

Mozambique transaction costs

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Structure of the report

- Theoretical overview- transaction costs
- Mozambique – status quo
- Quantification of transaction costs
- Analysis of specific sectors
 - Agriculture
 - Transport
 - Tourism
 - Manufacturing
- Overview of government programs
- Comparison with SA government programs

Theory in brief

- Role of government in correcting market failures?
- Report - highlights a number of areas in which the Mozambique government can improve the business friendly environment, and show how this supports exports.
- What are transaction costs?
 - Traditionally: costs incurred through handling, transport, storage, processing, packaging, market fees, risk management, brokerage, export handling, marketing, etc.
 - More recently (NIE): non-price costs, such as the expenses incurred in finding someone to trade with, time spent negotiating a deal and the costs involved in ensuring that contracts are honoured
- This report – all relevant costs - domestic and cross-border.

Government vs. private sector

- Entrepreneurs respond to incentives created by the rules of business;
- Maximising behaviour – e.g. regular strikes in France; German farmers destroying produce – a response to the institutional structures;
- The institutional structure must make it attractive for the role-players to invest in productive activities;
- Asymmetric information between two parties to a transaction – e.g. pre-shipment inspections in Mozambique;
- Observable and unobservable transaction costs (cost of uncertainty in the market/ corruption, etc.);

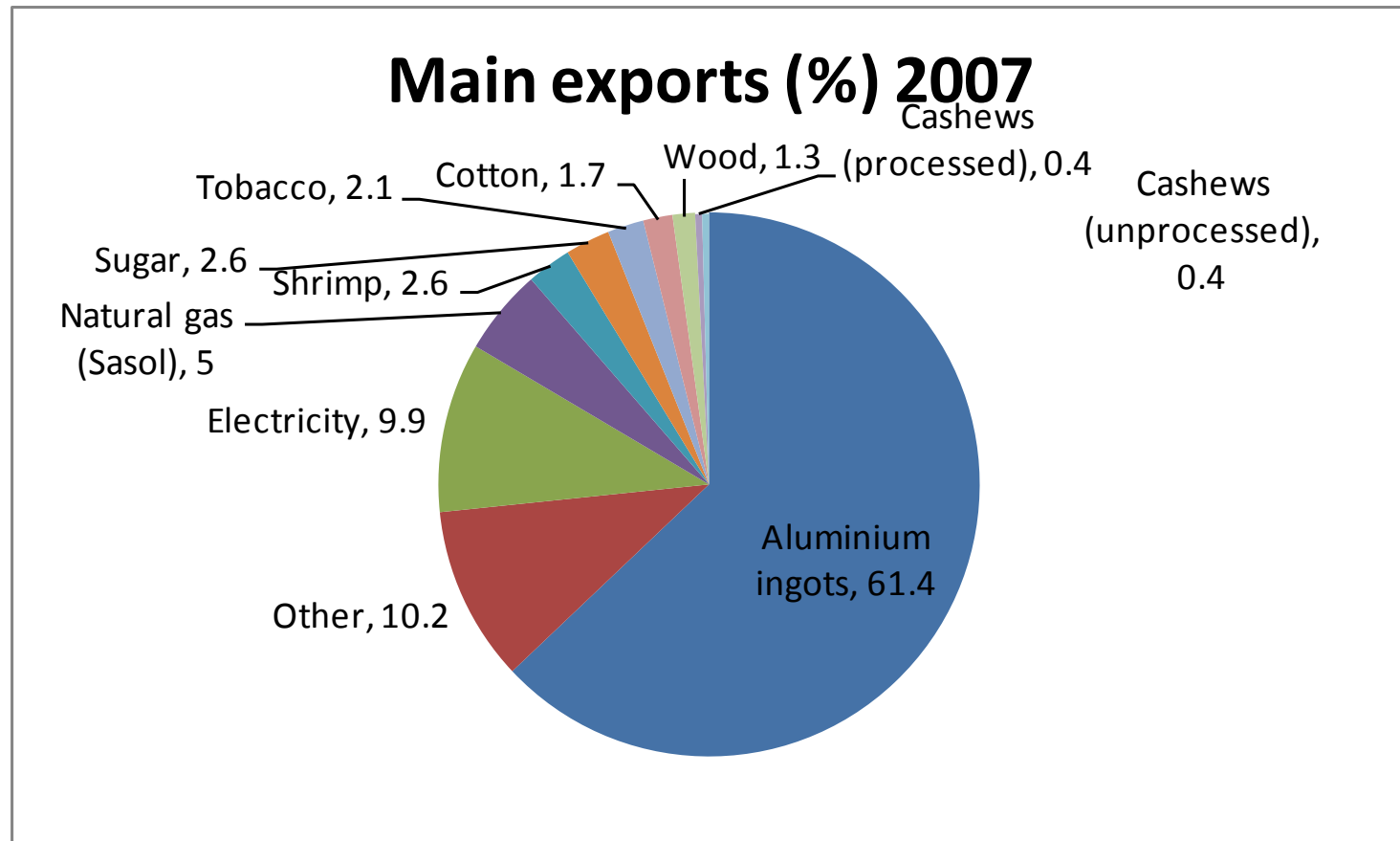
Lowering transaction costs

- To lower transaction costs, questions like the following should be asked. What can be done about:
 - producer bargaining power;
 - road infrastructure and transport;
 - international freight costs;
 - finance for agricultural trade and agribusiness;
 - market information;
 - electricity supply;
 - local taxation;
 - contract enforcement;
 - Corruption.

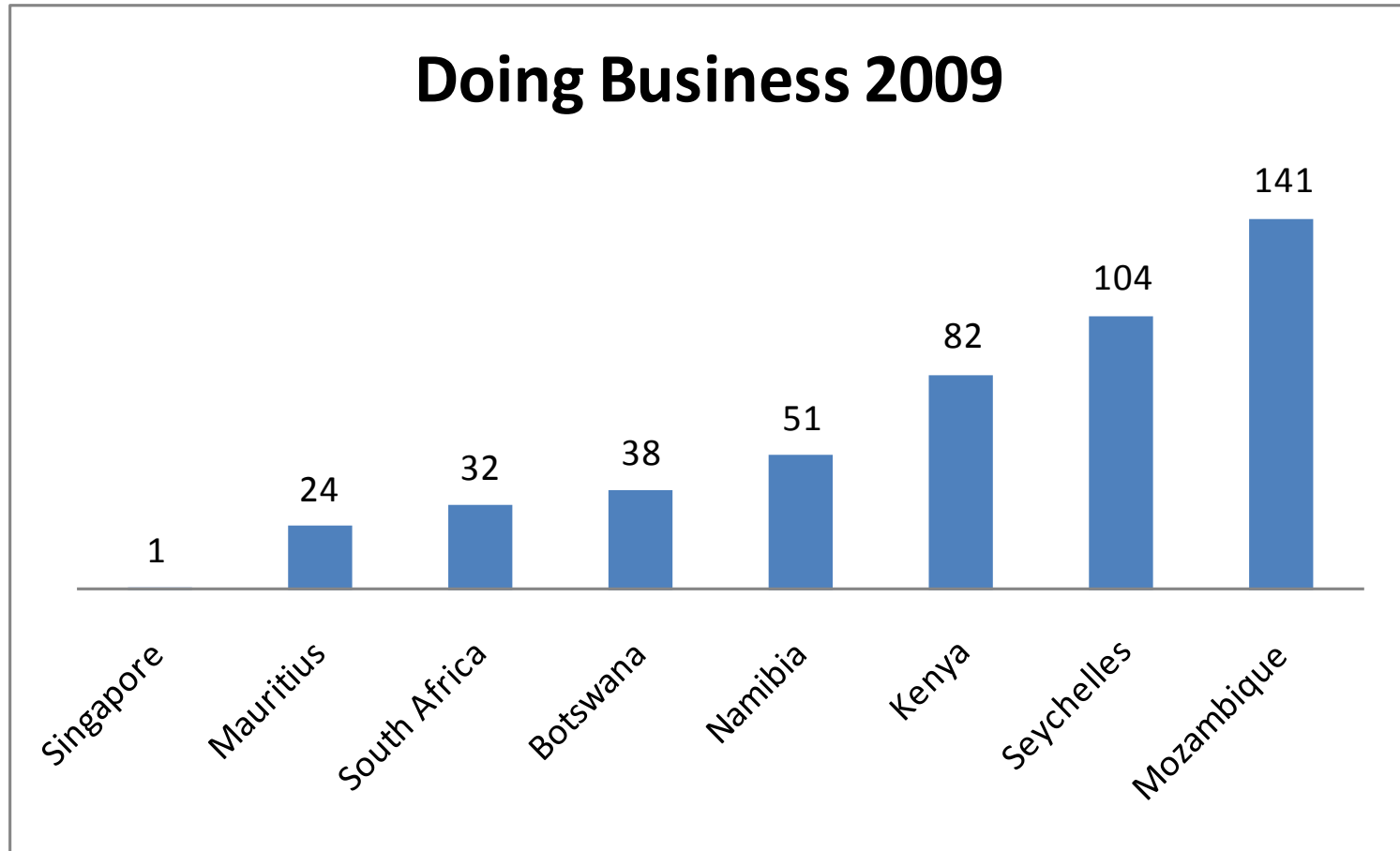
Mozambique – status quo

Country	Agriculture	Industry	Services	TOTAL	(% Manufacturing)
Angola	7.2	74	18.7	100	3.6
Botswana	2.3	53.3	44.4	100	3.9
Congo DR	46	25.3	28.7	100	5.5
Lesotho	17.3	41.4	41.3	100	18.5
Madagascar	27.9	15.8	56.4	100	14
Malawi	34.7	19.4	45.9	100	12.5
Mauritius	6.1	28.2	65.7	100	20.2
Mozambique	22.3	29.8	47.9	100	14.2
Namibia	9.9	31.7	58.4	100	13.5
SA	2.5	30.3	67.1	100	18.6
Swaziland	11.5	47.6	40.9	100	36.9
Tanzania	44.5	17.8	37.6	100	7.5
Zambia	18.5	25.1	56.3	100	11.7
Zimbabwe	18.1	22.6	59.3	100	12.8

Composition of exports



Doing business 2009 (was 134 in 2008)



Mozambique has been reforming

	Mozambique	Mauritius	Madagascar	SA
Starting a business	√	√	√	
Dealing with licences		√		
Employing workers				
Registering property		√		
Getting credit				√
Protecting investors	√			
Paying taxes		√		√
Trading across borders		√	√	
Enforcing contracts				√
Closing a business	√	√		

LPI

- 150 countries. Mozambique was number 110. Relatively worse than some of the other SADC countries, i.e. South Africa (24th), Angola (86th), Lesotho (108th), Malawi (91st).
1. Efficiency and effectiveness of the clearance process by Customs and other border control agencies;
 2. Quality of Transport and IT infrastructure for logistics;
 3. Ease and affordability of arranging shipments;
 4. Competence in the local logistics industry (e.g., transport operators, customs brokers);
 5. Ability to track and trace shipments;
 6. Domestic logistics costs (e.g., local transportation, terminal handling, warehousing); and
 7. Timeliness of shipments in reaching destination.

LPI (Scale 1(worse) – 5)

	Mozambique	SA	Sub-SA
Customs	2.23	3.22	2.21
Infrastructure	2.08	3.42	2.11
International shipments	2.25	3.56	2.36
Timelines	2.83	3.78	2.77
Logistics competence	2.36	3.54	2.33

Mozambique – improvement in LPI over past 3 years

Percent of respondents answering better/much better

	Malawi	Mauritius	Mozambique	South Africa
Overall business environment	100%	50%	100%	50%
Good governance and eradication of corruption	100%	50%	0	33.33%
Regulatory regime	100%	50%	0	50%
Availability of private sector services	100%	100%	100%	83.33%
Quality of telecommunications infrastructure	100%	100%	100%	66.67%
Quality of transport infrastructure	50%	50%	100%	33.33%
Other border crossing-related government agencies clearance procedures	100%	100%	100%	33.33%
Customs clearance procedures	100%	100%	100%	50%

Quantification of transaction costs

	Ranking	Mozambique	South Africa	SADC (Best)
Global Competitiveness	World (134)	130	45	45
Doing Business	World (181)	141	32	24
Corruption	World (145)	88	32	28
Property Rights	World (134)	116	20	20

Licenses

USAID: Mozambique's burdensome system of approvals, licenses, and special levies that impede market entry and raise the cost of doing business

Licenses		Mozambique	South Africa	SADC (Best)
Building Permits	Ranking (World = 181)	153	48	21 (Swaziland)
	Costs (% of income per capita)	747.8	27.5	27.5 (South Africa)
	Number of procedures	17	17	12 (Angola)
	Time (days)	381	174	93 (Swaziland)
Registering Property	Ranking (World = 181)	149	87	-
	Costs (% of property value)	12.9	8.8	3.3 (Malawi)
	Number of procedures	8	6	4 (Botswana)
	Time (days)	42	24	11 (Botswana)

Land

- Registering a property - whereas the cost in SA (% of property value) is 8.8%, it is almost 50% higher in Mozambique at 12.9%. It is almost 4 times as much as in Malawi (SADC best). Registering a property in Mozambique (keeping in mind that it is in any case only leased), takes on average 42 days compared to 24 days in SA (and 11 days in Botswana);
- DUAT – complicated system;
- Overlapping authority;
- 22 ministries and other governmental institutions as well as local communities;
- Cost elements:
 - Provisional authorisation;
 - Process costs – location draft, consultation fees; community incentive;
 - Definitive authorisation

Cost of capital

Cost of Capital		Mozambique	South Africa	SADC (Best)
Ranking (getting credit)	World (181)	123	2	2
Interest rates				
Nominal	%/year	25	15.5	
Real	%/year	15	1.9	
Interest Rate Spread (Ranking)	World (132)	97	45	45
Private bureau coverage	%/adults	0.0	64.8	64.8

Energy costs

Energy		Mozambique	SA	Lesotho	Zambia
Electricity	Average value of electricity \$/MWh				
	Industrial	45-60	19-34	43	54
	Commercial	120	75	91	77
	Residential	90	70	70	38-106
Fuel	\$/litre				
	Petrol	1.66	1.25		
	Diesel	1.33	1.24		

Energy related problems

- Low cost energy- exported to SA for further processing;
- Mozambique exports 35% of electricity to Zimbabwe and SA;
- Quality of energy supplied- frequent outages;
- Current Eskom power crisis – impact on Mozambique;
- No differentiated transmission tariffs – not creating any incentives;
- Limitations of grid – northern parts;
- Average industrial tariffs and energy quality in Mozambique have put the country's industry at a distinct competitive disadvantage vis-à-vis South Africa, but not against other regional countries.
- Due to the power supply crisis in South Africa, its competitive advantage is about to disappear

Example

Case study: Industrial firm electricity costs (June 2008)

Consider a firm with a demand for 1,152,000 kWh/month (load factor of 80%);

- In Mozambique an industrial customer will pay US\$51,840- \$69,120/month
- In South Africa an industrial customer will pay US\$28,296 (low season) to \$56,569 (high season)

Weighted average monthly bill is US\$35 365

Savings over Mozambique is ~\$US 16-24k per month

South African firms enjoy a 32-49% cost advantage

New tariff structure for Eskom should eliminate this differential

Water

Water		Mozambique	South Africa
Maputo and Matola cities	(\$/month)		
	Up to 50 m (Industrial use)	35	34.9 44.21
	Tariff for Rent of Counter Meter/Valve (Diameter = 8")	20.176	5.44

Labour costs (Labour law reforms)

Labour		Mozambique	South Africa	SADC (Best)
Ranking (Employing workers)	World (181)	161	102	34 (Namibia)
Costs (Minimum wage)	\$/month	80	250	n.a.
Firing costs	weeks	134	24	24

Transport costs (Cost of transport from Maputo and Durban to selected destinations in US\$)

(indicative data from the Maputo Corridor Logistics Initiative (2006))

	Maputo	Durban	Difference	Maputo	Durban	Difference
US\$	Long haul	Long haul		Rail	Rail	
JHB/Pretoria	1323.08	769.23	553.85	412.15	466.92	-54.77
Middelburg	1076.92	1366.92	-290.00	398.15	907.69	-509.54
Witbank	1076.92	1308.46	-231.54	398.15	923.08	-524.92
Nelspruit	769.23	1923.08	-1153.85	241.23	1076.92	-835.69
Swaziland	769.23	1584.62	-815.38	438.46	538.46	-100.00

Telecoms costs

Telecommunications		Mozambique		South Africa	
				Off-peak	Peak
Fixed line to fixed line	Domestically (\$/min)	0.12		0.0434	0.0867
	SADC	Initial 3 minutes (\$)	(\$/per additional min)		
		0.984	0.328	0.1533	0.1867
	Europe and USA	1.056	0.352	0.0964	0.1077

Mobile		Vodacom Mozambique		Vodacom South Africa	
	Monthly subscription (\$)	67,4		85.33 (106.67)	
	Domestic calls (\$/min)	Off-peak	Peak	Off-peak	Peak
	Vodacom to Vodacom	0.1296	0.1584	0.12	0.1906
	Vodacom to other mobile networks	0.2616	0.312	0.1533	0.2466
	Vodacom to fixed	0.1608	0.2688	0.12	0.1533
	International calls (\$/min)	Off-peak	Peak	Off-peak	Peak
	South Africa (Vodacom)/ Mozambique (Vodacom)	0.4704	0.4704	0.17	0.3213
	SADC, UK & US (\$/min)	0.5304	0.5304	0.17	0.3213
	Europe (\$/min)	1.0632	1.0632	0.17	0.3213
	SMS (domestic)	0.045	0.045	0.0467	0.1133
	SMS (international)	0.1236	0.1236	0.232	0.232
	Data (\$/Mb)	0.2698	0.2698	0.2667	0.2667
ADSL	\$/month				
	128kb/s	35.96		19.87	

Telecoms costs: South Africa vs. best practice

	Rank	Out of: (number of countries surveyed)	Number of times more expensive than the cheapest price	% greater than the average price
International leased lines	2	14	25,6	253,3%
Domestic leased lines	5	14	4,4	12,6%
Business ADSL	3	15	4,0	96,7%
Retail ADSL	1	15	5,6	118,5%
Mobile – business basket	1	15	12,3	106,9%
Fixed line – business basket	3	15	10,4	52,0%
Mobile – retail basket	8	15	5,6	-6,1%
Fixed line – residential basket	6	15	11,0	-3,4%
International voice	10	15	2,9	-47,4%

Taxes

Taxes		Mozambique	South Africa	SADC (Best)
Ranking	World (178)	43	62	6
Corporate Income taxes	Max %	32	29	21.7
Personal Income Taxes	Max %	32	29	
VAT	Max %	17	14	
Costs	% of profits	34.3	37.1	16.1
Time	Hours/year	230	350	76
Number	Payments	37	11	7

Tax reforms

- 'Replacing a distortionary turnover tax with a 17% value added tax (VAT) in 1999;
- Restructuring the excise tax which currently applies to over 140 specific products at rates between 15 to 65%;
- The introduction of two new income tax codes, a company tax with a basic rate of 32% and an individual tax with marginal tax rates ranging from 10-32% in 2002;
- The reduction of import duties with standard tariff rates which range from 0% on designated basic goods, to 20% on consumer goods. The standard tariff on intermediate goods is 7.5%, 5% on capital goods and fuel and 2.5% on raw materials;
- Adopting reforms for fuel tax, the stamp tax and municipal levies;
- Introducing Unique Taxpayer Identification Numbers, enacting a new decree on tax penalties, restructuring the tax department and establishing a legal framework for the establishment of a central revenue authority'.

International trade

International Trade		Mozambique	South Africa	SADC (Best)
Ranking	World (181)	98 – 116	127 – 133	12 - 22
Export	Costs			
	\$/Container	1,200	1,445	725
	Documents (Number)	8	8	4
	Time (days)	26	30	17
Import	Costs			
	\$/Container	1,475	1,721	677
	Documents (Number)	10	9	6
	Time (days)	32	35	16

Scanning Costs

Scheduled fees:	Mozambique	Durban
■ Import containers	\$100 per TEU	zero
■ Export containers	\$ 70 per TEU	zero
■ Empty containers	\$ 20 per TEU	zero
■ Transit containers	\$ 45 per TEU	zero
■ Vehicles	\$ 65 per unit	zero
■ Bulk cargo	\$ 0.25 to \$1.90 per ton.	zero

Example:

Port scanning fees: World Bank research

1% increase in transportation costs – 2.4% decline in merchandise trade;
Shipments from Mozambique to US or EU - \$100= increase of 5%;
Could reduce trade by more than 10%.

Starting a business

Starting a business		Mozambique	South Africa	SADC (Best)
Ranking	World (181)	144	47	27
Procedures	Number	10	6	5
Duration	Time (days)	26	22	6
Minimum Capital	% of gross national income per capita	122.5	0	0
Cost	% GNI per capita	22.9	6.0	2.3

Improvement in registering times

Year	Number of days	Number of procedures
2004	540	18
2005	153	14
2006	153	14
2007	113	13
2008	26	10

Sector specific analysis - Transport

- Problems with infrastructure
- USAID: ‘weaknesses in the transport infrastructure and in border crossing procedures that raise transport and transaction costs, rendering Mozambican products uncompetitive in global markets’. One of 3 main impediments to export growth;
- Role of transport corridors (e.g. Maputo corridor);
- Issues identified in interviews:
 - Delays and discretion at customs
 - Inappropriate weighbridge facilities
 - Delays in the returns of value added tax paid on inputs
 - Labour law and its relation to skilled workforce
 - Lack of skills, especially with regards to skilled drivers

Sectors - Agriculture

- Issues identified by other consultants:
 1. system used to administrate land use (DUAT),
 2. lack of available finance,
 3. insufficient or low quality infrastructure investment (and the maintenance of this infrastructure),
 4. difficulties with tax administration,
 5. meeting sanitary and phytosanitary requirements for export,
 6. various kinds of delays when importing and exporting; and
 7. difficulties in obtaining returns of value added tax (VAT) paid on inputs into the production process.
- Issues identified in our interviews:
 1. Assignment of land use (DUAT)
 2. Labour law and discretion in labour inspections
 3. Electricity costs and disruption in supply
 4. Phytosanitary implementation
 5. Delays in the return of value added tax paid on inputs
 6. Delays and discretion at customs

Sectors- Tourism

- General constraints :
 1. Infrastructure;
 2. Air transport, road networks, energy distribution, telecoms;
 3. Water quality and solid waste management;
 4. Land use and land tenure;
 5. Licensing procedures;
 6. Labour regulations – seasonal workers and training of staff
 7. Visa requirements
- Issues identified in our interviews:
 1. Assignment of land use (DUAT)
 2. Labour law and discretion in labour inspections
 3. Electricity costs and disruptions in supply
 4. Monopoly market conditions in supply of air transport

Government programs

- Investment Act (1993) and Investment Promotion Centre (1997)
- Various financial incentives and investment guarantees;
- Industrial policy;
- Estratégia de Moçambique para o processo de integração regional na SADC;
- Trade policy;
- Industrial Free Trade Zones;

- Comparative SA programs
- NIPF (IPAP)

Comparison – business environment

	Mozambique	SA	SADC (best)
Global competitiveness	130	45	45
Doing business	141	32	24
Corruption	88	32	28
Property rights	116	20	20
Building permits	153	48	21
Cost of capital (getting credit)	123	2	2
Labour	161	102	34
Taxes	43	62	6
International trade	98-116	127-133	12-22
Starting a business	144	62	6
Interest rate spread	97	45	45

Overall Comparison

	Measurement Unit	Mozambique	SA	SADC (best)/ (other SADC country)
Building permits	Costs (% of per capita GNI)	747.8	27.5	27.5
Time	Days	381	174	93
Registering property	Costs (% of property value)	12.9	8.8	3.3
Nominal interest rate	%	25	15.5	n.a.
Real interest rate	%	15	1.9	n.a.
Electricity	Average value \$/MWh (Industrial)	45-60	19-34	43 (Lesotho)
	Commercial	120	75	77 (Zambia)
	Residential	90	70	70 (Lesotho)
Fuel	Petrol (\$/litre)	1.66	1.25	n.a.
	Diesel (\$/liter)	1.33	1.24	n.a.
Labour	Minimum wage (\$ per month)	80	250	n.a.
	Firing costs (weeks)	134	24	24

Comparison

Taxes	Personal income (max %)	32	29	n.a.
	Corporate taxes (max %)	32	29	21.7
	VAT %	17	14	n.a.
International trade	Export (\$/container)	1 200	1445	725
	Import (\$ per container)	1 475	1 721	677
Scanning costs	Per TEU (\$)	100	0	
Starting a business	Minimum capital (% of per capita GNI)	122.5	0	0
	Cost (% of per capita GNI)	22.5	6.0	2.3

Proposals for lowering transaction costs

- Eliminate minimum capital requirement (Botswana, Mauritius & SA);
- Registrations at various authorities merged;
- Selective scanning of cargo (e.g. 20%);
- Abolish pre-shipment inspections;
- Create a single window that links customs with banks and port authorities;
- Labour termination costs;
- Property transfer tax – rather a service fee;

Telecoms: South Africa vs. best practice

	PPP-adjusted GDP per capita US\$	Population size (m)	Population density per sq km	Gini coefficient ¹
South Africa	12 347	46,9	38,6	57,8
International telecoms best practice				
Australia	31 646	20,3	2,7	35,2
Denmark	21 317	5,4	127,7	24,7
Hong Kong	31 165	6,9	6 663,7	43,4
Netherlands	32 927	16,3	481,7	30,9
South Korea	21 868	48,3	489,2	31,6
Sweden	31 062	9,0	22,0	25,0
United Kingdom	32 005	60,2	248,9	36,0
United States	41 854	296,4	32,4	40,8
Peer group telecoms best practice				
Brazil	8 730	186,4	22,0	57,0
India	3 486	1 094,6	368,2	36,8
Malaysia	10 843	25,3	77,2	49,2
Morocco	4 421	30,2	67,6	39,5
Thailand	8 551	64,2	125,7	42,0
Turkey	8 430	72,1	93,6	43,6