

Please cite this paper as:

Hallaert, J. (2010-07-09), "Increasing the Impact of Trade Expansion on Growth: Lessons from Trade Reforms for the Design of Aid for Trade", *OECD Trade Policy Papers*, No. 100, OECD Publishing, Paris.
<http://dx.doi.org/10.1787/5kmbphgwkl46-en>



OECD Trade Policy Papers No. 100

Increasing the Impact of Trade Expansion on Growth

LESSONS FROM TRADE REFORMS FOR THE
DESIGN OF AID FOR TRADE

Jean-Jacques Hallaert

Unclassified

COM/DCD/TAD(2010)4/FINAL

Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development

09-Jul-2010

English - Or. English

DEVELOPMENT CO-OPERATION DIRECTORATE
TRADE AND AGRICULTURE DIRECTORATE

Cancels & replaces the same document of 06 July 2010

INCREASING THE IMPACT OF TRADE EXPANSION ON GROWTH: LESSONS FROM TRADE REFORMS FOR THE DESIGN OF AID FOR TRADE

GOOD PRACTICES IN AID FOR TRADE

OECD Trade Policy Working Paper No. 100

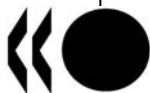
By Jean-Jacques Hallaert

Changes were only made to the Executive Summary to clarify the concepts of compatible and complementary policies.

All Trade Policy Working Papers are available on the OECD website at: <http://www.oecd.org/trade>

JT03286610

Document complet disponible sur OLIS dans son format d'origine
Complete document available on OLIS in its original format



COM/DCD/TAD(2010)4/FINAL
Unclassified

English - Or. English

ABSTRACT

The working paper “Binding Constraints to Trade Expansion: Aid for Trade Objectives and Diagnostics Tools” [OECD Trade Policy Working Paper No. 94] showed that the most common objectives of Aid for Trade have the potential to boost economic growth. However, this growth potential may not always be realized. While most trade reforms had a positive impact, some trade reforms proved unsustainable and some trade reforms did not have a meaningful impact on growth. This working paper discusses the various reasons for these outcomes in order to draw the lessons for the design of aid-for-trade projects and programmes and increase their effectiveness.

It argues that the scope of activity of aid-for-trade is broad enough to support the compatible that will make the reform sustainable and the complementary policies that will increase its growth impact. Experience shows that an appropriate macroeconomic environment is essential to make a trade reform sustainable. In an unstable macroeconomic environment, aid for trade can support compatible policies that reinforce the stabilization process. In a stable macroeconomic environment, aid for trade can help preventing trade reform from resulting in macro-economic tensions and can foster a rapid export response. The working paper also argues that many complementary policies fall under the scope of activity of aid for trade and shows that aid-for-trade projects and programmes already support some of the key complementary policies.

Supporting compatible and complementary policies is about policy coherence and adequate sequencing. In order to reach its objective, Aid for Trade should not only focus on helping developing countries to turn trade opportunities into trade but also tackle the binding constraints that choke the impact of trade on economic growth. Aid for trade has the means to do so but this requires proper sequencing and policy coherence. As much as possible, proper sequencing and policy coherence should be reflected in the design of aid-for-trade projects and programmes. This cannot be achieved without adequate donor coordination and alignment on country priorities.

Keywords: Aid for Trade, Trade Expansion, Supply-Side Constraints, Trade and Growth, Trade Reforms, Complementary Policies, Sequencing of Reforms, Aid effectiveness.

ACKNOWLEDGEMENTS

This study has been prepared by Jean-Jacques Hallaert under the supervision of Michael Plummer. Gimin Kang and Michael Plummer (all TAD) as well as Frans Lammersen, William Hynes, and William Nicol (all DCD) provided valuable comments. The final report benefitted from discussions at the OECD joint Development Assistance Committee-Working Party of the Trade Committee meeting on Aid for Trade on June 7, 2010. At this meeting, it was agreed to make the study more widely available through declassification.

This study is available on the OECD website at the following address: <http://www.oecd.org/trade>.

Copyright OECD 2010

Applications for permission to reproduce or translate all or part of this material should be made to: Head of Publications Service, OECD, 2, rue André-Pascal, 75775 Paris Cedex 16, France.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	4
1. Introduction	6
2. Two problems with trade reforms that affect aid for trade’s impact and effectiveness	7
2.1 <i>Problem 1: The growth response to trade can be weak</i>	7
2.2 <i>Problem 2: Trade reforms can be reversed</i>	10
2.3 <i>Investigating why some countries run into these problems</i>	14
2.4 <i>How aid for trade can help</i>	17
3. Avoiding policy reversal: the role of compatible policies.....	17
3.1 <i>Why policy reversal matters for aid for trade</i>	17
3.2 <i>What are the compatible policies?</i>	18
3.3 <i>Lessons for the design of aid for trade</i>	24
4. Maximizing the economic growth response to trade: the role of complementary policies	28
4.1 <i>Why complementary policies matter for aid for trade</i>	28
4.2 <i>What are the complementary policies?</i>	31
4.3 <i>Lessons for the design of aid for trade</i>	32
5. Conclusion.....	33
REFERENCES	35

Tables

Table 1. Change in average growth rates post trade reform	8
Table 2. Change in average GDP per capita growth rates post trade reform	9

Figures

Figure 1. Causality chain in aid for trade and binding constraints	29
Figure 2. How aid for trade affects the impact of trade on growth through investment.....	30

Boxes

Box 1. Reforming trade in an unfavourable macroeconomic environment: Madagascar’s experience with a temporary cut of import duties on capital goods	12
Box 2. The role of exchange rate policy in the success and failure of Chile’s trade reforms	21

EXECUTIVE SUMMARY

Trade can be a powerful engine for economic growth, poverty reduction, and development. However, harnessing the power of trade is often difficult for developing countries, particularly the least developed countries, because of supply-side domestic constraints (lack of trade-related infrastructure and capacity). The Aid for Trade Initiative was launched to address these constraints. The report “Binding Constraints to Trade Expansion: Aid for Trade Objectives and Diagnostics Tools” [COM/DCD/TAD(2009)5/FINAL] showed that the four most common objectives of aid-for-trade projects and programmes (increasing trade, diversifying exports, maximizing the linkages with the domestic economy, and increasing adjustment capacity) have the potential to boost growth and reduce poverty in developing countries.

However, the growth potential of trade may not always be realized. While most trade reforms have been successful, in some cases trade reforms proved unsustainable and in other they did not have a meaningful impact on economic growth. This working paper discusses the various reasons for these outcomes (they range from targeting the wrong problems to lack of credibility and policy incoherence) in order to draw the lessons for the design of aid-for-trade projects and programmes and increase their effectiveness.

The scope of activity of aid-for-trade project and programmes is broad enough to support the compatible policies that will make the reform sustainable and the complementary policies that will increase its growth impact.

- *Compatible policies: Aid for Trade can mitigate the risk of macroeconomic problems which are the main reason of policy reversal.* Experience shows that fiscal and balance of payments problems and an inadequate exchange rate policy often made trade reforms unsustainable. Aid for trade can help address these problems. In particular, aid for trade can help mitigate the fiscal revenue impact of a trade reform by providing technical assistance in the design of the trade reform, by helping rebalance the tax system away from trade taxes to domestic taxes but also by providing financial support to face the adjustment. Aid for trade has also a major role to play in fostering an early export response to the reform. An early export response reduces the balance of payments, employment, and fiscal problems arising from the fact that a trade reform tends to have an immediate impacts on imports and on the activity of the import-competing sector while its impact on exports and activity of the export sector appears with a lag. For the same reason, a rapid export response helps achieve another objective of aid for trade, namely smoothing the adjustment cost of a trade reform. Finally, an early export response is a political advantage. As people see early the benefit of the reform, support to the reform process increases.
- *Complementary policies: Aid for trade can support some policies that increase the economic growth impact of a trade reform.* Complementary policies are a fact: trade reforms are (almost) never taken in isolation but are part of a broader reform package. There is potentially a large range of complementary policies. The working paper shows that aid-for-trade projects and programmes already support some of the most important complementary policies such as building infrastructure, supporting the financial and banking sector development, building public and private sector capacities or supporting some regulatory reforms.

Supporting compatible and complementary policies will help aid for trade to reach its objective of using trade as a development tool. Aid for trade should not only focus on helping developing countries to turn trade opportunities into trade but also tackle the binding constraints that choke the impact of trade on economic growth. Aid for trade, in supporting compatible and complementary policies, has the means to do so but this requires proper sequencing and policy coherence. The working paper argues that once a

country has identified the most binding constraints to its trade expansion, it should implement the reform designed to tackle it making sure that the measure is sustainable and supported by complementary reforms that will increase its impact on economic growth. As much as possible, proper sequencing and policy coherence should be reflected in the design of aid-for-trade projects and programmes. This cannot be achieved without adequate donor coordination and alignment on country priorities.

Supporting compatible and complementary policies will also increase the effectiveness of aid for trade. Effectiveness has become a central issue for aid for trade. The Aid for Trade Initiative has been successful in mobilizing resources and in raising awareness on the positive role trade can play in development. However, the Initiative has reached a stage where it is also important to demonstrate that the substantial amount of aid mobilized has been well spent and had an impact. Evaluation has a key role to play in this context. This working paper complements the OECD work on evaluation by focusing on good practices that will help to make aid for trade as effective as possible.

Trade openness can — and I stress CAN — contribute to economic well-being and political harmony in important ways, but only if other conditions are met. What are these conditions? Firstly, we need sound macroeconomic policy, and not a doctrine that sees trade policy as a quick fix for over-arching economic fundamentals. Second, trading opportunities created by openness are worth little, and perhaps even unwelcome, if price signals do not reach their destination because this is made impossible by a lack of physical infrastructure and functioning markets. These elements are part of a basic development agenda, one in which the international community certainly has a role. This is why I have placed so much emphasis on the Aid-for-Trade Initiative. [...] I should emphasize that arguing for pre-conditions to make trade openness work is not to make the case for eschewing trade openness. On the contrary, it is the case for creating conditions to embrace openness.

WTO Director-General Pascal Lamy (2010)

1. Introduction ¹

1. Trade can be a powerful engine for economic growth, poverty reduction, and development. However, harnessing the power of trade is often difficult for developing countries, particularly the least developed countries (LDCs), because of supply-side domestic constraints (lack of trade-related infrastructure and capacity). The Aid for Trade Initiative was launched to address these constraints.

2. Empirical literature brings much support to the most common objectives of aid for trade (increasing trade, diversifying exports, maximizing the linkages with the domestic economy, and increasing adjustment capacity). If achieved, experience shows that they will boost growth and reduce poverty. This was one of the key messages of the report “Binding Constraints to Trade Expansion: Aid for Trade Objectives and Diagnostics Tools” [COM/DCD/TAD(2009)5/FINAL].²

3. However, the report “Binding Constraints to Trade Expansion” also cautioned that this finding is valid *on average* and that experience with trade reforms differs significantly across countries. This report investigates this caveat. It reviews the lessons from the empirical literature on trade reforms and growth in order to draw lessons for the design of aid-for-trade projects and programmes.³ The purpose is to provide an overview of the various linkages that need to be considered in the design of aid-for-trade projects and programmes in order to make aid for trade as efficient and effective as possible and to maximize its impact. More precisely, the report first documents that trade reforms⁴ in developing countries are sometimes reversed or do not deliver the expected impact on economic growth. It investigates the underlying reasons

¹ The author of this report is Jean-Jacques Hallaert (TAD). William Hynes, Frans Lammersen, William Nicol (all DCD) as well as Gimin Kang and Michael Plummer (all TAD) provided comments.

² The report was declassified at the November 2009 joint meeting of the DAC and the Working Party of the Trade Committee on Aid for Trade and published as OECD Trade Policy Working Paper No. 94 (hereafter Hallaert and Munro, 2009).

³ The implications for poverty alleviation are discussed in Hayashikawa (2009). Surveys of the empirical literature on the nexus trade, growth, and poverty can be found in Ben-David *et al.* (1999) and Winters *et al.* (2004).

⁴ In this report, “trade reform” is defined as encompassing all reforms and measures that affect the tradable sector. This approach is consistent with the recommendations of the Task Force on Aid for Trade (2006): “the scope of Aid for Trade should be defined in a way that is [...] broad enough to reflect the diverse trade needs identified by countries.”

for these setbacks (Section 2). Sections 3 and 4 then draw the lessons for the design of aid for trade. Aid for trade can support the “compatible” policies that will make reforms sustainable (Section 3) and the “complementary” policies that will increase the role of trade as an engine for growth (Section 4).

4. The report is part of the “good practices” intermediate output described in the Joint 2009/10 Programme of Work and Budget between the DAC and the TC on Aid for Trade [COM/DCD/TAD(2008)7]. It aims at helping maximize the effectiveness of aid for trade. Effectiveness has become a central issue for aid for trade. The Aid for Trade Initiative has been successful in mobilizing resources and in raising awareness on the positive role trade can play in development. However, the Initiative has reached a stage where it is important to demonstrate that the substantial amount of aid mobilized has been well spent and had an impact. Evaluation has a key role to play in this context. This report complements the OECD evaluation work (see COM/DCD/TAD(2010)1, COM/DCD/TAD(2010)2, and COM/DCD/TAD(2010)3).

2. Two problems with trade reforms that affect aid for trade’s impact and effectiveness

5. A vast empirical literature shows that trade expansion does lead to higher economic growth. This finding justifies using trade as a tool for development and vindicates the Aid for Trade Initiative. However, the same literature shows that there is no guarantee. In some cases, developing countries’ experience with trade reform was disappointing because trade reform did not deliver the expected economic growth and poverty reduction.

6. Whatever the underlying reasons, disappointment with trade reform is an issue for the Aid for Trade Initiative mostly because it makes new reforms more difficult to implement and reduces the incentive for developing countries to consider trade as an important part of their development strategy. Moreover, if trade does not lead to growth, the effectiveness of aid-for-trade projects and programmes is undermined. They would not be able to reach one of the key objectives of the Initiative, namely “enable developing countries, particularly least developed countries (LDCs), to use trade more effectively to promote growth, development and poverty reduction and to achieve their development objectives, including the Millennium Development Goals (MDGs)” (WTO, 2006).

7. This section first documents the severity and the frequency of the weak response of growth to trade expansion and of policy reversal. It then reviews the possible reasons for these two problems before discussing the role aid for trade can play in preventing them.

2.1 Problem 1: The growth response to trade can be weak

8. On average, trade fosters growth. However, the economic growth response to trade expansion and trade reform varies significantly across countries. For example, Wacziarg and Welch (2003) found that, although increased policy openness has *on average* a positive impact on growth in developing countries, “there is a vast amount of heterogeneity across countries in the extent to which growth rose after trade reforms. [...] Roughly half of the countries experienced zero or even negative changes in growth post-liberalization.”

9. Looking at the growth performance before and after the trade reform illustrates the heterogeneity of the growth response to trade reform.⁵ Table 1 summarizes the growth impact of trade reform implemented

⁵ This is a crude way of illustrating the heterogeneity in the growth response to trade reform because (i) it is often difficult to identify exactly when a reform took place, (ii) there are delays in the adjustment to the reform so that the growth response can vary across countries and take longer than what is captured, (iii) trade reforms vary in their depth and scope, and (iv) both the magnitude and the type of liberalization differ across countries.

by thirty-two countries during the period 1986-91. The impact on growth was positive with growth rates higher by 1.4 percentage points on average after the reform. However, the heterogeneity is sizable: standard deviation reaches 4.8 and fourteen countries experienced a decline in their economic growth

Table 1. Change in average growth rates post trade reform

1	Mali	0.1018	Poor (low)	
2	Philippines	0.1004	Low Mid	
3	Chile	0.0855	Low Mid	
4	Uganda	0.0807	Poor (low)	
5	Malaysia	0.0740	Low Mid	
6	Tanzania	0.0495	Poor (low)	
7	Nigeria	0.0364	Poor (low)	
8	Malawi	0.0341	Poor (low)	
9	Costa Rica	0.0334	Low Mid	
10	Argentina	0.0320	Low Mid	
11	Colombia	0.0314	Low Mid	
12	Venezuela	0.0226	Upper Middle	
13	Senegal	0.0226	Low Mid	
14	Madagascar	0.0195	Poor (low)	
15	Côte d'Ivoire	0.0184	Low Mid	
16	Vietnam	0.0177	Poor (low)	
17	Bangladesh	0.0039	Poor (low)	
18	Mexico	0.0018	Upper Middle	
19	Indonesia	-0.0006	Poor (low)	
20	Korea	-0.0009	Upper Middle	
21	Thailand	-0.0014	Low Mid	
22	Sri Lanka	-0.0101	Poor (low)	
23	Pakistan	-0.0160	Poor (low)	
24	Ghana	-0.0182	Poor (low)	
25	Kenya	-0.0233	Poor (low)	
26	Cameroon	-0.0292	Low Mid	
27	India	-0.0297	Poor (low)	
28	South Africa	-0.0370	Upper Middle	
29	Peru	-0.0435	Low Mid	
30	China	-0.0531	Poor (low)	
31	Brazil	-0.0776	Upper Middle	
32	Zaire	-0.0932	Poor (low)	
	Low Income	0.0062	Africa	0.0125
	Lower Middle	0.0294	South America	0.0107
	Upper Middle	-0.0182	South Asia	-0.0130
			South East Asia	0.0195
	Average	0.0104		
	St Dev	0.0476		

Source: Greenaway *et al.* (1997).

10. Heterogeneity can be measured across various dimensions. The growth response tends to vary across regions (being the strongest in South East Asia and the lowest in South Asia) as well as across income groups (being the strongest in lower-middle income countries). These findings echo the econometric results of other studies. Wang *et al.* (2004), as well as Dufrenot *et al.* (2009), focused on the heterogeneity across income groups. Wang *et al.* (2004) showed that for a larger sample (seventy-nine countries) over a longer period (1970-98) the poorer a country is, the larger is the growth impact of trade expansion. Dufrenot *et al.* (2009) found that the growth impact of trade openness is bigger on developing countries with low economic growth than on developing countries with high economic growth. Many other studies stressed the importance of other dimensions that are not measured in Table 1 such as the legal, institutional, and economic environment (Bolaky and Freund, 2004; Chang *et al.*, 2005; and Thomas and Nash, 1991).

Table 2. Change in average GDP per capita growth rates post trade reform ^{1/}

Country	Change in GDP per capita (in percent)
Jamaica	7.53
Dominican Republic	4.53
Chile	4.23
Madagascar	4.15
Ghana	3.84
Thailand	3.72
Niger	3.51
Zambia	3.35
Uruguay	3.24
India	2.69
Bangladesh	2.60
Argentina	2.50
Mauritania	2.24
Korea, Rep.	2.07
Côte d'Ivoire	1.91
Nepal	1.28
Malaysia	1.16
Panama	1.16
Honduras	1.06
Mali	1.01
Tunisia	0.90
Brazil	0.78
Costa Rica	0.73
Senegal	0.71
Central African Republic	0.59
Benin	0.59
South Africa	0.58
Jordan	0.49
Malawi	0.19
Ecuador	0.18
Bolivia	0.05
Kenya	-0.86
Turkey	-1.09
Philippines	-1.86
Cameroon	-2.13
Morocco	-2.81
Pakistan	-2.91
Mexico	-3.35
Paraguay	-4.00

1/: The average growth pre-liberalization is measured for the years [T-12, T-5] preceding the liberalization, while the post liberalization average period is measured for the years [T+2, T+9]. T represents the year of the trade reform.

Source: Aksoy and Salinas (2006).

11. Aksoy and Salinas (2006) undertook a more careful analysis of the growth response to trade reform of thirty-nine developing countries during 1970-2004 (Table 2). They controlled for many factors that can

bias the results presented in Table 1, namely they excluded (i) reforms that were reversed; (ii) economies in transition from socialism; (iii) economies that had a conflict; and (iv) macroeconomic crisis years that often triggered the trade reform.

12. However, the conclusion remains unchanged: on average, trade reform is associated with higher growth but the heterogeneity in the growth response is substantial. On average, the GDP per capita growth rate was higher by about 1.1 percentage points after the reform. This is quite impressive taking into account that in many cases the macroeconomic policy was clearly more expansionary in the years before the reform than after.⁶ Albeit more limited than in Table 1, the heterogeneity remains striking: one-fifth of the countries saw their economic growth performance deteriorating following the trade reform. Moreover, the difference in the growth response across regions and income levels is barely noticeable, suggesting that the differences highlighted in Table 1 may be due to the exogenous factors that Aksoy and Salinas (2006) control for.

13. Similarly, Sachs and Warner (1995) in a study of thirty-seven countries that opened up their trade regime after 1975 estimated that the trade reform resulted in higher growth (measured by the real GDP per capita growth) both in the short and long run. Again, the results showed substantial heterogeneity across countries. Interestingly, this study showed that the impact of the change in trade policy on GDP runs both ways: moving toward a more restrictive trade regime is clearly associated with lower growth on average and heterogeneity is substantial.⁷ Economic performance deteriorated for four-fifth of the countries, but improved for one-fifth.⁸

2.2 *Problem 2: Trade reforms can be reversed*

14. Past experience shows that trade reforms are sometimes reversed. Many case studies, including Ebrill *et al.* (1989), Edwards (1993), Foroutan (1993), Rodrik (1989), and Thomas and Nash (1991) analyze specific policy reversals.

15. Policy reversal is a concern for aid for trade because it affects its effectiveness. The impact of policy reversal on aid-for-trade effectiveness can be direct (if the reform was supported by aid-for-trade funds) or indirect (if the reform was crucial for another aid-for-trade project or programme). This section describes the main mechanisms leading to the policy reversal.

16. “Macroeconomic instability is perhaps the greatest enemy of trade reform” (Rodrik, 1989). Many case studies have shown that in a context of macroeconomic instability, trade reforms tend to be reversed. For example, a key message of both the World Bank Independent Evaluation Group (2006) review of the World Bank projects supporting trade and the cases studies of Michaely *et al.* (1991) was that poor macroeconomic policies were more commonly associated with reversals in trade reform than any other factor.⁹ In countries where the adverse macroeconomic environment did not result in policy reversal, trade

⁶ If the years of macroeconomic crisis are not excluded, the impact of the trade reform on the growth rates increases from 1.1 to 1.6 percentage points.

⁷ Economies are classified on the basis of the Sachs and Warner Index that was used extensively in the empirical literature on trade and growth. A country is considered closed if at least one of the following characteristics holds over the period 1970-89: average tariff rate is over 40%, nontariff barriers cover 40% or more of imports, the country operates under a socialist economic system, there is a state monopoly of the country’s major exports, and the black market premium on its official exchange rate exceeded 20% in the 1980s or 1990s. The value of this index to measure openness was criticized by Rodrik and Rodriguez (1999)

⁸ The sample covers fifteen developing countries.

⁹ See Foroutan (1993) or Rodrik (1989) for other examples.

reforms did not deliver the expected outcome. Macroeconomic instability is one of the many reasons (and often an important reason) for the weak economic growth response to trade liberalization discussed in the previous section. This was a conclusion of the Wacziarg and Welch's (2003) seminal article on the impact of trade liberalization on economic growth.

17. In addition, a trade reform can exacerbate macroeconomic imbalances. In such a case, it is more likely to be reversed. If revenue from taxes on international trade accounts for a large share of government revenue, a trade reform may prove fiscally unsustainable. Box 1 illustrates this point with Madagascar's experience with a temporary tariff-exemption scheme. Similarly rapid and comprehensive trade liberalization can be followed by an import surge and a sharp deterioration in the current account (van Wijnbergen, 1992).¹⁰ This can result in a balance of payments crisis.

18. The balance of payments problem is particularly acute if the trade reform is launched while the exchange rate is overvalued. Shatz and Tarr (2002), among many others, showed that this has been frequently the case including in the recent trade reforms of the 1980s and 1990s. If a currency is overvalued, trade liberalization triggers a rise in imports while the export response is weak because overvaluation damages competitiveness. Excess demand for foreign exchange emerges resulting in balance of payments tensions. In addition, domestic activity usually declines because the contraction in import-competing sectors is not offset by an expansion of the export sector. Unemployment rises. Governments then have to either adjust the exchange rate or reverse the trade reform.¹¹ The credibility dimension is also important: if trade reform is not accompanied by a meaningful depreciation, it is likely to be perceived as unsustainable because of the resulting impact on the external balance. This will in turn affect the agents' behaviour and the risk of policy reversal becomes larger (Rodrik, 1989, Falvey and Kim, 1992).

19. Although literature shows that a meaningful depreciation increases the chances of having a sustainable trade reform, depreciation also increases inflationary pressures. This danger calls for policy coherence: monetary policy should be consistent with the trade reform. This also highlights the need for appropriate sequencing: macroeconomic stabilization is often a prerequisite to trade liberalization. Nonetheless, sequencing does not necessarily mean that all elements of the trade reform must be postponed as some parts of a stabilization program can also contribute to the trade reform. For example, in many cases a fiscal consolidation is needed to reduce the fiscal and balance of payments deficits as well as to tame inflation (especially, but not only, if the fiscal deficit is financed by the central bank). As discussed below, such a consolidation can be achieved with a tax reform that can rebalance the tax system from taxation of imports towards domestic taxes.

¹⁰ Limiting this impact is one of the reasons why trade liberalization should be accompanied by currency depreciation.

¹¹ For more details, see Edwards (1993), Krueger (1997; 1998), Panagariya (2004), Wacziarg and Welch (2003), and World Bank Independent Evaluation Group (2006). See also Box 2 on Chile's experience.

Box 1. Reforming trade in an unfavourable macroeconomic environment: Madagascar's experience with a temporary cut of import duties on capital goods

In 2003, the macroeconomic environment of Madagascar was fragile. The fiscal deficit was at 4.8% of GDP and would have reached 9.3% without external grants. Moreover, at 10% of GDP, the country had one of the lowest tax-to-GDP ratios in the world. Madagascar's performance stood well below the sub-Saharan Africa average of 18% (Keen and Mansour, 2009). Finally, taxes on international trade accounted for over half of government tax revenue. The external position was also very weak. Despite the debt relief under the Heavily Indebted Poor Countries Initiative, official grants of almost 4% of GDP, and the IMF balance of payments support, import coverage was low and falling rapidly: gross official reserves covered 4.1 months of imports in 2002 but only 2.7 months of imports in 2003 (IMF, 2005a and 2007).

Nonetheless, and without any meaningful accompanying reform to offset the fiscal revenue loss, the Malagasy authorities embarked in August 2003 on a temporary two-year tax and tariff exemption of imports of capital goods in order to boost investment.^{1/} Firms and household hoarded imports while the scheme, which was announced as temporary, was in place. Imports of equipment jumped by 60% triggering a sharp deterioration in external accounts. The current account deficit ballooned from 5% of GDP in 2003 to 9% in 2004 and 11% in 2005. The fiscal deficit increased from 9.3% (excluding grants) in 2003 to 13.1% in 2004 (IMF, 2005b and 2006a).

Unsustainable, the cuts were partially rescinded in August 2004 and the scheme was terminated, as planned, in September 2005. In the following years, the government considered other tax cuts to boost investment, but these schemes could not be implemented because of their fiscal implications. Madagascar trade liberalization slowed down and shifted from unilateral liberalization to preferential liberalization. Madagascar also implemented two major reforms. The custom reform and the domestic tax reform improved the business environment, facilitated dramatically international trade, increased fiscal revenue, and reduced the Malagasy government fiscal dependency on taxes on international trade (Fjeldsted, 2009; Hallaert, 2007 and 2008; Josz, 2007).

^{1/}The Malagasy government saw the lack of saving as a major bottleneck for the country's development as it was a constraint to investment. Attracting foreign investors, especially from South Africa, was one of the reasons why Madagascar joined the Southern African Development Community (Hallaert, 2007).

20. A second, and important, macroeconomic problem that trade reform can exacerbate is fiscal. Ebrill *et al.* (1999) as well as the World Bank Independent Evaluation Group (2006) documented cases where trade liberalization was reversed because of a lack of accompanying fiscal revenue reform. Although declining, taxes on international trade still account, in many developing countries, for a very large share of fiscal revenues. For example, Keen and Mansour (2009) estimated that, in sub-Saharan Africa, trade taxes accounted on average to about 25% of total tax revenue in the first half of the 2000s (down from 40% in 1980). The average masks large differences across countries as in some countries the share exceeds 50%. As a result, fears from fiscal revenue consequences affect developing countries' willingness to undertake trade reform unilaterally, multilaterally (as illustrated by the concern expressed by many developing countries on the fiscal impact of the Doha Development Round — Kowalski, 2005; Elborgh-Woytek *et al.*, 2006), or on a preferential basis (as illustrated by the concerns on the fiscal impact of the Economic Partnership Agreements between the European Union and the African, Caribbean, and Pacific countries — Hallaert, 2010). Although, as discussed in details below, the fiscal impact of trade reform can be mitigated, a trade reform that is not properly designed or is not accompanied by a proper tax reform can have severe consequences and be unsustainable (Baunggaard and Keen, 2005, Khattry, and Rao, 2002; Hallaert, 2004).

21. A third cause of policy reversal is the adjustment costs. Structural changes and reallocation of resources toward more efficient uses are at the heart of the gains from trade and are crucial for sustained economic growth and development. Therefore, using trade as an engine for growth and development implies structural changes. However, structural changes are accompanied by adjustment costs that can be economically, socially, and politically unsustainable.¹² In such cases, trade reform may be reversed. In this context, it should be kept in mind that if policies and institutions affect the growth impact of trade openness, openness to trade also affects policies and institutions. Berg and Krueger (2003) argued that trade may expose weaknesses in some other areas or enhance the benefits of other reforms, which in turn lead to better export performance and increased productivity.¹³ They also stressed that trade liberalization may alter the political reform dynamic by influencing institutions and creating constituencies for further reforms. This is a key aspect for the design and the sequencing of trade reform (and thus for aid-for-trade projects and programmes as discussed below), which is developed in Dewatripont and Roland (1995), Krueger (2005), and Rodrik (1989).

22. As mentioned in the WTO Task force on Aid for Trade (2006) and discussed in details in the report “Binding Constraints to Trade Expansion” (Hallaert and Munro, 2009) as well as in “Trading out of poverty” (Hayashikawa, 2009), increasing adjustment capacity is a crucial objective of the Aid for Trade Initiative that requires complementary policies both to increase the impact of trade on growth and on poverty-reduction and to make the reform sustainable. Supporting these complementary policies, which are discussed in detail in Section 4, fall under the scope of activity of aid for trade.

23. In conclusion, the macroeconomic environment should be considered in the design and the sequencing of the trade reform. Lessons from past experience are clear: (i) macroeconomic stability is crucial for trade reform sustainability. In some cases it is a prerequisite;¹⁴ (ii) a particular attention should be paid to the exchange rate; and (iii) the role of smoothing adjustment costs should not be underestimated. Implications for the design of aid-for-trade programs and projects are also clear. In an unstable macroeconomic environment, aid for trade should focus (i) on compatible policies (Section 3) that can reinforce the stabilization process (such as trade-related capacity building)¹⁵ as macroeconomic instability

¹² Reform of the tax system can be part of the list of necessary structural adjustments.

¹³ An example is corruption. Trade reform provides incentives to fight corruption and thus can affect growth. Ades and Di Tella (1999) showed a relationship between rents (due to active industrial policy or lack of foreign competition) and corruption, which in turn reduces investment and medium-term growth. Wei (2000) found support for the hypothesis that open countries have incentives to develop better institutions and fight corruption because the latter particularly affects international transactions and thus is more costly in open economies than in closed ones. Other examples can be found in Rodrik *et al.* (2002) who argued that institutions explain more real income per capita than openness but also found that openness partly explains the quality of institutions and so has a positive indirect effect on incomes.

¹⁴ Illustrating the importance of the macro-economic environment for trade, all Diagnostic Trade Integration Studies (DTIS) include a section “Macroeconomic environment.” The reason is that “a stable macroeconomic environment and a stable exchange rate are a prerequisite for improving trade performance. The DTIS may therefore contain a current analysis and assessment of the macroeconomic environment and how it relates to main constraints to trade” (Integrated Framework, 2009). The DTISs are undertaken in the context of the Enhanced Integrated Framework (EIF). The EIF is an initiative of six multilateral institutions (IMF, ITC, UNCTAD, UNDP, World Bank, and the WTO). It aims to integrate trade in LDCs development strategy, and to help the delivery of trade-related technical assistance in response to needs identified by each LDC. For more details, see UNCTAD (2005) and <http://www.integratedframework.org/about.htm>.

¹⁵ Trade-related capacity building aims at creating, *inter alia*, an “enabling environment for increasing the volume and value added of exports, diversifying export products and markets, and increasing foreign investment to generate jobs and trade” (World Bank Independent Evaluation Group, 2006). The macro-economic part of the various DTISs’ action matrices provides a list of possible actions that could be supported by aid for trade.

is probably a binding constraint to trade expansion and (ii) on elements that are not affected by the macro-environment (such as infrastructure work and building capacities) but that are of importance in sustaining activities and trade during the turmoil but also once macro-stabilization is achieved. Finally, experience vindicates having increasing developing countries' adjustment capacities as an important objective of aid for trade (Hallaert and Munro, 2009).

2.3 *Investigating why some countries run into these problems*

24. The previous section showed the importance of implementing trade reform in the appropriate macro-economic environment. This section investigates other sources of failure in trade reform in order to inform the design of aid for trade. The empirical literature provides an array of reasons why some trade reforms failed. For the sake of clarity, these reasons can be classified into three categories. First, the trade reform suffered from weaknesses in their design and implementation. Second, the structure of the economy and policies affected the trade and economic growth response to the trade reform. Third, the trade reform was not credible.

25. Some trade reform failures can be explained by flaws in their design and implementation. The first type of flaw is to tackle the wrong problem. Milner (1998) analyzed why the investment and non-traditional exports response to trade reform was "modestly positive at best" in many African countries in the 1990s. He argued that trade reforms did not target the main source of anti-export bias. Reforms focused on trade policy while the main binding constraints to trade expansion were "natural barriers" notably high transportation costs related to inefficient transport infrastructure. As a result, trade reforms had little impact on trade and thus did not foster growth.

26. This argument was substantiated by two case studies of landlocked countries: Uganda and Malawi. In Uganda, the average implicit taxation of export was estimated at 77% in 1994. 13% was explained by customs tariffs while transportation costs represented an implicit tax of 64% (Milner *et al.*, 2000). Therefore, transportation costs were a more urgent problem to tackle than customs tariffs. They acted both as a significant implicit tax on exports and as an effective protection of imports. Thus, they represented a greater cost to exporters, and a more binding constraint to exports, than the trade regime.¹⁶ The same conclusion was reached in the case of Malawi. Milner and Zgovu (2003) estimated that non-traditional exports could have increased by 24% if at the start of the reform period in 1987 transportation cost problems had been eliminated (much more if other transaction costs were also addressed) compared to a more limited increase of 15% that the elimination of import tariffs would trigger.

27. In short, in some countries, significant trade reform did not stimulate trade and thus economic growth because they did not tackle the most binding constraints to trade. This highlights the need, emphasized in Hallaert and Munro (2009), to identify properly the most binding constraints to trade and the importance of the right sequencing of reform. As mentioned by the authors of the case studies, the trade policy reform could have been more effective and have a significant impact if the transportation costs (or more generally all transaction costs associated with trade) were addressed.

28. A second type of flaw is that reforms were in some countries limited and partial (Milner and Morissey, 1999; Morissey and Filatotchev, 2000). The cases of Uganda and Malawi illustrate the importance of complementary policies (discussed in detail in Section 4) as reform of the trade regime was worth undertaking but could only bring large benefit if accompanied by policies reducing transportation

¹⁶ Rudaheranwa (2006) partially updated this study. He calculated that, in 2003, the average implicit taxation of exports from total transportation cost was roughly stable (the decline in overland transportation cost being offset by an increase in the cost of overseas transportation).

costs or other significant transaction costs. Moreover, “misguided or overly timid reforms can undermine the reform process and make it difficult to muster support for future reform programmes” (Krueger, 2005).

29. The second type of explanation for the weak growth response to trade reform refers to the differences in the structure of the economies and to the role of non-trade policies. This strand of literature argues that trade openness may not foster growth in the absence of an appropriate economic, social, and political environment.

30. The heterogeneity of growth response to trade reform depends on differences in transportation infrastructure. The policies affecting transportation costs have been highlighted as a main reason for the disappointing growth impact of trade liberalization for African countries by Milner (1998) and Milner *et al.* (2000; 2003). Thomas and Nash (1991) in a survey of the experience of thirty-two countries with trade reform during 1985-93 concluded that, in some countries, the disappointing impact on output of the trade reforms can be explained by insufficient attention paid to the infrastructural needs of exporters.

31. The heterogeneity of growth response to trade reform can also be explained by differences in human capital and absorptive capacities. Trade and foreign direct investment (FDI) are two different “transmission channels” through which openness affects economic growth. Balasubramanyam *et al.* (1996) showed that these two channels interact: FDI has a positive impact on growth in countries whose trade regime is designed for export-promotion (versus import substitution). However, the interaction may be weaker in developing countries than in reach countries (and thus the impact of openness on growth) because, as pointed by Wang *et al.* (2004) low income countries benefit less (in terms of impact on growth) from FDI than richer countries due to lower level of human capital and technology absorptive capacities.¹⁷ This highlights the role of education policies in facilitating the impact of trade on growth.

32. The heterogeneity of growth response to trade reform also depends on differences in the regulatory and institutional environment. Dufrénot *et al.* (2009) emphasized the role of “reforms putting a stronger focus on other macroeconomic and social policies including productivity-boosting reforms, spending on social programs, improving the investment climate, and the strengthening of institutions.” In an analysis of seventy-nine countries over the recent period of 1980-96, they showed that that the positive impact of trade on growth was larger when these reforms complemented trade reform. Thomas and Nash (1991) argued that domestic regulatory and public sector policies also influence the supply response by determining whether incentives actually change and by affecting the mobility of factors of production in response to changes in incentives. Moreover they stressed that some policies have impeded rapid adjustment to a changed incentive structure and inhibited the supply response. More recently, Chang *et al.* (2005) found that the positive impact of trade on growth is larger if it is accompanied by increased education, infrastructure, and deeper financial markets, as well as institutional and regulatory reforms. Bolaky and Freund (2004) showed that the increase in trade does not affect positively growth in heavily-regulated economies but once the effect of domestic regulation is controlled, the impact of trade on growth is stronger than the one found in other studies.

33. This brief survey of literature clearly shows that the impact on growth of both trade and FDI depends on non-trade policies and institutions.¹⁸ In other words, the economic growth impact of a trade

¹⁷ Measuring absorptive capacity is not easy in practice as illustrated by the general framework for doing so in Bourguignon and Sundberg (2006).

¹⁸ Many other studies stress the importance of complementary policies. Among them, Rodrik (1998) argued that the results of its analysis of the weak growth response to trade expansion in thirty-one sub-Saharan African countries during 1964-94 can be interpreted as showing the need of complementary policies (broader reform package) for trade to have an impact on growth.

reform depends in large part on flanking policies. The implications for the design of aid-for-trade projects and programmes are discussed in Section 3 and 4.

34. The third type of explanation for the weak growth response to trade reform is credibility. If weaknesses in the design and in the implementation of a trade reform and the structure of an economy can explain the disappointing growth response to a trade reform, the lack of credibility is the source of a more dramatic outcome: policy reversal.

35. A reform implemented without policy coherence lacks credibility and can become unsustainable. For example, in many developing countries the fiscal position is fragile and fiscal revenue relies substantially on trade taxes. If a trade reform cutting dramatically import duties is implemented without a tax reform allowing recouping the loss, the fiscal deterioration can rapidly become unsustainable. Similarly a trade reform can lead, at least in the short term, to a surge in imports. In this context, a trade reform can make balance of payments tensions unsustainable. These points highlight the need for policy coherence.¹⁹

36. Even if a trade reform is appropriately designed, implemented, and supported by other policies, it can become unsustainable because of a lack of credibility. This can be the case, for example, if the trade reform follows unsuccessful reforms. “Opportunities for reform are infrequent and if critical efforts go wrong, reforms get discredited. Once that happens, it can be difficult to get another chance to introduce reform. And successive reform failures make each subsequent effort that much more difficult – and more costly” (Krueger, 2005).²⁰

37. Whatever the reasons, if agents perceive a trade reform as not credible and likely to be reversed, they will not adjust at the desirable speed and thus increase the adjustment cost to the reform (Falvey and Kim, 1992). In such case, the risk of failure is sizable. Balance of payments tensions will increase if an import tariff cut is perceived as temporary (or is designed to be temporary as in the case of Madagascar described in Box 1), households and firms will hoard imported goods leading to a rapid current account deterioration. A second impact is that when a reform is not credible, investors postpone their investment preferring to send their money abroad. This adds capital account pressures to current account pressures.²¹ In addition, if investments are suspended or postponed, the capacity of the reform to foster an export response is much affected.²²

38. Collier (1993) summarizes the issue: “the concept of policy credibility [...] is central in the recent literature on the theory of trade liberalisation. [...] Credibility [...] approaches being a necessary condition for sustainability. Although the sufficient conditions for credibility are unknowable, two necessary conditions are clear: the liberalisation must be compatible and it must be time-consistent.”

¹⁹ Case studies can be found in Ebrill *et al.* (1999), Milner (1998), and Thomas and Nash (1991).

²⁰ According to Krueger, this is what happened in India in 1966. Collier (1997) offered the same interpretation for Uganda’s reform experience in the 1990s.

²¹ In more formal terms, the reform then triggers an increase in consumption and thus a drop in saving. The current account, which reflects a country’s saving and investment gap, deteriorates significantly. This current account deficit is unlikely to be financed by inflows of capitals if the policy lacks credibility. On the contrary, lack of credibility can trigger a capital flight. The reform then affects negatively the gross reserves.

²² For more details see, among many others, Collier (1993), Dewatripont and Roland (1995), Rodrik (1989), and van Wijnbergen (1992).

2.4 *How aid for trade can help*

39. Past experience shows that trade reform is (almost) never implemented in isolation but is part of a broader package. As a result, the interaction of trade reform with other reforms is a fact of life. The issue is, then, to design the rightly sequenced package of reforms in order to make the trade reform sustainable and to maximize its impact on economic growth.

40. This approach is consistent with the rationale underpinning the Aid for Trade Initiative. The Initiative calls for mainstreaming trade in development strategy. Development strategy is obviously a concept that requires many policy reforms properly designed and sequenced *i.e.* that requires policy coherence between trade reform and other reforms. Moreover, the Task Force on Aid for Trade (WTO, 2006) has given aid for trade a broad definition of the areas it covers. This makes possible addressing not only the binding constraints affecting the trade response to the trade reform but also the binding constraints chocking the impact of trade on economic growth (Hallaert and Munro, 2009).

41. As a result, in collaboration with the partner countries, donors should be mindful of, and if possible support, flanking policies that will make the trade reform sustainable and increase its economic growth impact. Aid for trade's capacity building activities, notably technical assistance and training, can help government identify the appropriate reforms, design them, and implement them adequately. Aid for trade's productive capacity building activities and the numerous projects on infrastructure both help address the institutional and infrastructural need of exporters. Finally, although it is not the intended purpose, aid for trade, showing support of the international community, can also improve the credibility of the trade reform.

42. Aid for trade has the means of making trade reform sustainable and successful. This will in turn increase the effectiveness of aid for trade and its impact. To achieve this potential, the design of aid-for-trade projects, its sequencing, and the coherence with other policies are crucial. The rest of this report focuses on the lessons of experience with trade reforms in developing countries for the design of aid for trade. Section 3 focuses on the "compatible" policies. Compatible policies ensure policy coherence: trade reform must be supported by other policies, in particular macroeconomic policies, or face the risk of being not credible or unsustainable. Section 4 discusses "complementary" policies *i.e.* policies that maximize the impact of trade on economic growth.

3. **Avoiding policy reversal: the role of compatible policies**

43. This section discusses the reasons why preventing policy reversal is an important matter for aid for trade. It also describes the compatible policies that can reduce the risk of policy reversal and the implications for the design of aid-for-trade projects and programmes.

3.1 *Why policy reversal matters for aid for trade*

44. Policy reversal reduces aid for trade's effectiveness. Some aid-for-trade projects and programmes, such as capacity building and training, aim at supporting policy reforms. Other projects depend crucially on the implementation of a reform *e.g.* an export promotion campaign may only make sense if a tariff reform reducing the anti-export bias and eliminating the explicit or de facto export prohibitions is implemented. As a result, if the required reform is not implemented or is reversed, the rationale of some aid-for-trade projects or programmes may disappear (or be substantially reduced) and their effectiveness undermined. Thus, making sure that a reform is sustainable is an obvious way to preserve the effectiveness of aid for trade.

45. The dynamic dimensions of a policy reversal should be emphasized. A policy reversal usually affects the credibility of policy-makers making subsequent reforms more difficult as well as more costly

(Krueger, 2005). Another dynamic aspect is the fact that gradual reforms and sequencing are at the core of aid for trade. This is a reality rather than a choice: trade-related needs are numerous but both political capital and financial resources (including aid for trade) are limited and are only available over time. Thus, trade reform is by nature a dynamic process that requires countries to prioritize the measures taken. A policy failure may derail this process, breaking the chain of reforms.

46. Flanking policies aiming at smoothing the adjustment costs warrant a special consideration because adjustment cost is a major source of policy reversal and increasing country's adjustment capacity is an important objective of aid for trade (Hallaert and Munro, 2009). Flanking policies are important because gains from trade and adjustment costs become visible at different times: usually the costs of a trade reform are felt much before the gains – let alone the fact that the costs are usually concentrated on a small number of people and firms and thus are acutely perceived while the gains are diffused on a large number of people and may not even be noticed. In this context, it is noteworthy that aid for trade can help a country address the adjustment cost directly but also indirectly. Although it is not its purpose, properly designed aid for trade, aligned on the countries priorities, can also improve the credibility of the trade reform. If a reform is perceived as credible, it results in lower adjustment cost. Indeed credible reform reduces the uncertainty and helps an adjustment at the socially desirable speed (Falvey and Kim, 1992).

47. Avoiding policy reversal also helps aid for trade reaching its objective. Therefore, supporting the compatible policies that aim at making the trade reform sustainable is arguably part of aid-for-trade and should be, as much as possible, considered in the design of aid-for-trade interventions. The *raison d'être* of compatible policies meets one objective of aid for trade: “help facilitate, implement, and adjust to trade reform and liberalization” (WTO, 2006).

3.2 What are the compatible policies?

48. “Compatible policies” are the flanking policies aiming at ensuring the sustainability of the trade reform. Making trade reform sustainable is a question of policy coherence and of proper sequencing. Because experience shows that a trade reform can only be successful and sustained if the macroeconomic environment and policies are compatible with the trade reform, compatible policies should come first in the sequencing of a trade reform (Rodrik, 1989, Thomas and Nash, 1991, and World Bank Independent Evaluation Group, 2006).

49. Compatible policies should strive to maintain fiscal revenue for two reasons. First, this will avoid a trade reform being reversed because of its fiscal consequences. Second this is a matter of policy coherence: preserving fiscal revenue is (i) essential for the ability of a country to achieve another aid-for-trade objective: smooth the adjustment cost of opening up the trade regime; and (ii) it is required to finance the development needs of recipient countries. Aid for trade ultimately aims at helping developing countries achieve their development goal and thus should not undermine the capacity of developing country's budget to finance them. In sum, effectiveness considerations require that a trade reform, supported by aid for trade and aiming at reaching development goals, is designed in a way that it does not undermine fiscal revenue.

50. Preserving fiscal revenue in the context of a trade reform is often challenging. Trade taxes remain (partly because they are easy to collect) a major source of revenue for many, often fiscally stretched, governments. On average, in sub-Saharan Africa, trade taxes account for one-third of the non-resource tax revenue. And in some countries they account for more than half the tax revenue (Hallaert, 2004; Keen and Mansour, 2008). The risk is thus substantial that a trade reform results in large fiscal revenue losses. Developing countries often argue that a trade reform (multilateral, unilateral, or regional) is not feasible because of its fiscal implications or requires some financial compensation.²³ This concern cannot be

²³ See for example Baunsgaard and Keen (2005), Elborgh-Woytek *et al.* (2006), Hallaert (2010), and Kowalski (2005).

ignored by the Aid for Trade Initiative, which aims at facilitating, implementing and adjusting to trade reform and liberalization (WTO, 2006).

51. Not all trade reforms have a negative impact on fiscal revenue. Some reforms can even increase revenue. Removing prohibitions, reducing tariff rates that are higher than the revenue-maximizing rate, tariffing quotas, and rationalizing the tariff structure combined with the streamlining of exemptions for example can make a trade reform revenue neutral or revenue enhancing. Moreover, it is noteworthy that the fiscal losses from a tariff cut can be overestimated because part of the direct loss of a tariff cut will be offset by the increase in import. Additional imports will be taxed at the border (if the cut does not bring the tariff rate down to zero) but also internally with the sales tax or the VAT (Ebrill *et al.*, 1999; Hallaert, 2004). Similarly, the reduction or the elimination of an export tax, besides its impact on exports, can lead to an increase in production and profits, which are taxed, leading to some revenue increases that partly offset the direct fiscal loss.

52. However, in many countries, revenue neutral or revenue enhancing trade reforms have already been implemented and further reforms are likely to have adverse consequences for fiscal revenue. In such cases, there is the need to move to “second generation” reforms, *i.e.* rebalancing the tax system from trade taxes to domestic taxes.

53. Rebalancing the tax system away from trade taxes to domestic taxes is a strategy that has merits on its own. Trade taxes are an inefficient and distortive way of raising revenue.²⁴ Offsetting the revenue losses from trade reform with domestic revenue helps meet the challenge of globalization while preserving the resources needed to meet the development needs. Moreover, revenue from domestic taxes have the advantage to be less volatile than trade taxes or other flows such as aid or, as evidenced in the current crises, remittances and FDI (Bulír and Hamann, 2007). Thus, they help provide more visibility and pay for the maintenance cost of projects financed by aid, including infrastructure projects financed by aid for trade (Gupta and Tareq, 2008).

54. In addition, this strategy helps safeguard consistency between the various forms of aid notably aid for trade and budget support. Development needs of developing countries are large and require a scaling up of spending. To finance this spending in a sustainable manner, it is important that donors live up to their commitments but also that countries generate resources internally. A growing share of many developing countries’ fiscal spending is financed by aid (Gupta and Tareq, 2008).²⁵ Beyond the sustainability issue, this fact points to another coherence issue: coherence between the various forms of aid. Aid for trade should make sure that revenue losses stemming from the trade reform are offset by other forms of revenue otherwise it will undermine the capacity of recipient countries budget to finance development needs; a capacity that budget aid and debt relief try to shore up.²⁶

55. Rebalancing the tax system does not necessarily mean increasing the domestic tax rates. Tax rates are already so high in some countries that they may have a negative impact on the growth rate. A rebalancing could, as argued by Gupta and Tareq (2008), seek a broadening of the tax base, a rationalization of the tax incentives and exemptions, and a strengthening of the tax administration. This requires technical assistance and capacity building that aid for trade can, and do, provide. However,

²⁴ Trade taxes have a narrow base and distort both consumption and production decisions. For details, see Whalley and ab Iowerth (2002) and Farhadian-Lorie and Katz (1988).

²⁵ For example, the current spending financed by aid increased from 16% in Ghana in 1997-99 to 36% in 2004-06, from 22% to 40% in Tanzania and from 60% to 70% in Uganda (Gupta and Tareq, 2008).

²⁶ It is possible that the revenue losses stemming in African Caribbean and Pacific countries from the reduction of customs tariff on EU imports agreed under the Economic Partnership Agreements are (partly) offset by increased budget support from the EU (Hallaert, 2010).

expanding the tax base can be difficult in countries where the informal sector and the agricultural sector are large.²⁷

56. Unfortunately, past experience with tax rebalancing in developing countries calls for caution. It is possible to design a “simple and practical strategies” that will help realize the trade gains from a trade reform and the efficiency gains from the tax rebalancing without affecting government revenue (Keen and Ligthart, 1999). However, in practice, the rebalancing of the taxation was only partially successful in low- and middle-income countries. Using a panel of one hundred twenty-five counties during 1975-2000, Baunsgaard and Keen (2005) calculated that countries that rely the most heavily on trade taxes have not been able to recover from other sources the revenues they have lost from trade liberalization. On average, low-income countries have “recovered, at best, no more than about 30 cents of each lost dollar” and for middle-income countries the recovery is in the range of 45 to 65 cents.²⁸ As a result, the decline in the ratio of trade tax to GDP in low-income countries was accompanied by a decline in the ratio of total tax revenue to GDP. However, this disappointing average performance masks the fact that a few low-income countries were able to fully recover the revenue losses stemming from trade liberalization.

57. Policies essential to preserve external sustainability and export competitiveness are another set of compatible policies. Section 2 showed that overvaluation can make a trade reform unsustainable. The empirical trade and growth literature emphasizes another dimension in the interaction between trade reform and exchange rate: many successful trade reforms were accompanied by a devaluation (Box 2 provides an illustration). As a result, the idea that an appropriate exchange rate management is a crucial complementary policy to trade reform probably gathers the strongest consensus in the literature on the design of trade reform (see among many others Bhagwati, 1978; Collier and Gunning, 1992; Krueger, 1978; Michaely *et al.*, 1991; Rodrik, 1989; World Bank Independent Evaluation Group, 2006).²⁹

²⁷ Agriculture and informal sectors are difficult to tax.

²⁸ Additional, although cruder, evidence on partial loss recovery can be found in Khattry and Rao (2002).

²⁹ In its review of forty-five countries that benefited from the World Bank trade support during 1987-2004, the World Bank Independent Evaluation Group (2006) indicates that the real exchange rate is “perhaps single most important variable” in the design of reform. Collier and Gunning (1992) provide details on why depreciation is the best option to deal with the balance of payments implication of trade liberalization. They show that depreciation is the best way to address the excess supply of money and the payments deficit that tariff liberalization triggers in the short run. They also show that using programme aid to finance a deficit until the money supply is sufficiently depleted is an inferior solution that increases the adjustment cost of the liberalization because it leads to less expansion of the export sector than the depreciation and is likely to lead to more unemployment overshooting. A combination of depreciation and aid can be considered when exchange rate depreciation is a “genuine political constraint.” This package reduces the problem of incoherence but does little to alleviate the unemployment problem and accentuated the risk of import hoarding.

Box 2. The role of exchange rate policy in the success and failure of Chile's trade reforms

Chile undertook several trade reforms after the Second World War: during 1956-57, 1959-61, 1965-70, 1974-81, and 1985-88. The first three attempts at liberalizing trade failed and the reforms were reversed. Only the reforms of the 1970s and 1980s were successful and sustained, bringing significant economic gains.

The exchange rate policy played a key role in explaining the fate of these reform attempts. Edwards (1993) argued that the failed attempts between 1950 and 1970 were in part explained by highly overvalued real exchange rate. Michaely *et al.* (1991) ascribed the sharp increase in the unemployment rate during the 1974-81 reform (4.8% the year before the period of trade reform to 22.5% the first year after the reform) not to the trade reform *per se* but to the exchange rate overshooting.

The successful trade reforms of the 1970s–80s, in contrast, were supported by an exchange rate policy striving at avoiding overvaluation. Starting in 1974 the trade regime was simplified. Quantitative restrictions were eliminated. The import tariffs, which averaged 105% in 1973 and were highly dispersed, were cut. A uniform 10% tariff on all goods except automobile was introduced in 1979. This trade reform was accompanied by a strongly depreciated real exchange rate until 1979 when a fixed exchange rate was introduced to fight against inflation.

During the 1982-83 debt crisis, real GDP dropped. In 1983, it was 16.4% lower than in 1981. A partial policy reversal took place. The rate of the uniform tariff was increased and reached 35% and the government allowed an overvaluation of the real exchange rate.

However, the setback was only temporary and the reform resumed soon. The uniform tariff was gradually cut back as soon as 1984 to reach 11% in 1991. Again, in order to help export competitiveness and contribute to the objective of the trade reform to promote non-traditional exports, overvaluation was avoided through steady devaluations. The real effective exchange rate of the currency depreciated by 21% in 1985 and was followed by an additional depreciation over 1986-88. In 1988, the real exchange rate was roughly half its 1980 value (Dean *et al.*, 1994; Dornbusch and Edwards, 1994; Shatz and Tarr, 2000).

Exports became the engine of Chilean economic growth. Between 1986 and 1991, Chile growth reached 4.2% per year. This was the best performance in Latin America (Edwards, 1993; Gutiérrez de Piñeres and Ferrantino, 1997; Shatz and Tarr, 2000).

58. Appropriate exchange rate management was identified as a key feature of successful trade reform by the NBER project conducted by Krueger (1978) and Bhagwati (1978).³⁰ This seminal project analyzed

³⁰ It is beyond the scope of this paper to describe the practicalities of exchange rate management. The real effective exchange rate is a function of the nominal exchange rate and of the price differential between the country and its trading partners. Therefore, the management of the real effective exchange rate depends on the exchange rate policies but also of all the policies affecting the country inflation. Agénor (1991), UNCTAD (2004), and Independent Evaluation Office of the International Monetary Fund (2007) are good introductions to the exchange rate management.

the experience of eleven countries³¹ and contributed to the wave of trade reforms undertaken by developing countries that started in the 1980s.³² It highlighted that countries following an export promotion strategy exhibited better growth performance than countries following an import substitution strategy. The classification was based on the ratio of the exchange rate effectively paid by importers to the exchange rate effectively paid by exporters. A ratio greater than one showed an anti export bias and the country was classified as following an import substitution strategy. Trade liberalization is then defined as any policy that reduces the anti-export bias. Such definition means that a country can be liberalized while keeping high tariff to protect or stimulate domestic production.

59. A key finding was that the *real* exchange rate depreciation was a key element of a trade reform leading to a reduction in the anti-export bias.³³ Michaely *et al.* (1991) analyzed thirty-six liberalization episodes in nineteen countries during the period 1950-82³⁴ and reached the same conclusion. They concluded that (i) real exchange rate devaluation is crucial to sustainability and (ii) it is a feature of successful trade reform.

60. Edwards (1989), in an analysis of the impact of thirty-nine devaluations of at least 15% in developing countries during the period 1962-82, concluded that *nominal* depreciation did not necessarily lead to the required *real* depreciation. This was the case in only twenty-five of the thirty-nine cases. This shows again the importance of policy coherence: if the nominal devaluation is accompanied by expansive monetary or fiscal policies, the impact of the nominal devaluation can be more than offset by the inflationary pressure they trigger. In other terms, as discussed before, a trade reform needs to be supported by a compatible fiscal policy but also by an appropriate exchange rate policy, which in turn reinforces the importance of a compatible fiscal policy.

61. In all the twenty cases where the real depreciation accompanied measures to dismantle trade, capital, and exchange controls, exports increased significantly and the external position of the countries improved significantly. This shows that, if supported by an appropriate set of compatible policies, a trade reform does not necessarily result in a deterioration of the external accounts (on the contrary), which, as already discussed, is an important source of policy reversal.³⁵

62. Moreover, echoing the discussion on the importance of compatible fiscal stability for the sustainability of the reform, Michaely *et al.* (1991) showed that successful reformers were fiscally prudent. Based on these findings, the authors recommended undertaking the trade reform gradually and in a stable political environment starting with the elimination of quantitative restrictions and a substantial devaluation before cutting tariffs. It is noteworthy that this sequencing is consistent with the fiscal recommendation

³¹ The in-depth analyses of nine countries (Chile, Colombia, Egypt, Ghana, India, Israel, Korea, Philippines, and Turkey) were published. The project also included Brazil and Pakistan, but no volume on these countries was published. Bhagwati (1978) and Krueger (1978) summarized the findings in two volumes.

³² The experience of thirty-two developing countries that liberalized their trade regime in the second half of the 1980s and early 1990s was studied by Dean *et al.* (1994).

³³ The real exchange rate is the nominal exchange rate adjusted by the difference in inflation rate in the two countries. It is an indicator of a country's competitiveness.

³⁴ There is a significant overlap with countries analyzed by the NBER project as eight of the countries are also analyzed by this work (Brazil, Chile, Colombia, Israel, Korea, Pakistan, Philippines, and Turkey). In addition the experiences of nine countries are studied in-depth (Argentina, Indonesia, New Zealand, Peru, Singapore, Spain, Sri Lanka, Uruguay, and Yugoslavia) and the summary volume also describes the experience of Portugal and Greece.

³⁵ Li (2004) provides additional empirical evidence on real exchange rate movement in 45 cases of trade liberalization.

made above: implement fiscally neutral trade reform (dismantling quantitative restrictions) before cutting tariffs.³⁶

63. In sum, past experience with trade reforms in developing countries shows that they need to be supported by an appropriate fiscal policy. In addition, to be successful, a trade reform needs to avoid overvaluation and often be accompanied by real depreciations.³⁷ These conclusions again highlight the importance of compatible fiscal policy: a nominal depreciation may not translate into real depreciation if the fiscal and monetary policies are creating inflationary pressures (*i.e.* are too expansive).

64. Another dimension of an appropriate management of the exchange rate during a trade reform is preventing the occurrence of a Dutch disease. Put simply, the Dutch disease can be defined as the consequence of a large increase in foreign inflows (*e.g.* due to the discovery of natural resources or due to a scaling up of trade), which triggers an exchange rate appreciation.³⁸ This appreciation damages the competitiveness of the export sector.³⁹

65. The Dutch disease is a problem potentially undermining the effectiveness of all forms of aid, but is particularly worrisome for aid for trade. Damaging the competitiveness of the partner countries export is obviously the opposite of what the aid for trade tries to achieve.

66. The potential for Dutch disease cannot be ignored when aid for trade is growing fast and contributing to a broader scaling up of aid. Total aid for trade reached USD 41.7 billion in 2008, a 37% increase in real terms from 2007, and an increase of 62% from the 2002-05 baseline.

67. There is evidence that aid can cause Dutch disease. A review of empirical evidence is provided Rajan and Subramanian (2005 and 2009)⁴⁰ who, with an innovative strategy that allows them to control for omitted variables and model misspecification, found that aid has a systematic adverse effect on a country's competitiveness because of the mismanagement of the real exchange rate. They argue that aid has an adverse impact on the relative growth of export sectors and the share of labor-intensive and tradable industries in the manufacturing sector drops.⁴¹ Using the same methodology, Rajan and Subramanian (2007) explored if governance is another channel through which aid could lead to that outcome. They argued that the impact of aid harms governance in recipient countries (as it reduces the need for governments to explain their actions to citizens), which in turn affects the manufacturing sector because manufacturing is more complex than agriculture or mining in that it requires many more transactions

³⁶ For a critical review of Michaely *et al.* (1991), see Greenaway (1993).

³⁷ For a review of theoretical, cross-country and case studies of the negative impact (notably on growth) of overvaluation and its link with trade protection, see Shatz and Tarr (2000).

³⁸ For a detailed survey of the various forms of Dutch disease and of the factors contributing to it, see Corden (1984).

³⁹ Choi (2005) describes another potential negative impact of aid on competitiveness which is ignored here for the sake of brevity (and because the means to limit this impact are similar to the ones described below to address the Dutch disease). If a country is a large exporter of a good, aid will cause a deterioration in its terms of trade. This has a negative impact on output that offsets the initial positive impact of aid.

⁴⁰ Choi (2005) also surveys the literature.

⁴¹ They estimated that a 1 percentage point increase in the ratio of aid to GDP is associated with a reduced share of manufacturing in total GDP of about 0.2 to 0.3 percentage point. See Hallaert and Munro (2009) on the role of manufacturing sector in economic growth fostered by export diversification and spillovers.

between unrelated parties. Thus, manufacturing is likely to be more dependent on a good-governance environment that can foster multiple transactions.⁴²

68. Rajan and Subramanian argued that aid, through its impact on the management of the real exchange rate and on governance, may reduce the profitability of investment and limit export growth and thus the role of trade expansion on growth. It is important to stress that they did not dismiss the direct positive impact of aid on economic growth. Rather they argued that this positive impact can be offset by some “side effect.” This calls for adequate design in aid programs in order to maximize the positive impact while minimizing the negative side effects. As indicated below, aid for trade is well placed to avoid the Dutch disease effect of aid.

3.3 Lessons for the design of aid for trade

69. An appropriate environment (notably avoiding fiscal and balance of payments tensions as well as exchange rate overvaluation) is essential to make a trade reform sustainable. How can aid for trade, by its coverage and its sequencing, support compatible policies?

70. Aid for trade can help address the fiscal problems that often impose a trade reform reversal. Various aid-for-trade projects such as capacity building in designing a trade reform, capacity building in order to strengthen the customs and tax administrations, and technical assistance in rebalancing the fiscal regime from trade taxes to domestic taxes can have a positive impact on fiscal revenue, on welfare, and on the economic environment.⁴³ These projects should thus be considered early in the sequencing of reforms. However, this sequencing can be affected if budget transfers are provided to offset the immediate fiscal losses from trade reform until other reforms, aiming at raising more domestic revenue, are implemented. Budget support is not part of the multilateral trade negotiations but is sometimes considered in regional agreements (Walkenhorst, 2006). Although, budget support can facilitate trade reforms and make them sustainable, it is not without risks as the need for temporary budget support may become permanent (if reforms aiming at raising domestic revenue fail) or reforms are not implemented (because temporary aid reduces the incentives to implement additional reforms). This would lead to more aid dependence and vulnerability to change in aid flows.

71. The Economic Partnership Agreements between the EU and the ACP countries provide a concrete example. In this context the EPAs, the EU committed itself to provide both budget support and technical assistance on the tax reform and tax administration. In its 2007 Aid for Trade Strategy, the EU has committed itself to “contribute to the absorption of net fiscal impact resulting from tariff liberalization in the context of EPAs in full complementarity with fiscal reforms” (Council of the European Union, 2007). In the EPA concluded with the Caribbean countries of the Cariforum⁴⁴ (the only comprehensive EPA signed so far), it was agreed that one of the priorities of the development co-operation would be “the

⁴² This discussion is somewhat related to the argument that aid is more effective when it goes to countries with sound institutions and good policies (fiscal, monetary, and trade). Burnside and Dollar’s article (2000) is the most famous publication of this strand of literature. Many studies tested the robustness of its conclusions. No firm conclusion could be reached as some studies support Burnside and Dollar’s findings but others showed that with different specifications the role of good policies in explaining the impact of aid on growth becomes statistically insignificant.

⁴³ For example, the Economic Partnership Agreement between the EU and the Cariforum indicates that one focus of the development co-operation will be the provision of assistance to strengthen tax administration and improve the collection of tax revenue with a view to shifting fiscal revenues from trade taxes to indirect taxes.

⁴⁴ Cariforum members are Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, the Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Saint Christopher and Nevis, Surinam, and Trinidad and Tobago.

provision of assistance for capacity and institution building for fiscal reform in order to strengthen tax administration and improve the collection of tax revenues with a view to shifting dependence from tariffs and other duties and charges to other forms of indirect taxation” (Official Journal of the European Union, 2008).⁴⁵

72. Balance of payments problems are another source of policy reversal. In this regard, the real exchange rate management is paramount. The recommendation to accompany trade reform with exchange rate depreciation has sometimes been controversial. One reason was the belief that exports (in particular agricultural exports) respond little to the change in prices that the depreciation triggers.⁴⁶ Edwards (1993) showed that empirical evidence does not support this popular belief. Nonetheless, aid for trade is in a position to ease these concerns as its *raison d’être* is to tackle supply-side constraints that limit the responsiveness of exports to trade opportunities.

73. Promoting an early response of the export sector to the trade reform is an important way to increase the likelihood that a trade reform will be sustained. An early exports response is a macroeconomic and social advantage: it reduces the balance of payments, employment, and fiscal problems arising from the fact that a trade reform tends to have an immediate impacts on imports and on the activity of (and employment in) the import-competing sector while its impact on exports and activity of (and employment in) the export sector appears with a lag. For the same reason, a rapid export response helps smooth the adjustment cost of the reform. Finally, an early export response is a political advantage. As people see early the benefit of the reform, support to the reform process increases which makes the implementation of subsequent reforms easier.⁴⁷

74. Aid for trade has an important role to play in this context as export promotion is one of its core objectives. Brenton and von Uexkull (2009) analyzed aid supported export development programs and concluded that (i) exports have on many occasions increased significantly under export development programs; (ii) export development programs have the biggest impact when provided to industries with initially high exports. The authors interpreted this result by the fact that the constraints facing the growth of existing exports are easier to identify and to alleviate than the constraints to new exports. Cali and te Velde (2009) also showed that aid to productive capacity delivered during the period 1985-2006 had a positive and significant impact on exports, but concluded that the effects appear to be driven by an allocation skewed towards already well performing sectors.

75. Aid for trade can also foster the export response to trade reform by supporting export promotion agencies (EPAs). In a recent article, Lederman *et al.* (2009) showed that after being sharply criticized in the 1990s, export promotion agencies have been revamped and “preeminent development economists now recommend the creation of adequately funded EPAs in Africa.” Their econometric analysis provides additional support to the conclusion of Brenton and von Uexkull (2009): export promotion agencies have more impact on exports when they focus on established exporters.

⁴⁵ For details on the fiscal consequences of the EPAs in sub-Saharan Africa, see Hallaert (2010).

⁴⁶ This concern is not limited to policy makers. For example, Grenaway *et al.* (1997) argued that the most common explanation for the weak output response to trade liberalization is the lack of credibility but added “the other possibility is that export sectors may have low supply elasticities. This [...] must surely be important where primary products are concerned. If the export sector is predominantly primary product based, a liberalization induced change in the relative price of tradables may fail to stimulate increased production and exports.”

⁴⁷ In addition, if the early response helps build support for the reform, the reform process gains credibility which increases the incentive to adjust at a socially optimal speed. As discussed in Section 2, this will smooth the adjustment.

76. Given the need to ensure not only an export response to trade reform but also an *early* export response, it should be stressed that aid for trade appears to have a rapid impact. Brenton and von Uexkull (2009) econometric work suggests that the export promotion programs have a strong and significant impact in the first five years (year 0 to 4 of the program). The econometric work conducted by Cali and te Velde (2009) suggests that this conclusion is also valid for infrastructure projects. They estimate that most of the impact of infrastructure projects on trade appears with only one year lag. Evaluation of the trade impact of aid for trade is in its infancy. However, if the preliminary quantitative estimates of Brenton and von Uexkull (2009) and Cali and te Velde (2009) are confirmed and proved robust, this would vindicate a focus of aid for trade on export promotion for its own merits but also in complement to other trade reforms.

77. As already emphasized, avoiding the potential Dutch disease effect of the scaling up of aid for trade is crucial to achieve export expansion. At the risk of oversimplifying, the Dutch disease can be seen as a sequence of two events. First the inflow of aid leads to an appreciation of the exchange rate (I). Second, the appreciation of the exchange rate results in a loss of competitiveness of the exports sector (II). Aid for trade has a role to play in each of these two phases.

78. The design and sequencing of aid for trade can prevent aid inflows from resulting in an appreciation of the real exchange rate (I). Aid inflows should be commensurate with the country's absorptive capacity. Therefore, they should be phased in and their amount should avoid triggering macroeconomic imbalances.⁴⁸ This requires close coordination between donors as well as alignment of aid-for-trade projects and programmes with the sequencing of reforms designed by recipient countries. If this does not prove possible and the inflow of aid is scaled up rapidly and beyond the absorptive capacity of the country, macroeconomic policies could phase in the absorption into the economy by delaying the spending of aid. Ethiopia provides an illustration. During 2001-03, budget support to Ethiopia increased by 6% of GDP. In an initial phase, only a small proportion of this aid was immediately spent and most of the aid was used to replenish foreign exchange reserves. This prudent fiscal and monetary management avoided a Dutch disease (Berg *et al.*, 2004).

79. Another option is to favour aid-for-trade projects with large import content when the absorptive capacity is low or when external conditions warrant it (for example when the currency is already appreciating because of the improvement of the terms of trade, large FDI inflows or large increase in other inflows of aid with low import content such as budget support are scaled up). Indeed, aid-for-trade projects with very high import content will only have a limited impact on the exchange rate because the impact of aid inflows is largely offset by outflows linked to the implementation of the project. The experience of Ethiopia shows that in such a case even a very large scaling up of aid will not trigger a Dutch disease: the large amount of aid received by the country was spent mainly on infrastructure projects with high import content (IMF, 2006b).

80. Choi's (2005) theoretical analysis of the impact of infrastructure aid on a small developing country abundant in labor, suggests another possible mix for aid-for-trade project: when a country's absorptive capacity is low, in order to minimize a possible Dutch disease effect, aid for trade could favor labor-saving infrastructure project. Indeed, Choi showed that labor-saving infrastructure aid causes an expansion of the export sector (assumed to be labor intensive), while capital-saving infrastructure aid results in a Dutch disease effect in the export sector.

81. The design and sequencing of aid for trade can also mitigate the impact of the appreciation of the currency on the competitiveness of the exports sector (II). Basically, the real appreciation of the currency means that the country's export price of the country increases on international markets: this is an important

⁴⁸ Lessons from experience with the macroeconomics of scaling up aid are reviewed by Berg *et al.* (2007). See also Isard *et al.* (2005)

source of the loss of competitiveness. Aid-for-trade projects can help offset this by reducing production and export costs.⁴⁹

82. The trade facilitation component of aid for trade appears powerful in this regard. A vast literature has documented the large return of investment in trade facilitation on the cost of export and on exports volume. Cali and te Velde (2009) focused on the role of aid for trade. Using a sample of ninety partner countries, they estimated that an increase of USD 1 million in the trade facilitation component of aid for trade (measured by the CRS code 33120) reduced export cost by 2.5 to 6% at the mean.⁵⁰

83. Another way for aid for trade to avoid the Dutch disease is to foster productive capacities. The basic idea is that the extent to which aid flows are associated with the problem of real exchange rate appreciation depends largely on the relative impact on demand and supply. The supply response, depending on the effects of aid on productivity across sectors, largely determines the depth and duration of adverse shock (Bevan, 2005). Therefore, if aid for trade can boost the productivity of the private firms through its productive capacity (or other) projects, it will help exporters withstand the potential Dutch disease effect of additional aid. Nonetheless, practitioners should be aware that productivity gains of such activities may occur with a lag. This has again implications for the sequencing of trade reform and aid-for-trade flows. To our knowledge, no assessment of the impact of aid for trade on the productivity of the private sector has yet been produced. An exception may be the work of Cali and te Velde (2009) who were unable to find a significant impact on exports of aid for trade to productive capacity during 1995-2007. However, the authors stressed that this result may be driven by a methodological shortcoming: the effect of productive capacity projects has an impact at the firm or the sectoral level and considering its impact on the whole of exports may be misleading.

84. Finally, in light of the discussion on the importance of dealing with the fiscal implications of a trade reform and of coherence between various forms of aid, it is useful to mention a more indirect way to mitigate a possible Dutch disease: rebalancing the tax system. Gupta and Tareq (2008) argued that tax rebalancing helps fighting the impact of Dutch disease because raising domestic resources offset the impact of scaling up of aid by lowering the amount of budget aid needed to finance current spending.

85. In conclusion, this section showed the importance of accompanying the trade reform with compatible macroeconomic policies in order to prevent policy reversal that would affect negatively the effectiveness and the impact of aid for trade. It highlighted that aid for trade has the means to promote the right compatible environment and that donor coordination and proper sequencing of reforms is crucial. A trade reform should first target the most binding constraints to trade expansion (Hallaert and Munro, 2009) so that it has the “biggest bang for the reform buck” but this reform should not be implemented in isolation. Rather it should be supported by appropriate macroeconomic policies and accompanied by other reforms (that aid for trade can support) to ensure an early response of exports and mitigate the potential Dutch disease effect of aid. Not all aid-for-trade project and programmes have the same gestation period (*i.e.* the time needed to affect exports performance differs across projects and programmes). These differences should be considered in the sequencing of reforms.

⁴⁹ It is noteworthy that improving the competitiveness of developing countries exports is an objective of aid for trade even in the absence of a risk of Dutch disease.

⁵⁰ There are large variations of the return across region. For example, the impact is five times larger for sub-Saharan Africa. Helbe *et al.* (2009) provide another estimate of the return of aid for trade facilitation projects.

4. Maximizing the economic growth response to trade: the role of complementary policies

86. Section 3 showed that the effectiveness of aid for trade depends critically on compatible policies and environment supporting the trade reform. Beyond ensuring the sustainability of trade reforms, this section describes the importance for aid-for-trade effectiveness to support complementary policies.

4.1 Why complementary policies matter for aid for trade

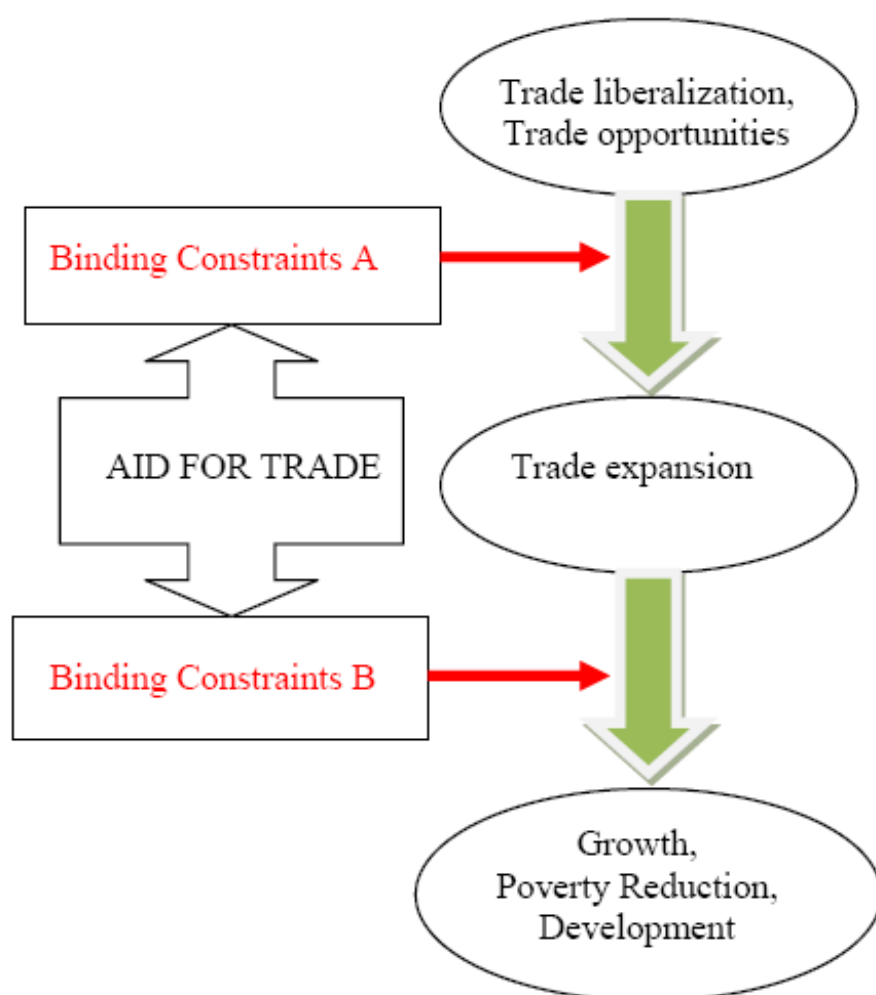
87. Complementary policies increase the impact of trade expansion on economic growth and poverty reduction. In the report “Binding Constraints to Trade Expansion” (Hallaert and Munro, 2009), the Secretariat argued that the most common objectives of aid-for-trade projects and programmes, namely addressing the binding constraints limiting developing countries’ capacity to turn trade opportunities into trade (constraints A in Figure 1), have the potential to boost growth. However, it also cautioned that this may not be enough to reach the objectives of aid for trade because some other binding constraints can choke the impact of trade on economic growth (constraints B in Figure 1).

88. Aid for trade can, and should, tackle these constraints B. This is the very purpose of complementary policies. Supporting these policies will help aid for trade to be as effective as possible. As emphasized by the Task Force on Aid for Trade, “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” (WTO, 2006).

89. Trade does not affect growth directly but through a myriad of transmission channels.⁵¹ It is beyond the scope of this report to discuss these channels but it is worth repeating a key message of Section 2.3: the magnitude of economic growth response to trade reform will depend on the transmission channel the reform is relying on as well as on the complementary policies implemented.

⁵¹ For an introductory survey of the various transmission channels, see Berg and Krueger (2005).

Figure 1. Causality chain in aid for trade and binding constraints



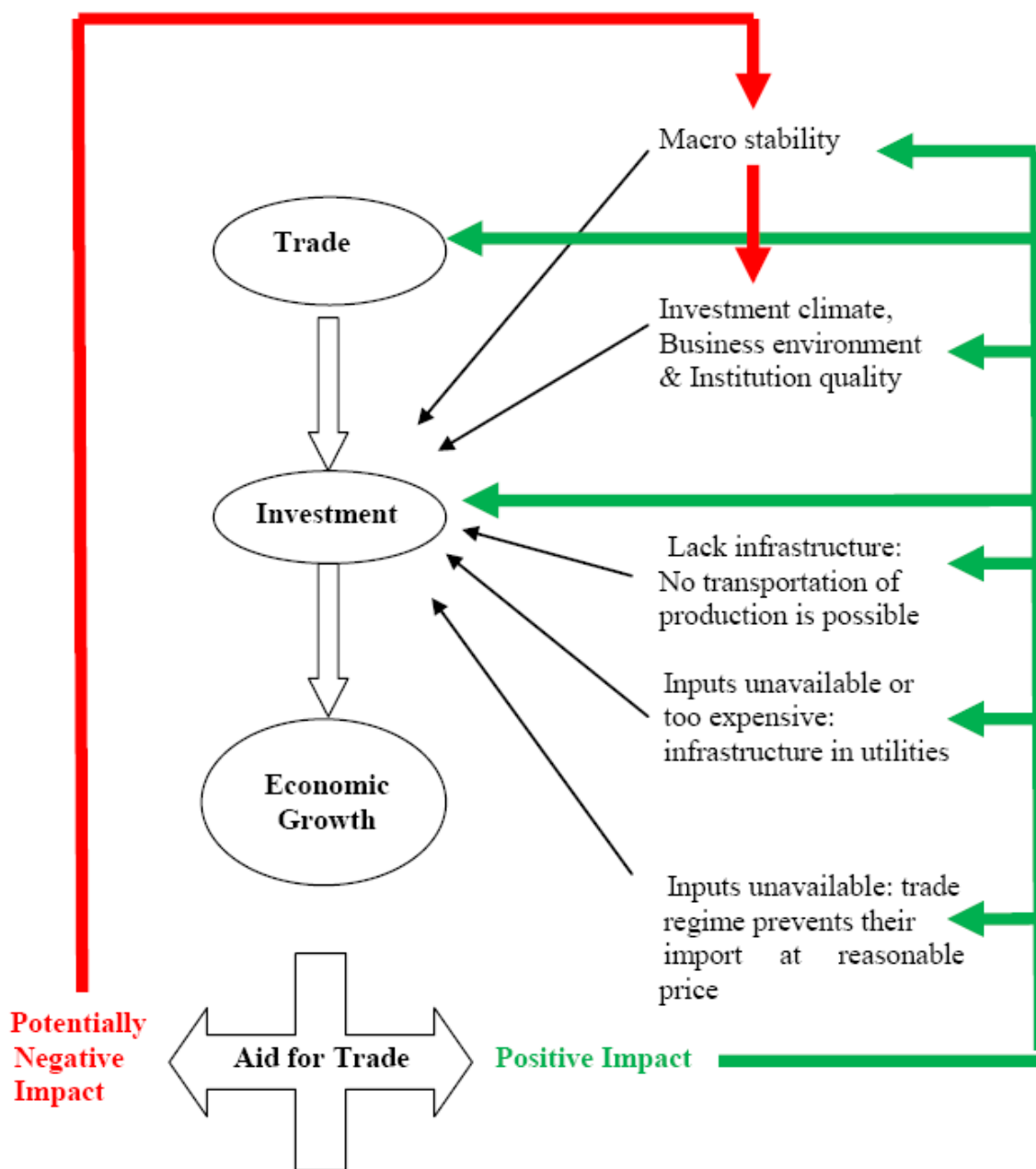
Source: Hallaert and Munro, 2009.

90. The literature on trade and growth has emphasized the role of productivity and investment as key transmission channels.⁵² For illustrative purpose, Figure 2 focuses on investment. Aid for trade through its direct impact on trade and on investment (*e.g.* infrastructure project) can boost economic growth. Though important, this direct impact needs to be supplemented by private sector investment. Private sector investment will be stimulated by the new opportunities offered by the trade reform but the magnitude of its response will depend on many other policies and institutions that shape the business and investment climate. Therefore, the effectiveness of aid for trade will be increased substantially if, in addition to its

⁵² For more details on the impact of trade on productivity see Berg and Krueger (2003), Edwards (1998), Hallaert (2006), Tybout (1992, 2000), and Winters (2004). Suggesting potential synergies, investment is highlighted as the main transmission channel between aid and growth since the pioneering work of Chenery and Strout (1966). Gomanee *et al.* (2002) showed empirically that investment was the main transmission channel between aid and growth in sub-Saharan Africa during the period 1970-97.

direct impact on growth through trade and investment, aid for trade supports reforms (“complementary policies”) that increase the capacity of investment to transmit the impact of trade on growth.⁵³

Figure 2. How aid for trade affects the impact of trade on growth through investment.



⁵³ This highlights the importance of involving the private sector in the national development strategy as well as in the design, implementation, and evaluation of Aid for trade. This was stressed in the recommendations of Task Force on Aid for Trade (WTO, 2006).

4.2 What are the complementary policies?

91. Assessing the role of the complementary policies in the trade-growth nexus has been challenging. Part of the difficulties comes from the fact that most trade reforms are part of a broader package. As a result, trade reforms complement other reforms but also are complemented by other reforms leading to an identification problem. Development in econometric techniques has only recently allowed identifying the role of complementary policies in the empirical analysis of the link between trade and growth. This strand of literature provides valuable insights for the design of aid for trade.

92. Trade reforms usually provide opportunities that stimulate both domestic and foreign investments. In a study of seventy-nine countries during the period 1970-98, Wang *et al.* (2004) found that an increase in openness (measured by the share of total trade in GDP) is associated with higher economic growth. Looking at the impact by income group they found that the poorer a country is the larger is the impact of trade expansion on economic growth. These findings are in line with many other studies but this work is of particular interest because it also investigates the mechanisms that explain the differences in growth response across countries.

93. Wang *et al.* (2004) found that export expansion, a common objective of aid-for-trade, is a source of growth.⁵⁴ However, the impact of trade on growth is not limited to exports. The increase in the imports-to-GDP ratio is also a source of growth (although the growth impact of imports is more limited than the impact of exports). While the increase of export-to-GDP ratio has a positive impact for all income groups, Wang *et al.* (2004) found that the increase in imports-to-GDP ratio has a positive and significant impact for low- and middle-income countries but is not significant for high-income countries. This is consistent with the conclusion of other empirical findings that imports are a source of transfer of technology.⁵⁵ Transfer of technology is obviously more important as a source of growth for poor countries than rich countries. Imports are also a source of growth for other reasons such as its impact on productivity through increased competition (this affects notably the import substitution sector) and the reduction in the cost of inputs and thus in the production cost of all domestic producers (including exporters).

94. The authors then show that a country's technical absorptive capacities are crucial in its ability to use trade and FDI as engines for growth.⁵⁶ They provide evidence that, while high and middle-income countries are able to use both trade and FDI (measured by inward FDI stock/GDP) as an engine for growth, low-income countries are able to use trade, but not from FDI, as an engine for growth. According to Wang *et al.* (2004), low-income countries' low technical absorptive capacity prevents them from taking advantage of the transfer of technologies that an inward FDI represents.

95. This study allows highlighting the role of a few complementary policies to maximize the impact of trade and FDI on growth. Improving technical absorptive capacities should be a priority. As technical absorptive capacity is closely linked to human capital, this shows the importance of education policy. This conclusion is consistent with the findings of other cross-country studies. For example, Chang *et al.* (2005) found that the positive impact of trade on growth is larger if it is accompanied by increased education but also infrastructure, deeper financial systems, and institutional as well as regulatory reforms.

96. Technical absorptive capacities, inflows of FDI, and private sector investment also depend on the regulatory regime. This is highlighted by Chang *et al.* (2005) but also by Bolaky and Freund (2004).

⁵⁴ For a survey and the link with aid for trade, see Hallaert and Munro (2009).

⁵⁵ See Hallaert (2006) for a survey and Hallaert and Munro (2009) for the importance of this mechanism in the context of aid for trade.

⁵⁶ FDI can be seen as one of the "investment" channels through which trade can stimulate economic growth.

Bolaky and Freund showed that, in heavily-regulated economies, the increase in trade is not positively associated with growth but once the effect of domestic regulation is controlled for, the impact of trade on growth is stronger than what has been found in other studies. This clearly suggests that regulatory reform can increase the impact of trade on growth.

97. Many regulations may choke the impact of trade on growth. The competitive pressure of imports, which is an important source of productivity gains and thus of growth, can be choked by many policies including imports prohibition, state trading, or monopolies. The investment channel is also affected by the regulatory regime (Figure 2). Another source of growth is the reallocation of resources (capital and labor) triggered by trade. This reallocation may be hampered by regulations as different as labor laws or restriction in closing business. The investment channel may also be choked by financial regulations.

98. The investment channel is also sensitive to regulations. Foreign investors may be willing to invest in a country in order to benefit from new opportunities opened by trade reforms. However, they may be discouraged or prohibited from doing so by regulations related to capital controls (inward as well as outward flows), land regulation, restrictive business environment practices, etc.

99. Similarly, the capacity of the private sector to invest in order to benefit from new opportunities may be constrained by many regulations. For example, financial regulations can prevent some industries to finance the investment needed to respond to opportunities arising from increased trade. The World Bank Doing Business indicators show that access to credit is a major constraint reported by entrepreneurs in many developing countries. Directed credit may leave insufficient resources for the sectors that are not listed as priority. Financial regulations can prevent the expansion of trade (for example by limiting the financial sector's ability of providing working capital and intermediated trade finance to some exporters).

100. Institutional issues or imperfection in the legal system can also limit the capacity of countries to exploit the opportunities of trade. For example, insufficient contract enforcement (leading to a large share of non-performing loans, which in turn limits the banks' capacities to extend new loans), may lead banks to require substantial collateral that small- and medium-size enterprises cannot provide. Access to credit then becomes not only a binding constraints to trade but also choke the impact of trade on economic growth. In this context, it is worth highlighting that an important objective of aid for trade is maximizing the linkage of trade with the domestic economy (Hallaert and Munro, 2009), which in turn requires investment in the non-tradable sector including small- and medium- size enterprises. The role of institutions and of the legal system on economic growth has recently stimulated a large amount of academic work. Therefore, it is not surprising that they have also been identified as crucial in the link between trade and economic growth.

4.3 Lessons for the design of aid for trade

101. The broad definition of aid for trade provides the means to support many, if not all, complementary policies. The rationale is clearly stated in the recommendations of the Task Force on Aid for Trade (2006): "the scope of Aid for Trade should be defined in a way that is [...] broad enough to reflect the diverse trade needs identified by countries." Moreover, the Task Force clearly states that "investment promotion," a key transmission channel of trade on economic growth, is part of aid for trade (WTO, 2006). Investment is indeed crucial in helping developing countries to build their supply-side capacities and investment promotion potentially covers a large range of complementary policies shaping the business environment.

102. Some complementary policies are explicitly part of aid for trade. Building infrastructure is a well-known and obvious example.⁵⁷ Support to the financial sector is another one. Trade finance, an issue that

⁵⁷ More than half of aid for trade flows is spent on economic infrastructure (OECD/WTO, 2009). In 2008, they increased by 43% reaching USD 23 billion or about 55% of total aid for trade.

attracted much attention in the current global economic crisis, is explicitly part of the trade development component of aid for Trade (WTO, 2006). Pascal Lamy, the head of the WTO, welcomed the World Bank decision to increase the ceiling of the International Finance Corporation's trade finance as "Aid for Trade in action" (Lamy, 2008).⁵⁸ However, consistent with the view that banking and financial services are a major element of building productive capacity, the scope of aid for trade in financial sector goes much beyond the realm of trade finance. The banking and financial services received over 9% of aid for trade in 2008.

103. Other important complementary policies are not or only partially part of aid for trade. This is the case of education and research policies. The work of Wang *et al.* (2004) showed that technical absorptive capacities determine the ability of developing countries to use trade and FDI as engines for growth. Technical absorptive capacity is linked to human capital and thus to education policies. Aid for trade has no direct role in education but some "capacity building" activities or some activities to support the private sector involve training and contribute to increasing human capital in partner countries.

104. Regulations and institutions are another example. They affect most, if not all, transmission channels linking trade to economic growth. Aid for trade does only deal with some institutional and regulatory issues. For example labor law and law related to the closure of businesses (which are important to allow one source of gain from trade: the reallocation of resources to more productive sectors and investment) are not part of the aid for trade activities. However, "trade policy and regulation" is part of aid for trade. In 2008, about 3% of total aid for trade went to this type of project. However, aid-for-trade support to institutional and regulatory reform is not limited to the trade policy and regulations. Institutional and regulatory projects supported by aid for trade also are often captured as building economic capacities. For example, part of the building capacity activities is to support "legal and regulatory reform aimed at improving business and investment climate," "private sector institution capacity building and advice." Aid for trade to agriculture includes support to "agriculture policy and administrative management," etc.

105. This discussion shows that aid for trade has a role to play, and indeed is active, in many areas considered to be complementary policies. The issue is thus, once again, the sequencing of the reforms and the identification of the most binding constraints to trade expansion. On the one hand, complementary policies will increase the effectiveness of aid for trade and the growth impact of trade reforms. Therefore, in the design of their aid for trade project, donors should be mindful of, and if possible support, complementary policies. This will increase the effectiveness of their aid for trade intervention. On the other hand, too many reforms increase the risk of policy reversal. Therefore, for both donors and local authorities, there is often a clear tradeoff between an optimal package of reforms and a politically and financially doable package of reforms. Once the most binding constraints to trade expansion are identified it is important to determine the *most* relevant complementary policies that will accompany and enhance the impact of the measure taken to address it. This will ensure the biggest bang for the reform buck but also a quicker response of exports, which, as argued in Section 3.3, is important to build support for the reforms.

5. Conclusion

106. The binding constraints that prevent a country from turning trade opportunities into trade flows have been the main focus of aid-for-trade programmes and projects. Addressing these binding constraints is a prerequisite to achieve the ultimate goal of aid for trade: using trade as a tool for boosting growth and reducing poverty. The empirical literature on the impact of trade on economic growth provides much

⁵⁸ Auboin (2007) showed that long before the crisis, many countries had been lobbying at the WTO to find ways to increase the availability of trade finance for developing countries. In this context, the Aid-for-Trade Initiative was perceived as providing leverage.

support to this approach. There is ample empirical evidence that the main objectives of aid for trade, if achieved, will foster economic growth (Hallaert and Munro, 2009).

107. Tackling the binding constraints that choke the impact of trade on economic growth is also crucial to achieve the objective of the Aid for Trade Initiative. Indeed, there is no guarantee that trade expansion boosts economic growth. Experience shows that the positive *average* impact of trade on economic growth masks a substantial heterogeneity of experiences. Most countries reaped the benefit of greater trade openness but for a few countries the impact of trade reforms has been negligible and in some cases negative.

108. The ability of aid for trade to address the binding constraints that choke the impact of trade on growth determines its effectiveness. Effectiveness has become a central issue for aid for trade. The Aid for Trade Initiative has been successful in mobilizing resources and in raising awareness on the positive role trade can play in development. However, the Initiative has reached a stage where it is also crucial to demonstrate that the substantial amount of aid mobilized has been well spent and had an impact.

109. This report argues that aid for trade has the role to play in increasing the impact of trade expansion on economic growth. Aid for trade has the means to support both compatible and the complementary policies. Compatible policies ensure that the trade reform is not reversed. Complementary policies maximize the impact of trade on economic growth. In this context, the importance of sequencing is paramount.

110. Once a country has identified the most binding constraints to its trade expansion, it should ensure that the measures taken to address them will be sustainable. A reform will be unsustainable and reversed if it triggers a macroeconomic crisis or if it lacks credibility. The sustainability of a trade reform can be increased if accompanied by compatible policies. Aid for trade can, and do, support some of these compatible policies. For example, as reforms can be politically difficult to implement and sustain, it is important to build political support for the reform process notably by taking measures that will smooth the adjustment cost and help an early response of exports to the reform. On both fronts aid for trade can help.

111. Moreover, the impact of trade reforms on both trade and economic growth will depend on complementary policies. In the package of reforms aiming at tackling the country's most binding constraints to trade expansion, a country should determine the most relevant complementary policies that will ensure that the trade impact translates into higher economic growth. Again, aid for trade has the means to support many of the potential complementary policies.

112. The importance of adequate sequencing as well as the need to support a trade reform with other reforms policies highlights the importance of donors' alignment on countries' priorities and donor coordination.

REFERENCES

- Ades, A. and R. Di Tella (1999), “Rents, Competition, and Corruption,” *The American Economic Review*, vol. 89(84).
- Aksoy, A. and G. Salinas (2006), *Growth Before and After Trade Liberalization*, Washington, D.C.: World Bank, Policy Research Working Paper 4062.
- Agénor, P.R. (1991), *Credibility and Exchange Rate Management in Developing Countries*, Washington, D.C.: International Monetary Fund, Working Paper WP/91/87.
- Auboin, M. (2007), *Boosting trade finance in developing countries: What link with the WTO?* Geneva: WTO, Staff Working paper ERSD-2007-04.
- Berg, A. and A. Krueger (2003), *Trade, Growth, and Poverty: A Selective Survey*, Washington, D.C.: International Monetary Fund, Working Paper WP/03/30.
- Berg, A., S. Aiyar, M. Hussain, S. Roache, T. Mirzoev and A. Mahone (2007), *The Macroeconomics of Scaling Up Aid – Lessons from Recent Experience*. Washington, D.C.: International Monetary Fund, Occasional Paper 253.
- Bevan, D. (2005), *An Analytical Overview of Aid Absorption: Recognizing and Avoiding Macroeconomic Hazards*. Paper presented at the “Seminar on Foreign Aid and Macroeconomic Management,” in Maputo, Mozambique, available at: <http://www.imf.org/external/np/seminars/eng/2005/famm/pdf/bevan.pdf>
- Balasubramanyam, V. N., M. Salisu and D. Sapsford (1996), “Foreign direct Investment and Growth in EP and IS Countries,” *The Economic Journal*, vol. 106(434).
- Baunsgaard, T. and M. Keen (2005), *Tax Revenue and (or?) Trade Liberalization*, Washington, D.C.: International Monetary Fund, Working Paper 05/112.
- Ben-David, D., H. Nordström and L.A. Winters (1999) *Trade, Income Disparity and Poverty*, Geneva: WTO, Special Studies 5.
- Bhagwati, J. (1978), *Foreign Trade Regimes and Economic Development, volume XI: Anatomy and Consequences of Exchange Control Regimes*,” Cambridge, Massachusetts: Ballinger for the National Bureau of Economic Research.
- Bolaky, B. and C. Freund (2004), *Trade, Regulations, and Growth*, World Bank, Policy Research Working Paper 3255.
- Bourguignon F. and M. Sundberg (2006), *Absorptive Capacity and Achieving the MDGs*, Helsinki: UNU-WIDER, Research Paper 2006/47.
- Brenton, P. and E. von Uexkull (2009), “Product specific technical assistance for exports – has it been effective?” *The Journal of International Trade & Economic Development*, vol. 18(2).
- Bulír, A. and A. J. Hamann (2007), “Volatility of Development Aid: An Update,” *IMF Staff Papers*, vol. 54(4).

- Burnside, C. and D. Dollar (2000), "Aid, Policies, and Growth," *The American Economic Review*, vol. 90(4).
- Cali M. and D. W. te Velde (2009), *Does aid for trade really improve trade performance?* processed; available at: <http://ssrn.com/abstract=1430492>.
- Chang, R., L. Kaltani and N. Loayza (2005), *Openness can be good for growth: The role of policy complementarities*, Cambridge, Massachusetts: NBER, Working Paper 11787.
- Chenery, H. B. and A. M. Strout (1966), "Foreign Assistance and Economic Development," *The American Economic Review*, vol. 56(4).
- Choi, E. K. (2005), *Infrastructure Aid, Deindustrialization, and Welfare*, Washington, D.C.: International Monetary Fund, Working Paper WP/05/150.
- Collier, P. (1993), "Higgledy-Piggledy Liberalization," *The World Economy*, vol. 16(4).
- Collier, P. (1997), "Ugandan trade policy liberalisation in an environment of limited credibility," in: S. Arndt and C.R. Milner (eds.), *Global Trade Policy 1997*, a special issue of *The World Economy*, London: Blackwells.
- Collier, P. and J.W. Gunning (1992), "Aid and Exchange Rate Adjustment in African Trade Liberalisations," *The Economic Journal*, vol. 102(413).
- Corden, W. M. (1984), "Booming Sector and Dutch Disease Economics: Survey and Consolidation," *Oxford Economic Papers*, New Series, vol. 36(3).
- Council of the European Union (2007), *EU Strategy on Aid for Trade: Enhancing EU support for trade-related needs in developing countries*, Brussels, available at: <http://register.consilium.europa.eu/pdf/en/07/st14/st14470.en07.pdf>
- Dean, J., S. Desai and J. Riedel (1994), *Trade Policy Reform in Developing Countries since 1985: A Review of Experience*, Washington, D.C.: World Bank, Discussion Paper WDP 267.
- Dewatripont, M. and G. Roland (1995), "The Design of Reform Packages under Uncertainty," *The American Economic Review*, vol. 85(5).
- Dornbusch, R. and S. Edwards (1994), "Exchange Rate Policy and Trade Strategy," in Bosworth, Dornbusch, and Labán, *The Chilean Economy: Policy Lessons and Challenges*, Washington, D.C.: Brookings Institution Press.
- Dufrénot, G., V. Mignon and C. Tsangarides (2009), *The trade-growth nexus in the developing countries: A quantile regression approach*, Paris: CEPII, document de travail 2009-04.
- Ebrill, L., J. Stotsky and R. Gropp (1999), *Revenue Implications of Trade Liberalization*, Washington, D.C.: International Monetary Fund, Occasional Paper 180.
- Edwards, S. (1989), *Real exchange rates, devaluation and adjustment: Exchange rate policy in developing countries*. Cambridge, MA: MIT Press.
- Edwards, S. (1993), "Openness, Trade Liberalization, and Growth in Developing Countries," *Journal of Economic Literature*, Vol. 31(3).

- Edwards, S. (1998), "Openness, Productivity and Growth: What Do We Really Know?" *The Economic Journal*, vol. 108(447).
- Elborgh-Woytek, K., J. J. Hallaert, H. P. Lankes, A. Sadikov and D. Smith (2006), *Fiscal Implications of Multilateral Tariff Cuts*, Washington D.C.: International Monetary Fund, Working Paper WP/06/203.
- Falvey, R. and C. D. Kim (1992), "Timing and Sequencing Issues in Trade Liberalisation," *The Economic Journal*, vol. 102(413).
- Farhadian-Lorie, Z. and M. Katz (1988), "Fiscal Dimensions of Trade Policy," Washington, D.C.: International Monetary Fund, Working Paper WP/88/44.
- Fjeldsted, K. (2009), "Madagascar trade" in *Celebrating Reform 2009: Doing Business Case Studies*. Washington, D.C.: World Bank.
- Foroutan, F. (1993), *Trade Reform in Ten Sub-Saharan African Countries: Achievements and Failures*, Washington, D.C.: World Bank, Policy Research Working Papers 1222.
- Gomanee, K., S. Girma and O. Morrissey (2002), *Aid and Growth in Sub-Saharan Africa: Accounting for Transmission Mechanisms*. Nottingham: University of Nottingham, CREDIT Research Paper 02/05.
- Greenaway, D. (1993), "Liberalising Foreign Trade through Rose-Tinted Glasses," *The Economic Journal*, vol. 103(416).
- Greenaway, D., W. Morgan and P. Wright (1997), "Trade Liberalization and Growth in Developing Countries: Some New Evidence," *World Development*, vol. 25(11).
- Gupta, S. and S. Tareq (2008), "Mobilizing Revenue," *Finance and Development*, vol. 45(3).
- Gutiérrez de Piñeres, S. A. and M. Ferrantino (1997), "Export diversification and structural dynamics in the growth process: The case of Chile," *Journal of Development Economics*, vol. 52(2).
- Hallaert J. J. (2004), "Implications of Trade Liberalization on Government Revenue," *An OECD Tool Kit for Trade Policy Makers III-Trade in the Service of Growth*, Paris: OECD.
- Hallaert, J. J. (2006), "A History of Empirical Literature on the Relationship between Trade and Growth," *Mondes en Développement*, No. 135, 2006/3.
- Hallaert J. J. (2007), *Can Regional Integration Accelerate Development in Africa? CGE Model Simulations of the Impact of the SADC FTA on the Republic of Madagascar*, Washington, D.C.: International Monetary Fund, Working Paper WP/07/66.
- Hallaert J. J. (2008), *How Does a Domestic Tax Reform Affect Protection against Imports? The Case of the Republic of Madagascar*, Washington, D.C.: International Monetary Fund, Working Paper WP/08/151.
- Hallaert J.J. (2010), "Economic Partnership Agreements: Tariff cuts, Revenue Losses, and Trade Diversion in Sub-Saharan Africa," *Journal of World Trade*, vol. 44(1).
- Hallaert J. J. and L. Munro (2009), *Binding Constraints to Trade Expansion: Aid for Trade Objectives and Diagnostics Tools*, Paris: OECD, Trade Policy Working Paper 94.

- Hayashikawa, M. (2009), "Trading Out of Poverty – How Aid for Trade can Help," *OECD Journal on Development*, vol. 10(2).
- Helble, M., C. Mann and J. Wilson (2009), "*Aid for Trade Facilitation*," Washington, D.C.: World Bank, Policy Research Working Paper 5064.
- Integrated Framework (2009), "Explanatory note to the DTIS Template," available at: http://www.integratedframework.org/files/non-country/DTIS%20template_9335e2.pdf.
- International Monetary Fund (2005a), *Republic of Madagascar: Sixth Review under the Three-Year Arrangement under the Poverty Reduction and Growth Facility—Staff Report*, Washington, D.C.: International Monetary Fund, Country Report No. 05/156.
- International Monetary Fund (2005b), *Republic of Madagascar: 2005 article IV Consultation*, Washington, D.C.: International Monetary Fund, Country Report 05/350.
- International Monetary Fund (2006a), *Republic of Madagascar: Request for a Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Activation of the Trade Integration Mechanism*, Washington, D.C.: International Monetary Fund, Country Report 06/306.
- International Monetary Fund (2006b), *The Federal Democratic Republic of Ethiopia: Selected Issues and Statistical Appendix*, Washington, D.C.: International Monetary Fund, Country Report 06/122.
- International Monetary Fund (2007), *Republic of Madagascar: Selected Issues*, Washington, D.C.: International Monetary Fund, Country Report 07/239.
- Independent Evaluation Office of the International Monetary Fund (2007), *An IEO Evaluation of IMF Exchange Rate Policy Advice, 1999-2005*, Washington, D.C.: International Monetary Fund, available at: http://www.ieso-imf.org/eval/complete/pdf/05172007/exrate_full.pdf.
- Isard, P., L. Lipschitz, A. Mourmouras and P. Heller, eds. (2005), *Macroeconomic Management of Foreign aid: Opportunities and Pitfalls*. Washington, D.C.: International Monetary Fund.
- Josz, C. (2007), "Madagascar-Tax Policy Reform Priorities to Improve Revenue Performance," *Republic of Madagascar: Selected Issues*, Washington, D.C.: International Monetary Fund, Country Report 07/239
- Khattry, B. and J. M. Rao, (2002), "Fiscal Faux Pas? An Analysis of the Revenue Implications of Trade Liberalization," *World Development*, vol. 30(8).
- Keen, M. and J. E. Ligthart (1999), *Coordinating Tariff Reduction and Domestic Tax Reform*, Washington, D.C.: International Monetary Fund, Working Paper WP/99/93.
- Keen, M. and M. Mansour (2009), *Revenue mobilization in Sub-Saharan Africa: Key challenges from globalization*, Washington D.C.: International Monetary Fund, Working Paper WP/09/157.
- Kowalski, P. (2005), *Impact of Changes in Tariffs on Developing Countries' Government Revenue*, Paris: OECD, Trade Policy Working Paper 18.
- Krueger, A. (1978), *Foreign Trade Regimes and Economic Development, volume X: Liberalization Attempts and Consequences*, Cambridge, Massachusetts: Ballinger for the NBER.

- Krueger, A. (1997), "Trade Policy and Economic Development: How We Learn," *The American Economic Review*, Vol. 87(1).
- Krueger, A. (1998), "Why Trade Liberalisation Is Good For Growth," *The Economic Journal*, vol. 108(450).
- Krueger, A. (2005), "De Tocqueville's 'Dangerous Moment': The Importance of Getting Reforms Right," *The World Economy*, vol. 28(6).
- Lamy, P. (2008), The Speaking notes for the Director-General Lamy's report to the General council on November 12, 2008, available at:
http://www.wto.org/english/news_e/news08_e/gc_dg_stat_12nov08_e.htm.
- Lamy, P. (2010), Address at the conference "Trade and Inclusive Globalization," Paris School of Economics; the entire address is available at:
http://www.wto.org/english/news_e/sppl_e/sppl152_e.htm.
- Lederman, D., M. Olarreaga and L. Payton (2009), *Export Promotion Agencies Revisited*, Washington, D.C.: World Bank, Policy Research Working Paper 5125.
- Li, X. (2004), "Trade Liberalization and Real Exchange Rate Movement," *IMF Staff Papers*, vol. 51(3).
- Michaely, M., D. Papageorgiou and A. Choksi, eds. (1991), *Liberalizing Foreign Trade, volume 7. Lessons of Experience in the Developing World*, Oxford and Cambridge: Basil Blackwell.
- Milner, C. (1998), "Trade Regime Bias and the Response to Trade Liberalisation in Sub-saharan Africa," *Kyklos*, vol. 51(2).
- Milner, C. and O. Morrissey (1999), "Measuring Trade Liberalisation in Africa," in M. McGillivray and O. Morrissey (eds.), *Evaluating Economic Liberalisation*, London: Macmillan.
- Milner, C., O. Morrissey and N. Rudaheranwa (2000), "Policy and Non-Policy Barriers to Trade and Implicit Taxation of Exports in Uganda," *Journal of Development Studies*, vol. 37(2).
- Milner, C. and E. Zgovu (2003), *Export Response to Trade Liberalisation in the Presence of High Trade Costs: Evidence for a Landlocked African Economy*, Nottingham: University of Nottingham, CREDIT Research Paper 03/04.
- Morrissey, O. and I. Filatotchev (2000), "Globalisation and Trade: The Implications for Exports from Marginalised Economies," *Journal of Development Studies*, vol. 37(2).
- Official Journal of the European Union (2008), *Economic Partnership Agreement between the CARIFORUM States, of the one part, and the European Community and its Member States, of the other part*, L 289/I/4, 30 October; available at:
http://trade.ec.europa.eu/doclib/docs/2008/february/tradoc_137971.pdf.
- OECD/WTO (2009), *Aid for Trade at a Glance 2009 – Maintaining Momentum*, Paris and Geneva: OECD and WTO.
- Panagariya, A. (2004), "Miracles and Debacles: In Defence of Trade Openness," *The World Economy*, Vol. 27(8).

- Rajan, R. and A. Subramanian (2005), *What undermines Aid's impact on Growth?* Cambridge, MA: NBER Working Paper 11657.
- Rajan, R. and A. Subramanian (2007), "Does aid affect Governance?" *The American Economic Review*, Paper and Proceedings, vol. 97(2).
- Rajan, R. and A. Subramanian (2009), *Aid, Dutch Disease, and Manufacturing Growth*, Washington, D.C.: Center for Global Development, Working Paper 96.
- Rodrik, D. (1989), "Credibility of Trade Reform – a Policy Maker's Guide," *The World Economy*, vol. 12(1).
- Rodrik, D. (1998), *Trade Policy and Economic Performance in Sub-Saharan Africa*, Cambridge, Massachusetts: NBER, Working Paper 6562.
- Rodrik, D. and F. Rodriguez (1999), *Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence*, Cambridge, Massachusetts: NBER, Working Paper 7081.
- Rodrik, D., A. Subramanian and F. Trebbi (2002), *Institutions Rule: The Primacy of Institutions Over Geography and Integration in Economic Development*, London: CEPR, Discussion Paper 3643.
- Rudaheeranwa, N. (2006), *Trade Policy and Transport Costs in Uganda*, Nottingham: University of Nottingham, CREDIT Research Paper 06/09.
- Sachs, J. and A. Warner (1995), "Economic Reform and the Process of Global Integration," *Brookings Papers on Economic Activity*, vol. 1995(1).
- Shatz, H. and D. Tarr (2000), *Exchange Rate Overvaluation and Trade Protection: Lessons from Experience*. Washington, D.C.: World Bank, Policy Research Working Paper 2289.
- Thomas, V. and J. Nash (1991), "Reform of Trade Policy – Recent Evidence from Theory and Practice," *The World Bank Research Observer*, vol. 6(1).
- Tybout, J. (1992), "Researching the trade/productivity link: New directions," *The World Bank Economic Review*, vol. 6(2).
- Tybout, J. (2000), "Manufacturing Firms in Developing Countries: How Well Do They Do, and Why?" *Journal of Economic Literature*, vol. 38(1).
- UNCTAD (2004), *Trade and Development Report 2004 - Policy coherence, development strategies and integration into the world economy*, Geneva: UNCTAD.
- UNCTAD (2005), *An IF Manual: Integrating LDCs into the International Trading System*, New York and Geneva: United Nations.
- van Wijnbergen, S. (1992), "Trade Reform, Policy Uncertainty, and the Current Account: A Non-Expected-Utility Approach," *The American Economic Review*, vol. 82(3).
- Wacziarg, R. and K. Welch (2003), *Trade Liberalization and Growth: New Evidence*, Cambridge, Massachusetts: NBER, Working Paper 10152.
- Walkenhorst, P. (2006), "Compensating Lost Revenue in Regional Trade Agreements," in Newfarmer (ed.) *Trade, Doha, and Development – A Window into the Issues*, Washington D.C.: World Bank.

- Wang, C., X. Lin and Y. Wei (2004), "Impact of Openness on Growth in Different Country Groups," *The World Economy*, vol. 27(4).
- Wei, S. J. (2000), *Natural Openness and Good Government*, Cambridge, Massachusetts: NBER, Working Paper 7765.
- Whalley, J. and A. ab Iowerth (2002), "Efficiency Considerations and the Exemption of Food from Sales and Value Added Taxes," *Canadian Journal of Economics*, Vol. 35(1).
- Winters, A. (2004), "Trade Liberalization and Economic Performance: An Overview," *The Economic Journal*, vol. 114(493).
- Winters, A., N. McCulloch, and A. McKay (2004), "Trade liberalization and Poverty: The Evidence so Far," *Journal of Economic Literature*, vol. 42(1).
- World Bank Independent Evaluation Group (2006), *Assessing World Bank Support for Trade, 1987-2004: An IEG Evaluation*, Washington, D.C.: World Bank.
- World Trade Organization (2006), *Recommendations of the Task Force on Aid for Trade*, Geneva: WTO, WT/AFT/1.