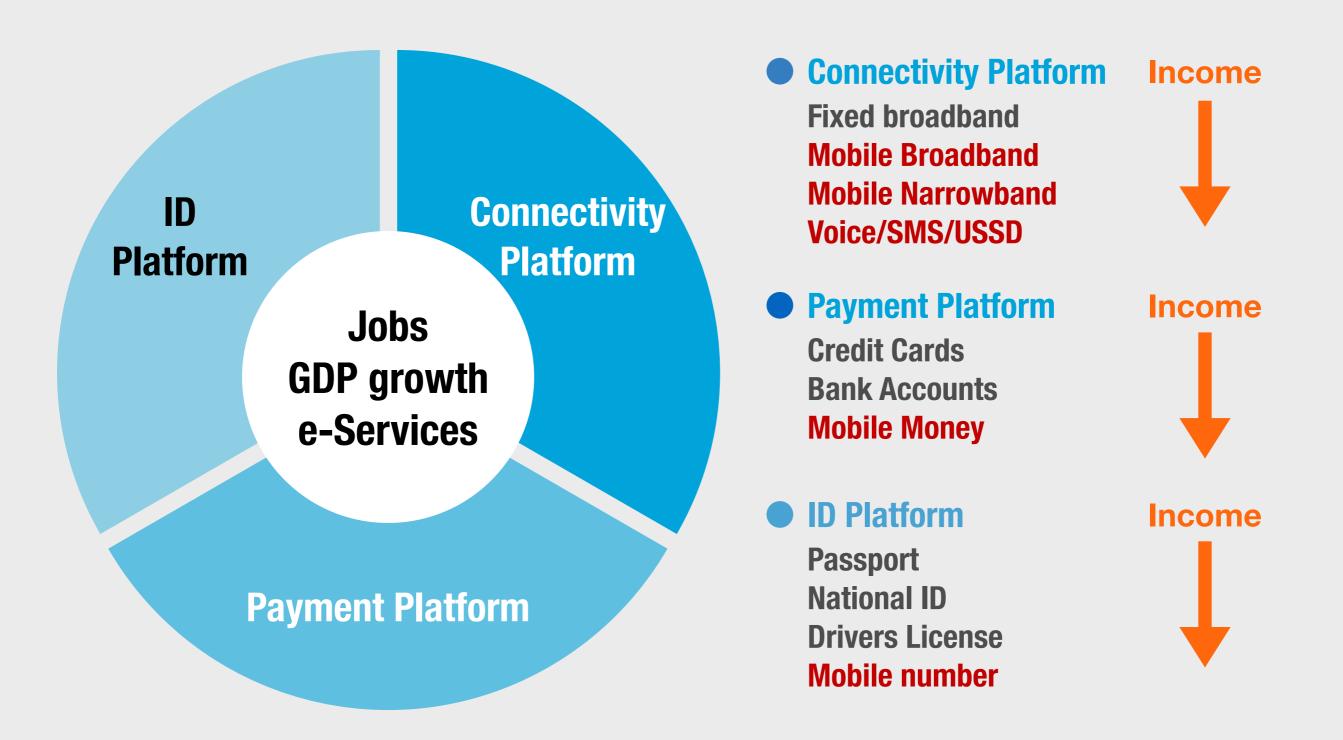
ICT SECTOR TAXES

Research ICT Solutions

Dr. Christoph Stork and Steve Esselaar 8 July 2021



The ICT sector supports all three platforms needed for the digital economy



ICT taxes weaken all three platforms and disadvantage the poor

International studies measuring the impact of a 10% increase in mobile broadband penetration on GDP growth

Authors	Countries	GDP growth
Czernich et al. 2009	OECD, 1996-2007	0.9-1.5%
Koutroumpis 2018	OECD, 2002-2016	0.82-1.40%
OECD 2011	EU countries, 1980-2009	1.1%
Qiang et al. 2009	Low income countries 1980-2006	1.4%
Scott 2012	Low income countries 1980-2011	1.35%
Endquist et al. 2018	Global 2000-2015	0.6-2.8 %
	World	1.5%
ITU 2020	Africa	2.46%

- Higher broadband penetration spurs economic growth and job creation.
- There is a well established link between broadband penetration and GDP growth. The ITU (2013 & 2020) lists a range of studies that measure the macroeconomic effects of mobile broadband penetration.
- The effects vary for sets of countries and time periods and range from 0.8% to 2.46% of additional GDP growth for an increase of 10% in mobile broadband penetration.
- The additional GDP growth of a 10% higher broadband penetration is not a once-off benefit but continues to benefit a country going forward.

Effect of 10% higher mobile broadband penetration on selected African countries based on the ITU (2020) data for Africa

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Country	GDP 2019	Additional GDP	Tax to GDP Ratio	Additional Tax	Additional Tax if GDP to tax ratio is increased by 1%
	USD million	USD million	%	USD million	
Angola	94,635	2,328	9.2%	215	946
Botswana	18,341	451	19.5%	88	183
Burkina Faso	15,746	387	15.2%	59	157
Cameroon	38,760	954	12.2%	117	388
Cote d'Ivoire	58,792	1,446	12.0%	173	588
Ethiopia	96,108	2,364	7.6%	180	961
Malawi	7,667	189	17.3%	33	77
Kenya	95,503	2,349	15.6%	367	955
Rwanda	10,122	249	13.5%	33	101
South Africa	351,432	8,645	27.0%	2,330	3,514
Tanzania	63,177	1,554	11.8%	184	632
Uganda	34,387	846	11.6%	98	344
Zambia	23,065	567	15.2%	86	231
Sub-Saharan Africa	1,755,011	43,173	18.9%	8,176	17,550

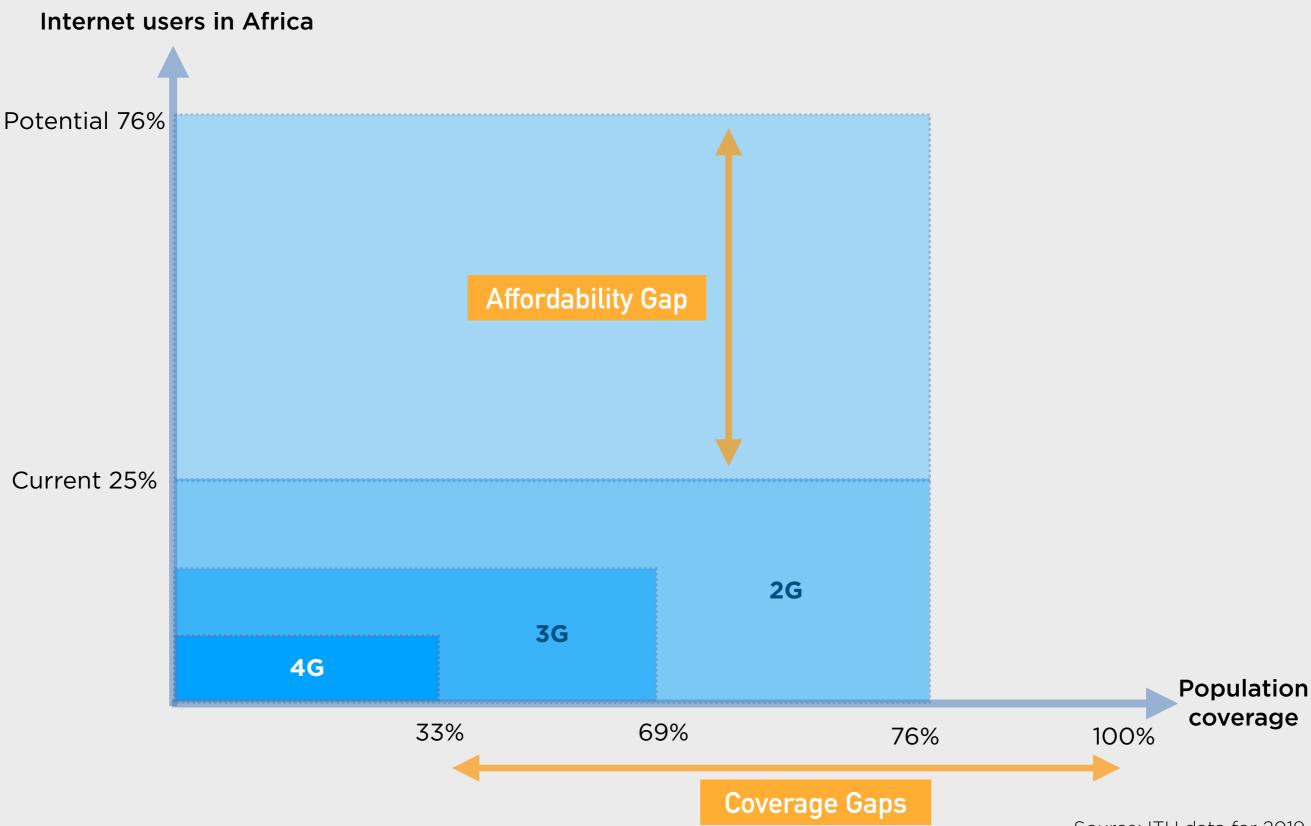
■ The potential economic cost of ICT Sector taxation must be taken into account.

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- Lower prices lead to higher broadband penetration and thus to increased economic growth and, as a result, also
 increased tax revenues for the state.
- Across Sub-Saharan Africa a 10% higher broadband penetration would yield USD 43 billion in additional GDP growth and USD 8 billion in additional tax revenue for states, based on the latest ITU data (2020) for Africa.
- Increasing tax compliance and tax to GDP ratio by 1% leads to even higher tax revenues

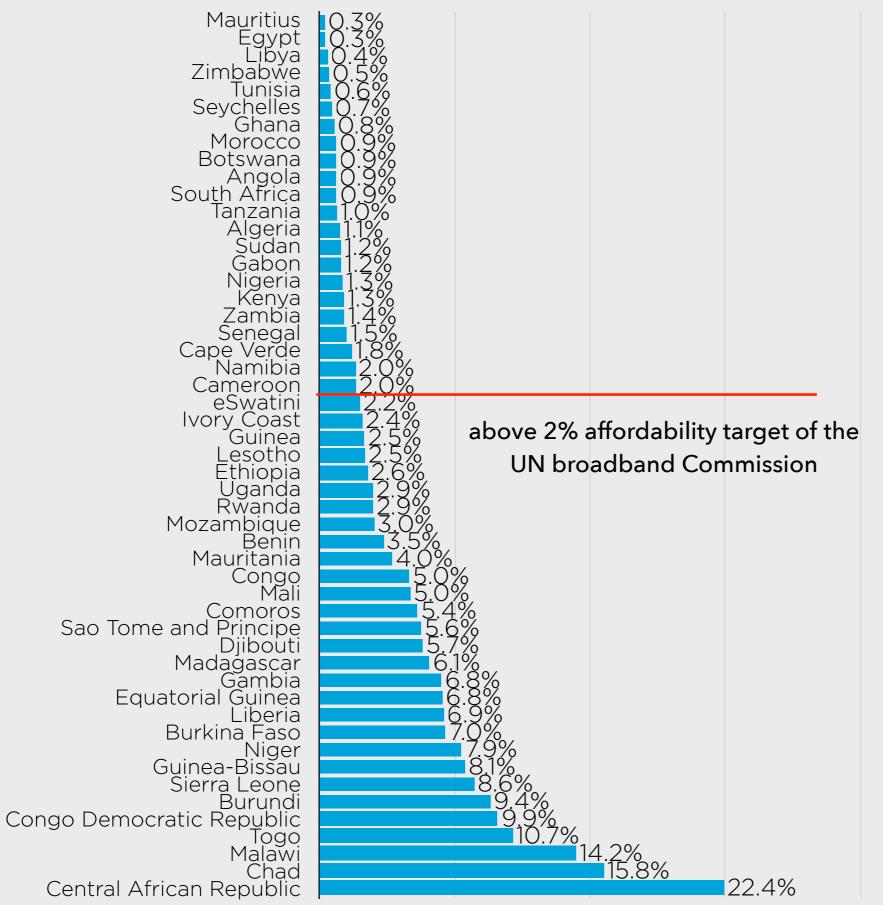
The affordability gap is neither good for our societies nor MNOs

RIS



Source: ITU data for 2019

Q1 2021 1GB per month as % of GNI per capita per month ⁶



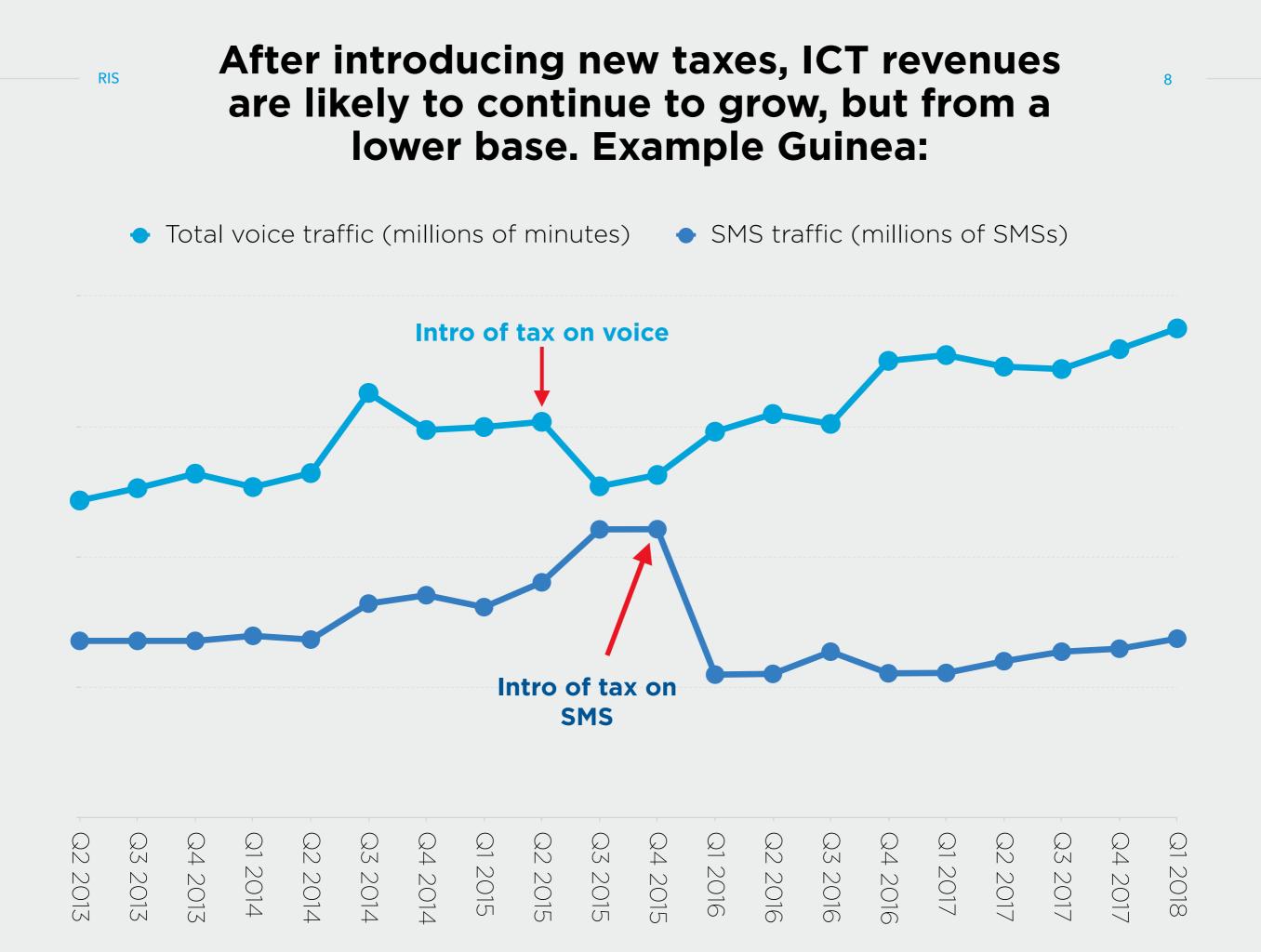
Source: Research ICT Solutions

The main objective of taxation is to generate income for state

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	Purpose	Paid by	Collected from	Problems
Corporate Income tax		MNOs		 Tax avoidance by multinationals through transfer pricing OECD initiative: minimum CIT of 15% (30 countries joined already)
VAT PAYE	Generate income for state	End User		 Domestic service providers have disadvantage if streaming services do not pay VAT as well. Hence withholding taxes. The OECD recommends that VAT is charged on non-resident companies, but that the existing processes for collecting VAT are simplified.
Excise Duties	Discourage harmful consumption (gambling, alcohol, tobacco).	_		in Africa often used to generate income for state
OTT taxes	Pretend to tax OTT providers but effectively just generate income for state by taxing end-users			
Spectrum fees	Dis-incentivise spectrum hoarding and safeguarding spectrum is used for best economic application			Spectrum fees, in particular once off fees are often used to generate income for state
Regulator Levy	Pay for cost of regulation	MNOs		
USF Levy	Pay for UAS projects for uneconomical areas.			USF fees are often collected by revenue authority and not disbursed leading to additional indirect taxation

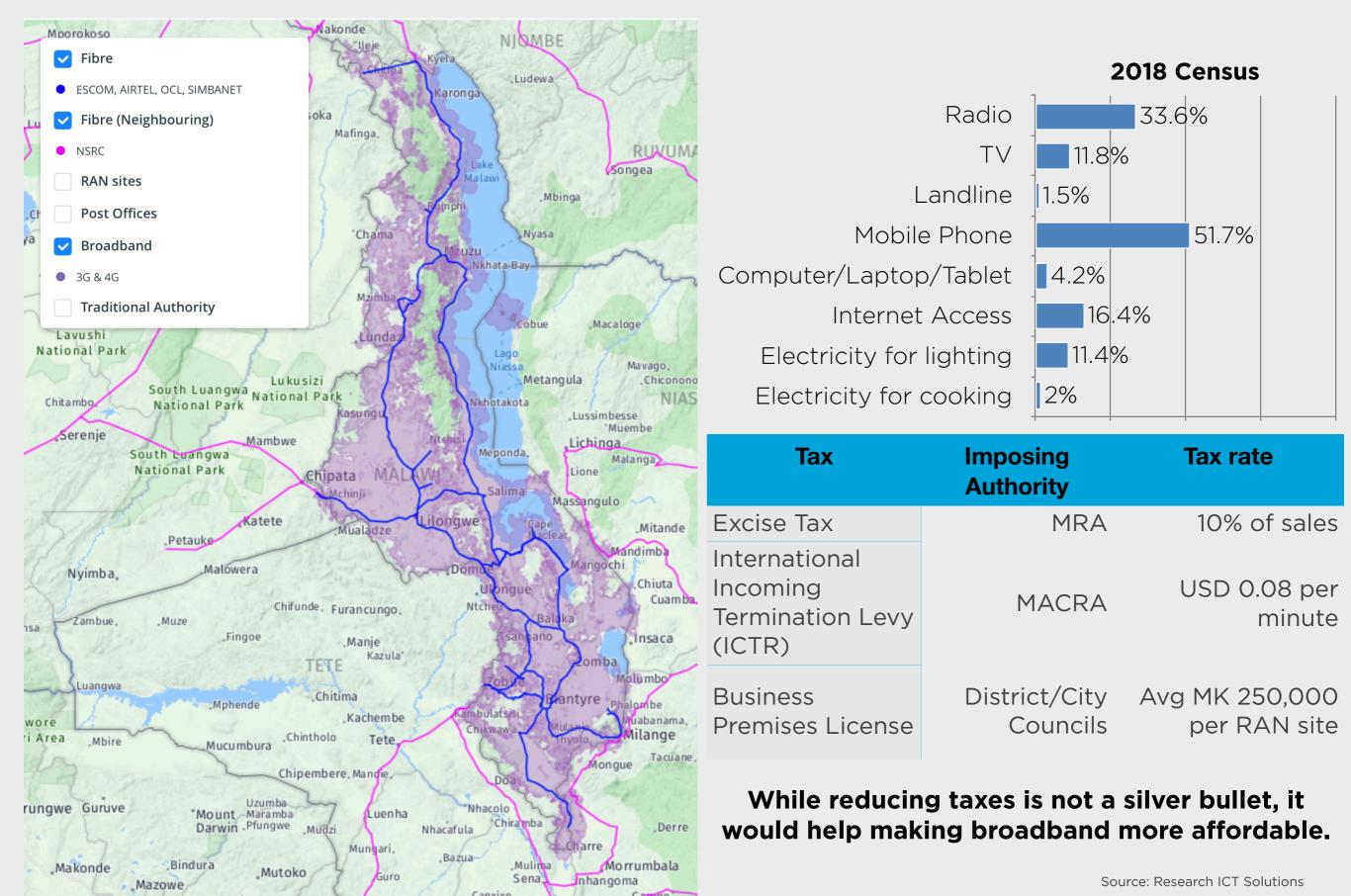


Best-practice principles for taxation

- Broad-based: A broad base of taxation means that a lower tax rate is required to raise the same revenue, while sector specific taxes distort incentives and require higher levels of taxation to get the same revenue.
- Take into account externalities: Sector specific taxes should be imposed on activities with negative externalities where the objective is to lower consumption, such as alcohol or tobacco, and should not be imposed on sectors with positive externalities, such as telecoms.
- Simple and enforceable: Taxes should be clear, easy to understand, and predictable, thereby reducing investor uncertainty and ensuring better compliance.
- Incentives for competition and investment should be unaffected: Higher taxes for one sector in comparison to the rest of the economy could reduce investment in that sector.
- Progressive not regressive: The tax rate should increase as the taxable amount increases. Specific value taxes on small amounts should be avoided because they make the poor pay more.

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Example Malawi: 88% broadband population coverage, extensive national backbone infrastructure but low broadband adoption.



Example Sudan: A 10% higher Broadband Penetration could add USD 465 million in GDP growth and USD 37 million in taxes

	Sudan	Sources
GDP 2019 USD million	18,902	WDI 2020
Additional GDP USD million	465	calculation based on ITU 2020 effect size for Africa of 2.46%
Tax to GDP Ratio	7.96%	WDI 2020, Sudan 2016
Additional Tax USD million	37	Calculation

- VAT of ICT revenues was 30% now 40%, may be the highest in the world
- Corporate income tax is not being charged on profit but on revenues 10% (because new entrants that make a loss initially but that should not be reason any longer)
- Localities charge for sites (negotiate)
- Equipment VAT 17%

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 Administrative charge on cross border connectivity (drop points) and landing stations, VSAT teleports. (TPRA)

		USD million
	Sudatel	293.9
2020 Revenue	MTN	200.8
2020 Revenue	ZAIN	417.0
	Revenue Total	911.7
7% but will be 10 tax on revenues	0% not implemented by now + 40% VAT	455.8
Profit estimate I	based on 30% profit margin	273.5
Corporate Incor	me tax based on rate of 35%	95.7
VAT of 17%		155.0
New direct tax		250.7
Tax shortfall		205.1

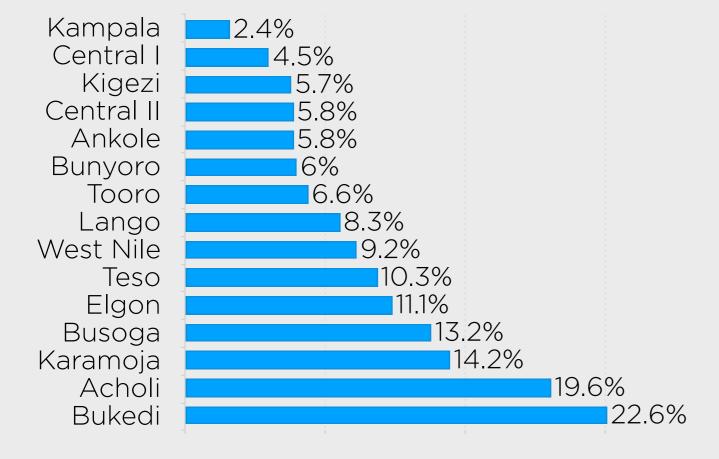
CASE STUDY UGANDA

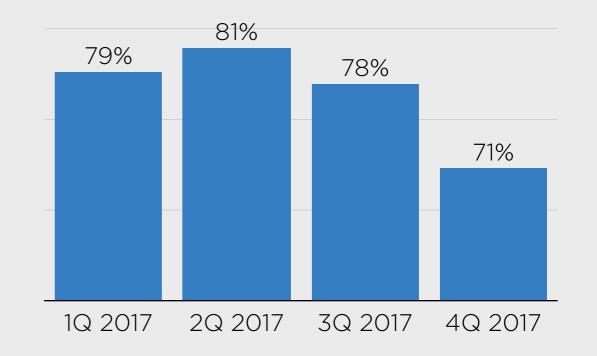
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Uganda's excise duties on the ICT Sector and and OTT tax violate best practice principles

April 2002	July 2014	July 2018	June 21
Airtime 7%	12% on Airtime b	ut not data	12% on Airtime
	VAS 20%		
	Landlines 5%	Landlines 12%	
	MM fees 10%	MM fees 15%	
		1% MM tax on transaction value of pay	/ments, transfers & withdrawals*
		OTT tax 200UGX per day or 6000 UGX per month	removed

Social media tax of UGX 6,000 per month as % average individual income UGX 6,000 per month expressed as share of MTN Uganda's ARPU indicates that most users will not be able to afford it.





The social media tax of UGX 200 a day a discriminates against low usage data bundles - i.e. the poor

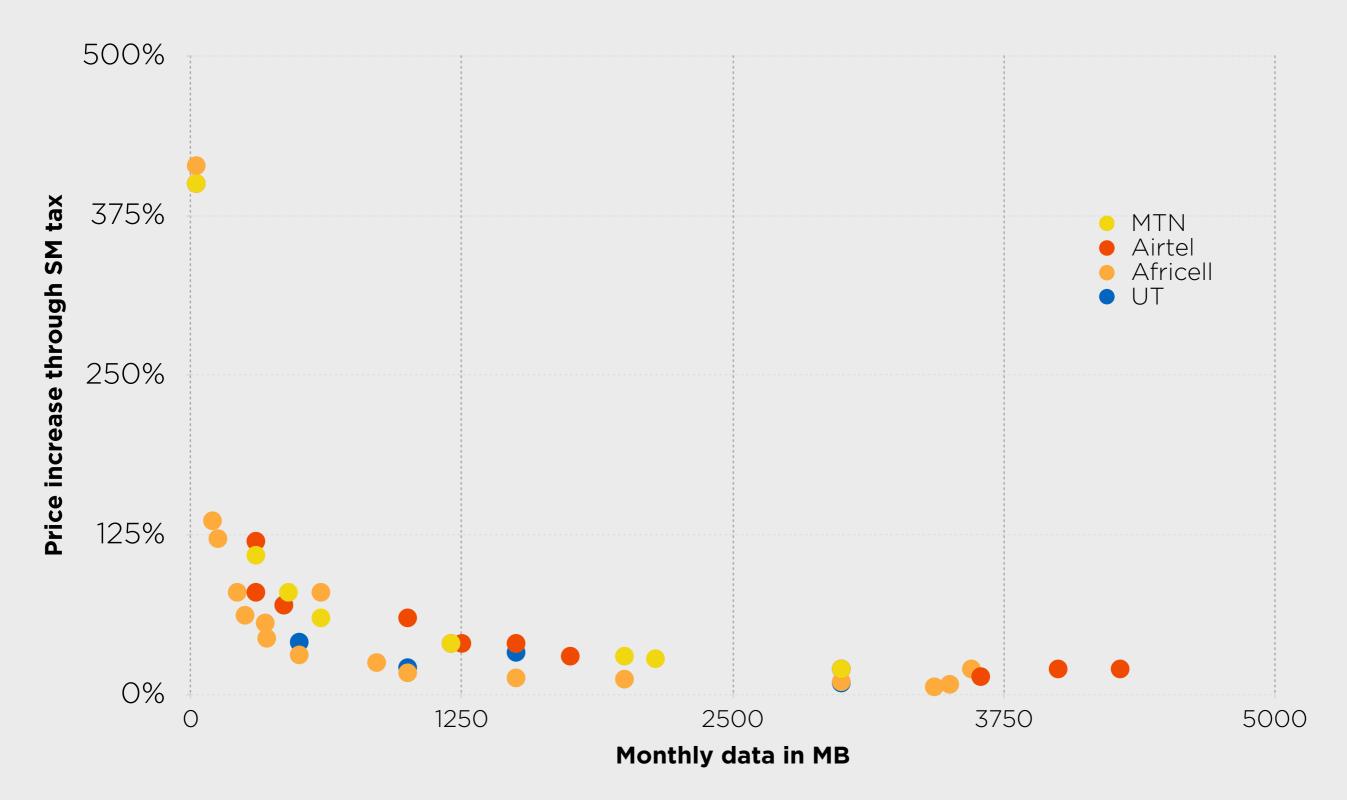


Table 1.1.1: Revenue Collections (UGX, Bn) by Tax Head

Tax Heads	FY2016/17	FY2017/18	FY2018/19	FY2019/20
Net URA Collections	12,719.63	14,456.11	16,617.65	16,751.64
Gross Revenues	12,894.95	14,659.76	16,958.10	17,126.41
Domestic Taxes	7,480.40	8,448.92	10,074.12	10,679.81
Taxes on International Trade	5,414.56	6,210.84	6,883.98	6,446.60
Direct Domestic Taxes	4,180.05	4,670.68	5,511.68	5,878.63
PAYE	2,114.99	2,396.11	2,811.30	3,039.83
Corporate Tax	764.27	884.8	1,167.75	1,302.30
Other Income Tax	46.31	55.16	59.3	51.18
Rental Tax	71.74	88.75	115.23	103.69
Withholding Tax	677.93	754.29	846.66	872.99
Tax on Bank Interest	473.76	457.03	476.35	484.39
Presumptive Tax	4.46	5.32	7.21	5.22
Casino and Lottery Tax	26.59	29.22	27.9	19.04
Indirect Domestic Taxes	2,842.23	3,188.73	3,871.48	3,874.67
Excise Duty	819.78	953.91	1,317.04	1,266.08
Cigarettes	12.07	15.59	14.91	21.02
Beer	216.72	263.07	269.28	267.89
Spirits/Waragi	98.89	157.51	155.65	104.55
Soft Drinks	90.01	118.87	125.99	120.53
Phone Talk Time	194.3	178.97	211.88	231.26
Sugar	37.97	30.28	35.53	40.1
Bottled Water	16.17	16.43	19.03	19.15
Cement	23.72	26.74	32.09	34.51
Cosmetics	9.57	9.57	12.47	13.13
Mobile money transfers	45.81	57.18	74.03	79.02
International Calls	33.97	33.34	34.94	27.05
Bank charges	40.5	43.69	84.65	98.67
Cooking oil	-	-	39.84	48.92
Sweets and Chocolates		2.52		
Furniture		O.15		
Lavas an Malalla Managa			15707	100 50
Levy on Mobile Money	-	-	157.23	100.56
Over The Top	-	-	49.52	59.72

Of gross tax revenues

- OTT tax: 0.003487%
- Mobile Money transfer: 0.004613%
- Mobile Money Ley: 0.00587%
- International Calls: 0.001579%
- Airtime: 0.0135%

Removing excise duty on airtime (from 2002) is tax neutral (USD 2 million), while benefiting the poor

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	UGX billion	With excise duty	Without excise duty
	Excise Duties (URA 2016/17)	194.3	0
	Implied industry airtime revenues	1,619	1,969
Direct	MNO Profits from airtime (35%)	567	689
Direct	VAT	291	354
	Corporate Tax	170	207
	Net direct tax impact	656	561
Indirect from	Additional GDP		608
increase in mobile subribers Additi	Additional tax revenues		86
Overall Impact tax in	mpact for 1st year UGX billion	656	647
Overall Impact tax in	mpact for 1st year USD million	177	175

- Not broad-based: single out ICT sector
- Penalise positive externalities

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- New taxes are not simple and enforceable
- New taxes significantly affect competition
- Regressive not progressive tax



Adopt a long term vision focusing on economic growth and job creation: Unleash, not squeeze, the ICT sector

- OTT taxes do not tax Google, Facebook, TikTok etc but citizens, and poor citizens disproportionally.
- ICT sector taxes in general prevent the poor from participating in tomorrow's information society
- The more people that have broadband access, the easier it will be to serve them with e-gov, e-health, e-education and financial services.
- Dropping ICT excise duties will serve Africans better and grow tax revenues faster, creating a win-win situation.

Kenya		569,140	52,573,9	973	92.37		145.83	WDI 2020 (2019 da
				Nor	minal	Monthly G	NI per capita	
Affordability				USD	Africa Rank	%	Africa Rank	So
	20 GB prep	aid monthly	use	9.14	16	6.3%	14	RIS 202
	300 MB pre	paid monthl	y use	1.96	23	1.3%	21	RIS 202
							Africa Rank	So
Adoption	SIM per 100) inhabitants	6			103.8	17	ITU Dec
	Mobile broa	dband SIM				41.1	21	ITU Dec 2
							Africa Rank	So
Infrastructure	National Backhaul km per 10,000 inhabitants 2.65					13	NSRC	
	Fibre km per 1,000 sqkm 24.51					9	NSRC	
	IXPs					4	4	PCH :
	3G Coverag	je				93.3%	16	ITU Dec 2
	4G Coverag	je				57%	20	ITU Dec 2
	Average Mo	bile downlo	ad speed (M	bps)		8.2	3	Cable.co.uk Oct
	MNO	Current Period	Base Period	Total revenue as % of base			Share of digita venues (current)	
Migration towards data-centric business	Safaricom	2020	2016	as % of base 134%	• • •	.3%	57.5%	
model	-	-	-	-		-		-
								So
Impact of 10% higher	GDP USD million					95,503	WDI 2020 (2019 d	
broadband penetration	Tax to GDP	Ratio					15.09%	WDI 2020 (2018 d
				Broadband peneti			2.46%	ITU :

https://researchictsolutions.com/ict-evidence-portal-africa/ ict_evidence_portal_africa.php

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