Deloitte Africa Automotive Insights
Navigating the African Automotive Sector: Ethiopia, Kenya and Nigeria
“Due to the rise of income levels in many African countries and the emergence of a middle class, Deloitte regards the continent as the final frontier for the global automotive industry. Given Africa’s population size and its positive economic outlook, automotive companies will be able to gain a competitive advantage by adopting a medium- to long-term view towards the continent.”

Dr Martyn Davies  
Africa Automotive Leader  
Deloitte Africa

Dr. Thomas Schiller  
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Foreword

The Deloitte Global Automotive Team has a leading presence in the automotive industry across the world, providing services to 80% of the Fortune 500 automotive companies. With global capabilities and expertise, Deloitte supports clients across the automotive industry, including original equipment manufacturers (OEMs), suppliers, dealers, vehicle finance providers and the aftermarket – to navigate the rapidly evolving automotive landscape globally.

While Africa’s automotive market is still underdeveloped, Deloitte recognises the potential of the automotive industry in Africa and foresees room for growth across the automotive value chain including vehicle sales, aftersales, vehicle assembly and production.

Deloitte regards the continent as the final frontier for the global automotive industry. This is as per capita income levels continue to rise, financial markets develop and cars become more accessible for a greater share of the population. Entering these largely uncharted automotive territories in Africa requires a mix of market insights, patience and a medium- to long-term strategy. Deloitte undertook in-market research to shed light on the status quo of the automotive sector with the question in mind of which market(s), barring South Africa – an already relatively well-developed autos market in the region – will be the next frontier for growth for the automotive industry, with a lens on three countries, namely Ethiopia, Kenya and Nigeria. The automotive industry in each of these countries is at a different level of development but in each holds substantial potential in the long term.

In a series of reports, Deloitte will monitor the development of the automotive industry on the continent and will provide insights into the industry. Deloitte is excited to leverage its global automotive expertise and to collaborate with automotive industry stakeholders to develop solutions for what is the final frontier for automotive’s growth.

Dr Martyn Davies
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A snapshot of the automotive sector in Africa

Africa’s automotive market\(^1\) is relatively small. In 2014, there were just over 42.5 million registered vehicles in use in Africa – a continent of approximately one billion people.

As a result, the motorisation rate on the continent is only 44 vehicles per 1,000 inhabitants. This is far below the global average of 180 vehicles per 1,000 inhabitants, and lower than other developing regions such as Latin America (176) and Developing Asia, Oceania and the Middle East (79).\(^2\)

In 2015, approximately 1.55 million new vehicles were sold or registered across Africa.\(^3\) South Africa, Egypt, Algeria and Morocco – all countries with established and rapidly developing automotive industries – together accounted for more than 80% of total new vehicle sales in 2015. Based on recent sales trends, some sources estimate that Africa’s passenger vehicle sales could reach up to 10 million units per annum within the next 15 years.\(^4\)

Between 2005 and 2015, registrations and sales of new vehicles (passenger and commercial combined) increased by a compound annual growth rate (CAGR) of 3.6% on the continent. While coming from a low base and although slightly higher than the global average of 3.5%, total sales growth in Africa was significantly slower than other emerging regions such as Asia and the Middle East (8.9%), and Latin America (4.2%).

Both the lower motorisation rate to date and new vehicle sales and registrations reflect the still relatively low purchasing power of African consumers relative to their emerging market peers. More importantly, the sizeable latent potential of the continent’s automotive market in the long term.\(^5\)

Due to limited disposable income and the high cost of new vehicles, second-hand vehicles dominate the continent’s automotive retail sector. These are mainly imported. Based on in-market research, Deloitte estimates that in the three African countries under review (Ethiopia, Kenya, Nigeria) at least 8 out of 10 imported vehicles are used vehicles.

This is a common trend across the region given that Africa imports four times more automotive products than it exports, with automotive imports worth US$48 billion in 2014 and exports worth only US$11 billion that year. Key sources of used vehicles are the United States (US), Europe and Japan. The Middle East for example serves as a notable transit route for vehicles into East Africa.

Imports of vehicles grew rapidly from 2003 onwards, coinciding with GDP per capita growth and a growing middle class on the continent. This was supported by high commodity prices at the time. South Africa dominates automotive trade on the continent, accounting for three-quarters of Africa’s automotive exports and 15% of imports in 2014.\(^6\)

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1. This is inclusive of commercial and passenger vehicles, and excludes motorbikes.
2. OICA, 2016
3. OICA, 2016
5. OICA, 2016
6. UNCTAD, 2016
South Africa, Egypt, Morocco, and Algeria have sizeable automotive assembly and manufacturing sectors. Despite these relatively well established automotive hubs in South Africa and countries in North Africa, fewer than 900,000 vehicles were produced on the continent accounting for just over 0.9% of global production in 2015. The rest of the continent is mainly a retail dominated automotive market. A common trend thus is that a small share of new vehicles competes against a strong influx of second-hand vehicle imports.

Even though domestic vehicle production and assembly may have substantial multiplier effects for African economies, and could act as a catalyst for industrialisation and economic diversification, this is at a lesser stage of development. As a result the sector has been an attractive option for policymakers seeking to boost manufacturing employment, diversify export revenue sources and ultimately industrialise their economies.

**Vehicles in use in Africa, 2014**

- **42.5 Million** Vehicles in use
- **18.1%** Rest of Africa
- **22%** South Africa
- **2.1%** Ivory Coast
- **2.9%** Kenya
- **3.3%** Tunisia
- **4.3%** Congo
- **6.1%** Libya
- **8%** Morocco
- **12.1%** Algeria
- **12.1%** Egypt
- **8.4%** Nigeria

**Annual vehicle registrations in Africa, 2005-2015**

- **1800** Passenger vehicles
- **1600** Commercial vehicles

Source: OICA, 2016

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7OICA, 2016

8For example, research conducted shows that every automotive manufacturing job creates up to seven additional jobs, reflecting the strong multiplier effect of the industry (Centre for Automotive Research, 2015). Economies with established automotive sectors also tend to be more economically complex, where economic complexity is the “measure of knowledge in a society that gets translated into the product it makes”, and therefore also more prosperous (Centre for International Development, 2016).
The automotive sector in Ethiopia, Kenya and Nigeria

*Deloitte undertook in-market research to shed light on the status quo of the automotive sector with the question in mind of which market(s), barring some of the more developed automotive markets in Africa as noted in the previous section, will be the next frontier for growth for the automotive industry. Ethiopia, Kenya and Nigeria were identified for the research based on the following reasons:*

**Ethiopia**

Ethiopia was Africa’s fastest growing economy in 2015 and has the continent’s second largest population. Ethiopia’s automotive potential is underpinned by the state-driven economy and a government that is geared toward industrialisation, which makes it the African economy that is most similar and arguably likely to replicate the development successes of China of the mid-1980s onwards.

**Kenya**

Kenya is the largest and wealthiest economy in East Africa and plays an important regional role. Kenya’s sizeable middle class, progressive business environment, regional market access and history of automotive assembly positions the country well as a potential East African automotive hub.

**Nigeria**

Nigeria, as Africa’s largest economy, presents a sizeable untapped automotive market with the continent’s largest population and relatively high GDP per capita. For this reason, Nigeria has generated the most interest among automotive players as a future market in Africa. Nigeria also has a legacy of having sizeable assembly plants.
### Socio-economic indicators

<table>
<thead>
<tr>
<th>Indicator (unit)</th>
<th>Ethiopia</th>
<th>Kenya</th>
<th>Nigeria</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (m)</td>
<td>90</td>
<td>44</td>
<td>180</td>
<td>2015</td>
</tr>
<tr>
<td>GDP per capita (US$)</td>
<td>702</td>
<td>1 432</td>
<td>2 758</td>
<td>2015</td>
</tr>
<tr>
<td>Urban population (% of total)</td>
<td>19</td>
<td>25</td>
<td>47</td>
<td>2014</td>
</tr>
<tr>
<td>Population in the largest city (% of urban population)</td>
<td>17</td>
<td>33</td>
<td>15</td>
<td>2014</td>
</tr>
</tbody>
</table>

### Autos indicators

<table>
<thead>
<tr>
<th>Indicator (unit)</th>
<th>Ethiopia</th>
<th>Kenya</th>
<th>Nigeria</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleet size</td>
<td>587 400</td>
<td>1 300 000</td>
<td>3 590 000</td>
<td>2015</td>
</tr>
<tr>
<td>Sales of new vehicles (p.a.)</td>
<td>18 000</td>
<td>19 523</td>
<td>26 400</td>
<td>2015</td>
</tr>
<tr>
<td>Commercial vehicles (% new sales)</td>
<td>16</td>
<td>86</td>
<td>29</td>
<td>2015</td>
</tr>
<tr>
<td>Passenger vehicles (% new sales)</td>
<td>84</td>
<td>14</td>
<td>71</td>
<td>2015</td>
</tr>
<tr>
<td>New vehicles (% total fleet)</td>
<td>15</td>
<td>20</td>
<td>10</td>
<td>2015</td>
</tr>
<tr>
<td>Second hand vehicles (% total fleet)</td>
<td>85</td>
<td>80</td>
<td>90</td>
<td>2015</td>
</tr>
<tr>
<td>Motorisation rate (/1 000 people)</td>
<td>2</td>
<td>28</td>
<td>20</td>
<td>2014</td>
</tr>
</tbody>
</table>

### Financial inclusion indicators

<table>
<thead>
<tr>
<th>Indicator (unit)</th>
<th>Ethiopia</th>
<th>Kenya</th>
<th>Nigeria</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private credit bureau coverage (% of adults)</td>
<td>0</td>
<td>14.3</td>
<td>6.7</td>
<td>2015</td>
</tr>
<tr>
<td>Borrowed from a financial institution (% age 15+)</td>
<td>7.4</td>
<td>14.9</td>
<td>5.3</td>
<td>2014</td>
</tr>
<tr>
<td>Account at financial institution (% age 15+)</td>
<td>21.8</td>
<td>55.2</td>
<td>44.2</td>
<td>2014</td>
</tr>
<tr>
<td>Depth of credit information (0=low, 8=high)</td>
<td>0</td>
<td>7</td>
<td>6</td>
<td>2015</td>
</tr>
</tbody>
</table>

*Source: Ethiopian Ministry of Transport; Ethiopian Road Transport Authority; In-market interviews; World Bank; IMF; KMI; OICA*
Ethiopia
Country insights: Ethiopia

Ethiopia has been among Africa’s most impressive growth performers over the past decade averaging 10.9% annual growth between 2004 and 2014.

With a GDP of US$63 billion economy in Africa and the third in 2015 it is the ninth largest in Eastern Africa.

After Nigeria, the country is also home to the continent’s second largest population of 90 million people in 2015 and a forecasted 100 million in 2020.9

The government’s economic development strategy is highly regarded internationally. Premised on sound macroeconomic policies, the strategy focuses on economic diversification by promoting agriculture and industrial development, and the creation of a business environment that is conducive to investment, supported by sizeable infrastructure development. Although seen as one of the world’s poorest countries, with a per capita income of only US$702 in 2015, Ethiopia arguably is a relatively untapped investment opportunity in Eastern Africa especially in the manufacturing sector.

Given the current limited disposable income, Ethiopia’s automotive market is dominated by second-hand imported vehicles – particularly commercial vehicles. Commercial vehicles10 were Ethiopia’s second most valuable import overall in 2014, worth US$859 million.11 Commercial vehicles were also Ethiopia’s highest earning automotive export in 2014.

This can largely be attributed to Bishoftu Automotive Industry (BAI), an automotive manufacturing and assembly company run by the Ethiopian military. BAI specialises in assembling, upgrading, overhauling and localising buses, pick-ups, SUVs, trucks and military equipment such as tanks and armoured personnel carriers (APCs). Military vehicles are largely for the use of the Ethiopian military and African Union peacekeeping missions while civilian vehicles are supplied to local customers such as state-owned transport providers. Small quantities of commercial vehicles have been exported to neighbouring Somaliland.

Vehicles in use

Ethiopia has the lowest motorisation rate globally, with only two cars per 1 000 inhabitants in 2014.12 OICA estimates that in 2014 there were 150 000 vehicles in use in Ethiopia, of which 90 000 were passenger vehicles and 60 000 were commercial vehicles.

Between 2005 and 2014, total vehicles in use grew at a CAGR of 2%.13

“Second-hand vehicles in Ethiopia tend to appreciate in value due to high import duties and limited supply of vehicles.”

Recent buyer of second-hand vehicle

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9IMF, 2015
10SITC, 782
11UNCTAD, 2015
12OICA, 2016
13OICA, 2016
However, figures differ by sources, with OICA reporting perhaps the most conservative estimates. The World Health Organisation, for example, estimates that there were 377,943 registered vehicles in Ethiopia in 2010. Ethiopia’s Ministry of Transport reports that there are 587,400 vehicles on the road, with an annual growth rate of approximately 6%. Approximately 84% of the market is passenger vehicles while commercial vehicles make up 16%.

Second-hand vehicles dominate the market. Approximately 85% of vehicles are second-hand imports, of which almost 90% are Toyotas. These vehicles are imported primarily from the Gulf States, through the Port of Djibouti.

The vast majority of Ethiopia’s vehicles are concentrated in Addis Ababa, while the number of vehicles in rural areas remains low. Few grey or illegal imports exist in any of the big cities. Points of entry to Ethiopia are well controlled, with the exception of the area around the border with Somalia.

The average age of Ethiopia’s fleet is 15-20 years. Vehicles are considered to be second-hand ten years after their production date, compared to the global norm of four years after production.

**Vehicle sales**

There is almost no publicly available reliable data on vehicle sales in Ethiopia. It is however estimated that 18,000 vehicles are brought into Ethiopia each year. The majority of these are second-hand vehicles. Each year, 2,000 new Toyotas and between 5,000 and 7,000 used Toyotas are imported. In total, Toyota controls approximately 65% of the total market (new and second-hand) due to its reputation as being reliable and inexpensive to maintain.

The main drivers of new commercial vehicle sales are construction, agri-business and retail while passenger vehicle sales are driven by government (including diplomatic corps) purchases.

Due to low disposable income, the absence of vehicle finance facilities and the ban of vehicle leasing schemes, personal vehicles remain out of reach for the majority of the population. Limited availability of foreign exchange to purchase imports also restrains access to vehicles.

“Due to high taxes, the prices for luxury SUVs often exceed the cost of a commercial truck with trailer.”

*Senior executive of commercial vehicle distributor in Addis Ababa*

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14 World Health Organisation, 2015
15 Road Transport Authority, 2015
16 Interview, Addis Ababa, February 2016
17 Interview, Addis Ababa, February 2016
18 Interview, Addis Ababa, February 2016
19 The Ethiopian retail banking sector is currently closed to foreign financial services providers.
Vehicle affordability is further locked up by prohibitively high vehicle taxes of sometimes more than 220% depending on engine size. As taxes in Ethiopia are cumulative, excise tax is calculated on the customs duty, surtax is charged on top of the excise tax, and customs duty and final VAT is calculated once the surtax, excise tax and customs duty have been added. Imported vehicles may cost as much as three times the retail price of the vehicle outside of the country.\textsuperscript{20}

Commercial vehicles, such as pick-ups, vans and trucks, have a lower tax rate than vehicles for personal use. Relative disincentives exist vis-à-vis personal vehicles compared to commercial vehicles. Diplomats and foreign investors are allowed to import vehicles duty-free.

The supply-depressing character of foreign exchange shortages\textsuperscript{21} contributes to imbalances in the market and drives up the market price of vehicles, thus also having a negative impact on the affordability of vehicles in the Ethiopian market.

**Tax rate for vehicle imports, 2015**

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>1 Cylinder capacity 1 000 – 1 300cc</td>
</tr>
<tr>
<td>2 Cylinder capacity 1 301 – 1 800cc</td>
</tr>
<tr>
<td>3 Cylinder capacity 1 801 – 3 000cc</td>
</tr>
<tr>
<td>4 Cylinder capacity &gt;3 000cc</td>
</tr>
<tr>
<td>5 C-cabin and single cab, carrying capacity not exceeding 1 500kg</td>
</tr>
<tr>
<td>6 Public transport – seating capacity ≤ 15 passengers</td>
</tr>
<tr>
<td>7 Public transport – seating capacity &gt; 15 passengers</td>
</tr>
<tr>
<td>8 Truck</td>
</tr>
<tr>
<td>9 SKD</td>
</tr>
<tr>
<td>10 Duty-free vehicles</td>
</tr>
</tbody>
</table>

*Source: Ethiopia Revenue and Customs Authority, 2015*

\textsuperscript{20}Interview, Addis Ababa, February 2016

\textsuperscript{21}See the sub-section on Production and Assembly for more detail on impact of access to forex on assembly
Production and assembly

The Ethiopian Investment Commission (EIC) reports that 31 foreign vehicle investment projects (largely Chinese projects but also some involvement of European companies) and 73 domestic vehicle assembly investment projects have been licensed since 1998. This means that a total of 104 companies have been licensed for vehicle assembly in the country over the past two decades. However, only a few of these are operational, with the vast majority licensed at the pre-implementation stage. While actual production numbers are not available, a number of assemblers indicated that plants were not operating at full capacity due to the current limited market size and inadequate access to foreign exchange to cover imports of Semi Knocked-Down (SKD) kits.

Domestic assemblers, 2015

<table>
<thead>
<tr>
<th>Assembler</th>
<th>Location</th>
<th>Annual capacity</th>
<th>Brands</th>
<th>Type of vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yang Fan</td>
<td>Dukem Eastern Industry Zone</td>
<td>1 000</td>
<td>Lifan</td>
<td>Passenger vehicles</td>
</tr>
<tr>
<td>Betret International</td>
<td>Adama</td>
<td>1 200</td>
<td>BYD Auto</td>
<td>Passenger vehicles</td>
</tr>
<tr>
<td>Mesfin Industrial Engineering</td>
<td>Mekelle</td>
<td>1 000</td>
<td>Geely</td>
<td>Passenger vehicles</td>
</tr>
<tr>
<td>Nigma Motors and ZAZ</td>
<td>Gulele</td>
<td>300</td>
<td>Nigma (produce Daewoo, Chevrolet under license)</td>
<td>Passenger vehicles</td>
</tr>
<tr>
<td>Bishoftu Automotive Industry (BAI)</td>
<td>Bishoftu</td>
<td>4 000</td>
<td>Bishoftu, FAW</td>
<td>Passenger vehicles, LCV, HCV</td>
</tr>
<tr>
<td>Belayab Engineering</td>
<td>Adama</td>
<td>500</td>
<td>FAW</td>
<td>HCV</td>
</tr>
<tr>
<td>Automative Manufacturing Company of Ethiopia (AMCE)</td>
<td>Addis Ababa</td>
<td>600</td>
<td>IVECO</td>
<td>HCV</td>
</tr>
</tbody>
</table>

Source: In-market interviews and company websites, 2016

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22 GeeskaAfrika, 2015
23 Interview, Addis Ababa, February 2016
During the past decade, a number of leading international automotive companies have carried out market scoping exercises to assess the viability of Ethiopia as an assembly hub. However, due to the limited market size, large-scale investments by these automotive firms have not yet materialised.24

While SKD production currently takes place, companies such as BAI are looking to move to Complete Knocked-Down (CKD) kits and possibly the full production of vehicles within the next five years. BAI dominates the local production market, with a number of private sector players perceiving it to be difficult to compete against the state-supported assemblers in the current environment. BAI also benefits greatly from local government patronage of its products, especially buses used for public transport schemes in Addis Ababa.

Although a number of assemblers source some components such as tyres locally, Ethiopia has no defined local content requirement. A number of assemblers indicated that they are instructed that local content should be approximately 30% in order to qualify for the 30% tax incentive associated with all local manufacturing, but that no written agreement exists between assemblers and the state.25

Due to Ethiopia’s tax system, which subjects vehicles to tax depending on their engine size rather than age or origin, it is often cheaper to import a second-hand vehicle with a smaller engine size than it is to assemble a vehicle locally, despite import taxes on these vehicles.

Ethiopia is subject to foreign exchange controls and exporters are given preferential access to foreign exchange. Insufficient availability of foreign exchange causes inefficiencies and planning challenges for importers of SKD kits, Fully Built-up (FBU) units and parts (for assembly or repair) and inhibits the growth of the assembly and retail market.26

Policy environment

The Ethiopian government has been targeting both public and private investment into value-added manufacturing, in an effort to diversify the economy away from agriculture. Ethiopia is making a substantial effort to link into global value chains by targeting export-orientated manufacturing and has attracted a number of investors into the garment and textile industry. This is seen to support the government’s goal of becoming a middle income country by 2025.

The manufacturing sector has been selected as a high priority sector by government. As a result, Ethiopia’s economic policy, the second Growth and Transformation Plan (GTP II), aims to support and grow the manufacturing contribution to GDP from 4% in 2014 to 8% by 2020. This is supported by attracting investment through industrial parks and extending incentives, including tax incentives, to foreign investors.27

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24 Interviews, Addis Ababa, February 2016
26 Interview, Addis Ababa, February 2016
27 In 2012 the state introduced provisions for the development of both state-run and private industrial zones. These include a range of investment, tax and infrastructure investment incentives (Ethiopian Investment Commission, 2015).
Looking back three decades, the experience of foreign automotive companies in China holds valuable insights for automotive companies targeting African economies. Volkswagen (VW) and General Motors (GM) entered the Chinese market at a stage when vehicle sales were below 50,000 units per year. Five years after the market entry of VW, annual new vehicle registration had not yet reached 60,000 units, translating into a rate of 0.05 registrations per 1,000 people – below the current rates of 0.2 for Ethiopia, 0.4 for Kenya and 0.15 for Nigeria. The limited market in China was not a deterrent for the early movers who recognised China’s long-term potential.

VW, one of the first movers, entered China when China’s GDP per capita was less than a third of Ethiopia’s current level. GM, currently the market leader in China, entered the country when China’s per capita income was approximately at the same level as Ethiopia’s per capita income is at present. Today GM and VW sell more than 3.5 million units per year each and hold a combined market share of close to 30%. The experience of these two first movers shows that an early positioning vis-à-vis the future potential of an underdeveloped market can assist in establishing market leadership in the long term.

**Four decades of China’s automotive market, 1980-2016f**

Source: Deloitte calculations based on IMF, 2015 & EIU, 2015
For example, new investors in the manufacturing sector, including automotives, are exempt from paying income tax for a period of five years if more than 50% of their products or services are exported, or if more than 75% of their product is supplied to an exporter as a production input. Investors who only supply the local market or export less than 50% of their product are tax exempt for two years. Income tax exemptions ranging from one to ten years are applicable to investors in a range of prioritised industries and sectors which include manufacturing but not specifically automotive or component manufacturing. In fact, a dedicated automotive manufacturing policy is not in place.

Given that the current tax regime governing vehicle excise and surtax does not distinguish between imported or locally assembled vehicles, levying of these taxes does not provide any incentive for establishing local assembly or manufacturing but rather serves as a revenue generation mechanism for the government.

While most vehicle imports attract high tax rates, the Ethiopian Government does not levy any export duty on vehicles. Duty-free exports and preferential market access due to its membership of the Common Market for Eastern and Southern Africa and duty-free access to the US under the African Growth and Opportunity Act (AGOA), provide Ethiopia with access to a much larger market than its domestic market. The experiences of automotive hubs in emerging markets including Mexico, South Africa and Thailand, indicate that preferential or duty-free access to large export markets is beneficial for the development of an export-oriented automotive industry.

“The second-hand vehicle import market is almost exclusively controlled by Ethiopian nationals. It is almost impossible for outsiders to penetrate this corridor.”

Senior executive of international vehicle distributor with more than 20 years in-market experience

28 Ethiopia Revenue and Customs Authority, 2015
Book price versus actual price in Ethiopia

In addition to the high tax rates that vehicles attract, the government’s method of determining the value of imported vehicles further increases the retail price. The base value of the vehicle is based on the government’s own “blue book” which does not tend to be in line with market prices globally. Furthermore, when varying prices for the same vehicle occur, the highest base value is applied. The following examples illustrate the discrepancies between international market prices and the retail prices in Ethiopia:

“Consumers tend to opt for non-genuine spare parts because of their lower price.”

_In-market industry analyst_

<table>
<thead>
<tr>
<th></th>
<th>Toyota Vitz 2003</th>
<th>Toyota Land Cruiser 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price overseas</td>
<td>~US$1,500 (from Dubai)</td>
<td>~US$30,800 (from Germany)</td>
</tr>
<tr>
<td>Base government price</td>
<td>US$7,477</td>
<td>US$53,171</td>
</tr>
<tr>
<td>Old car depreciation of 30%</td>
<td>US$5,234</td>
<td>US$37,219</td>
</tr>
<tr>
<td>CIF value</td>
<td>US$5,934</td>
<td>US$39,219</td>
</tr>
<tr>
<td>Final exit price from customs (including all applicable taxes)</td>
<td>US$13,174</td>
<td>US$133,953</td>
</tr>
<tr>
<td>Tax paid amount on government base value</td>
<td>US$7,240 (122%)</td>
<td>US$94,734 (242%)</td>
</tr>
<tr>
<td>Effective tax rate on actual paid CIF value</td>
<td>329%</td>
<td>289%</td>
</tr>
</tbody>
</table>

_Source: Deloitte Ethiopia, 2016_
Key takeaways Ethiopia

Despite being home to the continent’s second largest population, the overall automotive market size remains small in the short to medium term for current and prospective assemblers and producers.

However, Ethiopia’s strong government support for industrialisation and the development of auxiliary industries coupled with a large cost competitive labour pool, and sizeable investments in infrastructure (both physical and economic) could position the country favourably for automotive manufacturing in the long term to service both the regional and domestic market with price competitive vehicles. To achieve this, clear definitions of local content need to be developed.

The country’s high tax rates on vehicles reduce the affordability of vehicles, especially given the low income of the population, and restrains the vehicle retail market. To address this, industry stakeholders should support the establishment of vehicle financing solutions, in order to encourage wider vehicle ownership. Taxes should be revised to also take the age of vehicles into account in order to provide incentives for locally-produced vehicles.

To overcome the limited supply of foreign exchange available to automotive importers and producers policy interventions and cooperation between government and private sector players would be required.

Ethiopia’s lack of automotive policy presents a unique opportunity to develop such a policy, with inputs from both the private and public sectors, to ensure that a comprehensive, efficient policy aligned to the country’s overall vision to industrialise is implemented over the medium term.

Similarly to the case of China in the early 1980s, Ethiopia’s current small market size and motorisation rate should not be seen as a deterrent for market entry, but rather as a unique long-term opportunity for first movers in the automotive sector.
Kenya
Country insights: Kenya

Kenya’s GDP per capita is expected to reach US$1 432 in 2015 and to grow at a CAGR of 7.5% between 2000 and 2020.\(^{29}\)

This is expected to result in an increase in private consumption and among other things, drive the sales of motor vehicles. Expenditure on the purchase of cars, motorcycles and other vehicles accounted for 1.5% of total consumer expenditure in 2015 and is expected to remain relatively stable to 2025 as incomes rise.\(^{30}\)

The volume of imported cars and motorcycles has been on the increase due to the availability of attractive credit from financial institutions and the rise of the middle class. According to the Kenya National Bureau of Statistics (KNBS) the volume of imported vehicles between 2003 and 2012 have grown at over 300% from 33 000 units to 110 474 units. Passenger vehicles were Kenya’s fourth largest import overall in 2014, valued at US$420 million and making up 2.3% of total imports (by value) while commercial vehicles ranked seventh, valued at US$370 million.\(^{31}\) If the current trend of 10% to 12% growth per annum on vehicle imports is to be maintained, Kenya will have five million vehicles on the road by the year 2030.

In the early 1980s, Kenya banned the importation of FBUs. At the time, Kenya was assembling approximately 18 000 units locally.\(^{32}\) Following a World Bank-imposed structural adjustment programme (SAP) in mid-1993, the country removed a large number of trade restrictions and the economy underwent liberalisation, allowing the importation of FBUs. As no age limit was imposed on vehicles imported, second-hand imports, some up to 20 years old, flooded the market.

To date, Kenya is still highly dependent on imports to meet domestic demand, with imports making up 94% of bilateral automotive trade and second-hand vehicles accounting for over 80% of those imports. Both passenger and commercial vehicles feature in Kenya’s top ten imports by value. As the regional gateway on account of the Port of Mombasa, 99.9% of Kenya’s automotive exports are to other African countries, with Uganda and Tanzania being the biggest markets.

Although Kenya used to have large volumes of grey and illegal imports, this has been reduced through a number of government interventions, and as a result the used imported market is now more regulated. The Kenya Revenue Authority and the Kenya Bureau of Standards are situated at entry ports such as the Port of Mombasa and Jomo Kenyatta International Airport to monitor and record the arrival of vehicles. Vehicles entering through these ports that are destined for countries other than Kenya, such as Uganda, have to receive their clearance and payment confirmation of registration fees from the destination country before they are able to leave the port of entry.\(^{33}\)

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\(^{29}\) IMF; 2015
\(^{30}\) Euromonitor, 2015
\(^{31}\) UNCTAD, 2015
\(^{32}\) Interview, Nairobi, January 2016
\(^{33}\) Interview, Nairobi, January 2016
Vehicles in use

It is estimated that approximately 80% of Kenya’s total vehicle fleet are second-hand vehicles,\(^{34}\) with a total vehicle fleet of around 1.3 million units in 2014.\(^{35}\) In 2012, the average age of vehicles on Kenya’s roads was 15 years, which has resulted in high levels of pollution, frequent breakdowns of vehicles, and a large non-genuine spare parts industry developing.\(^{36}\)

The total number of vehicles in use grew at a CAGR of 7.6% between 2005 and 2014.\(^{37}\) Figures for Kenya’s motorisation rate differ depending on the source, and range between 26 and 28 vehicles per 1,000 persons.\(^{38}\) This is forecast to increase to 31.5 in 2019, reflecting vehicle ownership growing faster than Kenya’s population.\(^{39}\)

“The most popular second-hand vehicles cost between Ksh350 000 and Ksh500 000.”

*in-market industry analyst*

Vehicle sales

According to the KNBS, a total of 112,536 vehicles were registered in 2015 – this included newly registered and re-registered vehicles.\(^{40}\) KNBS does not differentiate between the registration of new vehicles and the re-registration of used vehicles, whereas the Kenya Motor Industry (KMI) only records new vehicles sold. KMI states that 19,523 new vehicles were sold in Kenya in 2015, reflecting the dominance of used vehicles in the retail market. In 2015 light and heavy commercial vehicles combined accounted for 86% of total vehicle sales, highlighting the importance of larger vehicles, such as light commercial vehicles, minibuses, heavy trucks, and buses. Sedans and SUVs made up 14%.\(^{41}\) Heavy commercial vehicles too saw the highest growth, with a CAGR of 17.5% between 2005 and 2015 and thus were key drivers underpinning new vehicle sales growth over that period.

Sales of new vehicles in Kenya are driven by the demand for transportation in the construction, mining, agri-business, tourism, energy and retail sectors. The government and in particular its law enforcement and security authorities are significant buyers of new vehicles.

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\(^{34}\) Oxford Business Group, 2014  
\(^{35}\) BMI, 2015  
\(^{36}\) KMI, 2012  
\(^{37}\) OICA, 2016  
\(^{38}\) OICA, 2016; BMI, 2015  
\(^{39}\) BMI, 2015  
\(^{40}\) KNBS, 2016  
\(^{41}\) KMI, 2016
In light of current growth drivers, business fleet purchases make up a significant proportion of total vehicle sales. It is expected that firms investing in Kenya’s economy will drive stronger demand for business fleet purchases, particularly given the number of major infrastructure investments in the country in recent years, notably the Lamu Port-South Sudan-Ethiopia-Transport (LAPSSET) Corridor Project. The Kenya Local Government Sector Reform Strategy has given greater budgetary autonomy to local governments (Counties), resulting in County governments expanding their vehicle fleets and further driving local demand.42

**Production and assembly**

Kenya’s automotive market is largely focused on retail and distribution of vehicles, and after-sales support in servicing and spare parts sales. Small scale assembly of motor vehicles is done at three assembly plants, the General Motors East Africa (GMEA) plant in Nairobi, the Associated Vehicle Assemblers (AVA) plant in Mombasa and the Kenya Vehicle Manufacturers (KVM) plant in Thika. All three of the plants are operating below their capacity. However, the country’s good infrastructure, relative to other countries in the region, as well as its physical and strong economic position within the East Africa Community (EAC), make it a potential hub for automotive assembly and production in the region.

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42 Interview, Nairobi, January 2016
Recently, the Counties have been lobbying with investors to set up manufacturing hubs in their regions to provide employment and promote trade within their jurisdictions. In February 2016, Machakos County signed a deal with Ashok Leyland to set up an assembly plant in the County before the end of 2016.

Locally produced vehicles are assembled from CKD kits with minimal locally produced inputs. KMI defines CKDs as a package of most or all of the individual parts of a vehicle, as separate pieces. All of the pieces are brand new from their country of origin.

As Kenya does not locally assemble sedans (except occasionally on an ad hoc basis), commercial vehicles dominate Kenya’s domestic production – a similar focus employed in the early stages of Thailand’s automotive sector. In 2015 Kenya assembled 9,295 vehicles, of which 921 (close to 10% of assembly) were light commercial vehicles (LCVs) such as pick-up trucks, and the rest of the 9,295 were heavy commercial vehicles (HCVs) such as trucks and buses.

The assembly of motor vehicles in Kenya grew by 31.4% from 2013 to 2014. High growth of 54.4%, 43.7% and 20.8% was registered in the production of pick-ups, trucks and buses respectively. Kenya’s vehicle assembly figures are forecasted to almost double between 2013 and 2019.
Policy environment

The Kenyan government has identified the automotive and auto parts industry as a major economic driver in the Kenya National Industrialisation Policy Framework released in 2010. In order to build up its automotive industry, the framework identified five policy statements:47

01. The development of a 40 hectare automotive industrial park in Machakos by 2012;
02. Providing incentives to encourage locally assembled vehicles and the production of autos parts in order to gradually replace imported second-hand vehicles with locally assembled vehicles;
03. The establishment of a National Automotive Industry committee which would be tasked with developing the automotive value chain and co-ordinating the industry;
04. Impose high tariffs on automotive parts that could rather be produced locally to encourage the growth of a local industry; and
05. Set up a joint venture with an established automotive manufacturer by 2016 with the goal of domesticating the company within ten years.

While to date, most of the goals are yet to be realised, the government has devised a number of policies such as a 30% local input requirement for locally assembled vehicles (although this had not been implemented at the time of writing).

The Kenyan government has also committed to supporting entrepreneurs in the automotive components industry, developing the auto components supply chain, placing high tariffs on imported automotive components that could be manufactured locally and the formation of a national automotive industry board.

Duty rates for imported vehicles, 2015

<table>
<thead>
<tr>
<th>Type of Duty</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import duty</td>
<td>25% of CIF</td>
</tr>
<tr>
<td>Excise duty</td>
<td>KES 150 000* for vehicles over 3 years old</td>
</tr>
<tr>
<td></td>
<td>KES 200 000** for vehicles 0-3 years old</td>
</tr>
<tr>
<td>VAT</td>
<td>16% of (CIF + Import Duty + Excise Duty)</td>
</tr>
<tr>
<td>Import Declaration Fee</td>
<td>2.25% of CIF</td>
</tr>
<tr>
<td>Railway Development Levy</td>
<td>1.5% of CIF</td>
</tr>
</tbody>
</table>

* approximately US$1 500 at date of in-market research, ** approximately US$2 000 at date of in-market research, Source: KRA, 2015
47 Ministry of Industrialisation, 2010
All vehicles imported for use in Kenya attract an IDF (Import Declaration Fee of 2.25% of CIF) and RDL (Railway Development Levy of 1.5% of CIF) tax and are depreciated based on the year of manufacture and registration. Vehicles imported as CKDs attract 0% import duty but can only be imported by a licensed manufacturer. CKD kits are assembled in a KRA Bonded Warehouse facility and are only then required to pay IDF fees. However, as soon as these are removed from the bonded facility and are used in Kenya, they are subject to value added tax (VAT), excise duty and the RDL. Vehicles assembled in Kenya for export are not subject to domestic taxes.48

In July 2015 the Ministry of Industrialisation proposed policy measures in the Policy Framework for Motor Vehicle Assembly in Kenya to complement the National Industrialisation Policy Framework. The policy is expected to be implemented in 2016 with the aim of promoting new investments in the country’s automotive industry and for Kenya to become a globally competitive vehicle manufacturer.49

The 2015 framework aims to impose a tax of 2% on all imported FBU units, the creation of an Automotive Innovation Fund (AIF) to support research and development in the sector and the inclusion of the sector in special economic zones (SEZs), with the SEZ Bill passed at the end of 2015. Local assemblers and eventually producers located in SEZs will be afforded benefits including ten-year tax holidays, low utility rates, and export credits.50

The new framework, similar to the National Industrialisation Policy Framework, aims to create a National Automotive Council (NAC) which will be equipped to address aspects relating to the assembly and manufacture of vehicles, including capacity building and the proposal and implementation of incentives.51

The 2015 Policy Framework for Motor Vehicle Assembly in Kenya differs from the 2010 National Industrialisation Policy Framework in that engagement with the private sector has been more consistent. Rather than focusing on industrialisation as a whole and manufacturing more broadly, the new framework is centred on the automotive industry with a structure to drive local production. Stakeholders in Kenya’s automotive industry were engaged with to a greater degree than before and as a result the 2015 framework is seen as an improvement on the previous framework and a step in the right direction.52

In contrast to other EAC markets, vehicles older than eight years are not permitted for import into Kenya. Although, there is anecdotal evidence of cases of importers forging import documentation of older vehicles, this law is largely abided by and the industry believes that government implements it effectively.53 All imported vehicles undergo a roadworthiness inspection and the Ministry of Industrialisation is in the process of lowering the legal age limit of second-hand vehicles imported into the country to five years.54 This should reduce the number of imported used vehicles, as newer second-hand cars will be more expensive.
Within the EAC, products substantially transformed (i.e. from CKD to full assembly) in any of the member states (Burundi, Kenya, Rwanda, Tanzania and Uganda) should be sold on a duty-free basis in the other member states. In 2009 EAC member states ratified a Common External Tariff (CET) of 25% on vehicles imported into the region, hoping to drive local assembly. However, the other EAC countries have requested that the implementation of the CET be put on hold and continue to impose duties on vehicles assembled in Kenya, which currently is the only country in the EAC with the capacity to assemble vehicles.

Tanzania and Uganda’s argument is that vehicles assembled in Kenya do not abide by Tanzania and Uganda’s local content requirement of 35% and therefore do not qualify for duty-free access to these markets. Vehicles assembled in Kenya are therefore imported into these markets with a CET of 25%. This has resulted in imported vehicles having an advantage over vehicles assembled regionally, as cars arriving from Japan in Uganda and Tanzania are cheaper than vehicles assembled in Kenya. However, the Kenyan government is engaged in talks with other EAC states and it is likely that the issue will be resolved in the short term.55

Beyond the domestic policy focus on the automotive sector, Kenya was also identified by the EAC as a potential vehicle production hub for the region in its draft East African Industrialisation Strategy 2010-2030 released in 2010. The draft argued for encouraging major carmakers that already imported vehicles into the region to rather produce locally. However, this was left out of the final EAC Industrialisation Strategy 2012-2032, where the assembly of cars, buses and tractors and vehicle spares was identified as having the least growth potential in the region of 20 industries considered. Industry stakeholders interviewed however recognised the opportunity of both the regional parts value chain as well as the EAC as an export market for Kenyan produced vehicles and parts.56

“In order to avoid shipping duties, certain retailers fly-in cars from South Africa to Kenya.”

Senior executive of international vehicle distributor

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55 Interview, Nairobi, January 2016
56 Interviews, Nairobi, January 2016
Key takeaways Kenya

One of the greatest inhibitors to the advancement of Kenya’s automotive sector is the proliferation of second-hand vehicles available in the market.

Decreasing the age of cars allowed for import while simultaneously decreasing the affordability of these cars by increasing the taxes levied on them should drive sales of more affordable, newer, roadworthy, and locally-assembled cars.

Incentives to assemble locally, such as tax breaks or waiving of import duties for parts, will make it more affordable to assemble vehicles in Kenya in the short to medium term and could encourage production in the long term.

Also, definitions of local content need to be developed and aligned to the other EAC members’ automotive and manufacturing policies. These need to be accepted regionally, especially within the EAC, for Kenya to pursue an East African automotive manufacturing hub and export strategy. The development and promotion of auxiliary industries in partnership with the vehicle assemblers will enable automotive companies to source high-quality inputs locally, further strengthening the case for local assembly.

The Kenyan government is particularly aware of the need to improve the country’s infrastructure, with programmes in place to increase electricity accessibility and either refurbish or build new transport infrastructure. Despite new investments in the country, Kenya’s automotive sector is relatively stagnant and runs the risk of being side-lined in the long term by other regional players such as Ethiopia, which has a more progressive approach to industrialisation.
Nigeria
Country insights: Nigeria

With a population of close to 180 million and a GDP of US$493 billion in 2015, Nigeria is the most populous country with the largest economy in Africa.

Despite the current economic challenges low oil prices and a weakened currency, facing the country due to Nigeria still reveals robust economic growth of 2-4% in the medium term.

Owing to the lack of domestic vehicle production, Nigeria is highly dependent on imports to meet its domestic demand. In 2014, passenger vehicles constituted the second-largest import category after petroleum oils or bituminous minerals. Overall automotive-related imports stood at US$6.9 billion (passenger vehicle imports: US$2.9 billion) accounting for approximately 11.5% of Nigeria’s total imports. While auto imports recorded rapid growth between 2004 and 2014, the current slowdown in the economy and the recent introduction of high import duties on vehicles linked to the new automotive policy has led to a contraction in vehicle imports according to industry players.

Second-hand vehicles dominate the import market. It is estimated that approximately 10% of vehicles imported to Nigeria are brand new. A large share of second-hand vehicles are imported from the US, given that vehicle specifications in this market are more in line with the demand and taste of Nigerian consumers, which is not always met by entry-level models from Europe.

Before the hike of import duties on second-hand vehicles, Nigeria imported more than 100 000 cars per year from the US. In 2015, imports from the US had plummeted to less than 40 000 units. In addition to direct shipments to Nigeria, the Port of Cotonou in neighbouring Benin is a key transit point for second-hand vehicles destined for the Nigerian market. It is estimated that 85% of Benin’s used vehicle imports end up in Nigeria. In 2013, the European Union (EU) and the US exported approximately 300 000 cars to Benin.

Based on the import figures for Benin, an additional 255 000 used cars from the EU and the US entered Nigeria via Benin.

“There is no culture of maintenance in Nigeria – people drive their cars until they break down and then fix them.”

Vehicle finance executive in Lagos

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57 UNCTAD, 2015
58 Interviews, Lagos, January 2016
59 Black & McLennan, 2015
60 Black & McLennan, 2015
Vehicles in use

Depending on the source of data, the current vehicle fleet in the country ranges from 1.3 million vehicles\textsuperscript{61} to 10 million vehicles.\textsuperscript{62} According to the Federal Road Safety Corps the total fleet size was 1.52 million units in 2014, of which approximately one third are concentrated in Lagos State.\textsuperscript{63} Even applying the least conservative estimate of vehicles in use, namely 10 million vehicles, Nigeria’s motorisation rate is approximately one-third that of the global motorisation rate with less than 60 vehicles per 1,000 people. Due to the New Automotive Industry Development Plan (NAIDP) launched in 2014 that increased the prices for imported vehicles, and the economic slowdown triggered by low oil prices, Nigeria’s growth in fleet size slowed down remarkably in 2015. However, it is expected that in the short term fleet growth will stabilise in a range between 4.5\% and 5.5\% per annum.

“Provision of appropriate vehicle finance could potentially quadruple vehicle sales in the short term.”

\textit{Director of a major dealership}

\textbf{Vehicles in use, 2013e-2019f}

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</tr>
</thead>
<tbody>
<tr>
<td>Vehicles in use, units</td>
<td>1,224,138</td>
<td>1,334,954</td>
<td>1,341,156</td>
<td>1,414,400</td>
<td>1,479,423</td>
<td>1,547,812</td>
<td>1,617,345</td>
</tr>
<tr>
<td>Vehicles in use, units, % y-o-y growth</td>
<td>7.4</td>
<td>9.1</td>
<td>0.5</td>
<td>5.5</td>
<td>4.6</td>
<td>4.6</td>
<td>4.5</td>
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\textit{Source: BMI, 2015}
Vehicle sales

Despite being the most populous country in Africa, Nigeria’s new vehicle sales lag behind less populated countries such as Algeria, Egypt, Morocco and South Africa.

According to industry players, the overall new and second-hand market combined ranges between 500,000 and 1 million units per year. Smuggling, grey imports of second-hand vehicles and the lack of reliable data however, make the exact size of Nigeria’s vehicle market and fleet size difficult to quantify. Challenges concerning the licencing and identification of vehicles further contribute to this difficulty.

Imported second-hand vehicles, so-called tokunbos,64 dominate the Nigerian vehicle market as only a small segment of society is able to afford new vehicles. A representative of a leading automotive firm estimates that a mere 2% of the population is able to afford new vehicles given the current economic and financing environment. While commercial banks offer vehicle finance, accessing these credit facilities has become increasingly unattractive to individual consumers as credit facilities are provided at interest rates above 20% per annum and require at least a 10% down-payment.65

Commercial banks usually require repayment of vehicle loans within four years, due to the rapid depreciation of the value of vehicles given poor road conditions. According to one of the most established vehicle finance providers, the monthly repayment amount should not exceed 35% of the monthly income of the borrower.

The short repayment-period as well as the high interest rates present a key challenge for low- and middle-income households when it comes to accessing vehicle finance.

Due to the limited accessibility to and expensive financing of vehicles, new vehicles remain out of reach for most Nigerians and the largest share of current vehicle demand comes from the business community. Corporate buyers account for approximately 70% of overall new vehicle purchases, indicating the suppressed demand from private buyers,66 arguably the market segment with the largest growth potential.

Through recently introduced promotional offers by banks in partnership with selected vehicle dealers, customers are able to access finance at a discounted rate for a limited number of vehicles and models. Indeed, the provision of alternative financing products, especially in-house financing by the automotive companies, is seen by industry layers as a key requirement for the growth of the local market.

However, in the absence of affordable finance solutions, second-hand vehicles remain the more attractive option for private vehicle buyers. According to a representative of a leading automotive company, second-hand passenger vehicles accounted for 80% of sales in 2014. The share of tokunbos in the commercial vehicle market is even larger, reaching up to 90% of the market according to a leading commercial vehicle manufacturer.67

64 Tokunbo is a Yoruba term meaning ‘from across the seas’ or ‘from overseas’.
65 Interviews, Lagos, January 2016
66 Interviews, Lagos, January 2016
67 Interviews, Lagos, January 2016
Estimated new vehicle sales in Nigeria, 2005-2015

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Passenger vehicle sales</td>
<td>16 000</td>
<td>22 000</td>
<td>7 000</td>
<td>7 000</td>
<td>34 000</td>
<td>25 000</td>
<td>30 000</td>
<td>40 000</td>
<td>40 000</td>
<td>42 000</td>
<td>18 800</td>
<td>-55.2%</td>
</tr>
<tr>
<td>Commercial vehicle sales</td>
<td>7 000</td>
<td>16 000</td>
<td>5 000</td>
<td>5 000</td>
<td>17 000</td>
<td>12 000</td>
<td>15 000</td>
<td>10 000</td>
<td>12 000</td>
<td>11 900</td>
<td>7 600</td>
<td>-36.1%</td>
</tr>
<tr>
<td>Total sales</td>
<td>23 000</td>
<td>38 000</td>
<td>12 000</td>
<td>12 000</td>
<td>51 000</td>
<td>37 000</td>
<td>45 000</td>
<td>50 000</td>
<td>52 000</td>
<td>53 900</td>
<td>26 400</td>
<td>-51.0%</td>
</tr>
</tbody>
</table>

Source: OICA, 2016

Estimated market share of top vehicle brands by new sales in Nigeria, 2013-2014

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toyota</td>
<td>37</td>
<td>29</td>
</tr>
<tr>
<td>Hyundai</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Kia</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Other brands</td>
<td>38</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: BMI, 2015

New vehicle sales are dominated by Toyota which accounts for almost one third of new sales. Hyundai and Kia have established themselves as increasingly serious competitors to Toyota due to their competitive pricing and improved image in terms of quality. In 2014, the three Asian brands accounted for half of new vehicle sales in the country.

The economic slowdown, the depreciation of the naira and the increase in vehicle prices due to the import duty hike had a substantial impact on new vehicles sales in 2015. Although vehicle sales saw positive growth post the global financial crisis, total new vehicle sales dropped by more than half in 2015, compared to 2014. The sharp decline of sales highlights the absence of sizeable and competitive domestic assembly that could provide an affordable alternative to imports and the dependency on vehicle imports to meet domestic demand.
Production and assembly

Nigeria is no stranger to automotive assembly and manufacturing. Already in the 1970s Nigeria started assembling motor vehicles. In the 1970s and 1980s, the federal government of Nigeria partnered with six international automotive and commercial vehicle manufacturers to produce passenger and commercial vehicles locally from CKD kits. According to the National Automotive Council (NAC) these six companies had an initial installed capacity of 149,000 units per annum during the 1970s and 1980s.

**History of vehicle manufacturing in Nigeria**

<table>
<thead>
<tr>
<th>Company</th>
<th>Type of vehicles</th>
<th>Technical partner</th>
<th>Start of production</th>
<th>Annual plant capacity 1970s/80s</th>
<th>Estimated annual plant capacity 2013</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peugeot Automobile Nigeria Ltd</td>
<td>Passenger vehicles, mini-buses</td>
<td>Peugeot (France)</td>
<td>1975</td>
<td>63,000</td>
<td>25,000</td>
<td>Kaduna</td>
</tr>
<tr>
<td>Volkswagen of Nigeria Ltd</td>
<td>Passenger vehicles, mini-buses</td>
<td>Volkswagen (Germany)</td>
<td>1975</td>
<td>45,000</td>
<td>39,000</td>
<td>Lagos</td>
</tr>
<tr>
<td>Leyland Nigeria Ltd</td>
<td>Light commercial, mini-buses</td>
<td>Leyland UK (United Kingdom)</td>
<td>1980</td>
<td>7,500</td>
<td>5,000</td>
<td>Ibadan</td>
</tr>
<tr>
<td>Mercedes Benz-Anambra Motor Manufacturing Ltd</td>
<td>Trucks, buses</td>
<td>Mercedes Benz (Germany)</td>
<td>1980</td>
<td>7,500</td>
<td>5,000</td>
<td>Enugu</td>
</tr>
<tr>
<td>National Trucks Manufacturers Ltd</td>
<td>Trucks, tractors, buses (FIAT)</td>
<td>FIAT (Italy)</td>
<td>1980</td>
<td>13,000</td>
<td>5,000</td>
<td>Kano</td>
</tr>
<tr>
<td>Steyr Nigeria Ltd</td>
<td>Trucks, tractors, buses</td>
<td>Steyr Motors (Austria)</td>
<td>1980</td>
<td>13,000</td>
<td>5,000</td>
<td>Bauchi</td>
</tr>
</tbody>
</table>


“Sometimes, cars are imported to be stripped for parts as availability of genuine parts is limited."

Senior manager of leading vehicle insurance provider
In addition to these plants, the Federal Government entered into five more agreements with international automotive companies to establish assembly plants in 1982, according to the National Automotive Design and Development Council Nigeria. These agreements included the establishment of plants by Isuzu in Maiduguri, Mazda in Umuahia, Mitsubishi in Ilorin, Nissan in Minna and Peugeot in Gusau. However, these plans did not materialise.

Furthermore, due to inconsistent policy implementation, corruption, declining patronage by local and federal government departments and lack of reliable power supply, the output and capacity utilisation of the six existing plants declined rapidly.

Symptomatic of the demise of Nigeria’s automotive industry was the stop of production activities by Peugeot Automobile Nigeria (PAN), Nigeria’s largest manufacturer, in 2010. Since then assembly plants have been lying dormant. By 2012, all of the country’s automotive manufacturers had been privatised as the government exited the existing partnerships, eroding any incentives for government departments to purchase locally assembled vehicles.

**Peugeot Automobile Nigeria annual production, 2000-2013**

![Peugeot Automobile Nigeria annual production chart](source: Chamberlain, 2013)
The launch of Nigeria’s NAIDP in 2014 and the subsequent hike in import tariffs for vehicles has attracted the interest of leading international carmakers and has led to the resumption of small-scale vehicle assembly in the country. While the high import tariffs are aimed at encouraging local assembly, the sharp drop in vehicle sales in Nigeria in 2015 is a strong indication that this measure had an adverse impact on overall vehicle prices in the absence of a sufficient assembly base that could provide substitutes for imported vehicles. In 2015, local assembly was only able to cover 10-15% of the new vehicle market.

According to Bloomberg, Nigeria produced 4,000 vehicles in 2014. Representatives from the Lagos Chamber of Commerce and Industry put the total number of locally assembled vehicles at approximately 2,500 units for 2015. A leading commercial vehicle assembler cautioned that even these figures of locally assembled vehicles are likely to be overstated. A number of assemblers either only assemble a very limited number of test vehicles, or overstate the degree of value added in the assembling process in order to gain access to benefits under the NAIDP, highlighting the need for clear measures that ensure adequate implementation of the policy.

According to a senior representative of one of the automotive companies present in Nigeria, approximately 1,000 passenger vehicles were assembled in Nigeria in 2015 – an even more conservative estimate.

Currently, 35 companies are licensed to produce by the Nigerian Automotive Council under the NAIDP. Despite the increased focus on the automotive industry, the sector’s contribution to Nigeria’s GDP remains low at 0.07% in Q2 2015.

At present the vehicles are assembled from imported SKD kits with a limited degree of local inputs-sourcing due to the lack of a reliable and adequate domestic supplier base. While current assembly figures are low, with Peugeot Automobile Nigeria recording the largest number of vehicles assembled in 2015 with 400 units, the automotive companies aim at increasing their annual output in order to capitalise on the long-term growth prospects of the Nigerian market. However, due to the current economic slowdown, expansion plans are likely to be delayed as reflected in the decline of employment levels in some of the assembly facilities.

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70 Bloomberg, 2015
71 Interviews, Lagos, January 2016
72 National Automotive Design and Development Council, 2015
Assembly activities of leading automotive companies in Nigeria, 2016

<table>
<thead>
<tr>
<th>Brand</th>
<th>Local assembly partner</th>
<th>Models</th>
<th>Start of assembly</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nissan</td>
<td>Stallion Group</td>
<td>Patrol, Almera, NP300</td>
<td>April 2014</td>
<td>Lagos</td>
</tr>
<tr>
<td>Hyundai</td>
<td>Stallion Group</td>
<td>i10, i10 Grand</td>
<td>August 2014</td>
<td>Lagos</td>
</tr>
<tr>
<td>Volkswagen</td>
<td>Stallion Group</td>
<td>Passat, Jetta, CC, Amarok</td>
<td>July 2015</td>
<td>Lagos</td>
</tr>
<tr>
<td>Kia Motors</td>
<td>Dana</td>
<td>Rio, Cerato, Optima, Sportage, Sorento</td>
<td>August 2014</td>
<td>Lagos</td>
</tr>
<tr>
<td>Ford</td>
<td>Coscharis Group</td>
<td>Ranger</td>
<td>November 2015</td>
<td>Lagos</td>
</tr>
<tr>
<td>Honda</td>
<td>Honda Automobile Western Africa</td>
<td>Accord</td>
<td>July 2015</td>
<td>Ogun State</td>
</tr>
<tr>
<td>Peugeot</td>
<td>Peugeot Automobile Nigeria</td>
<td>301, 508</td>
<td>June 2014</td>
<td>Kaduna</td>
</tr>
</tbody>
</table>

*Source: Nissan Global, 2014; Leadership, 2014; Honda, 2015; Vanguard, 2015; This Day Live, 2015; Forbes, 2015; Interviews, Lagos, January 2016*

In addition to the activities of international automotive companies, Innoson Vehicle Manufacturing Company (IVM), an indigenous company, has started assembly of passenger vehicles in November 2014 at its plant in Nnewi in Anambra State in south-eastern Nigeria. IVM has been assembling commercial vehicles in Nigeria since 2009. The company has supply agreements with GAC Gonow Auto Company and Xiamen Golden Dragon Bus Co. Ltd – both from China – to be supplied with CKD kits for trucks and buses. While IVM is focusing on local procurement, the vehicles’ engines, gear boxes and electrical parts are imported from overseas.
Policy environment

Nigeria’s NAIDP, which was gazetted on 29 January 2014, forms part of the five-year Nigerian Industrial Revolution Plan (NIRP), which was officially launched by former President Goodluck Jonathan on 11 February 2014. The NAIDP was developed in consultation with existing local vehicle assemblers and international carmakers, as well as government entities of countries that successfully used policy measures to develop their automotive industries. The content of the policy was made available to the public on 2 October 2013.

In its current form the plan focuses on the following elements:

- Industrial infrastructure development, in particular supplier parks and clusters
- Skills development
- Homologation certification and standards
- Investment promotion, including fiscal measures
- Domestic market development

The fiscal measures which include a sliding-scale of tariffs and levies came into effect in July 2014 and follow the import substitution concept. By increasing the cost of importing FBUs the Nigerian government encourages the establishment of local assembly. The policy takes into account that the current manufacturing output is insufficient to meet local demand hence, providing carmakers with local production an import levy exemption for the import of two vehicles for each vehicle produced. The policy is supported by a ban of imports of vehicles older than 15 years; however, according to anecdotal evidence, the enforcement of this ban is undermined by smuggling and corruption. In order to mitigate this risk, the customs authorities from Benin and Nigeria have intensified efforts to collaborate on this matter and to work towards full compliance with the Economic Community of West African States (ECOWAS) trade agreements.

Import tariff regime, 2015

<table>
<thead>
<tr>
<th>Category</th>
<th>Duty</th>
<th>Levy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital equipment used for auto assembly</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Completely knocked-down kits (CKD)</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Semi knocked-down kits 1 (SKD1)</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>Semi knocked-down kits 2 (SKD2)</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Fully built vehicles (within the programme)</td>
<td>35%</td>
<td>0%</td>
</tr>
<tr>
<td>Fully built vehicles (outside the programme)</td>
<td>35%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Source: NAC, 2014
In addition to vehicle assembly, the NAIDP also aims to build a local component industry that is able to supply components to automotive companies at a competitive price. According to the NAC, the following have been earmarked for local production: welded parts including exhaust systems and seat frames; electrical parts including batteries, indicators and wiring harnesses; plastic and rubber parts including tyres, tubes, fan blades, seat foam, oil seals, hoses and radiator grills; and other parts such as radiators, cables, filters, brake pads, windscreens, side glasses, fibre-glass and paints.

The NAIDP aims to achieve the creation of a well-developed domestic supplier base by following a phased approach. Over four subsequent phases that are intended to last no longer than 12 months each, the level of local content and value addition is set to increase as follows:

**SKD 2 Phase 1:**
- Vehicle cabin fully trimmed, painted
- Dashboard fitted
- Accessories are installed
- Remaining aggregates are supplied loose and are assembled at plant

**SKD 2 Phase 2:**
- Cabin body fully painted and glazed
- Vehicles are assembled from finished components at plant

**SKD 1:**
- Cabin body unpainted
- Vehicles are assembled from finished components at plant

**CKD:**
- Inputs supplied loose for final welding and final assembly

At an initial stage during which local supply of inputs of parts and components is insufficient, assemblers will have to rely on imports. Given this dependency a temporary suspension of the Central Bank of Nigeria’s foreign exchange restriction rule should be considered. Under the current regime importers of 41 product lines – including glass and rubber products – are not able to access foreign exchange to secure these imports. This restriction is meant to encourage local production of the banned items; however, various industry players cite this as a key impediment to growing the domestic automotive industry in the short to medium term.75

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75 Interviews, Lagos, January 2016
While the NAIDP has been welcomed in general by motor vehicle assemblers, the policy reveals potential gaps.

Given that automotive assembly in Nigeria is not yet able to compete with established international automotive hubs on price, assemblers rely on protective measures such as import barriers.

The creation of a controlled operating environment for assemblers would allow Nigeria to ensure that investors compete on a level playing field, which in turn would encourage international automotive companies and suppliers to invest in Nigeria. In this controlled environment a government agency should ideally monitor and audit the influx of parts and components for assembly plants in order to effectively apply the automotive policy and the granting of duty rebates.

To ensure that the NAIDP is successful, the automotive-focused policy needs to be embedded into a broader industrialisation and economic policy that reduces operating costs across industries. In addition, the promotion of auxiliary industries including steel, rubber, leather and glass is required. By promoting a competitive operating environment for the industries to supply into the automotive sector, automotive companies will be enabled to source local inputs and to create multiplier effects within the Nigerian economy.

Given that the current NAIDP is geared towards the development of an automotive sector that serves the domestic market, very much like the inward-focused automotive policy of Brazil, the policy should be accompanied by interventions that increase access to vehicle finance through, for instance, the provision of specific government support earmarked for vehicle financing of locally produced cars. In addition patronage of Nigeria-based assemblers by government departments and entities would send a positive signal to the market.

While Nigeria has recently attracted a number of automotive players, the country runs the risk of derailing its automotive achievements, if the overall manufacturing environment does not improve or if policy implementation stalls. Without facing any notable production competition in West Africa yet, Nigeria’s automotive sector should take advantage of this opportunity.
A comparative look at Ethiopia, Kenya and Nigeria

The three countries under review each have an existing automotive industry, although at various stages of development, and are all interested in further expanding the sector. Only Nigeria has a concrete automotive industry policy in place to provide targeted support to the industry. Kenya and Ethiopia currently rely on their respective industrial policies, with Kenya focusing on improving the country’s operating environment, and Ethiopia on building industrial capacity through the country’s state-owned enterprises and by promoting science and technology education.

<table>
<thead>
<tr>
<th></th>
<th>Ethiopia</th>
<th>Kenya</th>
<th>Nigeria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of vehicle finance</td>
<td>Not readily available</td>
<td>Available to some extent</td>
<td>Available but at unfavourable terms</td>
</tr>
<tr>
<td>Vehicle retail market</td>
<td>Dominated by second-hand imports</td>
<td>Dominated by second-hand imports</td>
<td>Dominated by second-hand imports</td>
</tr>
<tr>
<td>Enabling operating environment</td>
<td>Difficult operating environment for private players, but good industrialisation policy</td>
<td>Improving operating environment</td>
<td>Difficult operating environment</td>
</tr>
<tr>
<td>Local supplier base</td>
<td>In the process of being developed</td>
<td>Existing, but quality needs to improve</td>
<td>Currently insufficient</td>
</tr>
<tr>
<td>After-sales market</td>
<td>Highly fragmented, dominated by independent or informal service providers</td>
<td>Highly fragmented, dominated by independent or informal service providers</td>
<td>Highly fragmented, dominated by independent or informal service providers</td>
</tr>
<tr>
<td>Automotive policy</td>
<td>Non-existent</td>
<td>In planning stages</td>
<td>Favourable policy, but implementation requires improvement</td>
</tr>
</tbody>
</table>

Source: Deloitte Analysis
Our take on navigating the African automotive sector

Deloitte views Africa’s automotive sector as the final frontier for automotive growth.

The viability of automotive assembly or production in Africa is regarded as limited in the short term, but has largely untapped potential in the long term.

To date, new vehicle sales on the continent as well as the local production and assembly of vehicles have been limited by various factors such as a small market size, lower purchasing power, a less competitive operating environment and an insufficient policy environment.

This has undermined the industry’s ability to reap economies of scale and thus supply price competitive vehicles to domestic and regional markets. To help unlock the markets of the countries evaluated, formalising and consolidating the automotive retail sector will be a priority in the short term. This will assist players across the automotive value chain to be closer to the consumer, at the same time educating the consumer about the benefits of new or certified pre-owned vehicles. It will also enable industry players to build local expertise and scalable capacity. As economies of scale at an individual country level will be challenging to achieve in the short term, domestically created capacity could be further scaled. This should be achieved through an export-orientated focus of both building regional value chains around components and plugging the continent into the global automotive supply chain through cost-competitive production in the medium to long term.

Firstly, the strong growth of vehicle sales in emerging markets generally reflects the global shift of sales from developed, high-wage countries to emerging, low-wage countries. This shift of sales has been accompanied by the shift of production capacity to these growth markets, in order to respond to increasing pressure on margins. The relocation to low-wage emerging markets allowed automotive manufacturers to save on labour costs and to be closer to the end consumer. In order to reduce logistics costs and to ensure uninterrupted supply with parts and components, tier-1 suppliers are increasingly relocating to the vicinity of the automotive plants they supply. While in 2002, seven out of 10 vehicles sold were in high-wage countries, Deloitte expects this to reverse by 2023.
Secondly, the shift within emerging or low-wage economies also requires consideration. A key focal point in this regard is China. Due to rising labour and input costs, it has been estimated that more than 80 million Chinese lower-end manufacturing job opportunities will offshore over the medium term.\textsuperscript{76} Although China is expected to remain an automotive manufacturing powerhouse in the coming years, rising production costs will encourage producers to move labour-intensive elements of the automotive value chain to cheaper locations.\textsuperscript{77} Due to its large labour pool and low cost for semi-skilled labour, Africa is well positioned to take advantage of this trend.

To transform the used vehicle markets to assembly and ultimately production markets, players in the automotive value chain have to commit to investments in market development activities that address the current bottlenecks and unlock the sector’s future potential.

This includes industry stakeholders building partnerships with governments and other auxiliary players in the value chain, in order to work towards a more competitive operating and supportive policy environment.

\textsuperscript{76} Lin, 2012

\textsuperscript{77} Frontier Advisory Deloitte, 2015
Getting Africa into gear

It is Deloitte’s view that achieving scale and unlocking the automotive market in Africa is a potentially sizeable medium- to long-term opportunity. A market-shaping approach, including a combination of interventions by industry stakeholders and governments that target supply-side and demand-side challenges, will however be required in the countries evaluated.

**Overcoming the over-reliance on second-hand vehicle imports**

In the markets under review imported second-hand vehicles accounted for more than 80% of total sales, reflecting the attractiveness of more price-competitive second-hand vehicles. In order to decrease the dominance of used vehicles, the attractiveness of these vehicles needs to be reduced and the access to new vehicles improved. Import tariffs or age restrictions on second-hand vehicles are aimed at stimulating demand for new vehicles and at encouraging local assembly.

**Addressing insufficient vehicle finance options**

In the absence of available vehicle finance options and in light of limited disposable income, African vehicle markets remain relatively suppressed, particularly markets for new vehicles. Insufficient vehicle finance tilts markets towards more affordable second-hand vehicles and reduces the number of potential vehicle buyers as vehicle finance allows consumers to spread the cost of ownership over a prolonged period of time. The development and provision of adequate vehicle finance solutions that are tailored towards the needs of local consumers provides an option for automotive companies to develop the market for new vehicles in countries with low levels of financial inclusion and underdeveloped credit information systems.
Building a sufficient local supplier base

Efficient and competitive vehicle assembly and production requires uninterrupted and price-competitive supply of parts and components. In order to ensure adequate supply of inputs, tier-1 suppliers tend to locate in proximity to assembly or manufacturing operations. This is even more important in the absence of cost-effective and efficient transport infrastructure. Yet, the current lack in scale of assembly and the uncompetitive operating environment reduce the incentives for tier-one suppliers to locate in-market and makes SKD and CKD assembly more attractive. As a result, enhancing the operating environment will ensure that countries are able to both increase the scale of local vehicle production and attract suppliers into the market.

Designing and implementing an automotive policy to unlock the auto market

The unlocking of Africa’s automotive market requires a country/regional vision. This vision needs to be supported by the correct mix of trade and industrial policies that address the key challenges in the sector, and that are designed and implemented in partnership with industry stakeholders. Furthermore, in order to ensure the success of policies supporting the automotive sector’s development, the proposed interventions need to be supported by and imbedded into the target market’s overall industrial, economic and trade policies.

Consolidating a highly fragmented aftersales market

In the absence of a sizeable new vehicle market and an underdeveloped maintenance culture, the aftersales market is highly fragmented and dominated by independent or informal service providers. The development and participation in the aftersales market enables automotive manufacturers to develop scale and to increase the demand for genuine parts. As the demand for parts allows the development of economies of scale, the formalisation and consolidation of the aftersales market is likely to increase the attractiveness of the market for part and component manufacturers to move production activities into these markets.
Methodology

The research methodology included both sourcing of quantitative data from secondary sources as well as qualitative data and commentary from field research in the three African country case studies, namely Ethiopia, Kenya and Nigeria.

In-market semi-structured interviews with stakeholders in the private sector and government were conducted by the Frontier Advisory Deloitte research team in conjunction with the respective Deloitte offices in Nairobi and Lagos (January 2016) as well as Addis Ababa (February 2016) in order to verify secondary data sourced from publicly-available sources.

The field research also assisted with obtaining up-to-date data for each country’s automotive sector, trade policy and industrial policy direction, and assisted in providing current insights into the concerns and opportunities from the perspective of stakeholders with operations in this sector.

Respondents’ inputs and insights were kept as confidential and as such interviewed stakeholders have not been cited nor directly referenced in this report.


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