Causes of high road freight costs in southern Africa for perishables and commodities

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Rationale: Transport central to integration of regional markets, what is the state of competition & constraints in road transport?

- Rapid income, consumption and urban growth in key hubs – food products, perishables, light manufactured goods
- Focus on the transportation of goods from areas of production to areas of consumption growth *within* the southern African region
- Road is primary mode ~>70% of goods transport in Africa, 78% SADC trucks from SA
- Gaps in the literature on transport of perishables, & outdated

Research methodology

- Firm-level study of the nature of competition between transport operators – prices, costs, key players, regulation, changes over time
- Focus on transport between growth hubs on N-S corridor - Lilongwe, Lusaka, Johannesburg, Harare, Maputo
- 32 interviews in Malawi, SA, Zambia, Zimbabwe – truckers, agents, agencies, associations, retailers and secondary data

Key findings

- Border delays, lack of return loads & low levels of competition increase rates
- Refrigerated transport: concentration and lack of return loads drive rates
- Export rates from SA 30-50% higher than on return leg i.e. rates could be halved!
- Border delays cost ~$13-20/ton ($400-600/day)
- Lusaka-Johannesburg became more competitive – regulation, competition matter

Causes: Imbalance of trade flows

- Infrastructure not a constraint on trunk routes
- **Trucks are returning empty** on import leg back to SA, factored into transport rate
- Massive opportunity but lack of output in e.g. Malawi and Zimbabwe
- Export rates from SA are **30-50% higher** than on return leg
- **Jhb to Lusaka has come down around 25%** between 2014 and 2015/16, more competitive with loads in both directions
  - Number of Zambian trucks up significantly
  - Rivalry between SA, Zambia, Zimbabwe truckers
- Import leg to SA reflects a benchmark (lower) rate for transport that ought to pertain in the market
  - Accounts for all costs at least, less cost of delays
  - Efficient benchmark estimated at **$0.04 per ton per km** (per tkm)
    - International comparators, Jhb-Cape Town, lower end of Zambia rate

Non-refrigerated rates, 2015

Route	Distance (km)	Export rate ($)	Import rate ($)	Average rate ($/ton/km) & [range]
Lusaka – Harare	495	1500	1800	0.11 [0.10-0.12]
Lusaka – Johannesburg	1576	1800	3660	0.06 [0.04-0.08]
Lilongwe – Johannesburg	1863	2100	3950	0.06 [0.04-0.08]

- Lusaka-Jhb down from around $160/ton (2013/4) to $120/ton (2015/6)
  - Cross-border rivalry
  - 1-Stop Border Post at Chirundu (from 2009) yielding results around 2013
  - Pro-competitive regulation – bilateral common permits, lifting duty on truck imports, deregulation for private participation in 2000s
  - More two-way loads on dry and bulk goods

Causes: Cost of delays

- Estimated cost of border delay is **$400-600/day** (around $13-20/ton)
  - So 1-day delay on a trip charged at $80/ton from Jhb to Harare is 25% of rate
- Basics: clearance systems between countries (e.g. ASYCUDA) not interoperable
- Compared to 5 years ago:
  - Still taking 2-3 days through Beitbridge,
  - Chirundu (better than 10 years ago but room for further improvement)
- Processes are electronic (for about three years now)
- BUT internet-based systems rely on electricity and connectivity – but Chirundu OSBP high power outage rate, and not open 24 hours/day
- Pre-clearance - Clearing for perishables much faster and can move from Jhb to Harare < 1 day – suggests it can be done for commodities?
- Inconsistencies – Zambia did not offer preferential clearance for reefers

Causes: Fuel, agents, competitive dynamics

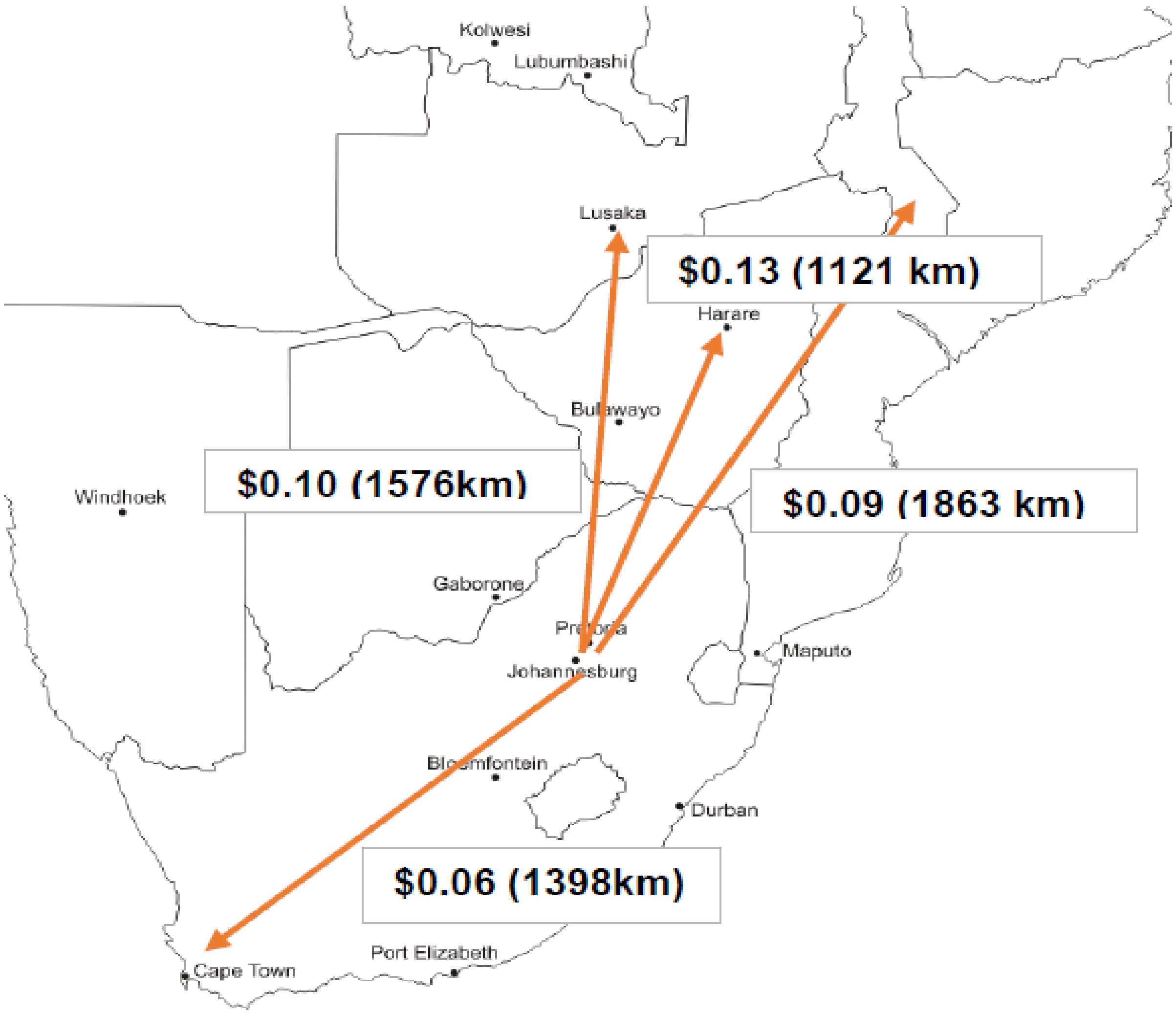
- Fuel price differentials between countries (linked to exchange rates also)
  - Fuel is ~50% of trucker operating costs, local regulation matters (Malawi 30% higher)
  - Relative competitive position of e.g. Malawi truckers directly affected by higher cost-base vis-à-vis South African and Mozambican transporters

- Role of agents/forwarders
  - Collusion at industry association level – at least Zimbabwe, Malawi, possibly region-wide
  - BUT only 10% of total rate to client is agent/broker commission…so less important?
  - More important is that agents control key loads and subcontract to truckers – but should mean lower rates? No, if agent keeping the extra margin rather than passing through
    - But trade-off is efficiency and one-stop shop for client, which is very important

- Route specific dynamics (e.g. Moz vs Mal truckers; SA-Zim-Zam competition between truckers)

- Large transport companies and agents are multinational
  - Leverage reputation, technology, major contracts to ease transit constraints
  - Does the system favour large integrated logistics firms? Major retail groups?

And for diversified freight?



- Highly concentrated
- Low levels of demand outside SA
- Control by major agents outside SA
- Requires related cold rooms, storage, IT
- Higher entry costs
- Higher risk
- Largely SA truckers
- High rates (double) reflecting market power
- Jhb-CT benchmark at $0.06 per tkm

And for refrigerated freight?

- Food products exports from SA *within* supermarket value chains
  - >90% of reefer trucks loads carried by SA truckers
  - Jhb to Harare around $3100-4000/trip (compared to $2500 on normal flatbed)
  - **Large regional contracts** such as for Mar Group with Shoprite (with Freshmark)
- **Niche market controlled by demand of major users** which have internalized transport or outsource to small subset of firms
  - Malawi ~4 players, agents manage contracts
  - **Lonrho in Zimbabwe fully integrated** to growing activities and cross-border transport for certain clients
  - **Imperial in SA fully integrated** to supply chain and stock management for major clients such as Astral, McCain
    - Largest **storage and cold room facilities**, & fleet
    - Rivals cannot compete on capacity

What can we draw from this?

- We estimate that rivalry, reduction in border delays, regulatory effectiveness, & backhaul **could halve rates** to $40-60/ton on Lusaka-JHB
  - Price of Zambian soya bean delivered in JHB was $400/ton (2015)
- Scope for cross-country intervention on **border delays** – easy win?
- Good **pro-competitive regulation** matters – Zambia
- **Retail groups demand and receive efficient transport** through major reputable logistics firms, suggesting potential for same efficiency on commodity transportation – what are they doing right to get this?
- Trade flow imbalance only controllable through greater output from region, but opportunity for **leveraging 'cheap' transport** on return leg
- **Route specific dynamics** do matter
- **Infrastructure not a prominent concern**, focus is on deriving efficiencies from use of existing networks
- Competition law and regulation tools for dealing with competition constraints to support regional industrialisation strategies

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