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Bottlenecks or Growth Zones? A Study of the Chirundu and Beitbridge Border Economies

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Land borders in the Southern African Development Community (SADC) region are critical zones for unlocking regional value chains, trade and economic development. The Beitbridge and Chirundu border posts represent important links in the North–South Corridor. They are vital in both regional development and bilateral initiatives. It is at these borders that many issues related to regional integration intersect. Understanding the major complications that prevent competitive trade and undermine trade facilitation initiatives is, therefore, essential. This policy brief examines the causes of standing time – a major contributor to transport costs in sub-Saharan Africa – and discusses the softer issues such as driver behaviour and border operations. We further discuss the economic development opportunities for border economies. These are intimately linked to the operation of border posts. Various complex linkages are considered. These include the potential disruptive impact that trade facilitation measures may have on firms operating at the border. A failure to improve border efficiency can similarly undermine the existing industries at the border. We also review challenges and economic opportunities at the Beitbridge and Chirundu border posts with a focus on women and youth. We conclude by providing policy recommendations.

1. Introduction

Substantial evidence suggests that trade costs remain one of the major impediments to increased intra-African trade. In particular, poor trade facilitation, inefficient and costly transport services and trade barriers have been shown to impede cross-border intra-African trade flows (Njinkeu, et al., 2008; Portugal-Perez & Wilson, 2009). The border effects literature shows that in addition to restricting trade, political borders segment product markets and cause price gaps of similar products to escalate beyond what is explain by distance (Nchake, et al., 2017; Rodrik, 2018). Studies on Africa show that national borders cause prices to deviate from the law of one price by 7 to 30 percent (Balchin, et al., 2015; Aker, et al., 2014; Brenton, et al., 2014).

These studies infer the border effect based on observed systematic discontinuities of prices across national borders, while controlling for distance and other factors, such as tariffs

and exchange rates. However, few studies explore the effect of standing time on exacerbating the border effect. It is clear that border delays, particularly standing time, increase transport costs the most and not the lack of backhaul opportunities, as others have argued. Softer operational issues rather than hard infrastructure constraints contribute most to standing time (Lowitt, 2017). The growth and development of intra-regional value chains in Sub-Saharan Africa will continue to be constrained by the weakest link in the chain – transport and logistics.

The biggest constraint to logistics performance is border functioning. That is border delays and standing time at the border. The two components most critical to efficient logistics, time taken and costs to transport, are very unfavourable in the Southern African region. The uncompetitive logistics environment continues to stifle growth and the development of regional value chains. The grassroots issues negatively affecting efficient logistics are well understood. A substantial body of work is available to guide decision makers on what needs to be addressed. It has been noted that "what appears to be lacking is appropriate prioritisation, political will and the operational ability to implement necessary (Lowitt. changes" 2018). Therefore. а bottom-up, value-chain-by-value-chain implementation strategy should be the focus.

Standing time increases transport costs substantially. This is dependent on the type of cargo being transported. Regardless of the various initiatives by the private sector, logistics companies currently attribute 60% of the high and uncompetitive logistics costs to standing time. They identify poor management at borders as the major culprit. It can be observed from the available literature that the problems arise mainly from operations and less related to physical infrastructure. This study of the Chirundu and Beitbridge borders seeks to explore these softer, operational issues.

2. Methodological Framework

The survey of the operations at the Chirundu and Beitbridge borders were conducted by a team of researchers. Interviews were conducted with various stakeholders and agencies on both sides of the Musina and Beitbridge borders and at the Chirundu border using a qualitative research technique. Beitbridge and Chirundu were selected because of the high amount of traffic that passes through them. The interviews were conducted using a semi-structured open-ended questionnaire. This was used as a guide for data collection, with the open-ended structure of responses allowing in-depth interviews. Some insights from the stakeholders' workshop in Harare and Pretoria are included in the analysis.

The respondents were chosen using a multistage cluster sampling technique. After selecting the survey sites in the first stage, the customs officials – the Zimbabwe Revenue Authority (ZIMRA) and the Zambia Revenue Authority (ZRA), were purposely selected as key stakeholders in border management. On the Beitbridge side, additional respondents from the Zimbabwe National Road Administration were also purposely selected for

interviews. A total six government officials in total was interviewed on immigration control and customs procedures. In the third stage, a number of randomly selected stakeholders were interviewed. These included 25 male truck drivers; one medical service volunteer from Trucking Wellness; eight local business owners, including three truck park owners; 12 clearing agencies; 24 cross-border traders; and five touts and vendors willing to engage.

On the Chirundu side, the respondents included: 19 clearing agents; 23 cross-border traders; 17 transit cross-border traders; 15 truck drivers; six bus drivers; the district economic planner; the district social planner; and the district HIV/AIDS coordinator.

Customs officials on both sides of the border, ZIMRA and the Zambia Revenue Authority (ZRA), were also engaged. The number of interviews depended on the respondents' availability and willingness to answer. The study was undertaken in June 2018 and was limited by the short time period available.

3. Results and Analysis

It is estimated that on average 400 trucks passed through Beitbridge every day in the first half of 2018. The truck drivers indicated that the average waiting time for a truck whose documents were in order was 48 hours. At the Chirundu border, we found that an average of 280 north-bound (into Zambia) and 140 south-bound (into Zimbabwe, loaded) commercial vehicles crossed the border every day. This is approximately 7,000 commercial vehicles every month and an average of 12 passenger buses every day. Customs officials observed that south-bound trucks took between two and 16 hours to complete border formalities, while some drivers estimated their waiting time at 36 hours.

It was observed that there are four main causes of longer standing times at both borders. These were poor signage and a lack of disaggregated lanes for offloading trucks, transit trucks, buses, commercial vehicles and passengers. A lack of risk management processes for scanning and inspections, leading to numerous inspections and a duplication of efforts among border agencies, causing longer queues; too few customs officials and inadequate inspection bays; and driver behaviour, where drivers remain at the border despite having been cleared.

Poor information and communications technology (ICT), weak interagency coordination owing to the lack of ICT connectivity, inappropriate infrastructure, ASYCUDA¹ system failures, badly trained and tardy clearing agents and shorter operational periods (on the Chirundu side) were also listed by stakeholders as extending standing time. The other major issues that were mentioned by about a dozen stakeholders were the numerous documents required and delays because of inadequate border and internal coordination. This underlines the importance of inter-agency coordination at borders.

¹ Automated System for Customs Data.

Table 1 captures some responses from Chirundu and Beitbridge on the reasons for border delays.

Reasons for delays	Number of times mentioned (Chirundu)	Number of times mentioned (Beitbridge)	
Staff shortages and inadequate inspection bays	9	5	
System failures ²	6	15	
Multiple inspections	2	9	
Too many documents and delays resulting from other border and internal coordination issues (OSBP* specific)	11	not applicable	
Slow and tardy agents / clearing agents' errors on declarations	2	7	
Delays in remitting duties by consignment owners	5	5	
Inadequate infrastructure / lack of separate transit lanes	3	20	
Delays in bills of entry for the other side of the border (OSBP specific)	4	not applicable	
Submission of declarations without import licences where required	no information	10	

Table 1. Interviewees' summar	y of causes of long standing times – Chirundu and Beitbridge
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* One-stop border post Source: Compiled by authors

3.1 Driver Behaviour

It was observed that truckers generally face poor working conditions. This tends to undermine driver well-being and contributes to the slow movement along the corridor. Truck drivers reported a litany of workplace challenges. These included serious labour rights concerns that have the potential to slow the movement of goods at the border. They complained about a lack of downtime between trips. Consequently, they preferred to spend more time at the border to rest, even once clearance is completed. They did not have enough funds for necessities, as many were not given adequate stipends by their employers. As a

² The researchers were delayed for two hours crossing into Zambia with a private vehicle, owing to the system delays. Officials have to wait for authorisation from Lusaka to initiate a manual capturing process for the issuing of toll fees.

result, they were more likely to act as conduits for smuggling for cross-border traders. Other complaints included poor treatment by certain state officials; the lack of amenities at border posts; downsizing of support teams such as escorts and co-drivers; concerns over harassment in the Democratic Republic of Congo and xenophobia in South Africa; and reports of union-busting during attempts to organise. It is thus doubtful that drivers have any incentive to reduce standing time.

Drivers contribute to standing time by remaining at the border despite the complete clearance of their documentation. Drivers said that they preferred to stay within the border area to undertake errands, to rest and for entertainment purposes, such as the use of commercial sex workers. Some drivers go home, to nearby towns such as Harare, and wait until the completion of their clearance documents. The additional time spent commuting back to the border adds to standing time. On average, a driver can spend an additional day or two at the border after having been cleared by customs.

The survey showed that driver behaviour is an important cause of extended standing time. This insight reinforces the fact that broad engagement with stakeholders is required when new trade facilitation measures are introduced. The implementation of new border procedures to reduce waiting time may be compromised if the source of the constraints and challenges causing drivers to remain at borders is not addressed. Driver behaviour must thus be incorporated into trade facilitation initiatives.

3.2 Risk Management Processes

Improved risk management processes are needed at both borders. This would contribute to the reduction of unnecessary queues. At Beitbridge, drivers reported that the Vehicle Inspectorate Department officers failed to issue receipts to truck drivers immediately after they paid for road transit coupons. This was later done, but at times as much as three hours later. At the Chirundu border, it was noted that a lack of coordination and cooperation among border agencies often resulted in multiple inspections. This increased standing time. Consignments were offloaded for physical inspection by customs, by agricultural experts for import and export permits and by standards officers, among others, before reloading. Additionally, queuing for the electronic scanner can take up to two hours per truck. A randomised scanning procedure could be considered to reduce standing time during such procedures.

3.3 Staffing Policies

A review of staffing policies at both borders is required to ensure they are well staffed, especially during peak traffic flows. Long queues cause unnecessarily increased waiting times. Truck drivers also attributed the extended border standing time to Zimbabwean customs officers who serve clients while accessing social media on their cell phones. In

addition, respondents reported that some clearing agents were tardy, mixed up procedures and made errors on documents that then had to be corrected. This is caused by the lack of appropriate training in clearing and forwarding for most clearing agents. It was observed on the Zambian side that the submission of incorrect documentation by customs agents caused a disconnect in procedural expertise. To ensure gender mainstreaming among government staff, an official staffing audit should be conducted to ensure officials are equally represented. This would also help female cross-border traders to report harassment or seek legal recourse with more ease, by being able to approach a female official.

3.4 Poor Signage

As a result of poor signage, touts are needed at borders to assist travellers. This creates an enabling environment for corruption and unnecessary middleman interactions. This results in added waiting time. Despite the Chirundu border being a one-stop border post (OSBP), there is insufficient signage and poor coordination between agencies. This increases waiting time at the border. The Beitbridge border requires a serious border re-design to simplify its time-consuming crossing processes by including sufficient signage and reducing the multiple steps taken by trucks, commercial vehicles and passengers. Modernisation plans are currently under way. It would be interesting to analyse the economic implications of this. The difficulties with the Beitbridge crossing procedures have caused the volumes of freight using the border post to decrease, especially in 2018. Drivers prefer to use other routes such as Grobler's Bridge or Pont Drift (borders between South Africa and Botswana).

3.5 Trade Facilitation Measures

Trade facilitation measures may have a disruptive impact on firms operating at the border. A lack of improvement in efficiency at the border can also undermine industries at the border. For example, Beitbridge is now open 24 hours a day. This has led to the closure of major hotels in the area. Travellers prefer to continue with their journey rather than seek accommodation. In examining the current economic activities at these borders, it is clear that while some level of border activity will likely remain regardless of trade facilitation changes, the current structure of border economies does not seem sustainable if improvements to facilitate border crossings are made without the creation of new economic opportunities in the long term.

Additionally, resistance from local industry could undermine trade facilitation reforms, as could firms' failure to take advantage of these reforms. For example, while the Beitbridge border now operates on a 24-hour schedule, most clearing agents do not, which undermines the impact of such reforms. Similarly, clearing agents require training and capacity building to ensure they comply with new and existing procedures, and that the benefits of the government-introduced facilitation measures are realised.

It was observed that firms were also concerned about the risk of trucks choosing alternative routes because of difficulties at the Beitbridge crossing, as mentioned earlier. This can be explained in the reported 16% decrease in traffic since 2016 at Beitbridge. There is, therefore, a need for broad engagement with stakeholders when new trade facilitation measures are introduced. This public-private interaction is necessary to ensure the tension between trade facilitation measures and stakeholders engaged in border activities is minimised and that the needs of the various stakeholders are incorporated in such measures.

3.6 Border Economy

The Beitbridge's border economy can broadly be divided into four segments: largely informal cross-border trade; a formal retail network that serves both traders and those crossing the border; a logistics industry largely serving the movement of freight through several clearing agencies; and, theoretically, manufacturing, which has potential for further development through the Musina-Makahdo special economic zone. Stakeholders that serve the border area need to be included in planning processes on trade facilitation initiatives, as a lack of coordination can undermine otherwise useful reforms.

The Chirundu border economic activity consists predominantly of small-scale or informal cross-border traders, mainly women and youth. Small-scale traders bear the brunt of many of the inefficiencies at the border post. There is a need to educate cross-border traders on official customs procedures, particularly on using the Common Market for Eastern and Southern Africa's information desks and the Simplified Trading Regime. The inadequate supply of amenities such as showers, toilets on the Zambian side (costing ZMW³ 2/\$0.20 per use) and low-cost accommodation are among the constraints experienced by cross-border traders, women and those travelling with children. With increased investment in the district, however, such as the recent construction of a Shoprite shopping mall, there have been positive spill-over effects, e.g. the opening up of neighbouring markets to Chirundu's agricultural products.

4. Policy Recommendations

To address the growth and bottlenecks of border economies such as Chirundu and Beitbridge, the state must pursue policies on trade facilitation that reduce waiting time with the consultation of stakeholders. Figure 1 depicts an example of key policy options from an action plan. The plan highlights beneficiaries that would benefit from these initiatives.

³ Currency code for the Zambian kwacha.

Recommendation	Border firms	Travellers	Truckers	Border towns
Single point of communication for complaints and issues				
Regional trucker federation				
Development of qualifications and support for training				
Construction of secure, low-cost accommodation				
Construction of logistics parks				
Accreditation of vendors and guides at border posts				
Special processes and support to cross- border traders				
Long-term: Centralised warehousing for cross-border traders?				
Long-term: Cross-border economic zones?				

Figure 1: Border Action Plan

Source: Compiled by authors

Secondly, while trade facilitation initiatives are gradually being implement, the state and private sector should institute coping strategies that involve better and transparent communication mechanisms between border agencies and the public. They should provide amenities at the border targeting women and youth, such as low-cost accommodation. The education of cross-border traders on trade processes should be prioritised. There is an incentive for the state to coordinate policy implementation to ensure trade facilitation measures are aligned with private sector interests.

Thirdly, the states of both countries should re-engineer border processes by redesigning the border, deploying efficient signage, disaggregating traffic lanes, reviewing staffing policies, especially during peak traffic flows, conducting joint inter-agency inspections including implementing procedures to reduce duplication of efforts, and introducing better risk management and sampling procedures for inspections and scans.

Fourthly, driver wellbeing must be a priority. The public sector should support the formation of a national or regional association to advocate for better conditions and ensure that drivers are represented in policy design. Driver behaviour should also be factored into trade facilitation initiatives.

Lastly, border firms need support to ensure clearing agencies provide training and capacity building to existing clearing agents (especially with youth on the Zambian side). This will reduce operational errors. The industry should look to standardise clearing agents' qualifications in the SADC region.

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