December 2015

Briefing Paper

Regional infrastructure for trade facilitation: impact on growth and poverty

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Acknowledgements

This is a policy summary of a report for a UK DFID-funded project on 'Regional Infrastructure for Trade Facilitation – Impact on Growth and Poverty Reduction'. We are grateful for support from DFID. However, the views expressed are those of the authors and not necessarily those of DFID or ODI. The main report brings together the findings of a literature review and six background papers around three clusters of investigation. The team is coordinated by Marie-Agnes Jouanjean and Dirk Willem te Velde and involves a range of ODI researchers (including Neil Balchin, Linda Calabrese, Alberto Lemma, Andrew Scott and Judith Tyson) and international experts (including Olivier Cadot, Alexander Himbert and Ben Shepherd). We are grateful for comments during the course of the project from Brian Baxendale, Douglas Brooks, Tim Bushell, Yolanda Chakawa, Paolo Craviolatti, Charles Kunaka, Callixte Kambanda, Alex MacGillivray, Athman Mohamed, Phil Outram, Gael Raballand, Rob Rudy and Tom Wagstaff. The overall project has also benefited from discussions with Channing Arndt, Paolo Craviolatti, Keith Garrett, Frank Matsaert, Tom Pengelly and Marco Serena. Finally, we thank participants at an ODI workshop on 7 December 2015.

Introduction

The expectation by policymakers that regional integration for trade facilitation (RITF) will help growth and poverty reduction is well founded in theory but has not been matched by clear evidence from the evaluation and research communities. The research undertaken for this project contributes to the body of research inspiring better evaluation and policies related to RITF. It unpacks infrastructure distinguishing among different types, such as physical and regulatory infrastructure. In particular, it provides more evidence of the complementarities between both types of infrastructure to ensure pass-through of the benefits of the reduction in trade costs to poor producers and consumers.

The approach used in the report is to provide evidence on the impact of regional infrastructure and associated trade cost reduction on the behaviour, risks and opportunities of economic actors (households, firms) through direct and indirect routes. It does this by creating and using new infrastructure measures; undertaking original surveys and new regressions; and developing and testing a new theory of change.[1]

The research undertaken shows investment in RITF enhances economic activity around the border, thereby reducing spatial inequalities within African countries. It also supports the activity of the informal sector at the border, in particular informal traders. But to increase the benefits, the design of cross-border infrastructure should take into account their specific characteristics. There are, however, potentially negative effects on the livelihoods of the most vulnerable, for whom specific initiatives can support adaptation to the new economic environment.

RITF also facilitates integration into modern value chains and international production networks. Finally, RITF has positive impacts on the productivity of African firms.

The pass-through of the effect of new hard infrastructure to economic actors occurs only when complementary regulations allow for efficient trade logistic services. In particular, innovative regulations and infrastructure should address coordination failures in modern value chains and tackle barriers such as localisation barriers reduce competition in the logistics sector. Taken together, the evidence suggests most of the impacts on growth and poverty reduction are indirect and require an understanding of constraints to connectivity throughout value chains. Hence, policymakers should take greater care of accounting for these in policy decisions and evaluations of RITF.

We summarise the impact and risks of RITF in terms of growth and poverty reduction as well as the poverty implications around three major findings.

RITF encourages economic activity around the border, including for most informal traders.

New econometric analysis focusing on African countries finds the facilitation of trade across borders leads to a greater spatial spread of economic activity, suggesting trade facilitation projects are valuable not just for their growth effects but also for their spatial effects and potential reduction in urban pressures.

1 For example, a recent Independent Commission for Aid Impact report that evaluated the impact of a UK DFID trade facilitation programme in Southern Africa had very little research to draw on. Choosing to rely on one of the few analyses particularly emphasising potential negative impacts on the poor, and especially one specific *ex-ante* modelling exercise and a handful of interviews, it reached the conclusion that there was not enough proof about the impact of the poverty reduction impact of the programme, and that this impact could potentially be negative.

2 The background papers include:
Cadot, O., Himbert, A. and Jouanjean, M.-A. (2015) 'Trade Facilitation and Concentration: Evidence from Sub-Saharan Africa'. ODI Report.
De, P. (2015) 'Disentangling Transit Costs and Time in South Asia: Lessons from Firms in Bhutan and Nepal Importing through Kolkata and Haldia Ports'. ODI Report.
Engel, J. and Jouanjean, M.-A. (2015) 'Infrastructure to Improve Market Integration of Smallholders and Address Coordination Failure in Food Staples Value Chains: Lessons from the Kenyan Maize Value Chain'. ODI Report.
Jouanjean, M.-A., Gachassin, M. and te Velde, D.W. (2015) 'Regional Infrastructure for Trade Facilitation: Impact on Growth and Poverty Reduction – a Literature Survey'. ODI Report.
Tyson, J. (2015) 'Effect of Sub-Saharan African Trade Corridors on Vulnerable Groups'. ODI Report.Shepherd, B. (2015) 'Infrastructure, Trade Facilitation, and Network Connectivity in Sub-Saharan Africa'. ODI Report.
Te Velde, D.W. (2015). 'Regional Trade and Infrastructure and Firm-level Productivity in Sub-Saharan Africa'. ODI Report.

A new survey around the one-stop-border-post (OSBP) recently built in Busia (on the Kenya–Uganda border) finds mostly beneficial effects, even for directly affected informal traders and households. However, there can be some specific negative short-term impacts for informal workers whose economic activity depended on inefficiencies of border crossing.

In order to increase the benefits, policymakers need to recognise the specific characteristics of informal traders in the design of RITF that have traditionally aimed at facilitating formal trade across borders. Further, they need to implement complementary policies to support and sustain the effects on the reduction of spatial inequalities, such as investment in rural areas and small urban centres to support the participation and access of rural populations to the market and increase access to health and education services to address the needs of vulnerable groups.

RITF helps firms in African countries connect to modern value chains and in particular global value chains.

New econometric analysis finds a clear positive association between infrastructure for trade facilitation and connectivity to international production networks, particularly in textiles and clothing. There is a strong positive association between infrastructure and trade facilitation improvements in neighbouring countries and greater value chain connectivity at home. It is, therefore, not just what a country does that matters for its connectivity, but also what its neighbours do.

Recognising this new evidence, policymakers should improve infrastructure and trade facilitation performance, for instance through implementation of the World Trade Organization (WTO) Agreement on Trade Facilitation. They should also adopt a regional approach to infrastructure development, consistent with the recent emphasis on economic corridors.

A new case study example in Kenya illustrates how warehouses are specific examples of infrastructure with great potential to unlock coordination failures in the development of inclusive local and regional modern value chains. This case highlights the importance of treading the final mile for poverty reduction and recognising the complementarity within hard infrastructure (between roads and warehouses) and between hard and soft infrastructure (warehouses and complementary regulation) to support the participation of poor producers in modern national and regional value chains.

RITF has long-lasting effects through productivity of firms.

New empirical analysis based on firm-level data suggests firms in countries with better regional infrastructure (reflected in the quality of infrastructure in their neighbours) also have relatively higher productivity. The productivity-enhancing effects of regional infrastructure are shown to come through importing material inputs and supplies, but also through exporting. The empirical analysis based on firm-level panel data in Malawi, Rwanda, Senegal and South Africa shows regional exporters not only have higher productivity than other non-exporting firms (the average productivity gap between regional exporters and other firms ranges from 18% in Malawi to 60% in Senegal and 72% in Rwanda) but also experience greater productivity growth (reflected in faster growth in labour productivity in both Malawi and Rwanda) and more rapid total factor productivity (TFP) growth in Senegal. Regional exporters put greater emphasis on technology, which leads to higher productivity and better product quality.

We find evidence of significant variation in transaction costs associated with the use of regional infrastructure. We show, using data from the World Bank's Enterprise Surveys and a new case study in Bhutan, India and Nepal, that clearing costs can vary markedly between border crossings, but also across different types of exporters using the same crossing. The implication of these findings is that policymakers should take into account the role of the soft regional infrastructure environment in determining border costs in addition to hard regional infrastructure when investing in upgrading regional infrastructure.

Ensuring investments in regional infrastructure allow small producers and traders to access regional markets and integrate modern value chains. But it also requires institutions and regulations enabling transparent and competitive domestic and regionally integrated services markets. The report also lists a range of barriers that reduce the efficiency of trade logistic services, which in turn reduces the impact of new hard infrastructure, in particular in the context of transit agreements. Addressing those barriers (from licensing and service restrictions to labour regulations, in particular in the context of transit agreements) is essential to make sure the reduction in trade costs benefits all economic actors, from firms (through lower export and import costs and increases in variety) to consumers (through reduction in prices and increases in variety).

Policy implications

What can policy do to improve the impact of regional infrastructure for growth and poverty reduction?

The research suggests RITF is good for growth and productivity, but there are several ways in which policy can enhance these effects:

- Policy should focus not only on the quality of regional hard infrastructure, such as roads and ports, but also on other factors such as soft infrastructure, to increase transparency and the efficiency of trade-related services for all firms. In particular, it should focus on creating innovative regulations addressing coordination failure in the value chains.
- Policy should also remove barriers to efficiency of trade logistics services, in particular for transit, such as licensing and service restrictions, restrictions on the employment of labour or limitations on access to certain infrastructure facilities, cabotage restrictions, cargo reservation schemes and third-country rules or ownership and investment regulations.

Policy can also improve the impact of RITP for the poorest and reduce the risks they may face:

- Policy needs to help sustain the reduction in spatial inequalities from RITF by supplying complementary infrastructure such as rural feeder roads, but also health and education services. This could foster the development of new hubs of economic activity.
- It is important to design temporary programmes that could support those affected negatively by OSBPs and help them change to other types of activities.
- Better integration into international production networks is welcome, but complementary policy is needed to give smaller firms the opportunity to participate, directly or indirectly.

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 ISSN: 2052-7209