## The Effectiveness of Aid for Trade

## **Expected pathways**

We first discuss why certain types of aid should produce particular effects on trade, so that we can propose hypotheses and assess the relevance of empirical patterns in the context of Aid for Trade. Table 2.1 identifies potential market and governance failures affecting the development of trade and suggests policy responses to address these failures. It identifies whether a proposed response could be assisted by an AfT package and what part of the package would be relevant to the task (on the basis of its current classification in the OECD Credit Reporting System (CRS) aid statistics).

Table 2.1 suggests that if employed effectively AfT can:

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

AfT also has a number of other more indirect effects. For example, the shift to giving trade priority in aid spending aims to put more emphasis on economic development and the supply side. The share of aid going to economic infrastructure decreased dramatically after a mid-1990s donor consensus that social sectors had to be supported (Figure 2.1).

The actual macroeconomic effects of aid depend on the functioning of a number of channels, e.g. whether the exchange rate appreciates due to inflationary expansion, so that exports decline, or whether aid actually improves trade competitiveness through better infrastructure. From an economic point of view, if more support goes via investment and productive uses, rather than to consumption or other projects with less growth potential, this will help to remove or reduce the Dutch disease effects of increased aid. This is confirmed by Adam and Bevan (2006). They use a computable general equilibrium model to show that aid-funded increases in public investment yield potentially large medium-term welfare gains, as public infrastructure investments offset short-run Dutch disease effects.

We do not have enough information to predict what channels may be relatively more important for trade-related outcomes. Our hypothesis is that both the direct and indirect effects of AfT are potentially important in stimulating competitiveness and exports.

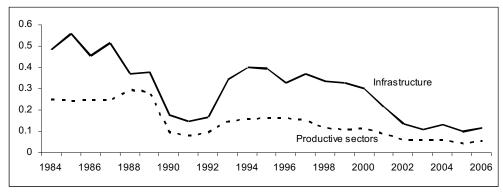
Broad source/ area of failure	Examples of failures	Responses: policies and activities	Role for Aid for Trade?
<i>Market failures</i> Co-ordination	Externalities ignored. Linkages not exploited Complementarities not exploited.	Capacity building for trade policy to identify linkages and externalities. National trade strategy	Yes, training and institutional development.
Developing, adapting and adopting technology	Incomplete and imperfect information. Network externalities.	Facilitate technology transfer and adoption. Support for quality control to meet export standards.	Yes, trade facilitation. Assisting co-ordination with the private sector.
Skills formation	Under-investment in training due to inability to appropriate externalities (in training workers) due to imperfect information.	Better co-ordination and/ or subsidies for training. Strengthen information flows.	Mostly not included under AfT. 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 AfT.
Infrastructure	Lack of good quality infrastructure because lumpy investment gets postponed in uncertain times.	Provide incentives for public-private partnerships. Provide grants in the case of low financial return/high economic return.	Yes, aid to economic infrastructure and better co-ordination with development finance institutions/ private sector.
<i>Governance failure</i> Regulatory and administrative structure	Burdensome administrative requirements.	Streamline administrative procedures and regulation.	Yes, trade policy and regulations (especially trade facilitation).

Table 2.1. How Aid for Trade can address market and governance failures

Source: Adapted from Te Velde (2008)

These effects are the product of a complex causality chain running from aid to country outcomes and mediated by domestic policy makers, implementation agencies, policies and country conditions. Bourguignon and Sundberg (2007) define this chain as a 'blackbox', as models usually do not include the actual way. 'If a dollar of aid produces little discernible change, was the objective ill-defined, the service delivery inefficient, bureaucratic measures inadequate, or was money diverted?' (Bourguignon and Sundberg (2007, p. 317). This problem applies to our analysis as well, but it is less significant than for models which

Figure 2.1. Share of total aid to economic infrastructure and productive sectors



Source: OECD CRS disbursements

estimate a relationship between aid and growth, as here we identify the links between AfT and specific outcomes.

These outcomes can be linked directly to certain types of aid for trade, for example trade-related administrative support, or they can be linked less directly, for example the impact of aid for infrastructure on the values of exports and imports, which are also influenced by many other factors. Moreover, some outcomes can be clearly measurable (e.g. streamlined administrative procedures could be measured through the cost of processing an export), while others are less easily measurable (e.g. improved trade policy co-ordination). We will try to measure the impact of different types of aid for trade on measurable outcomes, direct and indirect.

## **Empirical literature on aid effectiveness**

There is a large empirical literature on the macro relationships between aid, growth and investment, although not specifically on the effects of AfT. This literature tries to investigate the effects of aid on growth on the basis of a neoclassical growth model, where aid provides a boost in capital accumulation and thus to growth.<sup>4</sup> The findings of this literature have been at best mixed, with no consensus on the direction of the effects, let alone on their size.

Consider first the effects of general aid. Burnside and Dollar (2000) argue that aid has no identifiable additional effect on growth once other factors have been accounted for, including economic policies. Aid raises growth only in countries with 'good' policies. Hansen and Tarp (2001) use different econometric specifications and find that aid is effective and that the results do not depend on policy. In a number of recent studies, Rajan and Subramanian (2005; 2007) use longer time spans and show that the impact of aid on growth is less positive. The authors (2005) use an innovative strategy to examine the impact of aid across sectors within one country. In this way, they can better control for omitted variables bias or model specification. Their main finding is that aid has systematic adverse effects on a country's competitiveness, which is reflected in a reduction of the share of labour-intensive and tradable industries in the manufacturing sector. They suggest that these are Dutch disease effects, related to the real exchange rate overvaluation caused by aid inflows. Using a large panel of countries and instrumentation strategy to correct for the bias in conventional OLS estimation, Rajan and Subramanian (2007) do not find any positive relationship between aid and growth.

After analysing 97 different empirical studies on the impact of aid on growth, Doucouliagos and Paldam (2007) conclude that the impact of aid on growth is not significant. A number of factors may explain the inconclusiveness of these research efforts. Bourguignon and Sundberg (2007) argue that these mixed results are not surprising, given the heterogeneity of aid motives and the complex causality chain linking foreign aid to growth. Further, the impact of aid might depend on domestic economic policies, institutions and other conditions. Hansen and Tarp (2001) point to the lack of a satisfactory theoretical framework underpinning the empirical analysis. The simple neoclassical growth model of capital accumulation does not offer a framework to derive an exact empirical specification for a very complex relationship such as the one between aid and growth. Moreover the direction of causality (from aid to growth or vice versa) is to some extent still an unresolved issue.

There are number of studies that disaggregate aid by type or category. McPherson and Rakowski (2001) use a multi-equation system and find that the impact of aid on GDP per capita growth is positive but indirect through investment. Also emphasising that aid affects growth through investment, Gomanee, Girma and Morrissey (2002) find on the basis of 25 sub-Saharan African countries the period 1970–1997 that every 1 percentage point in the ratio of aid to GNP contributes one-third of 1 percentage point to growth.

Clemens et al. (2004) split aid into different types and identify the types of aid that could plausibly stimulate growth in the short run. These include budget and balance of payments support, investments in infrastructure and aid for productive sectors. The study finds that this type of aid has a large positive effect on short-term growth: a \$1 increase in aid raises the present value of output by \$8, although this effect decreases at the margin. These results survive a number of checks for robustness, but they are based on a short time horizon (1997–2001).

A few studies have quantified the effects of infrastructure provision from trade and growth and all find a positive correlation. François and Manchin (2007) estimate a large panel of bilateral trade flows over the period 1988–2002 for a number of countries and focus on the effects of communications and transport infrastructure. They estimate that an increase of one standard deviation (from the mean) in the communications infrastructure raises the volume of trade by roughly 11 per cent, compared to a 7 per cent effect on transport infrastructure and a 2 per cent effect on trade for tariffs. For least developed countries (LDCs), transport is more important than communications. The effects of communications infrastructure on trade grow as a country reaches the middle-income range. Buys et al. (2006) find that upgrading a primary road network connecting the major 83 urban areas in sub-Saharan Africa would expand overland trade within

the region by around US\$250 billion over 15 years. Other studies have quantified the positive relation between infrastructure and growth, although they have been unable to properly address the problem of causality (e.g. Canning et al., 1994; Canning, 1998). It seems natural to hypothesise that more aid to infrastructure should foster growth and exports.

By focusing our analysis on Aid for Trade, we can depart from the aid-growth conundrum by isolating the impacts of specific types of aid on specific outcomes. The rationale and objectives behind AfT are clearly narrower than those behind general aid and this should allow a more precise identification strategy. We test for the effects of total traderelated aid and specific types of AfT on trade-related outcomes, including the costs of trading and the level of exports.