



Trucking: Key to regional integration and a service export

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Stylized facts (1/2)

- **More economic activity:** in Mombasa and Dar es Salaam, total volumes handled by the port dramatically increased in the last decade: over 50% for Mombasa (Kenya) between 2004 and 2011, and a doubling between 2002 and 2010 for Dar es Salaam (Tanzania).

⇒ Increased demand => Reduced transport prices?

- But, not so simple.

Stylized facts (2/2)

Conflicting trends

- **transport prices along the Northern corridor have gone down significantly** : by 30% from Mombasa to Kigali from 2011 to 2015 and 26% to Kampala during the same period.
- **But have increased significantly along the Central corridor** with an increase by 79% from Dar to Kampala and 36% to Kigali during the same period (East Africa Logistics Performance Survey).

Rationale

- Why did prices decrease along the Northern corridor and not on the Central Corridor?
- Why trucking services efficiency is important for economic development?
 - Important for regional trade integration (if trucking services not efficient – economic impact of infrastructure investments limited – Teravaninthorn et al. 2009),
 - Integration of trucking services matters (Kunaka et al. 2008),
 - May enable export of services

Methodology and main findings

- **Methodology**

- trucking surveys data in East Africa (unpublished),
- unpublished border surveys to assess the extent of trucking services integration
- Data on port deliveries and removals by different modes

- **Main findings**

- Integration of trucking services is moving fast in East Africa (along the Northern corridor); market share of foreign-owned trucks in Rwanda is equal to $\frac{3}{4}$;
- Trucking fleet characteristics and management has improved tremendously and is now comparable to South Africa;
- Border clearance processes has played a major role in improving fleet productivity;
- Productivity along the Central corridor still lags behind and could be explained by recurrent protection.

What are the characteristics of trucking fleet, trucking management?

Main findings

Eastern Africa fleet more and more look like South African fleet:

- Concentrated
- But remaining family-owned
- Relatively new fleet
- Managed with GPS devices and monitoring devices
- Each truck creates 2-3 jobs

Fleet ownership – local/family-owned

	Kenya	Tanzania	Rwanda
Individual / Family owned	71%	89%	74%
Local shareholding	16%	2%	16%
Foreign shareholding	3%	2%	0%
Publicly owned	1%	0%	0%
Others	6%	1%	0%
Not specified	3%	7%	11%
Total	101	117	19

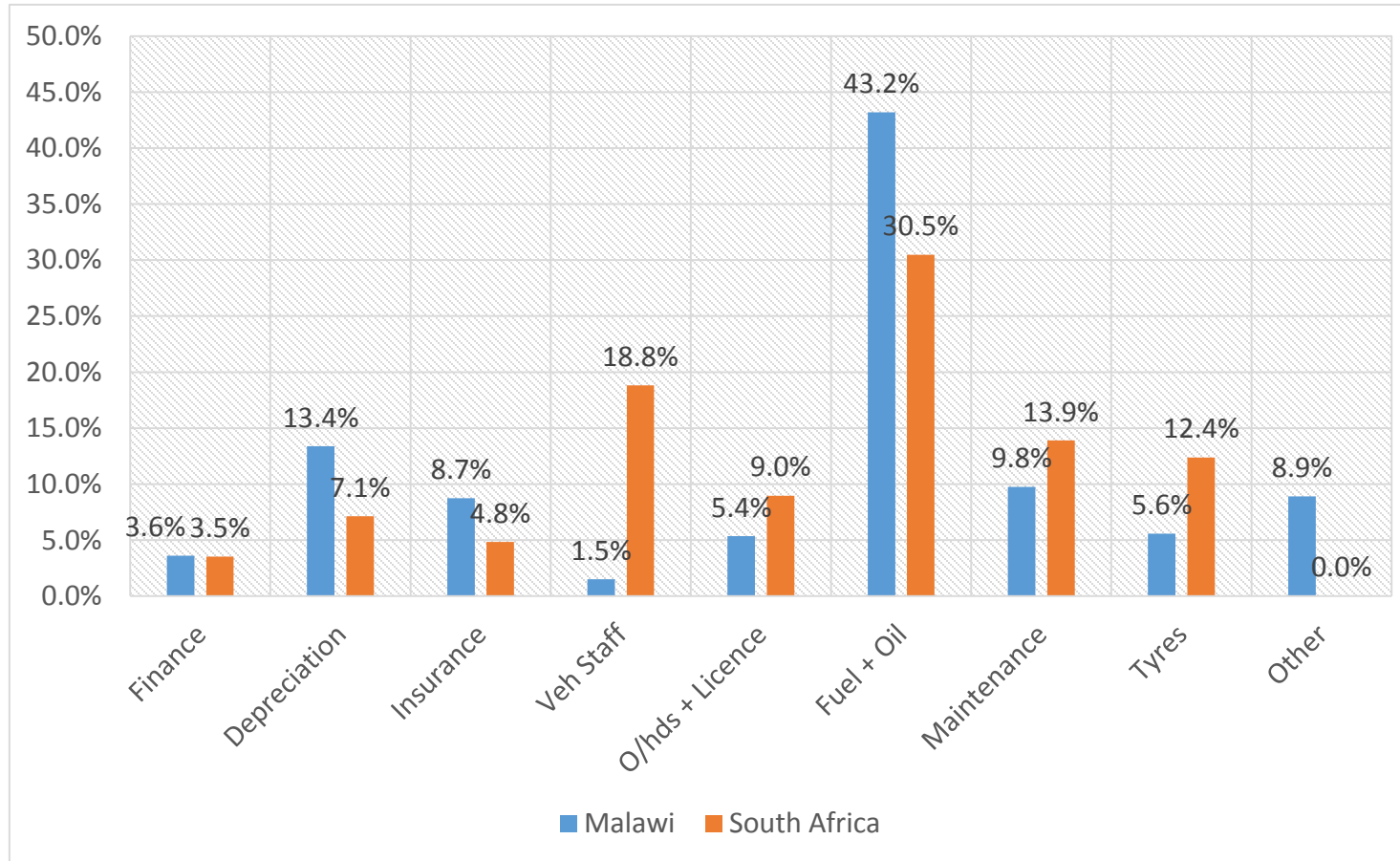
Fleet market shares – concentrated but a segmented market

- **Concentration:** 5% of the enterprises operate 45% of the truck fleet in Kenya while that proportion is 40% in Tanzania.
- **Segmentation:** large enterprises co-exist and compete with much smaller enterprises: 50% of the enterprises in Tanzania operate 7 trucks or less, and 4 or less in Kenya, while in Rwanda, almost 80% of the enterprises operate only one truck.

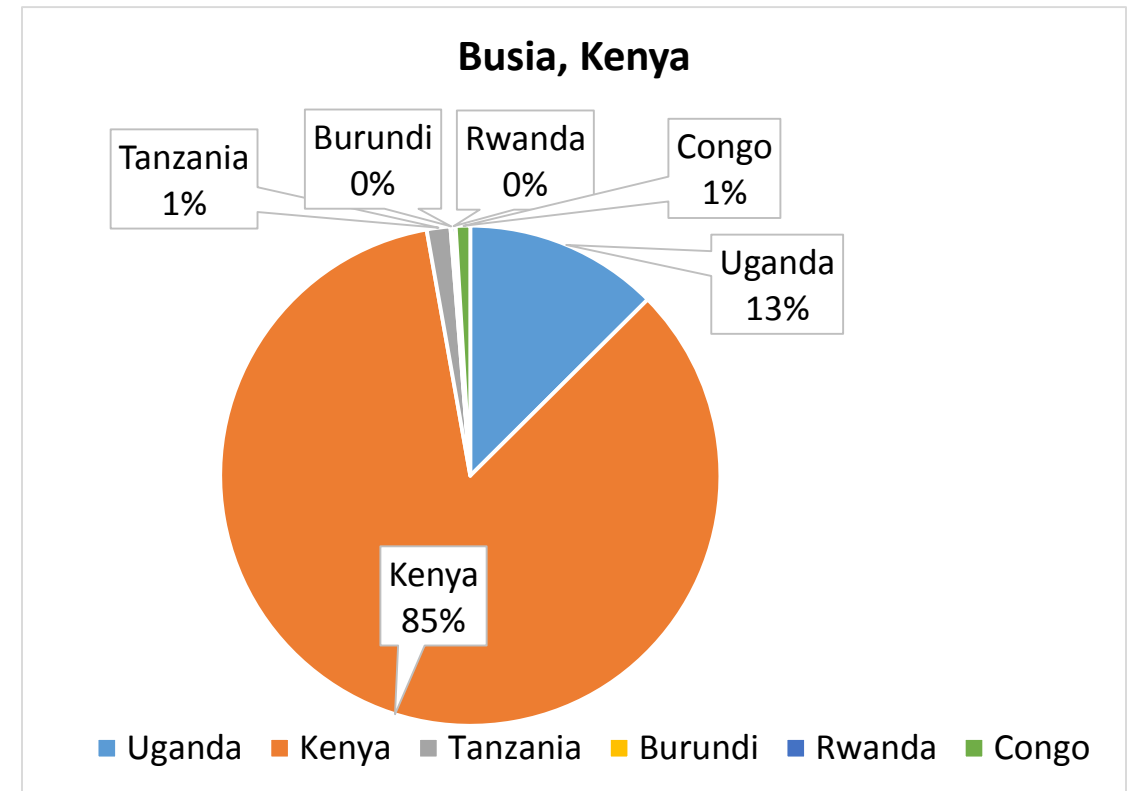
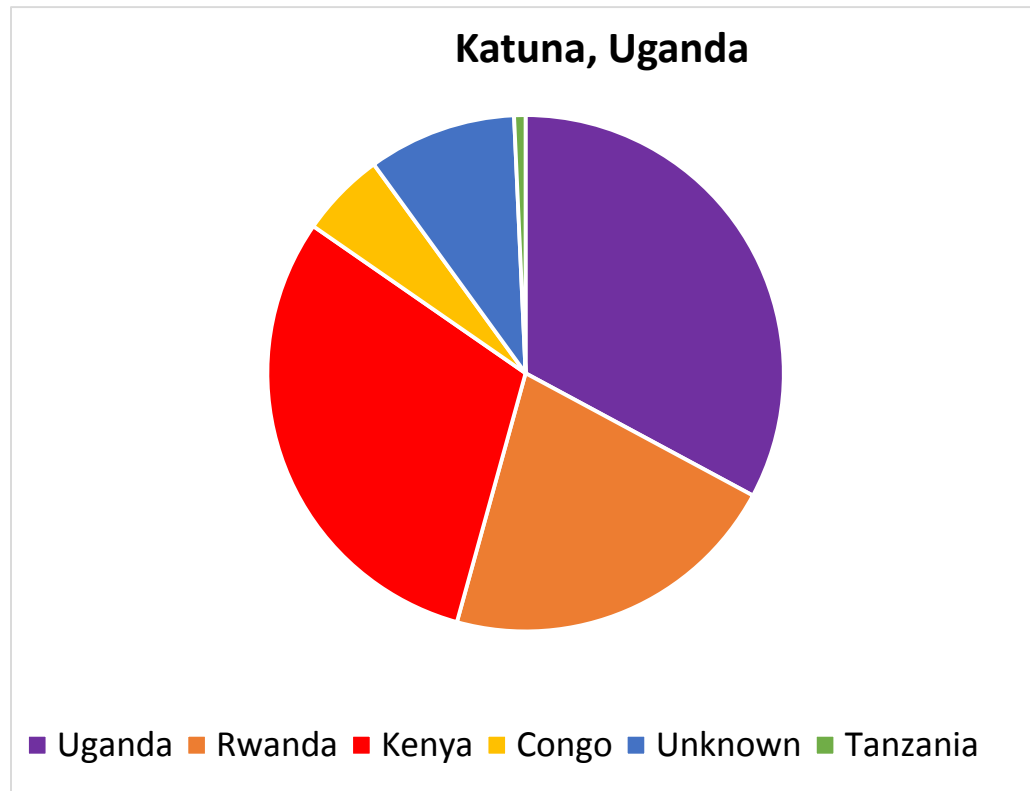
Fleet age – New and Old

	New	Second hand	Unknown	Total operated	Average age
Kenya	56%	23%	21%	4,531	7.5
Tanzania	18%	80%	2%	4,322	16.2
Rwanda	38%	60%	2%	133	12.6

Age impacts structure of costs



Strong competition on some routes ...



Increased professionalism

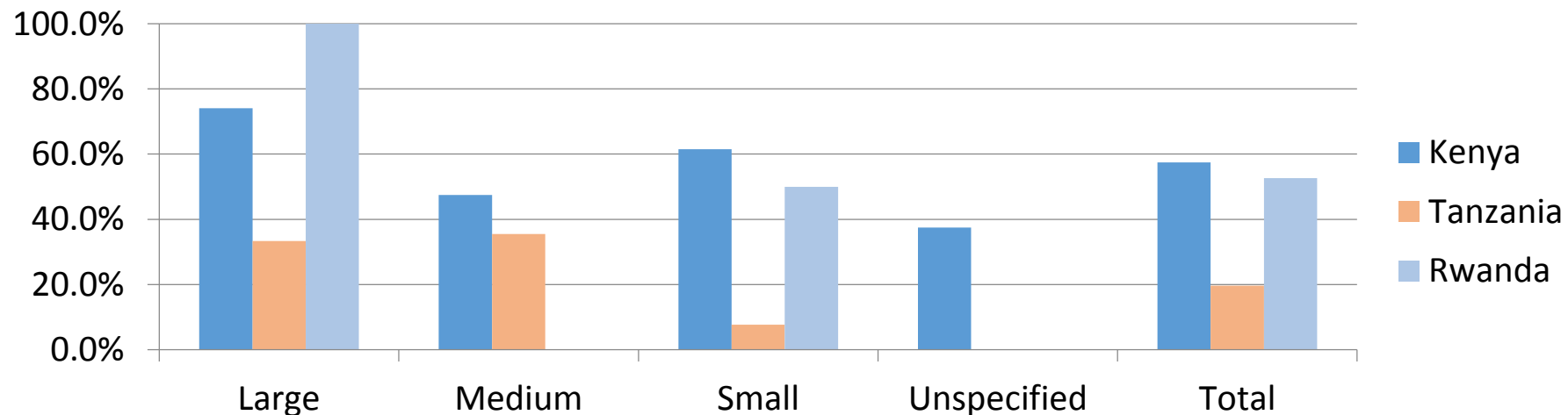
Top management is highly qualified, the fleet carefully managed and maintained, paying comparatively well its employees, and using modern techniques for its operations.

Both in Kenya and Tanzania, the top management positions are filled with highly qualified staff. A majority consists of graduate and post graduate levels, and has professional experience, typically between 5 to 15 years, but frequently much more.

Widespread use of GPS systems

Half of the enterprises with less than 10 trucks in Kenya and in Rwanda are equipped with GPS-based fleet management systems.

Percentage of use of GPS fleet management according to fleet size



The importance of export services and the employment impact

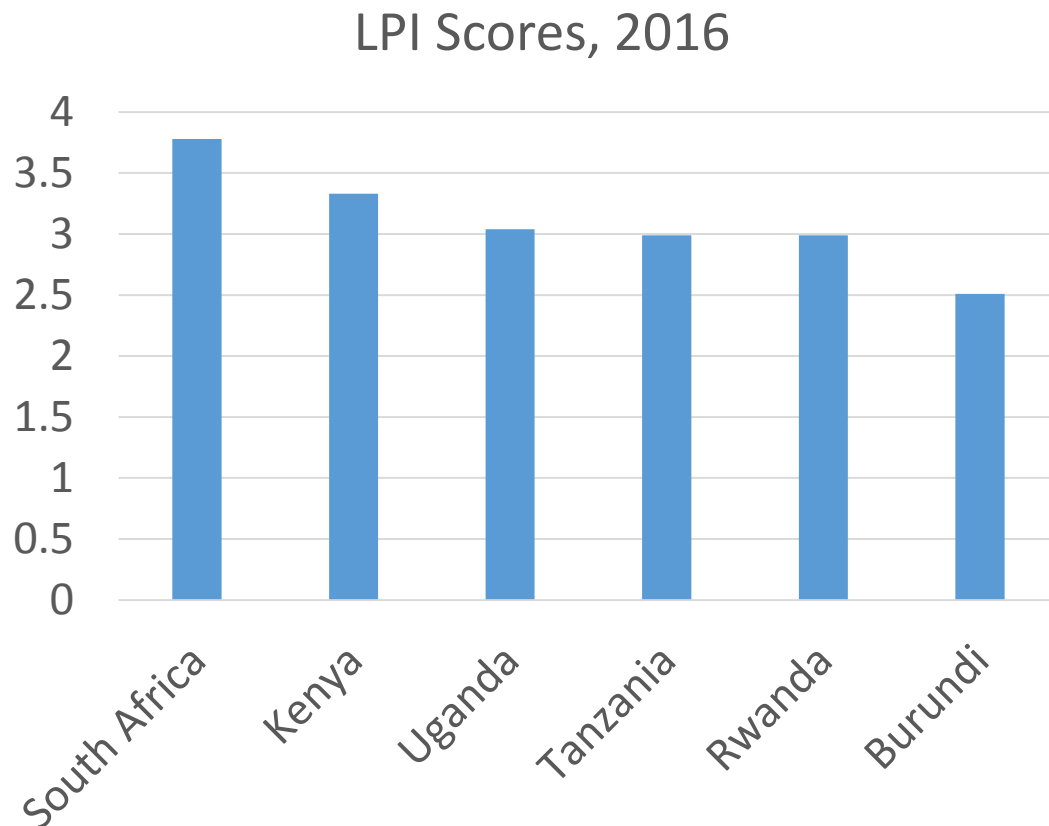
- At Katuna border-post (Rwanda/Uganda), only 25% market share of Rwandan companies => COMPETITION (almost 40% for Kenyan companies).
- We can estimate to 100 million USD the export of transport services from Kenya to Rwanda.
- **A relatively limited employment impact:** in Tanzania, less than 30,000 people in the trucking industry; in Kenya, close to 50,000

Each truck generates 2 – 3 direct jobs

Estimate of total employment generated by trucking industry

	Trucks	Drivers / truck	Employment / truck	Total employment
Kenya	17,066	1.11	2.73	46,590
Tanzania	12,356	1.18	2.23	27,554
Rwanda	444	1.11	2.77	1,230

Where does East Africa Stand in Logistics Performance?



- East African among most improved countries between 2014 and 2016
- Kenya, Rwanda, and Uganda over-perform their income group peers
 - Port, border post improvements
 - Transit management reforms
 - Reduction in en-route physical checks and controls

The positive impact of customs reform and border controls coordination

- *“While investing in infrastructure is essential, this response is often overrated, inter-agency and inter-country cooperation is vital to border reforms and will ultimately not only generate more revenue for countries but also reduce private sector spending,”* O. Hartmann.
- Crossing time for trucks loaded with goods that were routinely taking over 48 hours dropped to less than six hours, and average border-crossing time dropped from 24 hours to 4 hours (SSATP 2013).
- Based on estimates of the value of time for trucking enterprises and traders, the total savings generated by the improvement of the situation amounts to approximately US\$ 70 million per year after clearance reform at Malaba (Kenya-Uganda border).

What remains to be tackled?

- Cabotage
- Axle-load regulations – The counter example of Tanzania
- Infrastructure cost recovery

Preliminary conclusions

- Access to regional markets is sensitive to the efficiency of trucking
- Increasing trucking industry productivity is crucial for the development of various logistics intensive industries (fresh fruit, vegetables and flowers)
- Prospects for industries without smokestacks depend on regional harmonization and integration
- Important to invest in the medium and long term
- Tackle constraints along the value chain, and not always directly in transport sector

Thank you for your attention!

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Literature takeaways

- Kunaka et al. (2008) presents in the case of Zambia the various tools and instruments to protect fleet from competition.
- Lall et al. (2009) considered the role of *scale economies, market structure and competition between transport providers as determinants of the observed high transport prices.*
- USAID (2012) demonstrated in the case of West Africa that over 400 million USD could be saved from trucking liberalization and one-third of the benefits of reforms is attributable to reducing truck overloading. *Transit trade could increase on the order of 8 percent in value as a result of reform.*
- The regional dimension of infrastructure and trade facilitation policies is an important determinant of countries' ability to connect to global value chains. (Shepherd 2016). *Transit country performance matters most for landlocked countries.*