Table E.1), underscoring the importance of peace and security for trade – and of a supportive environment that will allow aid for trade to be productive.

It should also be noted that participation in preferential trade agreements has robust and uniformly positive effects on exports, even controlling for other factors that could otherwise explain this finding (such as a common border or language). These results held in virtually all the estimations in the annexed tables. They coincide with Vijil's (2012) finding that aid for trade tends to be particularly effective in the presence of preferential regional trading arrangements, especially aid for trade aimed at institutional improvements (see also Chapter 4).

...but generalisations about optimal use of aid for particular countries are elusive

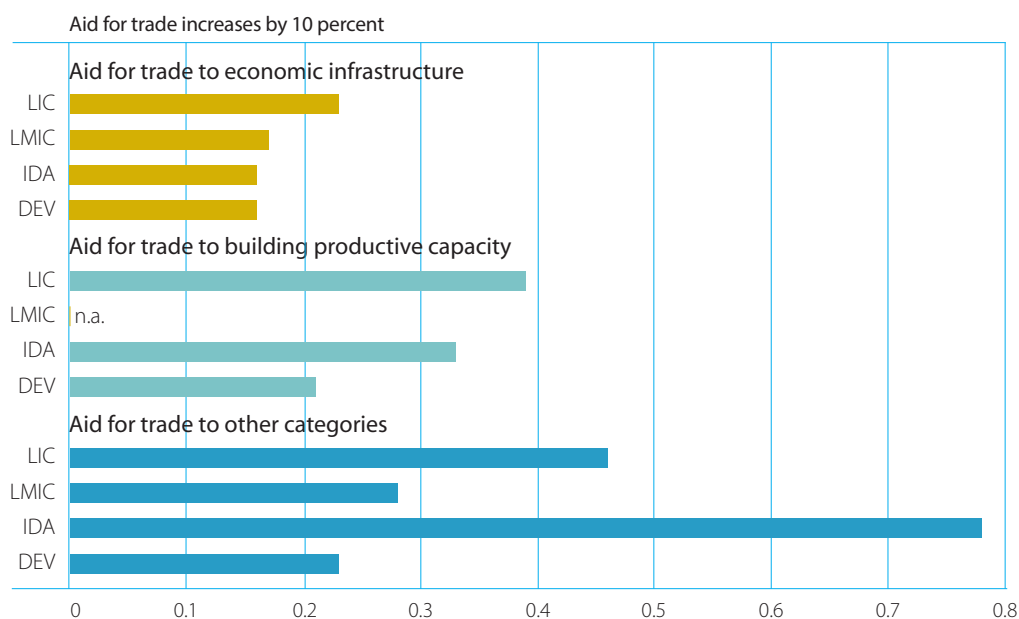
Some studies have tried to generalise about particular aid-for-trade allocations – whether for infrastructure, productive capacity, policies and regulations, etc. – and their appropriateness for selected categories of developing countries. Cali and te Velde (2010), studying the effects of aid-for-trade disbursements on trade performance by sub-category for the period 2002-07, found that aid for trade to infrastructure was more important for low income countries while aid to productive sectors was more important for middle income developing countries.

The OECD (2012b), based on its detailed study of the binding constraints to trade facing developing countries, presented some broad generalisations for the several key WTO constituencies about the key constraints that might be alleviated in part through aid for trade:

- For *landlocked countries*, geographical constraints were not found to be the only reason for their relatively low trade performance. As has been shown in fast-growing countries as diverse as Botswana, Burkina Faso, Rwanda and Uganda, solid domestic policies can promote trade growth. Restrictive trade policies (particularly for services) have a larger impact on trade performance in landlocked countries than in other countries. Policies fostering investment were found to have a sizable trade impact, if slightly smaller than in the full sample of countries. Macroeconomic policies also contribute to better economic performance, particularly in exchange rate management and, to a lesser extent, fiscal policy. Infrastructure, particularly access to electricity, was seen as a major constraint to trade development.
- For *small and vulnerable economies (SVEs)*, trade is the lifeblood of economic growth. Small market size results, among other things, in a substantial concentration of exports in a few product groups. Infrastructure – particularly power and (in contrast to other categories of countries) telecommunications – plays a key role in SVEs performance.
- For *commodity exporters*, governance and macroeconomic policy is a priority. Better fiscal spending to raise the productivity of public investment, and better monetary policy to diminish overvaluation of the real effective exchange rate, were considered crucial.

Using a longer timeframe and somewhat different formulation, the analysis in the chapter described above explored the effects of three categories of bilateral aid – economic infrastructure, building productive capacity, and other (predominantly trade-related policy and regulation) – on trade. Aid for trade-related policies and regulations appears to be the most important component of aid for trade for all countries. This may reflect the magnified effects of relatively small amounts of support for technical assistance, even controlling for other aid-for-trade programmes with greater exports. Beyond this, for low income countries aid to building productive capacities seems to be more important than infrastructure, while the reverse is true for the lower middle income countries (the coefficient for productive capacity is positive but small and insignificant, and hence not registered in Figure 5.1).¹⁸

Figure 5.1 Expected impact of aid for trade increases on exports (percentage change in exports)



Source: Results in Annex E, Table E.3

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<http://dx.doi.org/10.1787/888932854537>

These findings are the reverse of those of Cali and te Velde (2010). This may be because of the different methodologies used in their study compared with that used in this chapter (e.g. disbursements versus lagged commitments, differing time periods with 2002-07 compared to 1995-2011, and different specifications of country income categories). Therefore, more definitive generalisations have to await further research. In any case, generalisations of this type arguably fade towards insignificance when applied to specific country settings; binding constraints vary widely within specific categories of countries, so these generalisations provide no answers about remedies for a given country's trade problems, but only a first order indication of where to begin looking.

Aid for trade and other ODA

In the statistical analysis for this chapter, distinguishing the effects of aid for trade from other forms of official development assistance on exports presents a mixed picture. On the one hand, increases in other (non-aid for trade) bilateral ODA tends to dampen export performance.¹⁹ This may reflect the effects of development assistance inflows on the real exchange rate; it is not uncommon for large ODA inflows to drive up the real value of the local currency and thus depress export competitiveness. On the other hand, this effect is not large and is offset by the fact that other ODA to importing trading partners has a positive effect, so any effect seems to be effectively neutralised.

THE EMERGENCE OF GLOBAL VALUE CHAINS: IMPLICATIONS FOR AID FOR TRADE

The emerging prominence of global value chains (GVCs), as discussed in Chapter 3, underscores the urgency of aid for trade. The recent OECD report on policy determinants for participation in GVCs listed seven elements: regional trade agreements; lower investment barriers to multinational corporations; high-quality infrastructure; speed and flexibility of movement of physical goods and information; effective legal and regulatory systems; efficient services; and the capacity of domestic firms (often SMEs) to contribute to the supply chain (OECD, 2013b). In each of these areas, aid for trade has demonstrated that it can be a useful instrument to promote much needed investment and better policies. While the existing pattern of aid for trade would speak to all of these constraints, their growing importance underscores particular areas of action (see Chapter 3). The World Economic Forum (WEF, 2013) highlighted several areas:

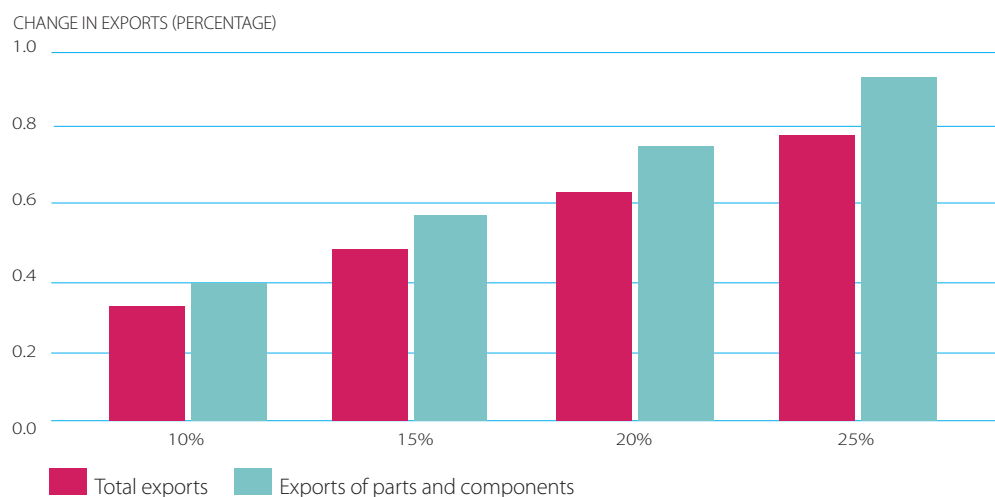
- *Border administration* and trade facilitation, as time spent at borders and ports is more important in GVCs;
- *Market access* barriers, including non-standardised, restrictive safety and sanitary regulations;
- *Services development* because transport and communications, standards, accounting norms, quality assurance functions and transport logistics are of increased importance.
- The *business environment* since regulations can handicap supply chains, and physical insecurity due to social conflict or lawlessness stifles supply chain growth.

Does aid for trade spur participation in GVCs?

To assess whether aid for trade has facilitated increased participation of developing countries in value chains, research for this section was conducted similarly to that for the previous one, but focusing on exports of parts and components as the variable of export interest. Trade in parts and components, whether intra-firm, part of lead firm networks or market-based transactions, generally captures the presence of trade in value chains, both regional and global. (This analysis uses the analysis by Kimura, *et al.* (2007) of these goods.)

Econometric analysis for this chapter confirms that aid for trade has a positive and significant correlation with increased exports of parts and components from developing countries. In fact, the results are somewhat stronger. A 10 percent increase in aid for trade to all developing countries is associated with a 0.4 percent increase in parts and components exports as compared to a 0.3 percent increase in all exports.²⁰ Moreover, as with the relation of aid for trade to all non-mineral exports, aid for trade to an importing developing country is associated with positive increases in trade. Here, too, the combined effects a 10 percent increase in aid for trade to both exporters and importers is associated with a 0.5 percent increase in parts and components trade as compared to a 0.4 percent increase for all non-mineral exports. Possible increases in aid for trade could have a substantial impact on increasing value chain trade; Figure 5.2 shows the direct effects on exports associated with differing levels of increases, leaving aside the influence of aid for trade on importing countries.

Figure 5.2 Impact of aid for trade increases on parts and components exports (percentage of additional aid for trade)



Source: Results in Annex E, Table E.4

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<http://dx.doi.org/10.1787/888932854556>

In conclusion, many aid-for-trade programmes are dealing with GVC-related issues already – that is, border administration, market access, trade facilitation, and business environment – and this is reflected in value chain development as captured by intermediate trade. This implies that the new trade opportunities created with GVCs will likely require only incremental shifts in aid-for-trade strategies. In fact, the analysis of the OECD/WTO survey in Chapters 2 and 3 shows that this salutary movement is already beginning to take place.

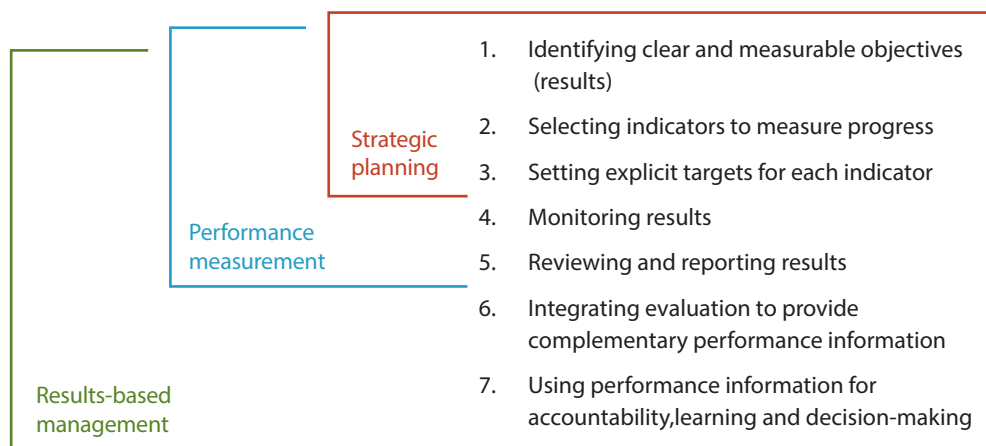
MANAGEMENT SYSTEMS: USING AID FOR TRADE EFFECTIVELY

As aid budgets have come under strain, the pressure on both donors and governments to increase the effectiveness of scarce resources has risen. Beneficiary governments play the most important role in ensuring a positive economic return on all development assistance, including aid for trade. Since the adoption of the Paris Principles in 2006, donors and governments have sought to establish frameworks for mutual accountability to ensure the most productive use of development assistance. On the one hand, donors have been charged with aligning their assistance programmes with the central priorities of beneficiary governments, co-ordinating with each other to better support agreed programmes, and using beneficiary country systems where feasible. For their part, developing countries have committed to provide strategic leadership for setting development priorities and to work with all domestic and donor stakeholders in establishing effective management systems to achieve results.²¹

Countries, working with donors and the multilateral financial institutions, have instituted various forms of management systems to monitor individual projects and programmes against original objectives. These management systems are intended to track more than inputs and outputs (e.g. the amount of money spent on road construction or the kilometres of roads built) and to focus on outcomes (e.g. lower transport costs and increases in goods exported) and impacts (e.g. rising export volumes and growth in income). This entails identifying the chain of results from project inputs, to activities, outputs, outcomes and long-term impacts:

The results chain provides a framework within which to monitor and measure expected changes that will result from project activities. Key changes described in the results chain are translated into targets, and indicators are identified for tracking results at each step in the programme logic. Indicators are therefore a critical component of results-based management systems (OECD, 2011c: 75).

Figure 5.3 Seven phases of effective results-based management



Source: OECD (2011c)

Results-based management of aid for trade

To help developing countries and donor agencies to identify quantifiable objectives for aid-for-trade programmes, the OECD has collated indicators to measure progress towards them (OECD, 2013a). This tool is based on six case studies of existing results-based management in different development situations. The case studies were of Bangladesh, Colombia, Ghana, Rwanda, Viet Nam and Solomon Islands. In all six countries the case studies reveal that trade had been mainstreamed in national development strategies, if mainstreaming is understood to mean integrated centrally into national development plans. These findings were confirmed by ICTSD in its three country case studies on Cambodia, Malawi and Nepal. The ICTSD also reported that “public recognition of trade as a vital component of economic growth was the first pre-requisite of sustained trade-related development efforts” and that “subsequent mainstreaming of trade into official development strategies led, in principle, toward better coordination and alignment. . .” (ICTSD, 2012: 11). The World Bank found the same to be true in its DTIS of Uganda (World Bank, 2013).

Of course, mainstreaming took different forms in each of the six case study countries. In Bangladesh the Perspective Plan, a ten-year programme of activities covering 2011-2021, was the principal vehicle. Ghana in the mid-1990s had prepared a Vision 2020 document. It then used this framework to prepare three-year programmes, the latest

of which was the Ghana Shared Growth and Development Agenda covering 2010 to 2013. Solomon Islands prepared a National Development Strategy 2011-2020. In all six countries overarching objectives were projected over a timeframe of one or two decades, usually with subordinate, more specific national planning documents with a two- to three-year horizon. All of these featured trade outcomes as prominent objectives and, even more frequently, objectives for the underlying determinants of trade capacity, particularly infrastructure and human skill development. For example, one of the five pillars of Colombia's National Development Plan was "sustainable growth and competitiveness: innovation, competitiveness and productivity growth, growth engines and job creation" (OECD, 2013a).

The national development plans, both long-term and shorter term, provided a framework for sectoral strategies evident in many of the case study countries. In Ghana, for example, accelerating agricultural modernisation through implementation of sector-specific programme was the objective of its Food and Agriculture Sector Development Policy and the corresponding investment plan articulated in its Medium-term Agricultural Sector Investment Plan. In Rwanda, the relevant ministries and agencies had formulated more than two dozen sectoral and sub-sectoral strategies for implementation in association with their respective ministries' plans. Although in all the case study countries trade objectives had been mainstreamed in national programmes, the formulation of explicit targets for purposes of monitoring and evaluation – topics towards the lower end of the results framework described in Figure 5.3 – was only clear in Colombia, Ghana, Rwanda and, to a lesser extent, Viet Nam. These countries reported fairly specific trade-related objectives and measurable indicators, while Bangladesh and Solomon Islands did not. Similarly, even fewer countries evidenced detailed monitoring and evaluation systems that provided regular feedback to policy makers that could be used to make course corrections.

The ICTSD reported on its three country studies that "...mainstreaming of trade at a formal level...does not necessarily imply mainstreaming in practice..." (ICTSD, 2012: 11). Uganda, according to the World Bank's DTIS (2013), does have a workable system of results-based management (RBM) and monitoring and evaluation (M&E). While only partially effective, it permits monitoring of aid-for-trade implementation and transmittal of M&E information upwards for subsequent implementation improvement.

Evaluating donor performance

Because mutual accountability implies not only government obligations to donors but also donors' obligations to government, some governments have begun to work with donors to establish an agreed evaluation scheme for donor performance. For example, in Uganda the 2013 DTIS (World Bank, 2013) reports that the Office of the Prime Minister (OPM) produces annually an evaluation of donor performance against the Paris Principles. In 2010/11 the government conducted its third survey of the Paris Declaration to measure progress against 15 pre-defined indicators. In 8 of the 15 indicators, the survey revealed some improved performance, particularly in "alignment with national priorities, better aid co-ordination, and avoidance of parallel systems for project implementation", while 6 indicators showed either no change or a declining trend in performance. These included using country systems, increasing predictability of funds, and ensuring better use of results-oriented frameworks. .

A leading example: Rwanda

Rwanda has developed a results-based management system that is as thorough and sophisticated as any found among low income countries. It is an example of effective implementation of all the stages of results-based management evident in Figure 5.3. It is also an example of an aid-for-trade partnership that, together with other initiatives, has produced rapid growth and poverty reduction. Versailles (2012) concluded that "...Rwanda now boasts what is very close to 'best practice' in mutual accountability frameworks".

Results-based management

The aid-for-trade programme was established in the general context provided by the objectives set out in the government's *Vision 2020*, and was operationalised in the five-year Economic Development and Poverty Reduction Strategy (EDPRS). The government has also set out a series of monitorable targets and indicators put forward in a Common Performance Assessment Framework (CPAF). To integrate development partners into the process, the government has set up 16 Sector Working Groups (SWGs) and/or districts down to the implementing agency, comprising both ministerial and agency representation and donors, to systematically track policy implementation and progress against the indicators. Results are evaluated annually and reported back up the chain of implementation, eventually to the economic cabinet.

The system is predicated upon a set of output and outcome indicators to be attained through enumerated (and often quantified) policies and actions that begin at the highest level of government and cascade down through the various ministries and agencies. Each level of government has its own outputs/outcomes and associated implementation plan. Taking into account only the Ministry of Industry and Commerce (MINICOM) and the Ministry of the East African Community (MINECOFIN), the government tracks some 90 indicators related to aid for trade and more than 540 associated actions – and this is not counting the other ministries' annual action plans and performance contracts (Table 5.2). Finally, annual performance results are fed back into planning and action plans for future years, so that feedback loops play an important role in ensuring effective use of development assistance.

Donor accountability: the Paris Principles

Since mutual accountability also implies the obligations of donors to the partnership, the government, working with donors, has established a comprehensive Donor Performance Assessment Framework (DPAF) as part of its administration of official development assistance (ODA). This has proven effective in encouraging donors to consider ways they might contribute more to the realisation in Rwanda of the five fundamental principles outlined in the Paris Declaration on Aid Effectiveness. The resulting DPAF is divided into five groups of indicators: financing national strategies to achieve the Millennium Development Goals (MDGs) and Rwanda's *Vision 2020*; use of national systems to strengthen ownership and accountability; facilitation of long-term planning through predictable development financing; reduction of transaction costs through the adoption of harmonised approaches; and budget support in a manner that enhances ownership predictability and lowers transaction costs. Each of these areas is associated with three to seven indicators that encapsulate the objective. By and large, for the 14 donors with time series data available, the trend is towards improved performance. Nevertheless, overall performance is still well below the aspirational targets. Of the 22 indicators across these five areas, donors had fully met the target in only two ("percent of technical co-operation provided through co-ordinate programmes" and "percent of total missions that are joint with the government"). While a few other countries have also begun to establish donor accountability frameworks, Rwanda's is arguably one of the most advanced.

Table 5.2 Rwanda’s results-based management system includes indicators of outcome and of policy implementation at various levels of government

		Total		Trade-related	
		Indicators	Policies	Indicators	Policies/actions
Plans	EDPRS 2008-12	73	..	25	29
	CPAF Oct. 2011	45	80	12	22
	PSD Sector Working Group			2	4
	Other SWG (AFT-related)			10	18
	Annual Performance				
	MINICOM APR 2011/12			4	123
	MINICOM Imihigo contract 2012/13			3	59
	MINEAC APR 2011/12			9	52
	MINEAC Imihigo contract 2012/13			5	62
	Leadership Retreat	6	70	4	52
Strategies	National Export Strategy			10	56
	Trade Strategy 2009-12			30	113
Total (1+2+3+4)				90	546

Note: Does not include indicators and policies from sectoral strategies in infrastructure and productive sectors or reviews from relevant ministries. In some cases, “policies” include implementation of specific programmes or other actions.

Source: Newfarmer, et al. (2013)

Do effective results-based management systems improve aid-for-trade performance?

The case studies suggest that a solid results-based management system can raise the effectiveness of aid for trade. While the aid effectiveness literature provides a plethora of convincing studies on the broad relationship of “effective governments” to better use of official development assistance, it is virtually silent on aid for trade.

To begin to fill that lacuna, research for this chapter used econometric techniques to estimate the interactive effects of aid for trade in the presence of good management. As noted above, these estimations revealed significant and positive associations of aid for trade on exports of recipient countries, controlling for the country characteristics of the trading partners, their trading situation (e.g. distance, regional trade agreements, conflicts), and year. To understand the effect of good management, analysis used these same models, but for this section interacted the aid for trade measure with indicators of government effectiveness. The best proxy for good management – because it spanned the entire period 1995-2011 – was the World Bank’s measure of “government effectiveness”.²² The results revealed that when the measure of “government effectiveness” was interacted with aid for trade, significantly greater than average increases in exports resulted.²³ Perhaps more revealing, when the management interaction term was included in the analysis, the separate positive effects of aid for trade evident in the base runs turns significantly negative; this suggests strongly that management is crucial to the effectiveness of aid for trade.

Similarly, good management also indicates a strong positive spill-over effect from other forms of development assistance on exports. This suggests an additional interpretation of the negative coefficient in the earlier regressions. It may well be that effective use of all development assistance because of better management contributes to better trade performance, while only those receiving substantial aid in less well-managed contexts suffer the negative effects of lower trade through the exchange rate channel. This hypothesis requires further investigation.

CONCLUSIONS

Aid for trade is effective...but requires a supportive environment

This chapter explores the effectiveness of aid for trade in promoting trade – both exports and imports – and conditions which tend to make it most effective. The review provides abundant evidence suggesting that bilateral aid for trade is broadly correlated with increases in trade. Analysis in this chapter suggests that aid for trade destined for low and lower middle income countries is likely to have a high pay-off. Typically, one dollar invested in aid for trade is on average associated with an increase of nearly USD 8 in exports from all developing countries – while one dollar of aid for IDA countries amounts to USD 20 in new exports and to USD 9 for all low and lower middle income countries.

Furthermore, there is abundant evidence that aid for trade is appropriately targeted on lowering trade costs – in the form of additional infrastructure, better institutions such as customs and standards authorities, and more trade friendly policies and regulations, whether in regard to tariffs and non-tariff barriers (NTBs) or regulatory measures that expose logistics companies to new competition. However, because country situations are very different, trade obstacles and opportunities in a specific country should dictate appropriate instruments rather than cross-country generalisations.

These broad conclusions notwithstanding, it is clear that aid for trade is not effective in all country situations in attaining its intermediate outcome objectives of increasing trade, much less its impacts in promoting rapid growth and reducing poverty. Aid for trade is most effective at increasing trade and promoting trade-led growth when recipient countries have a supportive business environment, particularly stable macroeconomic policies and an investment climate that encourages private investment.

The absence of peace and security has a large dampening effect on export performance, and conflicts have the power to wipe out any benefits from investment in aid for trade. Similarly, the well-known lessons that high and unstable inflation, corruption, unstable property rights and erratic microeconomic policies undermine the effectiveness of all aid also apply to the subset of aid for trade (OECD, 2012b).

Aid for trade can promote regional and global value chains

The role of aid for trade in promoting trade in regional and global value chains is only now receiving academic and policy-making attention. However, three pieces of evidence reviewed in this chapter point to a nontrivial contribution of aid for trade to value chain development. First, aid for trade provided to both sides of the bilateral trading partnership reveals a synergistic effect. This stands to reason: if aid for trade helps make border crossings more efficient on both sides of the border, it will facilitate expanded trade of the bilateral partners as well as third parties. Similarly, aid for trade to infrastructure, such as roads or communication, stimulates two-way trade. A second indication that aid for trade promotes regional and global value chains is the fact that exports are even higher when the aid-for-trade recipient is a member of a regional trade agreement, shares a common border, and has a common language.

Finally, even more compelling is the direct evidence that aid for trade stimulates trade in intermediate parts and components, key indicators of value chains. Econometric analysis in this chapter found that aid for trade was positively and significantly associated with the growth in parts and components. This would suggest that, although the progressive proliferation of global and regional value chains is reshaping global trade patterns and widening the set of trading opportunities open to developing countries, current efforts to improve infrastructure, increase productive capacity, and reduce trading costs work as well for fostering value chains as for arm's length trade transactions. The emergence of global value chains does not appear to require major shifts in the focus of aid-for-trade efforts.

Improving in-country management systems can contribute to better aid-for-trade effectiveness

Policy matters, but so do government management systems. Governments that work together with donors in the context of a well-formulated programme with specific goals to overcome supply-side constraints are likely to have the greatest pay-off. Evidence in this chapter shows that effective government management systems lead to significantly more productive use of aid for trade as measured by increases in exports. This underscores the importance of government ownership, mutual accountability and overall alignment and harmonisation in aid for trade – namely, the now familiar Paris Principles. As shown in this chapter, countries have varying capabilities to articulate needs, plan, budget, monitor and evaluate aid for trade. Assistance to help governments build this type of results-based management capacity has a high return for all development assistance as well as for trade.

Evaluations of aid for trade could be more comprehensive

This review also suggests that evaluations still could be improved. A first step is to build in clear objectives and quantified measures of each phase of the results chain for every project. OECD (2013) provides a comprehensive map of possible indicators from which to select. Second, evaluations have to take into account the larger policy environment, particularly the trade policy environment but also policies that the trade literature has dubbed “complementary policies”. Third, importing efficiently is as important as exports, and too frequently evaluations fail to exhibit concerns about this dimension of competitiveness, a point that came out clearly in the case story submissions to the OECD/WTO and in the OECD’s meta-evaluation of projects in Ghana, Viet Nam, and the transport and storage sectors (OECD, 2011c). Finally, impact evaluations, though perhaps limited to a subset of policies and aid-for-trade projects, could yield important lessons and merit wider and more creative application.

Calibrating expectations about aid for trade: the elusive quest for poverty reduction

One corollary is important: complementary policies essential for successful aid for trade need not – indeed could not – be included in every aid-for-trade project. Often issues of job creation, education, environment and social protection (all important complements of trade) require separate policies distinct from aid for trade. This implies that, for example, a power project or a one-stop border post, to be considered effective, need not show direct linkages to poverty reduction or to some of the other cross-cutting objectives that are of concern to the development community, such as environment, gender or creation of social capital. Many aid-for-trade projects have their own direct channels to poverty reduction, independent of the trade channel. An agricultural project may increase food security even though its contribution to exports is minimal. Said differently, evaluating aid for trade requires locating it in a careful examination of its country policy and performance context.■

NOTES

1. Several studies provide robust evidence of the main linkages. For the relationship between more rapid growth of trade and increases in productivity and income growth, see Newfarmer and Sztajerowska (2012) for a summary of the 14 most recent econometric studies. The OECD also reaches this conclusion: "...[B]oth import and export expansion boosts economic growth, although the constraints to exports differ noticeably from constraints affecting imports. This finding [implies]...that trade reform (and aid for trade) should focus not only on export promotion but also on enhancing imports to achieve growth, poverty reduction and development" (OECD, 2012b:2). For the link that rising incomes lift the poor, see Roemer and Gugerty (1997), Rodrik (2000), Dollar and Kraay (2005) and Ravallion (2007). This link is also supported by more than a dozen country studies undertaken in the last decade years.
2. WTO 2006 "Recommendations of the Task Force on Aid for Trade", WT/AFT/1, WTO. Geneva, 27 July, p. 1. This definition is echoed by most evaluations, for example that of Finland: "Aid for Trade (AfT) aims to contribute to increasing the volume and value of products developing nations export, to promoting their integration into the multilateral trading system and to enabling them to benefit from increased market access (2011: 25)."
3. While conceptually distinct, the formal economic literature has subsumed this into the concept of reducing trade costs (Cadot *et al.*, 2013).
4. The OECD (2011c) presents a useful annex on the variety of evaluation systems.
5. Basnett, *et al.* (2012), in one of the most comprehensive overviews of the recent aid-for-trade evaluation literature, includes a useful discussion of the methods and variables used in the aggregate analyses.
6. The widely cited working paper, using a different methodology, had an associated increase of nearly USD 700 (Helble, *et al.*, 2009). The journal version revised this estimate downwards.
7. The references to these studies can be found in the thorough summary of them in *Trade-Related Assistance: What do Recent Evaluations Tell Us?*, OECD, Paris, 2006. Studies reviewed include evaluations undertaken by the EC (2004), USAID (2004), the United Kingdom (2005), the Netherlands (2005), the World Bank (2004 and 2006), the UN Conference on Trade and Development (UNCTAD) (2002), the UN Economic and Social Commission for Asia and the Pacific (ESCAP) (2003) and the Integrated Framework (2003).
8. See, for example, the case studies in OECD (2011a). This point is also elaborated in Cadot and Mattoo (2011).
9. See the case of Rwanda as described by Newfarmer, Savini and Vijil (2013) in the OECD series. A similar problem is described in the World Bank DTIS for Uganda (2013).
10. World Bank (2007).
11. World Bank (2006).
12. Reported in Cadot and Newfarmer (2011) on the basis of data in OECD, 2011c, table on p.147.
13. For more on this approach in development economics, see Banerjee and Duflo (2011) and Karlan and Appel (2011). For limited trade applications, see Cadot, *et al.* (2011), and Cadot and Newfarmer (2011).

14. Portugal-Perez and Wilson (2009) provide another example of the use of gravity models in this literature.
15. Oil exporters were excluded from the sample as exporters. These countries were either among the top 15 exporters of oil, following the United States Energy Information Administration, or their share of oil exports in total exports was higher than 75 percent during this period. See Annex F, Table F.3.
16. Other control variables included in the regression analysis show a consistent and predicted impact on bilateral export flows. For example, regional trade agreements tend to increase the total amount of goods traded between two countries and conflicts have a negative impact on exports.
17. The analysis used countries' income classifications of 1995 rather than current ones, so the analysis could look at the effects of aid for trade on exports over time (see Annex F).
18. See Annex E, Table E.3.
19. See, in particular, the coefficients shown in Annex E, Tables E.1 and E.2.
20. This can be seen by comparing the aid-for-trade coefficients in Annex E, Table E.4 with those in Annex E, Table E.1.
21. These mutual responsibilities under the Paris Principles and Accra Declaration are clearly recounted with some elaboration in *The Paris Declaration on Aid Effectiveness and the Accra Agenda for Action* OECD, Paris, www.oecd.org/development/effectiveness/34428351.pdf. In summary, the Paris Principles include ownership, alignment, harmonisation, managing resources for results, and mutual accountability.
22. Other measures tested included, among others, a combination of public sector and trade sub-indices for the World Bank's Country Policy and Institutional Assessment (2007-09) and the IMF's Public Investment Efficiency Index (2010). These measures had the disadvantage of providing only partial country coverage (e.g. the IMF index) or limited time coverage (e.g. the available CPIA data).
23. See coefficients in Annex E, Table E.5.

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