

Deloitte.



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

Europe, Middle East & Africa
Automotive Leader
Deloitte

Introduction

Foreword	03
A snapshot of the automotive sector in Africa	04
The automotive sector in Ethiopia, Kenya and Nigeria	06
Ethiopia	09
Kenya	19
Nigeria	29
A comparative look at Ethiopia, Kenya and Nigeria	41
Our take on navigating the African automotive sector	42
Methodology	46
Bibliography	47
Contacts	49
Research team	49

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

Africa Automotive Leader
Deloitte Africa

Dr Thomas Schiller

Europe, Middle East & Africa
Automotive Leader
Deloitte

A snapshot of the automotive sector in Africa

Africa's automotive market¹ 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

¹This is inclusive of commercial and passenger vehicles, and excludes motorbikes.

²OICA, 2016*

³OICA, 2016*

⁴Black & McLennan, 2015*

⁵OICA, 2016*

⁶UNCTAD, 2016*

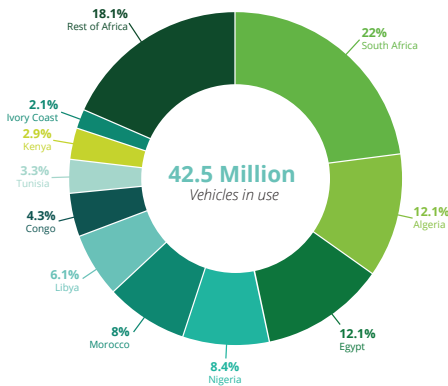
South Africa, Egypt, Morocco, and Algeria have sizeable automotive assembly and manufacturing sectors. Despite these relatively well established automotive hubs in South Africa and countries in North Africa, fewer than 900 000 vehicles were produced on the continent accounting for just over 0.9% of global production in 2015.⁷ 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

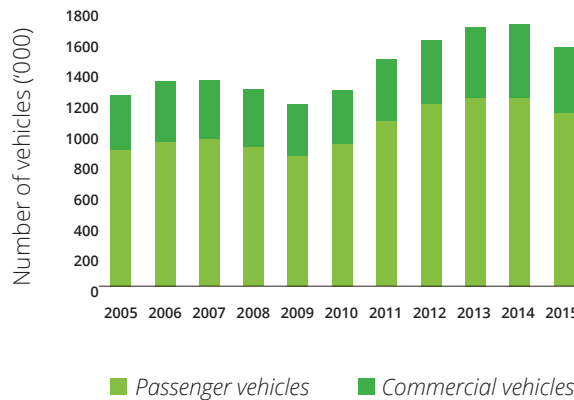
economies, and could act as a catalyst for industrialisation and economic diversification,⁸ this is at a lesser stage of development. As a result the sector has been an attractive option for policymakers seeking to boost manufacturing employment, diversify export revenue sources and ultimately industrialise their economies.

Vehicles in use in Africa, 2014



Source: OICA, 2016

Annual vehicle registrations in Africa, 2005-2015



Source: OICA, 2016

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

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



Autos indicators

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



Financial inclusion indicators

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

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 onomy in Africa and the third in 2015 it is the ninth largest ec 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

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 2010¹⁴ 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%.¹⁵

Second-hand vehicles dominate the market. Approximately 85% of vehicles are second-hand imports, of which almost 90% are Toyotas.¹⁶ 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.¹⁷

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.¹⁸ 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,¹⁹ 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

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.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 shortages²¹ 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

Description	Customs duty	Excise tax	Surtax	VAT
1 Cylinder capacity 1 000 – 1 300cc	35%	30%	10%	15%
2 Cylinder capacity 1 301 – 1 800cc	35%	60%	10%	15%
3 Cylinder capacity 1 801 – 3 000cc	35%	100%	10%	15%
4 Cylinder capacity >3 000cc	35%	100%	10%	15%
5 C-cabin and single cab, carrying capacity not exceeding 1 500kg	35%	0%	0%	15%
6 Public transport – seating capacity ≤ 15 passengers	35%	0%	0%	15%
7 Public transport – seating capacity > 15 passengers	10%	0%	0%	15%
8 Truck	10%	0%	0%	15%
9 SKD	5%	Similar to 1–8, depending on cylinder and seat capacity		
10 Duty-free vehicles	Free of any tax			

Source: Ethiopia Revenue and Customs Authority, 2015

²⁰Interview, Addis Ababa, February 2016

²¹See 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.²² 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.²³

Domestic assemblers, 2015

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

Source: In-market interviews and company websites, 2016

²² GeeskaAfrica, 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

²⁴ Interviews, Addis Ababa, February 2016

²⁵ 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).

Setting the timing: Entering Ethiopia as a first-mover

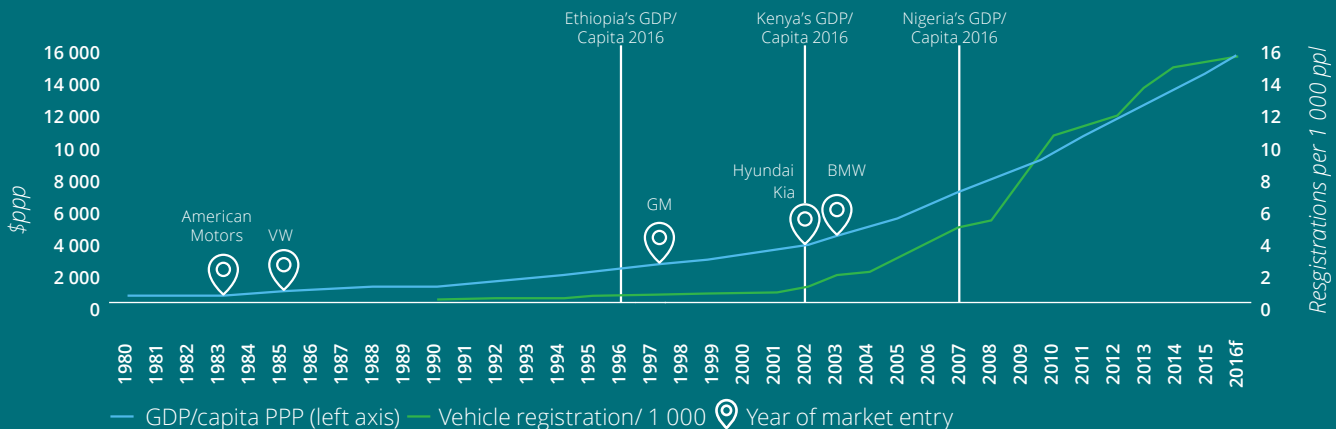
Looking back three decades, the experience of foreign automotive companies in China holds valuable insights for automotive companies targeting African economies. Volkswagen (VW) and General Motors (GM) entered the Chinese market at a stage when vehicle sales were below 50 000 units per year. Five years 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.²⁸ 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

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

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

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 break-downs 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.

³⁴ Oxford Business Group, 2014

³⁵ BMI, 2015

³⁶ KMI, 2012

³⁷ OICA, 2016

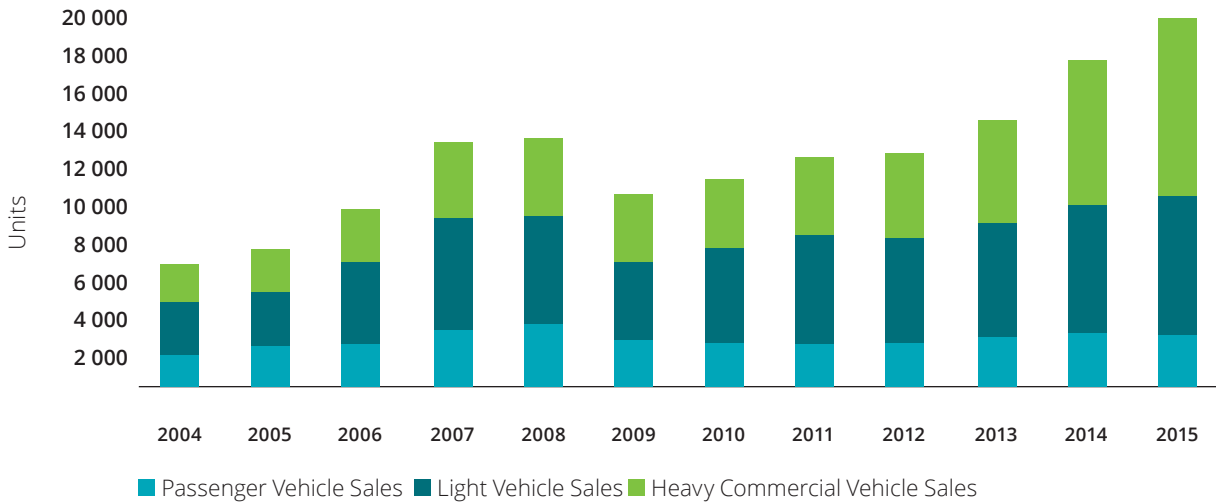
³⁸ OICA, 2016; BMI, 2015

³⁹ BMI, 2015

⁴⁰ KNBS, 2016

⁴¹ KMI, 2016

Estimated new vehicle sales in Kenya, 2004-2015



Source: 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.

⁴² Interview, Nairobi, January 2016

Domestic assembly plants, 2015

Plant	Location	Installed annual capacity	Operating capacity (2015)	Ownership	Brands
GMEA	Nairobi	16 000	5 015	General Motors East Africa (100%)	Isuzu
AVA	Mombasa	10 000	4 168	Marshalls East Africa (50%) Simba Colt (50%)	Mitsubishi, Fuso, Scania, Toyota, Hino, Tata
KVM	Thika	6 000	202	Government of Kenya (35%) CMC Holdings (32.5%) DT Dobie (32.5%)	Eicher, Hyundai, Land Rover, MAN, Nissan, Mobius, Ashok Leyland

Source: In-market interviews and company websites, 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.⁴³ 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.⁴⁴

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.⁴⁵ Kenya's vehicle assembly figures are forecasted to almost double between 2013 and 2019.⁴⁶

⁴³ Ministry of Industrialisation, 2010

⁴⁴ KMI, 2016

⁴⁵ KNBS, 2015

⁴⁶ BMI, 2015

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

Type of Duty	Rate
Import duty	25% of CIF
Excise duty	KES 150 000* for vehicles over 3 years old KES 200 000** for vehicles 0-3 years old
VAT	16% of (CIF + Import Duty + Excise Duty)
Import Declaration Fee	2.25% of CIF
Railway Development Levy	1.5% of CIF

* 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.

⁴⁸ KRA, 2015 and Interview, Nairobi, January 2016

⁴⁹ Ministry of Industrialisation, 2015

⁵⁰ Ministry of Industrialisation, 2015

⁵¹ Ministry of Industrialisation, 2015

⁵² Interview, Nairobi, January 2016

⁵³ Interview, Nairobi, January 2016

⁵⁴ Interview, Nairobi, January 2016

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

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.⁵⁷ 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 approximately a two-third contraction in vehicle imports according to industry players.⁵⁸

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 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.⁵⁹ In 2013, the European Union (EU) and the US exported approximately 300 000 cars to Benin.⁶⁰

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

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 vehicles⁶¹ to 10 million vehicles.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.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.”

Director of a major dealership

Vehicles in use, 2013e-2019f

	2013e	2014e	2015e	2016f	2017f	2018f	2019f
Vehicles in use, units	1 224 138	1 334 954	1 341 156	1 414 400	1 479 423	1 547 812	1 617 345
Vehicles in use, units, % y-o-y growth	7.4	9.1	0.5	5.5	4.6	4.6	4.5

Source: BMI, 2015

⁶¹ BMI, 2015
⁶² Ministry of Industry, 2014
⁶³ Federal Road Safety Corps, 2014

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 2014- 2015
Passenger vehicle sales	16 000	22 000	7 000	7 000	34 000	25 000	30 000	40 000	40 000	42 000	18 800	-55.2%
Commercial vehicle sales	7 000	16 000	5 000	5 000	17 000	12 000	15 000	10 000	12 000	11 900	7 600	-36.1%
Total sales	23 000	38 000	12 000	12 000	51 000	37 000	45 000	50 000	52 000	53 900	26 400	-51.0%

Source: OICA, 2016

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

	2013	2014
	Share (%)	Share (%)
Toyota	37	29
Hyundai	12	12
Kia	13	9
Other brands	38	50

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 2014.⁶⁸ 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

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

Source: National Automotive Council, 2014 & Switzerland Global Enterprise, 2014

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

Senior manager of leading vehicle insurance provider

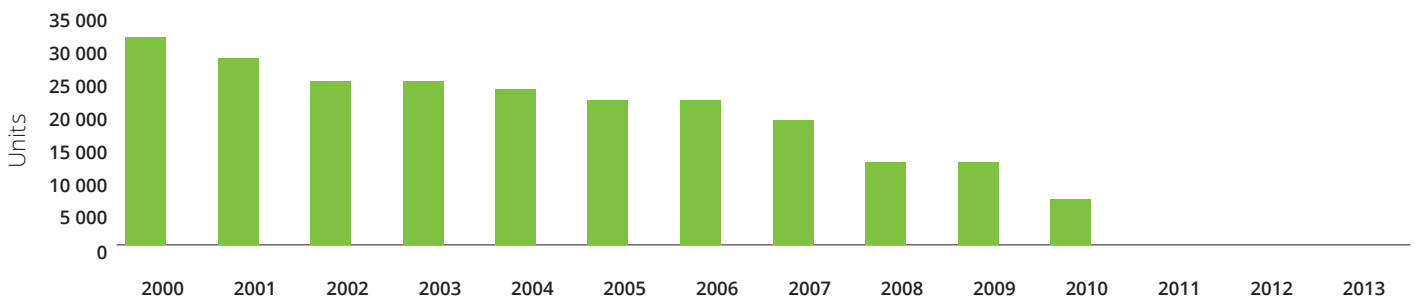
In addition to these plants, the Federal Government entered into five more agreements with international automotive companies to establish assembly plants in 1982, according to the National Automotive Design and Development Council Nigeria. These agreements included the establishment of plants by Isuzu in Maiduguri, Mazda in Umuahia, Mitsubishi in Ilorin, Nissan in Minna and Peugeot in Gusau.⁶⁹ 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



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 2014.⁷⁰ 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.⁷¹

Currently, 35 companies are licensed to produce by the Nigerian Automotive Council under the NAIDP.⁷² Despite the increased focus on the automotive industry, the sector's contribution to Nigeria's GDP remains low at 0.07% in Q2 2015.⁷³

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.

⁷⁰ Bloomberg, 2015

⁷¹ Interviews, Lagos, January 2016

⁷² National Automotive Design and Development Council, 2015

⁷³ National Bureau of Statistics, 2015

Assembly activities of leading automotive companies in Nigeria, 2016

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

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.⁷⁴ 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

Category	Duty	Levy
Capital equipment used for auto assembly	0%	0%
Completely knocked-down kits (CKD)	0%	0%
Semi knocked-down kits 1 (SKD1)	5%	0%
Semi knocked-down kits 2 (SKD2)	10%	0%
Fully built vehicles (within the programme)	35%	0%
Fully built vehicles (outside the programme)	35%	35%

Source: NAC, 2014

⁷⁴ Interview, Lagos, January 2016

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

⁷⁵ Interviews, Lagos, January 2016

Key takeaways Nigeria

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.

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

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.

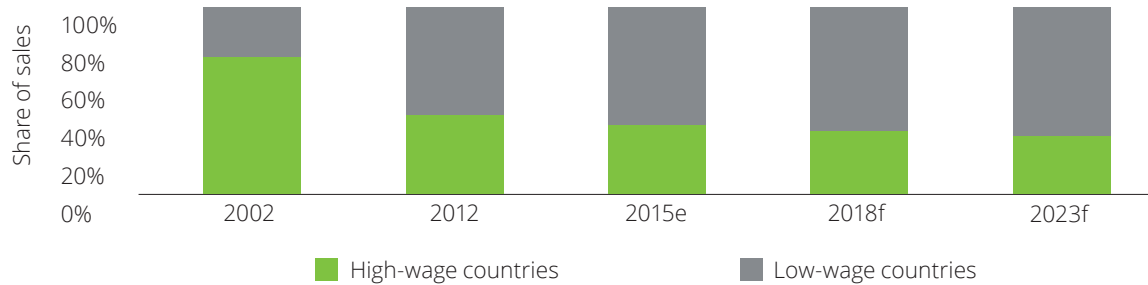
This has undermined the industry's ability to reap economies of scale and thus supply price competitive vehicles to domestic and regional markets. To help unlock the markets of the countries evaluated, formalising and consolidating the automotive retail sector will be a priority in the short term. This 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.

This global value chain is already undergoing a shift, with two external mega trends underway that will help to unlock Africa's automotive potential.

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.

Distribution of global vehicle sales, 2002-2023f



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.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.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.

⁷⁶ Lin, 2012
⁷⁷ Frontier Advisory Deloitte, 2015

Getting Africa into gear

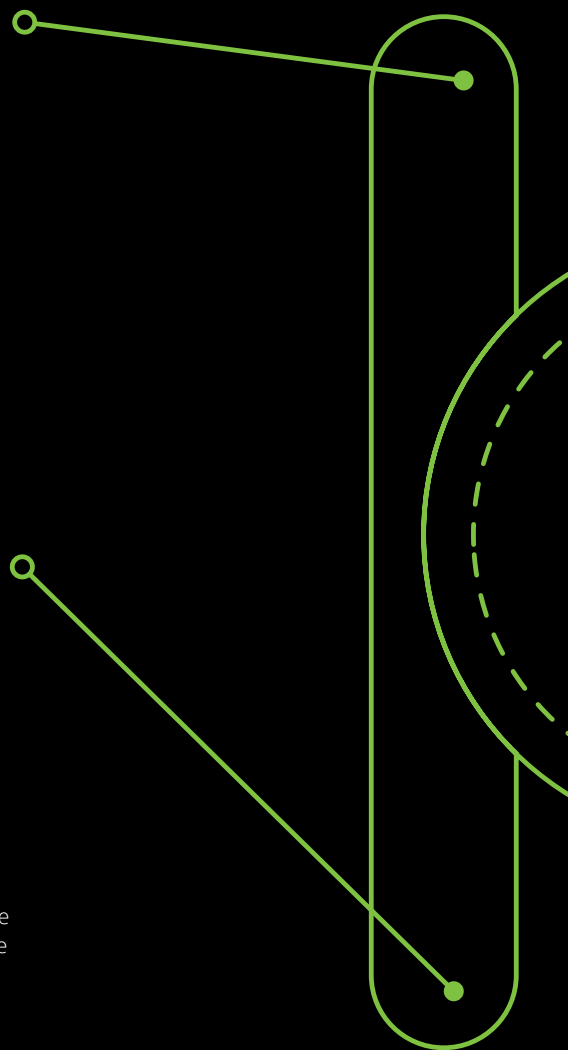
It is Deloitte's view that achieving scale and unlocking the automotive market in Africa is a potentially sizeable medium- to long-term opportunity. A market-shaping approach, including a combination of interventions by industry stakeholders and governments that target supply-side and demand-side challenges,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

Bibliography

- Black, A., & McLennan, T.** (2015). The Last Frontier: Prospects and Policies for the Automotive Industry in Africa.
- Bloomberg.** (2015, December 3). Nigeria Targets 80% Local Manufacturing in Auto Industry. Retrieved from Bloomberg: <http://www.bloomberg.com/news/articles/2015-12-03/nigeria-targets-80-local-manufacturing-in-auto-industry-by-2023>
- BMI.** (2015). Kenya Autos Report: Q4 2015. London: BMI Research.
- BMI.** (2015). Nigeria Autos Report: Q4 2015. London: BMI Research.
- Centre for Automotive Research.** (2015). Contribution of the Automotive Industry. Ann Arbor: CAR.
- Centre for International Development.** (2016). Country Rankings. Retrieved from The Atlas of Economic Complexity: <http://atlas.cid.harvard.edu/>
- Chamberlain, O.** (2013). History of Automobile Past and Present Challenges Facing Automobile Production in Nigeria. IOSR Journal of Research & Method in Education, 11-16.
- Deloitte.** (2014). Umbruch in der Automobillezulieferindustrie - Standortoptimierung und Sourcing. Germany: Deloitte.
- Ethiopia Revenues and Customs Authority.** (2016). Import/Export Information. Addis Ababa: ERCA.
- Ethiopian Investment Commission.** (2015). Invest in Ethiopia. Addis Ababa: EIC.
- Euromonitor.** (2015). Consumer Data. London: Euromonitor International.
- Federal Road Safety Corps.** (2014). The Pathfinder - A Transport Digest Publication. Abuja: Federal Republic of Nigeria.
- Forbes.** (2015, September 23). Dubai-Based Billionaire Vaswani's Stallion Group Wants To Dominate Nigeria And All Of West Africa. Retrieved from Forbes: <http://www.forbes.com/sites/saritharai/2015/09/23/dubai-based-billionaire-vaswanis-stallion-group-wants-to-dominate-nigeria-and-all-of-west-africa/#734379027b24>
- Frontier Advisory Deloitte.** (2015). Structural Transformation: Is China Bad for Africa's Industrialisation? Johannesburg: Deloitte.
- GeeskaAfrika.** (2015, October 12). Ethiopia: The End of the 'Made in Ethiopia'? Retrieved from GeeskaAfrika: <http://geeskaafrika.com/2015/10/12/ethiopia-the-end-of-the-made-in-ethiopia/10498/#sthash.WXF6LQfj.dpuf>
- Honda.** (2016). Honda Automobile West Africa. Retrieved from Honda World Wide: world.honda.com
- International Monetary Fund (IMF).** (2015, October). World Economic Outlook Databases. Retrieved from IMF: <http://www.imf.org/en/Data>
- Kenya Motor Industry (KMI).** (2012). Brief: Vehicle Ages. Retrieved from KMI: <http://www.kmi.co.ke/>
- Kenya Motor Industry (KMI).** (2016). Production and Sales Data. Nairobi: KMI.
- Kenya National Bureau of Statistics (KNBS).** (2015). Economic Survey. Nairobi: KNBS.
- Kenya National Bureau of Statistics (KNBS).** (2016). Leading Economic Indicators. Nairobi: KNBS.

Kenya Revenue Authority (KRA). (2015). Duties. Retrieved from KRA: <http://www.kra.go.ke/>

Leadership. (2014, August 11). Stallion Group Delivers Made-in-Nigeria Hyundai. Retrieved from Leadership: <http://leadership.ng/news/380622/stallion-group-delivers-made-nigeria-hyundai>

Lin, J. (2012). From Flying Geese to Leading Dragons: New Opportunities and Strategies for Structural Transformation in Developing Countries. *Global Policy*, 3(4), 397-409.

Ministry of Industrialisation. (2010). Kenya National Industrialisation Policy Framework. Nairobi: Republic of Kenya.

Ministry of Industrialisation. (2015). Policy Framework for the Development of the Motor-Vehicle sub-Sector in Kenya. Nairobi: Republic of Kenya.

Ministry of Industry, Trade & Investment. (2014). Nigerian Industrial Revolution Plan. Abuja: Federal Republic of Nigeria.

National Automotive Council (NAC). (2014). The Nigerian Automotive Industry Development Plan (NAIDP). Abuja: Federal Republic of Nigeria.

National Automotive Council (NAC). (2016). Industries. Retrieved from NAC: www.nac.org.ng

National Automotive Design and Development Council. (2016). List of Participants. Retrieved from NADDCC: www.naddc.gov.ng

National Bureau of Statistics. (2015). Nigerian Gross Domestic Product Report: Q2 2015. Abuja: NBS.

Nissan Global. (2016). Nigeria. Retrieved from Nissan Motor Corporation: www.nissan-global.com
Organisation Internationale des Constructeurs d'Automobiles (OICA). (2016). Statistics. Retrieved from OICA: <http://www.oica.net/>

Oxford Business Group. (2014). Automotive Assembly Lines Stand Ready for a Rise in Local Production. Retrieved from Oxford Business Group: <http://www.oxfordbusinessgroup.com/analysis/automotive-assembly-lines-stand-ready-rise-local-production>

Road Transport Authority. (2015). Data. Retrieved from RTA: <http://www.rta.gov.et/>

Switzerland Global Enterprise. (2014). Nigeria: Automobile Assembly and Production Starts Again. Abuja: Swiss Embassy in Nigeria.

The Economist Intelligence Unit. (2016). Industry Report: Automotive - China 1st Quarter 2016. London: EIU.

This Day Live. (2015). Maydieu - Kaduna Plant Equipped to Produce Over 50 000 Cars Yearly. Retrieved from This Day Live: <http://www.thisdaylive.com/articles/maydieu-kaduna-plant-equipped-toproduce-over-50-000-cars-yearly/191260/>
United Nations Conference on Trade and Development (UNCTAD). (2015). Trade Statistics. Retrieved from UNCTAD: <http://unctadstat.unctad.org/EN/>

Vanguard. (2015, November 24). Ford Plant in Nigeria, Another Milestone for Coscharis - Maduka. Retrieved from Vanguard: <http://www.vanguardngr.com/2015/11/ford-plant-in-nigeria-anothermilestone-for-coscharis-maduka/>

World Bank. (2016). Indicators. Retrieved from World Bank Data: <http://data.worldbank.org>

World Health Organisation. (2015). Global Health Observatory. Retrieved from WHO: <http://www.who.int/gho/en/>

Contacts

Dr Martyn Davies

Africa Automotive Leader
Deloitte Africa
+27 (0) 83 459 8880
mdavies@deloitte.com

Mike Vincent

Consulting Leader: Automotive
Deloitte Africa
+27 (0) 83 263 4163
mivincent@deloitte.com

Jan-Hendri Tromp

Snr Chief of Staff: Automotive
Deloitte Africa
+27 (0) 83 420 8339
jhtromp@deloitte.co.za

Alex Murage

Automotive Manager: Kenya
Deloitte Africa
+254 (0) 722 655 723
almurage@deloitte.com

Research team

Hannah Edinger

Associate director
Deloitte Africa

Simon Schaefer

Manager
Deloitte Africa

Kira McDonald

Consultant
Deloitte Africa

Deloitte.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee (“DTTL”), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as “Deloitte Global”) does not provide services to clients. Please see www.deloitte.com/about to learn more about our global network of member firms.

Deloitte provides audit, consulting, financial advisory, risk advisory, tax and related services to public and private clients spanning multiple industries. Deloitte serves four out of five Fortune Global 500® companies through a globally connected network of member firms in more than 150 countries and territories bringing world-class capabilities, insights, and high-quality service to address clients’ most complex business challenges. To learn more about how Deloitte’s approximately 245 000 professionals make an impact that matters, please connect with us on Facebook, LinkedIn, or Twitter.

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the “Deloitte network”) is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.

© 2018. For information, contact Deloitte Touche Tohmatsu Limited

Designed and produced by Creative Services at Deloitte, Johannesburg.
(81486tha)