

Ethiopian Automotive Policy in the African Automotive Market



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Background

- GDF and JICA have studied and discussed automotive policy with Ethiopian authorities (MOTI/MIDI, EIC, MOF, PMO...)
- Japanese automotive makers and their local partners were interviewed, former MIDI officials were invited to Japan, and Kenya and Myanmar were visited for SKD/CKD policy research.
- Our analyses and proposals were summarized in the 2020 policy note and PPT presentation (see next page).
- We need to additionally consider Ethiopia's position and challenges in the context of regional integration and policy competition under AfCFTA.

Downloads

Today's materials

New Policy note (August 2022)

https://gdforum.sakura.ne.jp/en/af-growth/support_ethiopia/document/2022.09_ET/Ethiopian_automotive_sector5a.pdf

Slides

https://gdforum.sakura.ne.jp/en/af-growth/support_ethiopia/document/2022.09_ET/auto5_ver4_rev.pdf

Selected past materials

Previous Policy Note (revised March 2020)

https://gdforum.sakura.ne.jp/en/af-growth/support_ethiopia/document/2022.09_ET/Automotive_policy_GRIPS4a.pdf

Slides

https://gdforum.sakura.ne.jp/en/af-growth/support_ethiopia/document/2019.02_ET_DJI/automotive5.pdf

About Myanmar

https://gdforum.sakura.ne.jp/ja/af-growth/support_ethiopia/document/2020.02_ET/auto3_myanmar3.pdf

https://gdforum.sakura.ne.jp/ja/af-growth/support_ethiopia/document/2020.02_ET/200218_Autoseminar_homma_final.pdf

Abbreviations

AAAM	African Association of Automotive Manufacturers
AfCFTA	African Continental Free Trade Area
ASEAN	Association of Southeast Asian Nations
Assy	(multiple components already assembled; assembly unit)
CBU	Completely Built Up
CKD	Completely Knocked Down
CV	Commercial vehicle (truck and bus)
EAC	East African Community
JAMA	Japan Automobile Manufacturers Association
PC	Passenger car
SKD	Semi Knocked Down

Previous Policy Note (Revised Mar. 2020)

1. The car industry develops in distinct stages. Ethiopia is in the early stage and needs policies for that stage.
2. The very first step is the restriction of used car imports.
3. CBU, SKD and CKD must be defined clearly and in line with global practices.
4. Domestic assembly should be incentivized relative to CBU imports. Tax structure should be simple and clear.
5. Production scale is vital. To ensure sufficient volume, firm entry should not be excessive and priority models must be promoted.
6. Publish a realistic long-term demand scenario. Policy must support this scenario, not undermine it.
7. When minimum scale is attained (tens of thousands/year), promote domestic value creation (high HR, components...)

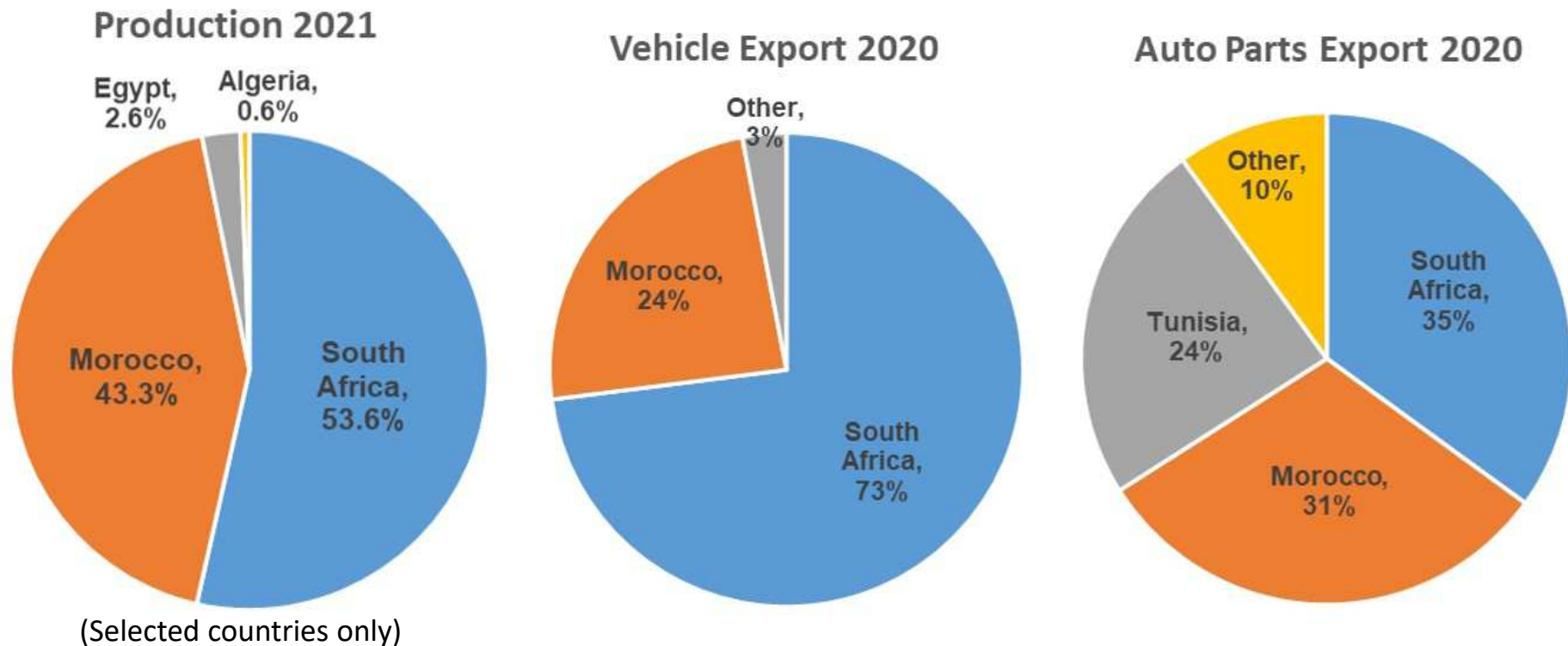
New Policy Note (Sep. 2022)

1. South Africa & Morocco dominate Africa's car production. Other producers are in early stages (incl. Ethiopia).
2. AfCFTA may have two dynamic effects:
 - (i) Member countries: policy competition for FDI.
 - (ii) Global carmakers: select one or a few African countries as a regional production hub.
3. Car assemblers usually want to combine local assembly and CBU imports for model variety.
4. Ethiopia: recommended immediate policy actions:
 - A simple incentive structure that clearly favors local assembly
 - Work closely with one or a few global carmakers to draft policies
 - A mechanism to solve policy inconsistencies and firm grievances
 - Reconsideration of F/C surrender and reallocation rules
 - A long-term automotive demand forecast
5. Ethiopia: medium- and long-term policy actions

Africa: Automotive Production and Market

- Africa's car production is small (<1% of global total) but it is growing fast.
- Production and market are dominated by a few countries, especially South Africa (export hub) and Morocco (EU linkage).

Africa's Key Automotive Players

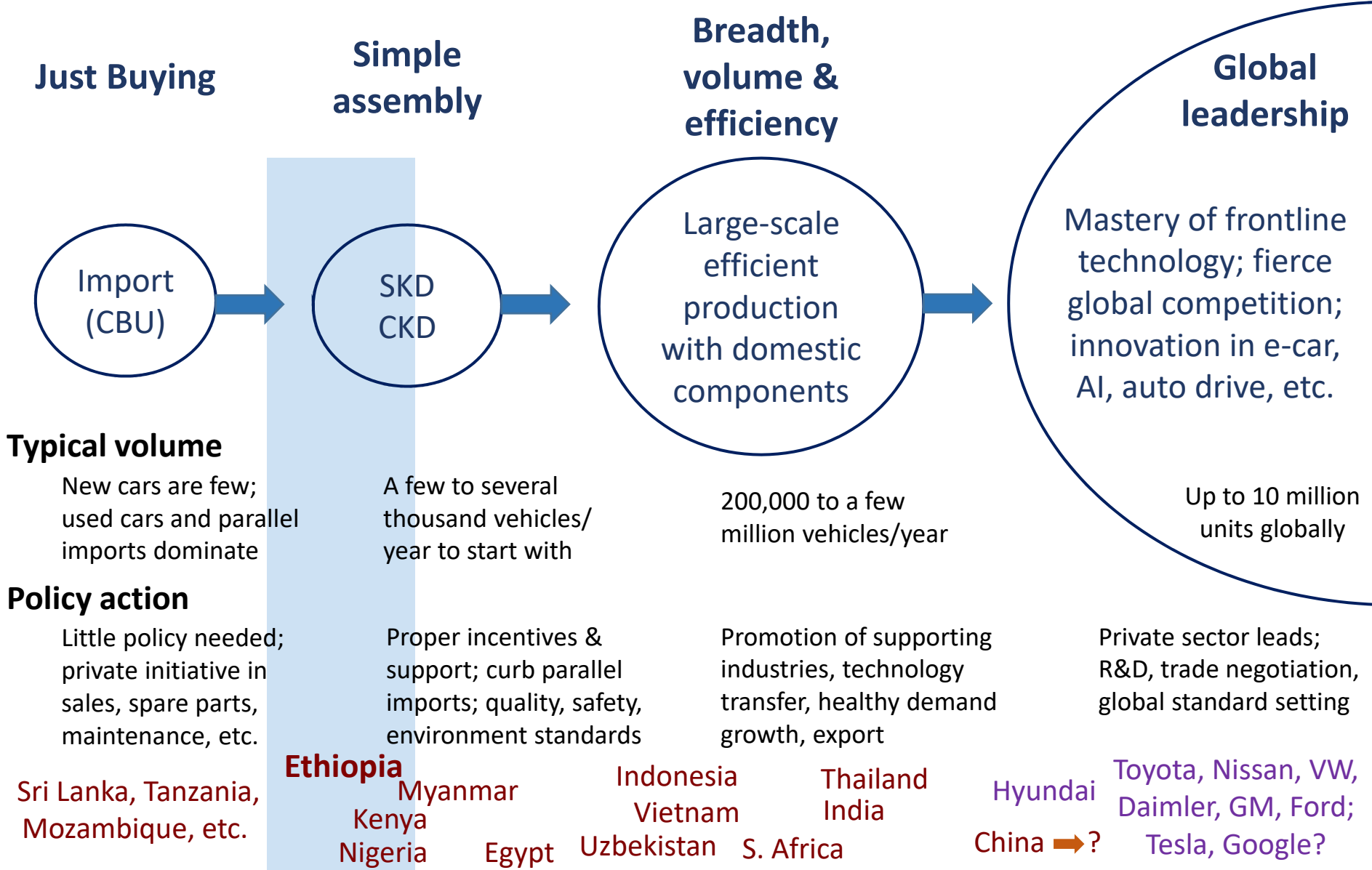


Source: Agarwal et al. (2022)

Timeline of Automotive Production

- The automotive industry is a fiercely competitive sector with a broad industrial base and changing technology. There are only about 16 global carmakers with original technology and annual sales volume exceeding 1 million vehicles.
- Latecomer countries must develop this sector by climbing the industrial ladder in proper steps. Each step requires different policy content. Jumping from bottom to top is hardly possible.
- New car technology—CASE (connected, auto drive, sharing, e-cars)—will impact Africa over time. However, immediate policy concern for Ethiopia is the successful establishment of domestic assembly in both quality and quantity.

Timeline Visualized



Issues Raised by Japanese Auto Assemblers Concerning Ethiopia (our interviews)

1. Foreign currency shortage

All of the interviewed Japanese assemblers cited this as the biggest problem and challenge for assembly in Ethiopia.

2. Tax and tariff structure

Ethiopia's auto levies are high and complex even after the recent revision. Long-term policy stability must be assured. For commercial vehicles, the CBU-local assembly difference is 5%, which is too small.

3. Used vehicles and new car imports

The revised tax structure effectively curbs used car imports. But dealers now shift from used to new car imports. This continues to discourage domestic assembly of new cars.

4. Volume problem

Even if the current Ethiopian market is small, government can announce long-term forecasts, and introduce policies consistent with (do not frustrate) such forecasts.

Ethiopia: Need for Further Revision of Incentive Structure

- To promote domestic assembly, it is necessary to curb both used car imports and CBU (new car) imports.
- Ethiopia recently introduced stiff excise taxes on used car imports which effectively killed this market.
- However, new car imports are still large because the tax gap between domestic assembly and CBU remains small (20% for PC, only 5% for CV).
- Domestic assembly incurs additional costs for management, factory construction and maintenance, equipment and tools, engineers, component imports, etc. The gap of 20-30% is needed to encourage domestic assembly.
(cf. Kenya has a 50% CBU-SKD gap for both PC and CV.)

Simpler Tax and Tariff Structure

- Ethiopia's automotive tax structure is unnecessarily complex with many categories, and highly penalizing for large PCs. It is unclear what policy purpose it serves.
- The tax structure should be
 - ✓ Simple—no need to have so many size categories and type classifications
 - ✓ Favorable to domestic assembly against CBU imports
 - ✓ Cascading—high on finished vehicles, low or zero on components and materials
 - ✓ Not excessively penalizing to large PCs (not all large cars are “luxuries”)
- The incentive structure must be stable and predictable without sudden change.
- Top leaders must instruct balance between industrial promotion (MOI, EIC) and the need to secure tax revenue (MOF, Revenues).

Ethiopia: Automotive Tax Structure

After Revision, for Gasoline Passenger Cars

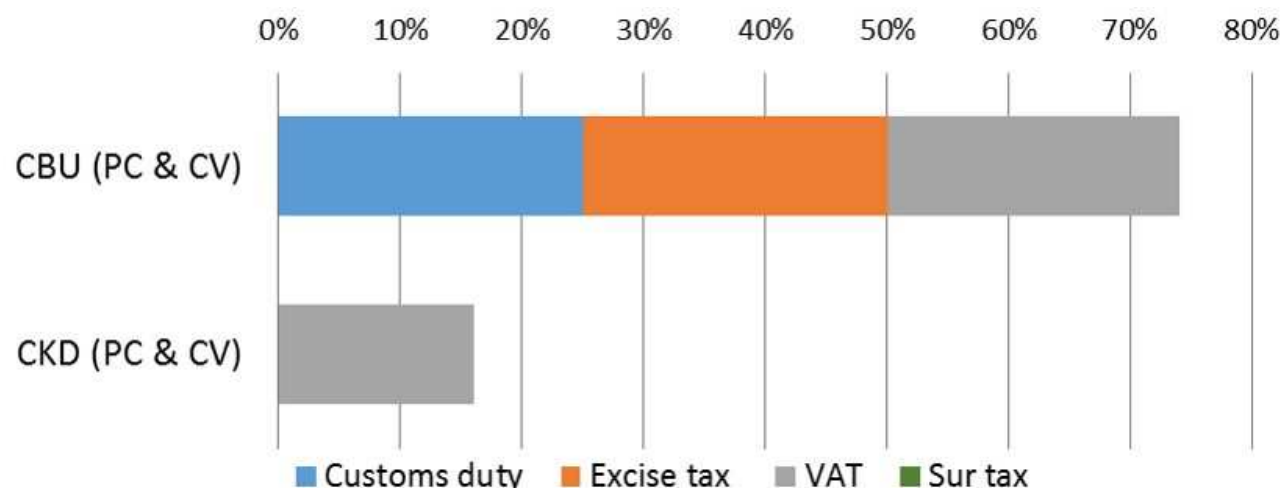
- ✓ Prohibitive excise taxes on used vehicles
- ✓ Same excise tax for CBU, SKD & CKD
- ✓ Customs duties favor local assembly (difference: PC 20%, CV 5%) but not enough
- ✓ Steep tax increase for large engine vehicles

Customs Classification	Customs Duty Rate	Excise Classification	Exc Tax rate	Exc Tax rate	Exc Tax rate	Exc Tax rate	Exc Tax rate	Exc Tax rate
Type of assembly/build & age		Type of assembly/build & age	1000	1300	1500	1800	3000	3050
CKD	5%	CKD	5%	5%	60%	60%	100%	100%
SKD	10%	SKD	5%	5%	60%	60%	100%	100%
CBU	30%	CBU	5%	5%	60%	60%	100%	100%
Used, 1-3 yrs	35%	Used, 1-2 yrs	55%	55%	110%	110%	150%	150%
Used, 3-5 yrs	35%	Used, 2-4 yrs	105%	105%	160%	160%	200%	200%
Used, 5-7 yrs	35%	Used, 4-7 yrs	205%	205%	260%	260%	300%	300%
Used, 7 yrs & older	35%	Used, 7 yrs & older	405%	405%	460%	460%	500%	500%

Source: EIC, "Ethiopian Automotive Sector Policy & Promotion Strategy Development Update," Nov. 2020.

Kenya: Automotive Tax Structure

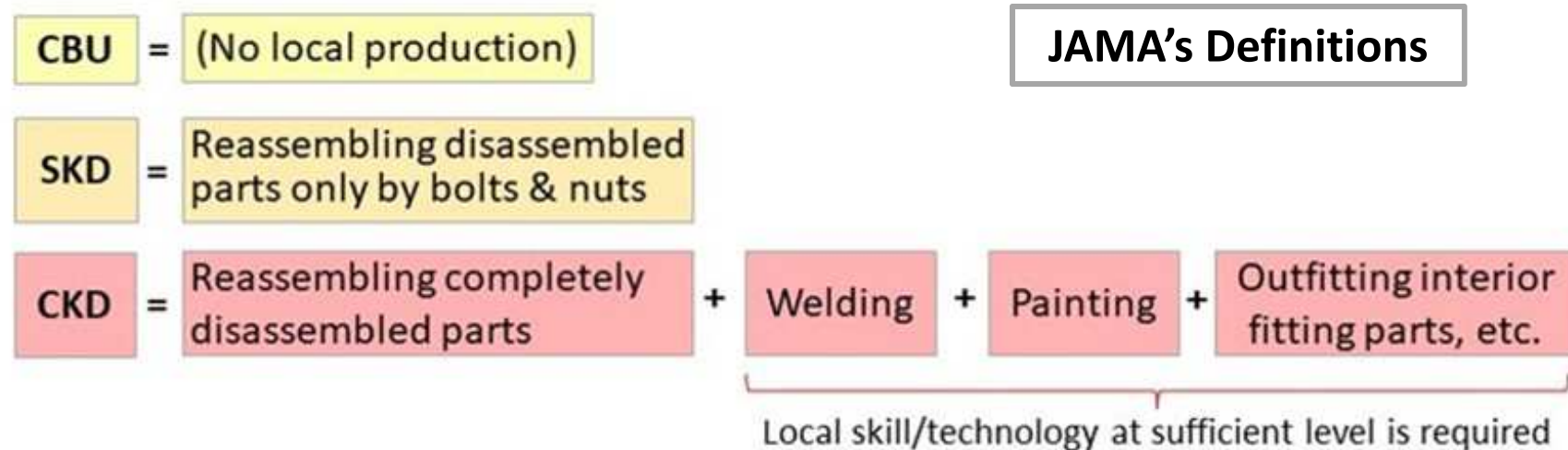
As of 2018, Kenya's tax structure was relatively simple and did not differentiate PCs and CVs. Japanese firms report that all officials say the same thing and are not bureaucratic. Kenya has 8-year age limit on used car import (wanting to shorten it to 5-year).



	Description	Customs duty	Excise tax	VAT	Sur tax
1	Passenger car CBU	25% (i)	20%	16%	--
2	Passenger car CKD	0% (ii)	0%	16%	--
3	Commercial vehicle CBU	25% (iii)	20%	16%	--
4	Commercial vehicle CKD	0%	0%	16%	--

Notes: (i) 0% for ambulance; (ii) positive rates apply for designated 17 part items; (iii) 0% for agricultural use vehicles.

Definitions of CBU, SKD and CKD



Source: Japan Automobile Manufacturers Association, JAMAGAZINE, February 2008; processed by Toru Homma.

- For incentive eligibility, CBU, SKD and CKD must be clearly defined. The usual definitions are
 - SKD = a full assembly package of components and assy's
 - CKD = full components (all loose) + welding + painting
- The current Ethiopian definitions seem different from global standards (absolute number of loose components required for individual vehicle models?)

Market Size and Demand Forecasts

- Ethiopia, with per capita income of USD 944 (WB 2021), has a small auto market confined mostly to public, corporate and project customers.
- Motorization (rapid increase in private car ownership) usually begins at per capita income around USD 3,000.
- Global automakers are attracted by the growth potential of each market. Even if the current market is small, assurance of robust growth and supportive policies are usually enough to attract foreign assemblers (capturing future demand).
- By contrast, inconsistent or unpredictable policy suppresses demand below potential and keeps FDI away.
- Auto demand forecasts should be based on GDP growth and income elasticity assumption. Add any country-specific elements such as product mix, predicted modal shift and policy factors (see Vietnam on the next page).

Vietnam: Auto Demand Forecasts as of 2013

Presented by MOI for Vietnam-Japan Industrialization Strategy Workshop (April 2013)

Key assumptions

	Low	Average	High
GDP growth	Slow 5-6%	Normal 7%	Fast 7-7.5%
Policy	Not supportive	As committed	Supportive
Infrastructure	Not as planned	As planned	As planned

Growth scenario

	Low	Average	High
2013-15	11%	15%	18%
2016-20	13%	18%	21%
2021-25	15%	20%	23%
2026-30	13%	14%	14%

Annual sales (flow)

	High	Middle	Low
2012	102,083	102,083	102,083
2013	120,458	117,395	113,312
2014	142,140	135,005	125,776
2015	167,726	155,255	139,612
2016	202,948	183,201	157,761
2017	245,567	216,178	178,270
2018	297,136	255,090	201,446
2019	359,535	301,006	227,633
2020	435,037	355,187	257,226
2021	535,096	426,224	295,810
2022	658,168	511,469	340,181
2023	809,546	613,763	391,208
2024	995,742	736,516	449,890
2025	1,224,762	883,819	517,373
2026	1,396,229	1,007,553	584,632
2027	1,591,701	1,148,611	660,634
2028	1,814,539	1,309,416	746,516
2029	2,068,575	1,492,735	843,563
2030	2,358,175	1,701,718	953,226

Total fleet (stock)

	High	Middle	Low
2012	1,867,592	1,867,592	1,867,592
2013	1,988,050	1,984,987	1,980,904
2014	2,130,190	2,119,992	2,106,681
2015	2,297,916	2,275,248	2,246,292
2016	2,500,864	2,458,449	2,404,054
2017	2,746,431	2,674,627	2,582,324
2018	3,043,567	2,929,717	2,783,770
2019	3,403,102	3,230,723	3,011,403
2020	3,838,139	3,585,909	3,268,629
2021	4,373,235	4,012,134	3,564,439
2022	5,031,402	4,523,603	3,904,620
2023	5,840,949	5,137,366	4,295,828
2024	6,836,690	5,873,882	4,745,718
2025	8,061,453	6,757,700	5,263,091
2026	9,457,682	7,765,254	5,847,722
2027	11,049,383	8,913,865	6,508,356
2028	12,863,923	10,223,281	7,254,872
2029	14,932,498	11,716,016	8,098,435
2030	17,290,673	13,417,733	9,051,661

Avoid Overcrowding in a Small Market

- Many automakers may want to enter a new market and secure its place for future. But scale is critical in auto production. Excessive entries will result in too small market for each, leading to inefficiency and high production cost.
- Government should not ban entry, but should prioritize and work with a selected few producers that truly bring value and long-term commitment to the country.
- VW was the first mover in China. Toyota is big in Thailand and Indonesia. Suzuki is the top auto firm in India and Myanmar. GM is the leading firm in Uzbekistan.
- Meanwhile, Vietnam permitted the entry of 14 auto firms in the 1990s that created overcrowding. Each FDI continues to suffer from small scale and high cost.

Production cost: Toyota Vietnam > Toyota Thailand

Local Assembly + CBU Imports

- Global auto makers do not locally produce all models sold in that country. Producing many models in small quantities increases the management, financial and time costs.
- They normally produce the most popular models while importing other models from factories abroad. This is also affected by the firm's global strategy and local incentive structure.
- Example: Toyota Vietnam produces **Innova, Vios**, Camry and Corolla (totally 70,000 units in 2020) but imports Fortuner, Land Cruiser, Yaris and other models from Toyota plants in Indonesia, Thailand, etc.
- Ethiopia should recognize the models each global maker wants to assemble locally, and support their production plan.
- Ethiopia may reward high-performing assemblers with the privilege to import CBUs (import duty cuts, etc.)

Domestic Value Creation

- Domestic value creation will become the key policy issue when annual production reaches 100,000-200,000 vehicles. This will require enhancement of high-level human resources and domestic component supply.
- This is also called “supporting industry” development. It is the biggest goal of automotive producing countries in Southeast Asia. Ethiopia should also engage in this policy when the volume rises to the threshold level.
- Localization of value creation is a sensitive matter. Proper policies are needed to entice carmakers to create value.
 - ✓ If it is promoted with appropriate support and incentives, assemblers will willingly cooperate and invest.
 - ✓ If government insists on localization without offering necessary domestic conditions in labor quality, firm capacity, logistics, trade facilitation, etc. FDI will be annoyed and may even leave the country.

Other Future Policy Issues

In addition to domestic value creation, the following must be incorporated as the core contents of the next automotive policy when the volume reaches the threshold.

- To reduce congestion—better traffic control, transport infrastructure, public transport, parking, intersection improvements, etc.
- To reduce accidents—safety standards and technology, vehicle inspections and drivers' education.
- Environmental standards and enforcement.
- Move to new car technology with necessary learning and infrastructure.

Two Possible Dynamic Effects of AfCFTA

1. **Member governments**—policy competition to capture new FDI inflow
2. **FDI firms**—enter Africa (or rearrange existing sites) to build a regional car production base to take advantage of regional free trade

- These two effects are mutually related. Countries that offer the best business conditions will receive new FDI inflows.
- Even if governments don't compete, FDI will select production sites by comparing business conditions (as they already do).
- The result will be the emergence of automotive winners and losers in Africa, not uniform development of all countries.
- At present, Ethiopia is not yet a preferred destination of automotive FDI. Some have come but they currently face many difficulties.

Toyota in Africa



Hilux Double Cab



Fortuner



Toyota South Africa Motors

- Toyota is very popular in Africa, but many are used cars or parallel imports. This does not contribute to Toyota's profit or encourage local assembly.
- In 1962, Toyota built a large assembly plant in Durban, South Africa (TSAM). It produces Hilux (pickup truck), Fortuner, Corolla, Hiace and Dyna. Other Toyota models are imported.
- TSAM is one of Toyota's three global production sites for pickup trucks along with Thailand and Argentina. It also serves as the gateway to Africa.
- Toyota also created production sites in Kenya (1977, Land Cruiser etc.), Egypt (2012, Fortuner) and Ghana (2021, Hilux). These are contract manufacturing by local assemblers.

Isuzu East Africa

- Isuzu assembles small- and medium-sized trucks and buses at its Nairobi plant (since 1975). The production capacity is 5,500 vehicles/year (one shift) and actual production was 4,200 in 2020.
- Kenya is the most industrialized member of the East African Community (EAC). It has the capacity to export manufactured products to other EAC members if regional tariffs are removed and standards are harmonized (not yet fully realized).
- In Ethiopia, Kaki began to assemble Isuzu trucks NPR and FSR in 2020 but volume remains small due to foreign currency shortage and other problems.



Mitsubishi Motors

- Mitsubishi Motors stopped car production in Africa (South Africa) in 2011 but it re-entered Africa (Kenya) in August 2022 to produce pickup truck L200. This is commissioned manufacturing by Associated Vehicle Assemblers (AVA), a Mombasa firm that also assembles Toyota, Hino, etc.
- Mitsubishi's re-entry may be driven partly by AfCFTA that offers the future possibility of low or zero tariffs within Africa. Mitsubishi plans to test produce 200 vehicles with possible future expansion (Nikkei Newspaper, July 14, 2022).



L200

Recommended Actions: Immediate

The immediate goal for Ethiopia is to move from CBU imports to domestic assembly by incentivizing global automakers. These actions do not require much time or money.

- 1. Revision of incentive structure in favor of local assembly relative to CBU imports.**
- 2. Simplification of incentive structure by eliminating unnecessarily detailed vehicle types.**
3. An effective mechanism to solve inconsistencies and grievances in taxation and customs clearance.
4. A review of the surrender requirement and reallocation rules of foreign currency earnings (including the possibility of higher prioritization of manufacturing and especially automotive assembly).
5. A long-term automotive demand forecast and policy commitments consistent with it.

Recommended Actions: Medium to Long Run

When minimum production scale (100,000-200,000) is attained, the policy focus should shift to creating higher domestic value. This will require great effort and much time.

6. Solution of internal war, ethnic conflicts and security.
7. An ultimate solution to foreign currency shortage.
8. Efficient, fair and e-based customs clearance and logistic service for cost and time reduction (including the Djibouti segment).
9. Quality, safety, traffic control, environmental and fuel standards, etc. based on global practices.
- 10. When the domestic volume reaches a certain level, policies should be launched to boost domestic value creation (high industrial HR, supporting industries, productivity, global value chain participation, etc.)**