



The African Free Trade Area (AfCFTA) and the Sierra Leone Economy: Challenges and Opportunities

The AfCTA under digitalization: A primer for Sierra Leone

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Outline

PART I: Essentials of AfCFTA

- Inserting the Africa Continental Free Trade area (AfCFTA) in AU agenda...
-with many key features calling for delegation of sovereignty
- Reminder: The long road to European integration

Part II: Uneven progress under the Regional Economic Communities (RECs): Implications for the AfCFTA

- Under RECs average applied intra-regional tariffs mostly still close to MFN levels
- On applied bilateral tariffs, ASEAN better than ECOWAS and EAC better than MERCOSUR...
- But small REC members are still bound by the negotiated CET for their tariffs with non-African partners
- High frequency of Non-Tariff Measures (NTMs): Are NTMs precautionary or protectionist in intent?
- The African integration "trilemma"
- AfCFTA: Limited ambition on tariffs over a long period

Part III: The Trade Facilitation Agreement(TFA): A win for Sierra Leone

- Trade Costs: At the border and behind the Border
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- Trade Facilitation Indicators in 2019
- Estimates of gains from TFA

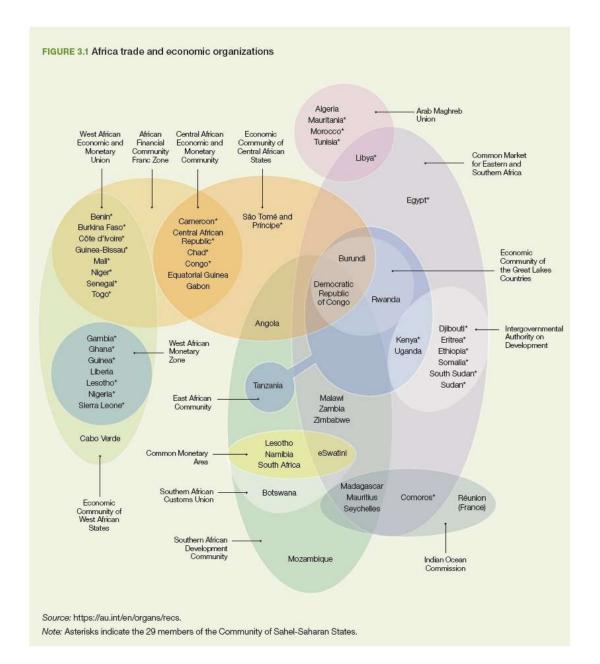
PART V: The Digital economy challenge

- Digitalization: the key to structural transformation
- Services in SSA: Low labor productivity growth, high levels of restrictions
- How will automation and 3DP affect the smile curve?
- Broadband subscriptions and usage
- Climbing the digital infrastructure ladder via regional harmonization?

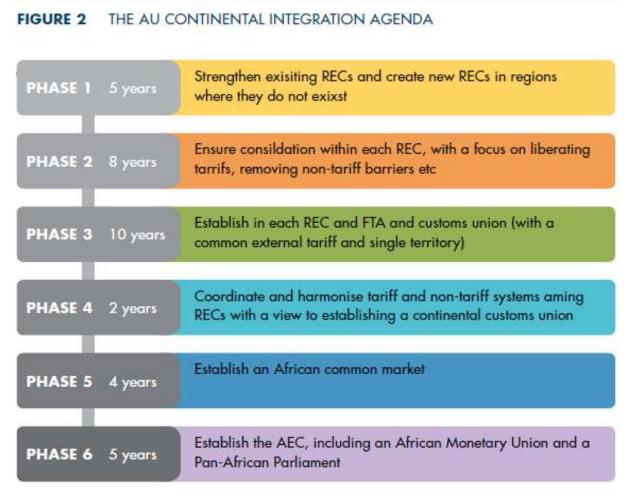
PART I: Essentials on AfCFTA

Inserting the Africa Continental free Trade Area (AfcFTA) in AU agenda...

October 2014



The AU continental Agenda of 2063 (2013) launch coïncides with 4th. phase in figure below taken from Abuja (1994) Treaty



Source: Soininen I, 'The Continental Free Trade Area: What's going on?', Bridges Africa, 3, 9, 28

....with many key features calling for delegation of sovereignty

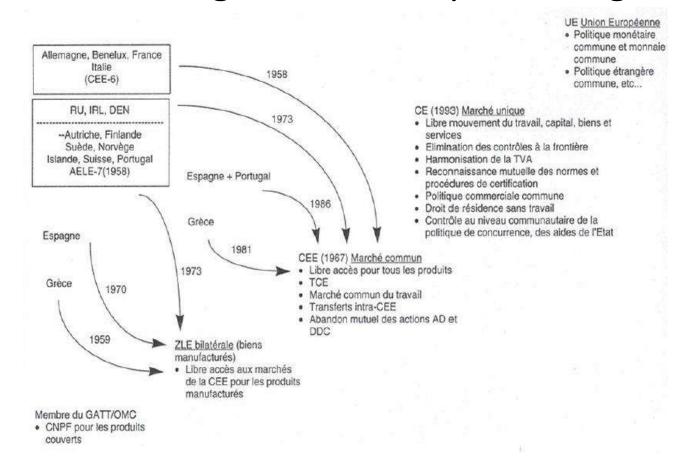
- Agreeing on contingent protection measures among heterogeneous members difficult
-and need to delegate some sovereignty to provide Regional Public Goods (RPGs) which have been neglected in evaluations (some examples here and tomorrow).
 - Externalities on Common Pool Resources (CPRs) e.g. lakes, river basins
 - Peace and security
 - Air transport (RPG at continental level)

Conflicts on RPGs are greater than on private goods (where differences in preferences are higher making negotiations on exchange easier)

- For dispute settlement, need to apply subsidiarity principle beyond the REC to the continental level
- A challenge for RECs and other Regional organizations in Africa is to determine the scope of RPGs and their benefits that determine application of the subsidiarity principle

Protocol on Trade in Services	 Elimination of non-tariff barriers Cooperation of customs authorities Trade faciliation and transit Trade remedies, protections for infant industries and general exceptions Cooperation over product standards and regulations Technical assistance, capacity-building and cooperation Transparency of service regulations Mutual recognition of standards, licensing and certification of services suppliers Progressive liberalisation of services sectors Service suppliers shall be treated no less favourably than domestic suppliers in liberalised sectors Provision for general and security exceptions
Protocol on Dispute Settlement Phase 2 negotiations	 To be agreed Intellectual property rights Investment
	Protocol on Dispute Settlement

Reminder: The long road to European integration



- **EU hope**: Deeper integration by delegation of (some) sovereignty to European Commission would help resolve differences in national preferences: mixed success at best.
- Even greater challenge in the African landscape (large vs. Small; coastal vs. Landlocked; resource-rich vs. Resource-poor; multiple ethnicities).
- **Conundrum**: Gains from integration are largest, the greater the disparities among participants...which calls for more compromises (EAC and MRU vs COMESA, ECOWAS, AFCFTA) and hence dilution of ambitions in the absence of compensation by gainers to losers....

Part II: Uneven progress under the Regional Economic Communities (RECs): Implications for the AfCFTA

Under RECs average applied intra-regional tariffs often still close to MFN levels

TABLE 3.1 Applied tariffs: Average intraregional tariffs and most favored nation tariffs, 2016

Agreement	Intraregional tariff	Most favored nation tariff
AU-recognized regional economic communities		
Arab Maghreb Union (AMU)	0.05	0.11
Common Market for Eastern and Southern Africa (COMESA)	0.05	0.12
Community of Sahel-Saharan States (CEN-SAD)	0.12	0.13
East African Community (EAC)	0.0	0.13
Economic Community of Central African States (ECCAS)	0.09	0.15
Economic Community of West African States (ECOWAS)	0.11	0.12
Southern African Development Community (SADC)	0.04	0.09
West African Economic and Monetary Union (WAEMU)	0.09	0.12
Other preferential trade agreements		
Agadir Agreement	0.00	0.13
Central African Economic and Monetary Community (CEMAC)	0.0	0.18
Gulf Cooperation Council (GCC)	0.0	0.05
Intergovernmental Authority on Development (IGAD)	0.09	0.16
Pan-Arab Free Trade Area (PAFTA)	0.00	0.09
Southern African Customs Union (SACU)	0.0	0.08
West African Monetary Zone (WAMZ)	0.12	0.13
Comparators		
Andean Community	0.0	0.09
Association of Southeast Asian Nations (ASEAN)	0.01	0.07
Southern Common Market (Mercosur)	0.00	0.12

Source: Data from the International Trade Centre. Most data for 2016 are from Espitia et al. (2018).

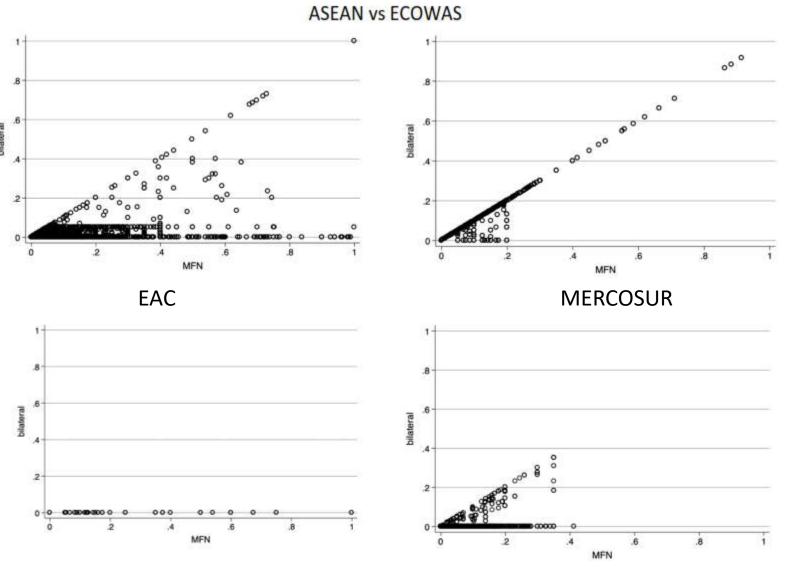
Note: All averages are simple averages of applied tariffs calculated in two steps. First, averages on the statutory schedules at the six-digit Harmonized System level are averaged for each country. Second, an average is taken among all group members. Column 1 reports the bilateral averages and column 2 the average applied most favored nation rates. Tariffs at the regional trade agreement level are obtained by taking a simple average across members.

Uneven implementation reflects the many objectives of integration across the very diverse RECs.

Compare ECOWAS and EAC (also see scatter on next slide)

- Many diverse objectives in the texts
- Cherry picking reflected in large number of memberships
- Diplomacy (peace and security)
- Lack of funds to compensate losers which were available for the second EU enlargement to the South (Greece, Spain, Portugal)

ASEAN better than ECOWAS at implementation and EAC better than MERCOSUR...



← Most applied tariffs on intra-ASEAN tariffs are zero (especially for low tariffs).

Very little reduction in applied intra-ECOWAS tariffs

← EAC furthest with all applied tariffs on intramember trade zero.
Further than MERCOSUR

Source: Melo et al. []

Scatter from HS-6 tariffs in 2015. Simple averages across members in brackets [intra, MFN]. ---Average applied intra-PTA tariff on vertical axis and average applied MFN tariffs on horizontal axis

High frequency of Non-tariff Measures: Are they precautionary or protectionist in intent?

Frequency Indices of Non-Tariff Measures (NTMs), in percentage (%)

HS Sections	Sanitary and Phyto-Sanitary (SPS)	Technical Barriers to Trade (TBT)	Border Control Measures (BCM)	Quantitative Restrictions (QRs)
I. Animals	90	62	54	12
II. Vegetables	83	53	53	6
III. Fats & Oils	87	63	53	14
IV. Beverages & Tobacco	81	56	51	9
V. Minerals	6	21	40	9
VI. Chemicals	14	27	37	9
VII. Plastics	6	19	47	8
VIII. Leather	28	32	43	10
IX. Wood products	35	18	47	7
X. Paper & Book	5	14	46	7
XI. Textile and clothing	8	24	53	8
XII. Footwear	9	17	46	12
XIII. Stone & Glass	6	15	46	7
XIV. Pearls	6	18	44	12
XV. Metals	7	14	46	6
XVI. Machinery	8	44	45	11
XVII. Vehicles	9	31	46	14
XVIII. Optical Medicals	7	21	44	10
XIX. Arms & Ammunition	14	53	33	14
XX. Miscellaneous	8	19	46	10
XXI. Works of art	11	20	44	19

Frequency: Percentage of tariff lines in each section subject to an NTM

Averages of frequency indices (over 5400 HS6 tariff lines) by NTM measure

BCM high for most categories SPS high for sections I-III TBT high for machinery, beverages

Sample: Benin, Botswana, Côte d'Ivoire, Cameroon, Cape Verde, Algeria, Ethiopia, Ghana, Gambia, Liberia, Morocco, Mali, Mauritania, Niger, Nigeria, Senegal, Togo, Tunisia.

Design of AfCFTA Rules of Origin determine effective market access (1)

- Preferential Trade Agreements amounts to giving with one hand (preferences) and taking away with another (restrictive and difficult to implement—especially for SMEs—ROO)
- Firms' access to zero AfCFTA tariff rates in practice will hinge on agreed ROOs. ITC surveys of firms' experiences with ROO consistently highlight this type of non-tariff measure as among the most burdensome and annoying, especially for manufacturing sector.
- Evidence: Overwhelmingly, adopted ROO amount to subsidizing inefficient partner (e.g. US auto producers under USMCA)
- For AFCFTA, agreement has not been reached for 973 out of 5,387 HS6 products.
- Average preferential margin for Product specific Rules (PSRs) still under negotiation, stand at 21%, about twice the average for products where agreement has been reached.
- Regulatory distance (in the sense of different PSRs by REC at the HS6 level) is less among PSRs where agreement
 has been reached.
- R-index values, an indicator of the complexity and restrictiveness of PSRs (an ordinal observation-based measure in which a higher value indicates a more restrictive PSR for example an RVC of 60% is more restrictive than an RVC of 40%) are higher among PSRs where agreement has not been reached.
- <u>Figure below shows that agreement has been reached with single criteria PSRs for 41% of HS6 codes (WO, RVC 40%, CTH)</u>. Agreement on another 37% reached for a mixed (alternative) criterion (CTH or RVC 40%, and CTH or RVC 40% or SP). (Definition of acronyms below Figure). These criteria are relatively simple and flexible
- Adopt simple, transparent ROO that minimize cost-raising effects for small firms (and small countries)

State of negotiations on ROO harmonization under AFCFTA (2)

(as of June 2021)



Notes: Figures in parenthesis refer to the number of HS codes in each category Source: Authors' calculations based on AfCFTA draft PSR text.

Distribution of PSR in AfCFTA across HS6 codes: agreed and to be agreed

Notes: WO (wholly obtained); CTH (Change of tariff heading); RVC (regional value content); SP (specific processing)

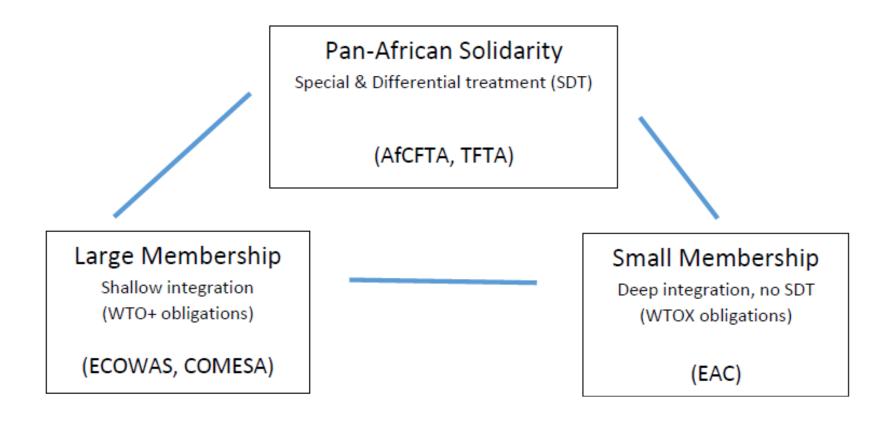
Source: Melo et al. (2021)

CONCLUSION: Resist adopting complex cost-raising ROO in remaining lines under negotiation as this will negate the benefits of preferential market access

Adopting digitalisation but avoiding data colonialism: What type of supply chain trade?

- Digital world may increase disparities across countries as noted by UNCTAD (2017) among others. Threat to low-income countries via 2 channels: New technologies are biased towards skills eroding comparative advantage based on unskilled labor like SLE. And bias makes it harder for low-income countries to exert their comparative advantage.
- The largest platforms (Apple, Microsoft, Amazon, Alphabet (Google), Tencent, and Alibaba) dominate all aspects of the global data value chain through: (a) data collection via user-facing platforms; (b) data transmission through SMCs; (c) data storage; (d) and data analysis, processing and use e.g. via AI, domination reflected in the stock prices.
- Optiond to deal with data colonialism?
 - An export-oriented industrialisation with free cross-border data flows?
 - A domestically-oriented industrialisation that tracks consumer preferences through data localisation requirements to deny (or charge a fee) to access data for dominating platforms

Figure 1 The African Integration Trilemma



Compromise: shallow integration (phase I) with limited market access on the table \rightarrow

AfCFTA Phase I: Limited ambition over a long-time period

(no pain no gain.. But tied in to CET under ECOWAS Customs Union)

Table 4.1: Tariff liberalization under AFCFTA: Schedules and Time table

	LDCs ¹	Non-LDCs
	90% of tariff lines	90% of tariff lines
Full liberalisation	10-year phase down	5-year phase down
	7% of tariff lines	7% of tariff lines
Sensitive products	13-year phase down (current tariffs can be maintained during first 5 years – phase down starting in year 6)	10-year phase down (current tariffs can be maintained during first 5 years – phase down starting in year 6)
Excluded products	3% of tariff lines	3% of tariff lines

← (excludes most tariff peaks where efficiency gains from elimination are greatest)

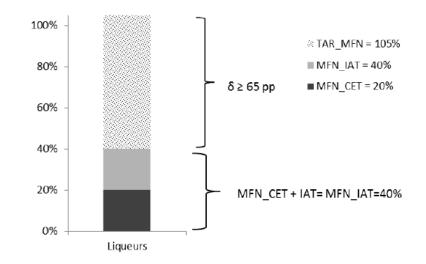
Source: Hartzenberg (2019)

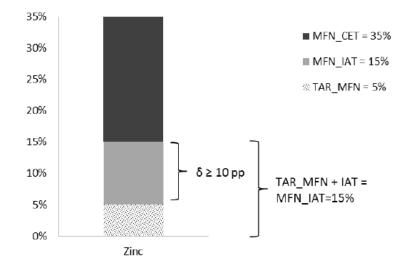
Notes:

1/ LDCs: Angola, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, South Sudan, Togo, Uganda, United Republic of Tanzania, Zambia

Small countries in RECs are bound by negotiated CET in their Customs Union

- Common External Tariffs (CET) negotiated under ECOWAS Customs Union are here to stay because of acquis
- → tariffs previously negotiated will hold under AfCFTA for non-African partners, e.g. the CET under ECOWAS wrt to non-African partners.
- Below, 2 examples from Liberia's minimum adjustments under the CET
- Illustrate costs of adopting tariffs Idetermined by large partners
 - Liquor and cordials: MFN AVE tariff=105%. CET=20%. Tariff cannot fall be above CET by more than 20% from CET Minimum tariff adjusted to 40% → (A bad decision since taxing alcohol is in effect taxing an externality while raising revenue efficiently)





- Zinc (corrugated steel): MFN tariff=5%. CET=35%. Tariff cannot fall short by more than 20% from CET
- ← Minimum tariff adjusted to 15%
 (A bad move since this amounts to subsidzing the inefficient partner)

The choice of Rules of Origin matters

- Preferential Trade Agreements amounts to giving with one hand (preferences) and taking away with another (restrictive and difficult to implement—especially for SMEs—ROO)
- Firms' access to zero AfCFTA tariff rates in practice will hinge on agreed ROOs. ITC surveys of firms' experiences with ROO consistently highlight this type of non-tariff measure as among the most burdensome and annoying, especially for manufacturing sector.
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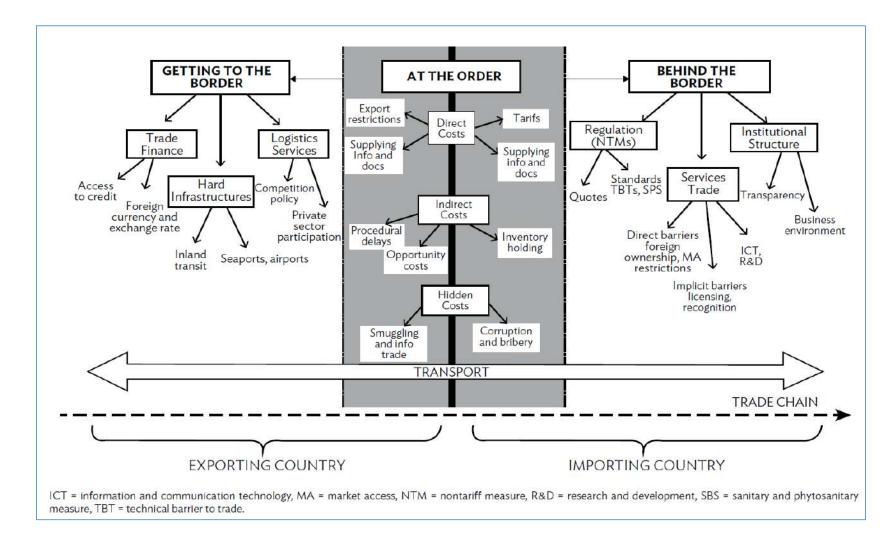
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Part III: The Trade Facilitation Agreement: A win for Sierra Leone

Trade Costs: At the border and behind the Border



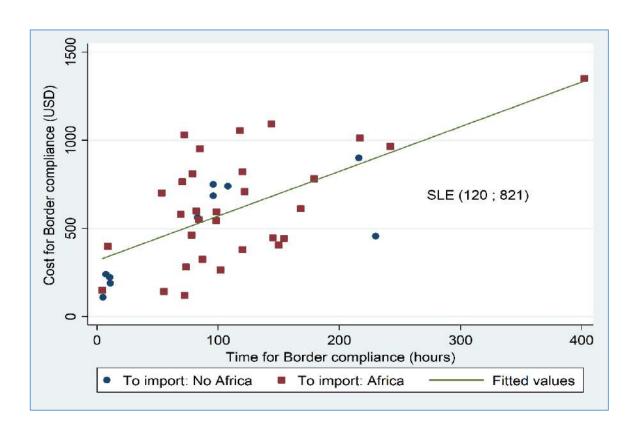
TFA:

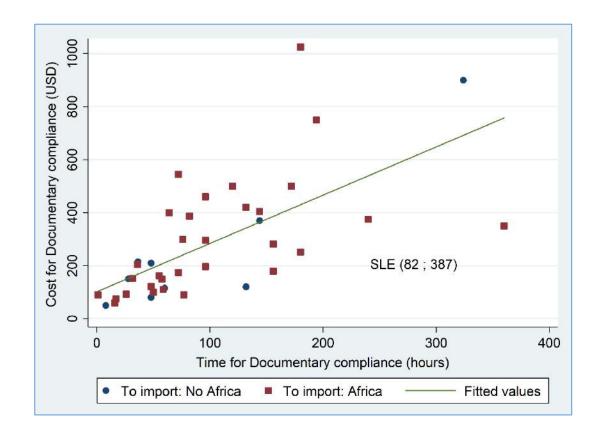
- Reduce red tape
- Increase predictability in customs clearance fees, formalities, transit
- Issue advance rulings

TFA is monitarable (finally!) Aid for Trade (AFT). It is about reducing time and costs at the border for imports and exports

Cost vs. Time: border and documentarty compliance (2020)

(LDC countries with Sierra Leone values in parenthesis)



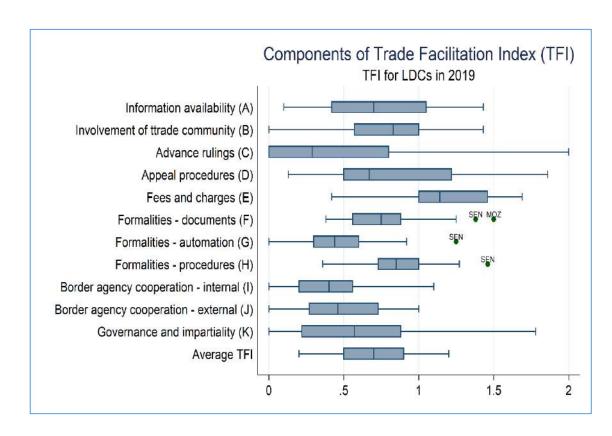


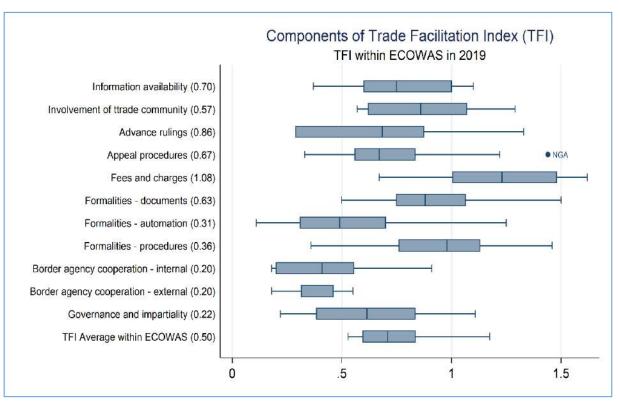
SLE (Sierra Leone): high average hours at customs (5 days) and for documentary (3.5days) and above average cost per time spent. So room for improvement also visible from the Trade Facilitation Indicators (TFI) on next slide where SLE estimates in parenthesis for each indicator are generally below average among ECOWAS. For formalities and procedures, SLE score is (0.36) while average for ECOWAS is around 0.95.

Trade Facilitation Indicators in 2019

LDC group

ECOWAS (and Sierra Leone in parenthesis)





Notes: cores range from a min of 0 to a max of 2. Box plot. Middle bar is mean value, shaded area is interquartile range and minimum maximum values correspond to +/- 1.5 times interquartile range.

Average TFI (bottom) is the average of components (A)-(K)

For ECOWAS, the average TFI score across countries is 0.7. The TFI score for Sierra Leone is 0.5.

Estimates of gains from TFA

	Lead Time at customs (DB)	Predicted Lead time at customs (Model)	Lead time at customs after Simul. (1)	Lead time at customs after Simul. (2)	Time reduction in hours (Simul. 1)	Time reduction in hours (Simul. 2)	AVE ^(a) of reduction in TC in % (Simul. 1)	AVE ^(a) of reduction in TC in % (Simul. 2)		
Column	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8		
Panel a. Lead Time at Border to Import										
LDCs (43)	117	135	82	48	-53	-87	2,9	4,7		
SIERRA LEONE	120	179	103	55	<mark>-76</mark>	<mark>-124</mark>	<mark>4.1</mark>	<mark>6.7</mark>		
AfCFTA (53)	130	129	91	70	-38	-59	2,1	3,2		
SAMPLE (138)	68	67	55	47	-11	-20	0,6	1,1		
	Panel b. Lead Time at Border to Export									
LDCs (43)	89	93	43	19	-50	-74	2,7	4,0		
SIERRA LEONE	55	122	<mark>52</mark>	<mark>19</mark>	<mark>-70</mark>	<mark>-103</mark>	<mark>ვ.8</mark>	<mark>5.6</mark>		
AfCFTA (53)	93	92	57	42	-35	-50	1,9	2,7		
SAMPLE (138)	54	52	39	33	-12	-19	0,7	1,0		

Notes: These estimates are based on ZINB Results covering 138/165 countries (see Table 2, col. 4 and 7). They are reported following four categories of countries (number of countries in each group in parenthesis): LDCs: least developed countries - LLDCs: landlocked developing countries - SIDS: Small islands Developing States - AfCFTA: African Continental Free Trade Area. All values are simple average per group. Simulations from Table 2, Col. (4) for Time to import; Col. (7) for Time to export.

a) The ad valorem equivalent (AVE) of reduction in trade costs (TC) is the simulated gain (to import/export) divided by 24, times 1.3% from Hummels and Schaur (2013). These AVEs in % (reported in col. 7 and 8) are calculated from the results of simulation 1 and simulation 2, respectively. For example, for the LDCs group, simulation 1 gives a gain of 135-82=53 hours resulting in an AVE of around 2.9% [(53/24)*1.3].

Simulations: Scenario (1) - Convergence to the top-2 average within each country group convergence: Within each country group, all countries converge to the average of the top 2 TFA index.

Scenario (2) - Convergence to the top-2 average in Sample: The TFA index of each country takes the average value of the top 2 TFA index in sample

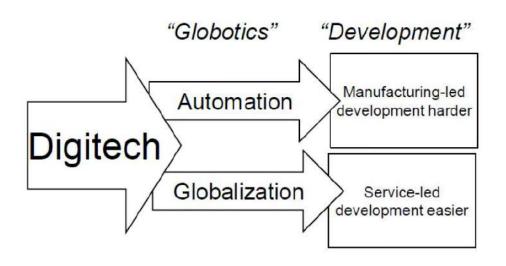
See Melo et al (2021) for methodology. Average percentage reduction in trade costs from a realistic improvement is large: 4.1%-6.7% for imports and 3.8%-5.6% for exports

Part IV

The Digital economy challenge

Africa will account for ½ of global labor force growth up to 2050. Will it benefit from opening left by China for low-wage labor to realize its 'demographic dividend'?

Will SSA realize the demographic dividend?



	Rule-based logic	Pattern recognition	Human work
Variety	Computer processing using deductive rules	Computer processing using inductive rules	Rules cannot be articulated and/or necessary information cannot be obtained
Examples	Calculate basic income taxes	Speech recognition	Writing a convincing legal brief
	Issuing a boarding pass	Predicting a mortgage default	Moving furniture into a third-floor apartment

Increasingly Difficult to Program

Source: Frank Levy and Richard Murnane, Dancing with Robots, NEXT report 2013, Third Way.

Source: (a) Baldwin and Forslid (2017); (b) Tirole (2017, table 5.1)

- Digitalization will ease e-commerce Telemigration (or 'globotics' Baldwin) means that teams no longer operate w/n countries as skill-intensive activities take place in HQs and production in low-wage countries (this is offshoring). But digitalizattion (e.g. Robots, 3D printing, IOT, etc...) likely to make mfg-led development harder as some reshoring of activities in high-income countries likely.
- Services-led development easier via d(MENA?).
- Digital innovations are forms of capital-biased technical change. Which jobs will be lost? New ones to replace them?
- Issue: is reinstatement effect on labor demand of new technologies observed in past may not occur this time (Acemoglu and Restrepo (2019))

Low labor productivity growth in SSA

(high levels of restrictions on Services trade?)

Labor Productivity Growth in industry and services by region, 1995-2018



TABLE 3.2 Service trade restrictions are generally much higher in Africa than elsewhere, 2015

۷	٩d	val	orem	tariff	equival	ents	(percent)

	African	Comparator group				
Service	Union	ANDEAN	ASEAN	Mercosur	OECD+EU	
Accounting	35	32	50	30	29	
Legal services	47	27	68	32	31	
Air transport	28	28	58	58	15	
Rail transport	59	8	62	28	16	
Road transport	32	8	60	22	18	
Banking	15	18	21	12	2	
Insurance	31	30	26	24	14	
Fixed line	485	9	175	11	35	
Mobile line	3	0	1	1	1	
Retail	3	2	5	1	٦	
Maritime transport	28	25	50	39	9	
Average (simple)	70	17	52	23	16	

Source: Calculations from ad valorem tariff equivalent data in Jafari and Tarr (2015, table 3).

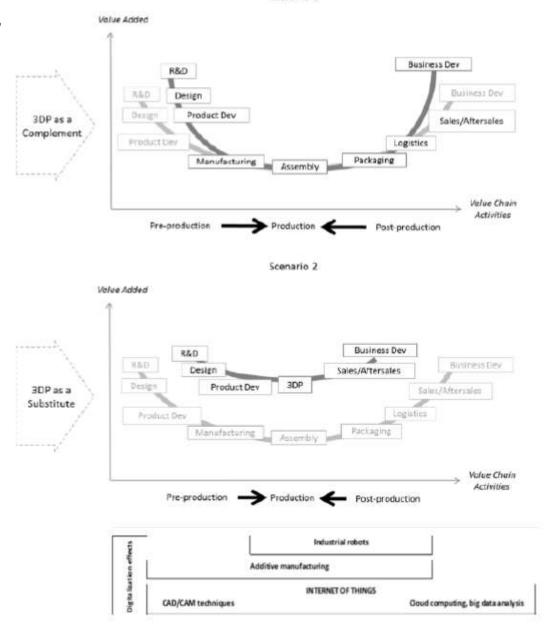
a. Simple average across RECs.

- Low average yearly labor productivity growth in SSA
- Over 1980-2000 Africa only contributed 1% of world trade in services in SSA.

Services are now highly tradable with many sectors to benefit from digitalization and automation

How will automation and 3DP affect smile curve

- Fears: Will digitech rob SSA of population growth dividend for employment enabled by China's rise in real wages? Three issues
- 1. Will SSA stay in the cusp (i.e. production stage along the supply chain) where VA is low?
- 2. Can digitalization move countries away from the cusp
- 3. How will Digitech affect the shape of the smile curve?
- 3DP could deepen it in some sectors (e.g. Aerospace, automobile) or flatten it (e.g. some consumer goods). Digitech then moves production closer to customer reducing need for packing, transport



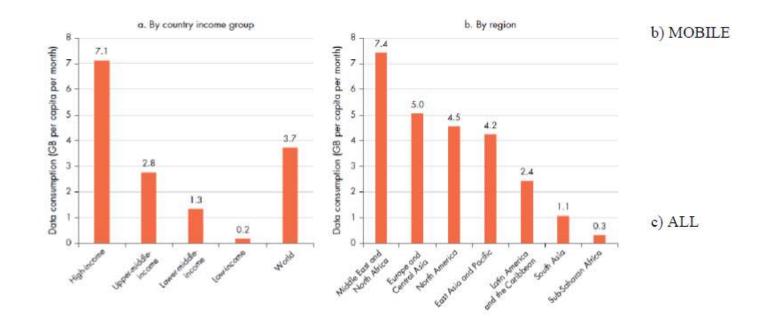
Broadband subscriptions and usage

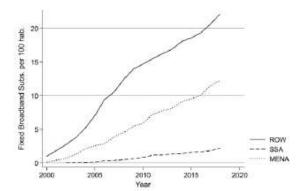
(country averages per region- World Bank 2021)

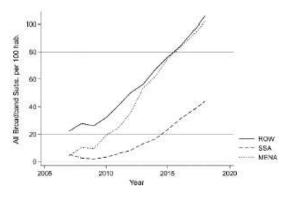
a) FIXED

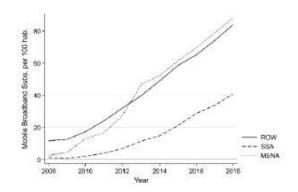
- MENA region is catching up with the rest of the world (row)
- Gap remains high in SSA, due to small markets, high costs.
 Giga Byte (GB) per capita very low across SSA

Figure 7:Mobile data consumption across country income groups and regions

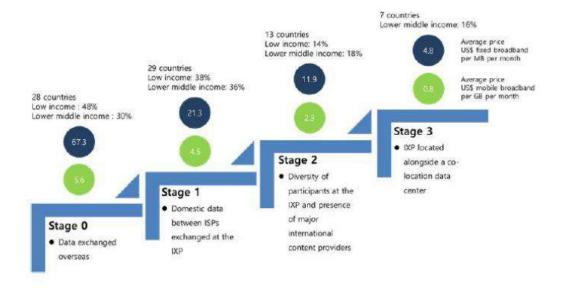








Climbing the digital infrastructure ladder via regional harmonization?



Notes: See table 2 for the list of MENA and SSA countries at each stage in the ladder. Number of internet exchange points (IXPs) per region and number of Colocation Data Centers (CDCs) in figure AXX Source: Comini et al. (2021, figure 2). Sample of 65 LIC and LMIC countries. IXP: Internet Exchange Point

Most MRU countries are in stage 0 (bottom of ladder) with no internet exchange point (IXP).

Cooperating among MRU members to create a harmonized enabling environment for mobile roaming as in the ONA in the EAC (see ONA evaluation here)

	Stage 0 (no IXP)	Stage 1(IXP)	Stage 2 (IXP with participant diversity)	Stage 3IXP + CDC
	CAR	Burkina Faso	Congo, Dem.Rep.	Ghana
	Mauritania	Cameroon	Morocco	Nigeria
Cluster 1	Niger	Cote d'Ivoire	Mozambique	1990
Competitive market; relatively high levels of mobile and fixed broadband penetration; heterogeneous access to SMCs	Somalia Yemen, R.	Egypt Madagascar Senegal Sudan Tanzania	Gambia	
		Sudan Tunisia Uganda Zambia		
Other *	5	6	4	2
	Cabo Verde	Benin		
	Chad	Congo,Rep.		
Cluster 2	Guinea Bissau	Liberia		
Claster 2	Lesotho	Malawi	WBank & Gaza	Kenya
Higher market penetration, fewer IXPs and	Sao Tome & Principe.	Mali	W Balle & Gaza	yu
heterogeneity in terms of	Sierra Leon	Rwanda		
access to SMCs	South Sudan Syrian Arab	Togo		
Other *	Rep.	3	2	1
Cluster 3 SIDS with no IXP or small	Comoros Eritrea	Eswatani		Djibouti
markets with monopolies of duopolies	Ethiopia			
ddopones				

Notes: Data for 2018. Sample of 65 Low and middle-income countries. *: number of other LIC and LMIC countries in each stage and cluster.

Source: Comini et al. (2021, table 2). See description of characteristics in each stage on the ladder in figure 8.

Adopting digitalisation while avoiding data colonialism: A challenge for Africa

- Digital world may increase disparities across countries as noted by UNCTAD (2017) among others. Threat to low-income countries via 2 channels: New technologies are biased towards skills eroding comparative advantage based on unskilled labor like Sierra Leone.
- The largest platforms (Apple, Microsoft, Amazon, Alphabet (Google), Tencent, and Alibaba) dominate all aspects of the global data value chain through: (a) data collection via user-facing platforms; (b) data transmission through SMCs; (c) data storage; (d) and data analysis, processing and use e.g. via AI, domination reflected in the stock prices.
- Two options to deal with data colonialism?
 - 1. An export-oriented industrialisation with free cross-border data flows?
 - A domestically-oriented industrialisation that tracks consumer preferences through data localisation requirements to deny (or charge a fee) to access data for dominating platforms

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