

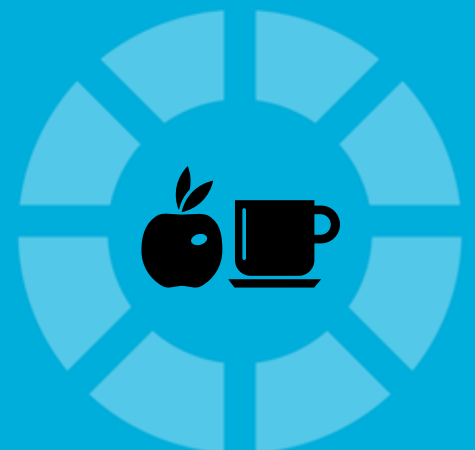
Q4 2016

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TANZANIA

FOOD & DRINK REPORT

INCLUDES 5-YEAR FORECASTS TO 2020



Tanzania Food & Drink Report Q4 2016

INCLUDES 5-YEAR FORECASTS TO 2020

Part of BMI's Industry Report & Forecasts Series

Published by: **BMI Research**

Copy deadline: August 2016

ISSN: 2049-047X

BMI Research
2 Broadgate Circle
London
EC2M 2QS
United Kingdom
Tel: +44 (0) 20 7248 0468
Fax: +44 (0) 20 7248 0467
Email: subs@bmiresearch.com
Web: <http://www.bmiresearch.com>

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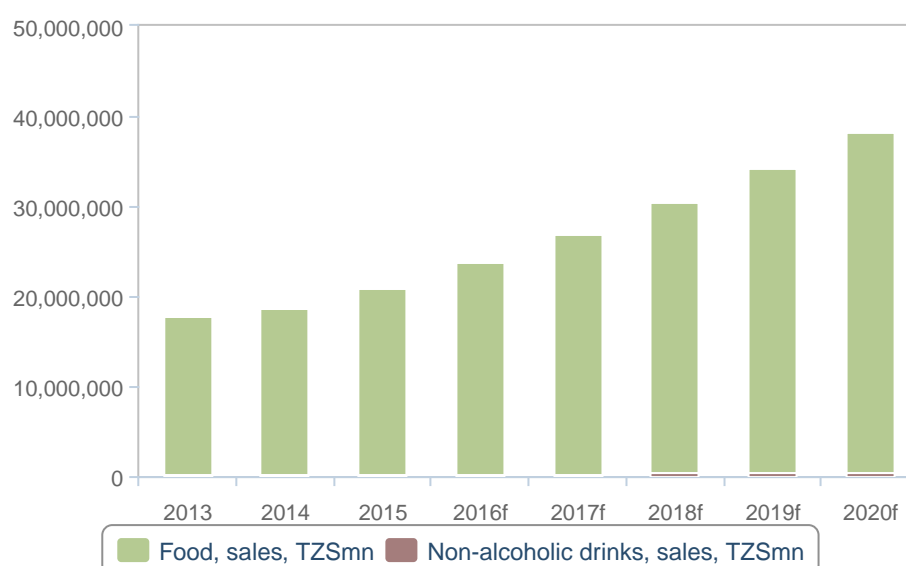
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BMI Industry View

BMI View: We hold a positive outlook for Tanzania's food and drink industry on the back of rising consumer purchasing power. We expect positive economic growth to boost household spending, which we expect to increase demand for discretionary products. We caution that the Tanzanian market will grow from a low base and that disposable incomes will remain considerably lower than its regional peers.

Food and Drink Spending

(2013-2020)



f = BMI forecast. Source: BMI, national statistics

Key Trends & Industry Developments

- The country's growing consumer confidence, due to rising disposable incomes, will boost sales growth in non-essential products.
- Carbonated soft drinks sales will lead the non-alcoholic drinks sector, growing by 12.3% over our five-year forecast period, with the entry of local companies **MeTL** and **Bakhresa** into the soda market.
- Tanzania's positive economic outlook will boost consumer spending and encourage long-term mass grocery retail investment.

Industry Forecast

Food

BMI View: We hold a positive view for Tanzania's food industry over our five-year forecast period on the back of an increasingly favourable consumer outlook. We believe household spending will remain sustainable owing to rising disposable incomes and strong private consumption growth. The food processing sector will offer robust growth due to the limited investment, which leaves room for further development.

Latest Updates

- Food sales (local currency) growth in 2016: 13.3%, compound annual growth rate (CAGR), 2015 to 2020: 12.9%.
- The country's growing consumer confidence, due to rising disposable incomes, will boost sales growth in non-essential products.
- Stable food sales will remain resilient, led by rice sales, owing to the country's rising investment in agricultural production.

Food Sales

(2013-2020)



f = BMI forecast. Source: BMI, national statistics

Structural Trends

We hold a positive outlook for Tanzania's food industry, on the back of a strong economy surviving 2015 headwinds. We expect strong economic growth over our five-year forecast period to 2020, as the country sees positive recovery in 2016 from a weak currency (about 25% depreciation over 2015). We forecast real GDP growth will rise by 6.8% in 2016 as the currency gains greater stability, owing to a softer dollar, which will help ease inflationary pressures. Moreover, we forecast consumer confidence will rise as GDP per capita increases from USD857 in 2016 to USD1,062 by 2020.

As a result, Tanzania's food industry will experience strong growth with food sales reaching a 12.9% CAGR over our forecast period to 2020. The country remains fairly self-sufficient in food production, and does not rely heavily on food imports. The Tanzanian food market will benefit from the country's growing investment in infrastructure as funds towards road development increase, therefore, improving the ease of doing business.

We forecast staple foods to experience the highest growth sales, bread, rice and cereal sales will grow by 18.5% to 2020. Tanzania is one of the East Africa regions leading rice producer, with aims to further improve the industry; Tanzanian farmers are encouraged to increase their processed rice production. We expect rice consumption will rise over our forecast period as investment in the industry increases. The country has been exposed to high food inflation due to a weakening currency, though there has been significant relief in food prices from January 2016 with food inflation down to 7.1% in April from 10.7%. However, in February 2016, more than 10 Iranian companies announced their plan to invest in rice, corn and wheat farms. Based on the increasing investment in the industry for local production, we believe this will ease on food prices as the country also benefits from increased export levels.

We believe high levels of private consumption will drive industry growth of non-essential foods, such as the confectionery segment. Our forecast for sugar and sugar products sales will grow by 11.2% over to 2020, owing to rising purchasing power in Tanzania. The country's growing economy and business friendly environment will encourage investment from international players, together with growing consumer demand for discretionary products. In January 2014, Turkish food company **Yildiz Holding's**, announced its plans to expand its snacks and biscuits segment in Tanzania, Kenya and Uganda.

Tanzania's meat industry will remain resilient as consumption in the country is fairly high. We forecast a 10.1% growth rate over 2016 for meat and poultry sales, stemming from high per capita consumption. In December 2015, the Organisation for Economic Cooperation and Development (OECD) reported Tanzania as one of the world's highest per capita beef consuming country.

Table: Food Sales (Tanzania 2013-2020)

	2013	2014	2015	2016f	2017f	2018f	2019f	2020f
Food, sales, TZSmn	17,575,173	18,373,061	20,666,940	23,415,105	26,584,588	30,135,313	33,771,983	37,854,974
Food, sales, TZSmn, % growth y-o-y	20.2	4.5	12.5	13.3	13.5	13.4	12.1	12.1
Bread, rice and cereals, sales, TZSmn	7,517,471	7,884,778	9,276,716	11,197,145	13,288,152	15,715,743	18,449,304	21,638,576
Bread, rice and cereals, sales, TZSmn, % growth y-o-y	32.6	4.9	17.7	20.7	18.7	18.3	17.4	17.3
Pasta products, sales, TZSmn	15,109.0	15,875.7	17,561.0	19,850.0	22,031.0	24,365.6	26,349.5	28,373.4
Pasta products, sales, TZSmn, % growth y-o-y	9.8	5.1	10.6	13.0	11.0	10.6	8.1	7.7
Baked goods, sales, TZSmn	560,278.6	584,726.2	634,652.8	291,461.3	315,905.7	340,737.6	359,683.6	377,564.1
Baked goods, sales, TZSmn, % growth y-o-y	9.1	4.4	8.5	-54.1	8.4	7.9	5.6	5.0
Meat and Poultry, sales, TZSmn	3,422,831.2	3,609,860.5	3,998,055.1	4,520,942.3	5,015,992.8	5,542,574.2	6,001,031.4	6,458,323.1
Meat and Poultry, sales, TZSmn, % growth y-o-y	13.4	5.5	10.8	13.1	11.0	10.5	8.3	7.6
Fish and fish products, sales, TZSmn	1,219,686.1	1,266,476.7	1,354,872.3	1,473,154.3	1,565,800.1	1,652,780.8	1,707,017.8	1,749,125.6
Fish and fish products, sales,	11.1	3.8	7.0	8.7	6.3	5.6	3.3	2.5

Food Sales (Tanzania 2013-2020) - Continued								
	2013	2014	2015	2016f	2017f	2018f	2019f	2020f
TZSmn, % growth y-o-y								
Dairy, sales, TZSmn	454,185.5	477,405.3	528,931.4	598,319.3	664,094.8	734,150.8	793,238.4	852,656.7
Dairy, sales, TZSmn, % growth y-o-y	11.3	5.1	10.8	13.1	11.0	10.5	8.0	7.5
Oils and Fats, sales, TZSmn	857,131.8	899,329.2	990,859.7	1,115,033.8	1,231,634.1	1,355,413.6	1,458,937.7	1,563,419.9
Oils and Fats, sales, TZSmn, % growth y-o-y	9.3	4.9	10.2	12.5	10.5	10.1	7.6	7.2
Fresh and preserved fruit, sales, TZSmn	336,617.0	336,910.8	337,755.4	344,560.3	344,033.6	341,560.1	332,288.4	321,189.2
Fresh and preserved fruit, sales, TZSmn, % growth y-o-y	3.7	0.1	0.3	2.0	-0.2	-0.7	-2.7	-3.3
Fresh vegetables, sales, TZSmn	1,903,182.1	1,939,707.7	2,013,441.5	2,128,049.5	2,202,691.6	2,268,269.5	2,287,725.6	2,305,249.8
Fresh vegetables, sales, TZSmn, % growth y-o-y	11.3	1.9	3.8	5.7	3.5	3.0	0.9	0.8
Sugar and sugar products, sales, TZSmn	1,108,260.4	1,168,339.4	1,304,081.5	1,488,910.2	1,670,114.0	1,867,193.4	2,039,664.0	2,218,981.2
Sugar and sugar products, sales, TZSmn, % growth y-o-y	19.8	5.4	11.6	14.2	12.2	11.8	9.2	8.8
Other food products, sales, TZSmn	180,421.0	189,651.4	210,013.3	237,679.2	264,138.7	292,524.0	316,741.9	341,514.6
Other food products,	11.3	5.1	10.7	13.2	11.1	10.7	8.3	7.8

Food Sales (Tanzania 2013-2020) - Continued

	2013	2014	2015	2016f	2017f	2018f	2019f	2020f
sales, TZSmn, % growth y-o- y								

BMI/National Statistics

Drink

***BMI View:** Tanzania's drinks market is poised for good growth opportunities over our five-year forecast period. The country's drinks sector benefits from increasing affordability among consumers as disposable incomes increase. We expect an uptick in the consumption of alcohol through the formal market, in line with growing consumer spending as more consumers switch out of the informal sector.*

Latest Updates

- Non-alcoholic drinks sales (local currency) growth in 2016: 10.0%; compound annual growth rate (CAGR), 2015 to 2020: 8.2%.
- Tanzania's tea industry is particularly mature, and leading company **Chai Bora** will look to expand across the region.
- Carbonates will lead soft drink sales, growing by 12.3% per year over our five-year forecast period, with the entry of local companies **MeTL** and **Bakhresa**.
- Total alcohol consumption (litres) growth in 2016: 10.2%; CAGR 2015 to 2020: 10.4%.

Structural Trends

Total Alcohol Consumption

Litres mn (2013-2020)



BMI Research/WHO

Tanzania's alcohol industry will experience positive growth over our five-year forecast period as total alcohol consumption increases by 10.4% between 2015 and 2020. The industry benefits from a favourable demographic outlook. We forecast Tanzania's population to grow from 55.2mn in 2016 to 62.3mn by 2020, with approximately 27% between the ages of 20 to 39. We believe this will boost Tanzania's alcohol sector, as younger cohorts tend to consume greater amounts of alcohol.

Beer will be the fastest-growing alcohol category, much like the wider Sub-Saharan Africa (SSA) region. In Tanzania we forecast beer consumption will account for about 95% of total alcohol consumption in 2016.

Diageo, owner of **East African Breweries Limited**, is the key player in the beer industry, having previously been locked in a regional joint venture with **SABMiller**.

In comparison to its neighbouring countries, the growth of alcohol consumption in Tanzania will outperform Kenya and Uganda. GDP per capita will grow from USD839 in 2015 to USD1,062 in 2020. We

believe this will also boost demand for commercial beer consumption as consumers become more affluent and move away from homebrewed beer.

Table: Total Alcoholic Drinks Spending And Consumption (Tanzania 2013-2020)

	2013e	2014e	2015e	2016f	2017f	2018f	2019f	2020f
Total alcohol consumption, litres mn	457.6	512.7	562.1	619.2	682.5	755.3	834.5	923.2
Total alcohol consumption, litres mn, % change y-o-y	6.3	12.1	9.6	10.2	10.2	10.7	10.5	10.6
Total alcohol consumption, litres per capita	16.6	18.1	19.2	20.5	21.8	23.4	25.0	26.7
Beer, litres mn	445.6	492.5	541.3	596.2	657.2	727.2	803.7	889.2
Beer, litres mn, % change y-o-y	8.5	10.5	9.9	10.1	10.2	10.7	10.5	10.6
Beer, litres per capita	16.2	17.4	18.5	19.7	21.0	22.5	24.0	25.7
Wine, litres mn	4.6	5.2	5.9	6.8	7.8	9.0	10.2	11.7
Wine, litres mn, % change y-o-y	3.1	12.8	14.4	15.3	14.7	15.1	13.7	13.8
Wine, litres per capita	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
Spirits, litres mn	7.4	15.1	14.9	16.3	17.5	19.0	20.6	22.4
Spirits, litres mn, % change y-o-y	-50.9	102.8	-1.1	9.1	7.6	8.7	8.1	8.8
Spirits, litres per capita	0.3	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Alcoholic drinks spending, TZSbn	569.11	591.31	639.94	696.73	761.09	832.33	905.27	986.23
Alcoholic drinks spending, TZS %	11.77	3.90	8.22	8.87	9.24	9.36	8.76	8.94
Alcoholic drinks spending, TZS per household	54,288.79	54,540.96	57,087.94	60,128.75	63,561.11	67,283.38	70,854.33	74,758.36
Alcoholic drinks spending, TZS per capita	11,333.78	11,410.24	11,968.12	12,632.09	13,381.29	14,194.81	14,979.77	15,838.64

National Sources/BMI

Non-Alcoholic Drinks Sales

(2013-2020)



BMI/National Statistics

We forecast Tanzania's non-alcoholic drinks sales will experience positive growth over our forecast period to 2020, reaching an 8.2% CAGR. Growth will be driven by consumers' rising incomes and increasing investment into the segment. Also contributing to growth is the fact that soft drinks appeal to lower-income consumers, as carbonates are often cheaper than bottled water and prices of core carbonates rarely rise at the rate of inflation. Carbonated soft drinks sales will grow by 12.3% over our five-year forecast period to 2020. In line with our expectations for pan-regional disposable income appreciation, demand for low-cost carbonated soft drinks and bottled water is projected to grow considerably over the coming years.

While Tanzania was once dominated by **PepsiCo's** core brands, **The Coca-Cola Company** came back strongly in the mid-1990s under the South African company **Coca-Cola SABCO**, which invested heavily in resuscitating Coca-Cola and usurping Pepsi's long-held dominance. The rising demand for carbonated soft drinks across the country will create profitable opportunities for expansion as well as companies looking to invest in Tanzania. Local companies Bakhresa Group (one of East Africa's leading conglomerates) and MeTL (a family conglomerate) are expanding into the beverage segment (*see 'Carbonates To Fizz On'*,

January 5 2016). The companies will target low-income consumers, as their prices undercut mainstream companies such as Coca-Cola.

With a positive consumer outlook, we forecast positive growth for bottled water sales, growing by 6.3% to 2020. However, we believe the bottled water industry will experience slower growth than carbonated soft drinks, owing to lower demand. A large proportion of Tanzania's population still lives in rural areas and we expect consumers to spend less on bottled water as it is a relatively more expensive product. Furthermore, a large part of the population is dependent on purified tap water, due to the cost of bottled water.

Tanzania's tea industry will begin to experience slowing growth over our five-year forecast period, as the country's tea industry is among the most mature in the region. Tanzania plans to increase its tea exports after the opening of Iran's trade market through the East Africa Tea Trade Association. Tanzania's tea market leader, **Chai Bora**, is looking to expand into new markets in the East Africa region in its aim to boost sales in a market that is gradually losing momentum. Moreover, the company will expand its operations across new avenues, following the 2014 acquisition of tomato sauce makers, **Dabaga**.

Table: Non-Alcoholic Drinks Sales (Tanzania 2013-2020)

	2013	2014	2015	2016f	2017f	2018f	2019f	2020f
Non-alcoholic drinks, sales, TZSmn	209,344.1	235,512.1	261,418.4	287,560.3	313,440.7	338,516.0	362,212.1	387,566.9
Non-alcoholic drinks, sales, TZSmn, % growth y-o-y	12.0	12.5	11.0	10.0	9.0	8.0	7.0	7.0
Coffee, teas and other hot drinks, sales, TZSmn	62,618.3	66,833.6	68,523.0	68,798.3	67,523.0	64,688.8	60,431.0	54,191.0
Coffee, teas and other hot drinks, sales, TZSmn, % growth y-o-y	7.4	6.7	2.5	0.4	-1.9	-4.2	-6.6	-10.3
Soft drinks, sales, TZSmn	146,725.8	168,678.5	192,895.5	218,762.0	245,917.7	273,827.2	301,781.1	333,376.0
Soft drinks, sales, TZSmn, % growth y-o-y	14.1	15.0	14.4	13.4	12.4	11.3	10.2	10.5
Fruit and vegetable juices, sales, TZSmn	37,831.2	44,420.9	50,537.5	57,030.6	63,775.6	70,604.4	77,286.7	84,855.6
Fruit and vegetable juices, sales, TZSmn, % growth y-o-y	9.8	17.4	13.8	12.8	11.8	10.7	9.5	9.8
Mineral or spring waters, sales, TZSmn	10,138.8	11,383.4	12,442.2	13,414.2	14,345.9	15,279.9	16,028.3	16,868.9

Non-Alcoholic Drinks Sales (Tanzania 2013-2020) - Continued

	2013	2014	2015	2016f	2017f	2018f	2019f	2020f
Mineral or spring waters, sales, TZSmn, % growth y-o-y	7.0	12.3	9.3	7.8	6.9	6.5	4.9	5.2
Carbonated drinks, sales, TZSmn	98,755.9	112,874.2	129,915.8	148,317.3	167,796.2	187,942.9	208,466.1	231,651.5
Carbonated drinks, sales, TZSmn, % growth y-o-y	16.6	14.3	15.1	14.2	13.1	12.0	10.9	11.1

BMI/National Statistics

Mass Grocery Retail

***BMI View:** Tanzania's food retail sector will grow as an attractive investment destination, stemming from positive growth potential due to low market penetration and favourable economic outlook. The country offers large room for expansion for retailers entering the market, with its large and growing population as well as rising food consumption. We caution that low disposable incomes will restrict consumer spending, which will benefit low-cost product offerings to capture the mass market.*

Latest Updates

- Tanzania's positive economic outlook will boost consumer spending and encourage long-term mass grocery retail (MGR) investment.
- **Nakumatt** will look to expand its operations further in Tanzania, with two new stores being built to make a total of six stores in the country.
- We caution the dominance of the informal retail sector as a key risk, in line with the country's low disposable incomes and consumer price-consciousness. .

Structural Trends

Tanzania's organised food retail sector remains underdeveloped, and only over the past few years has it begun to attract investment from regional retailers, particularly from Kenya and South Africa. The pace at which the economy is growing and the fact that more of the bigger African retailers are looking to expand regionally is likely to see Tanzania attract a lot more investment over the next few years.

In our Q416 SSA Food and Drink Risk/Reward Index, Tanzania move up into third position on the back of favourable per capita food consumption as well as market fragmentation scores, which highlight the country's great growth opportunities. Tanzania's growing food industry will support growth in the formal retail sector. The country's highly fragmented market will encourage investment as the market is still far from mature and growth opportunities will be high, on the back of a fast-growing economy.

We believe Tanzania's formal retail sector benefits from a sizeable consumer group, with a large and growing population. **BMI** forecasts the total population to reach 55.2mn in 2016, rapidly increasing to 62.3mn by 2020. However, the sector grows from a low base with the consumer group largely dominated by the rural population, which will account for approximately 64.9% by 2020. Further, disposable incomes remain relatively low throughout our forecast period as GDP per capita increases to USD976, well below Kenya at USD1,939 in 2020.

Tanzania's food retail sector represents highly unsaturated development, dominated by the informal sector. We expect the expansion of the sector to be led by discount store formats in light of restricted consumer purchasing power owing to low disposable incomes. As a result, consumers in Tanzania will be more price-conscious, which will support the popularity of low-cost product offerings in the discount retail segment. We believe trends such as Premiumisation will not materialise within our five-year outlook owing to its early phase development.

However, as logistical systems improve in Tanzania, it stands to reason that big organised outlets will be able to sell food at competitive enough prices to appeal to the mass market. As with much of the region, the mass grocery retail industry in Tanzania suffers from a lack of infrastructure, meaning outlets face challenges getting their goods to shops and to customers. Another issue is accessing good quality and affordable real estate. A lot of retailers with pan-African or pan-regional plans will likely be more interested in establishing long-term platforms initially, because in time there will be some terrific opportunities.

Nonetheless, the positive economic outlook as well as growing modern consumer remains notable. Kenyan-based Nakumatt Supermarkets is one of the biggest retailers in East Africa and is the fastest-growing with its extensive expansion strategy. As of February 2016, the company opened two new stores in Tanzania, primarily targeting the more affluent consumer base by locating its stores in the urban areas such as the central business district in Dar es Salaam and at the beachfront, Oyster Bay (*see 'Nakumatt: First-Mover To Gain On Brand Loyalty' May 27*).

Industry Risk Reward Index

Sub-Saharan Africa Risk/Reward Index

BMI's regional Risk/Reward Index provides a platform for investors to compare markets across a variety of indicators that assess the relative strengths and weaknesses of individual countries. In doing so, our index provides a platform for benchmarking regionally, and by being forward looking in nature, the index helps us to gauge which markets we think will provide the strongest opportunities. We can also dig a little deeper and go sub-regional, which offers useful insight for ambitious regional food retailers.

The reward part of our Food & Drink Risk/Reward Index takes into account market size, current consumption levels, industry growth prospects (based on our five-year industry forecasts), market fragmentation (with greater fragmentation indicating higher opportunities) and the size of the youth population. The risk part of the index takes into account the legislative environment, the level of development of the organised retail sector (with higher development leading to lower risks), as well as relevant aspects of the economic and political environment.

Côte d'Ivoire Leads, Tanzania Moves Into Top Three

Côte d'Ivoire and Ghana maintain first and second position out of the 17 markets in the Q4 2016 iteration of our Sub-Saharan Africa (SSA) Food & Drink Risk/Reward Index. Côte d'Ivoire scores highly in the 'Industry Reward' component, with a high score for market fragmentation and favourable demographics. Côte d'Ivoire's government will invest more in infrastructure and push pro-business policies to encourage foreign investment. The mass grocery retail sector will expand rapidly as the country grows from a low base. Ghana also scores high in the market fragmentation category. Both markets boast a strong regulatory environment by regional standards, supporting growth in the industry. Tanzania moves up into the top three from sixth position to replace Mozambique, which now moves down to ninth place following our downward revision to the country's real GDP growth forecasts for 2016 and 2017. Uganda also moves up, into fourth place. Tanzania and Uganda benefit from favourable and growing market size, as well as positive long-term economic outlooks.

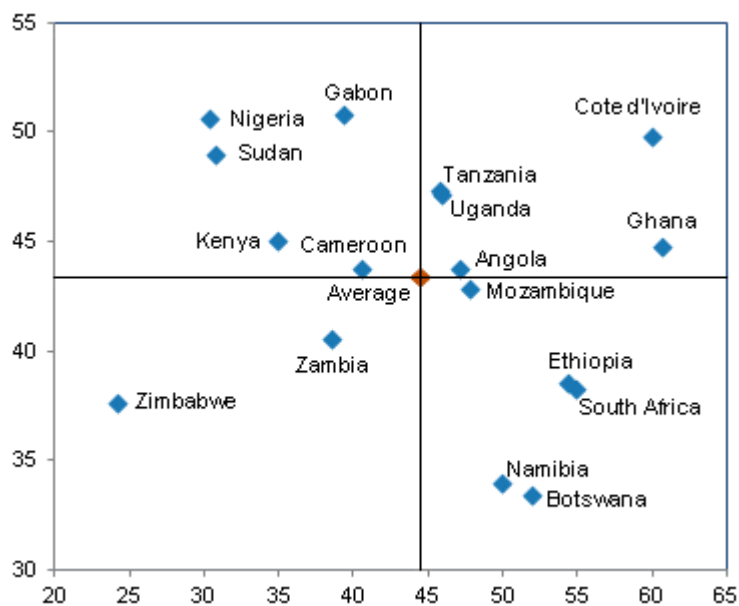
We have introduced Ethiopia into our index in Q416, and the new entrant ranks eighth, below South Africa. Ethiopia's large population size and high real GDP growth offers strong consumer prospects. South Africa experienced the biggest shift in the region in Q316, dropping from first to eighth, and moved up only gradually into seventh place this quarter. The current economic headwinds facing the country will deter growth opportunities. Angola and Nigeria are the top two oil-dependent countries in SSA and we forecast

economic growth to be slow for both due to the global oil crisis. Currency weaknesses will impact negatively on consumer spending for both countries, with our five-year forecast food consumption levels for both being low on a regional comparison. Nigeria's population size remains favourable and will be the driving force behind investment in the country. Previously ranking in the bottom four, Angola now moves up to sixth position on the back of improvement in its 'Industry Risk' profile.

Owing to faster-growing economies with higher long-term consumer growth prospects, Botswana and Namibia fall into the bottom four economies. Namibia now ranks 15th, ahead of only Zambia and Zimbabwe, owing to its more mature market and small population size, which offer limited long-term growth opportunities.

Côte d'Ivoire To Remain Fastest-Growing Market

Sub-Saharan Africa - Food & Drink Risk/Reward, Q416



Source: BMI

Table: Sub-Saharan Africa - Food & Drink Risk/Reward Index, Q416

	Reward	Industry Reward	Country Reward	Risk	Industry Risk	Country Risk	Food & Drink Score	Rank
Côte d'Ivoire	49.8	54.0	45.6	60.1	65.0	55.1	53.9	1
Ghana	44.8	44.0	45.6	60.7	65.0	56.4	51.2	2
Tanzania	47.3	50.0	44.6	45.8	40.0	51.7	46.7	3
Uganda	47.1	52.0	42.2	45.9	40.0	51.7	46.6	4
Gabon	50.8	54.0	47.6	39.3	40.0	38.6	46.2	5
Angola	43.8	42.0	45.6	47.1	55.0	39.1	45.1	6
South Africa	38.3	30.0	46.6	54.9	67.5	42.3	44.9	7
Ethiopia	38.5	30.0	47.0	54.4	57.5	51.2	44.9	8
Mozambique	42.9	46.0	39.8	47.8	50.0	45.6	44.8	9
Nigeria	50.7	46.0	55.3	30.4	20.0	40.8	42.5	10
Cameroon	43.8	42.0	45.6	40.5	35.0	46.0	42.5	11
Sudan	49.0	50.0	48.0	30.8	25.0	36.6	41.7	12
Kenya	45.0	42.0	48.0	34.9	27.5	42.3	41.0	13
Botswana	33.4	30.0	36.9	52.0	52.5	51.5	40.9	14
Namibia	34.0	32.0	35.9	50.0	52.5	47.5	40.4	15
Zambia	40.6	38.0	43.2	38.5	27.5	49.6	39.8	16
Zimbabwe	37.7	38.0	37.3	24.2	15.0	33.4	32.3	17

Each score is out of 100, with 100 the highest. The Food & Drink Risk/Reward Index is the principal index. It comprises two sub-indices, 'reward' and 'risk', which have a 60% and 40% weighting respectively. In turn, the 'reward' index comprises 'industry reward' and 'country reward', which have equal weighting and are based upon growth and size of a country's food, alcoholic drinks and soft drinks market (industry) and the broader economic and socio-demographic environment (country). The 'risk' index comprises 'industry risk' and 'country risk', which also have equal weightings and are based on a subjective evaluation of the market's regulatory and competitive issues (industry) and its broader country risk exposure (country), which is based on BMI's proprietary Country Risk Index. Source: BMI

The six factors that make up the rewards score in our index are: food consumption per capita, market fragmentation, per capita food consumption (five-year compound annual growth), population size, GDP per capita and youth population size.

The first indicator we are going to look at is **food consumption per capita**. This metric reflects the contracting spending power of the South African consumer, with the country scoring 1/10. By comparison, Côte d'Ivoire scores 1/10, which draws attention to how much more room there is for incomes to grow. In fact, all the markets in our table score poorly on this metric. The fact that Côte d'Ivoire scores just 1/10 yet

is still able to post a higher reward score than South Africa illustrates the growth-oriented nature of our indices.

The second indicator is **market fragmentation**, a subjective indicator that assesses how relatively developed (less fragmented) or underdeveloped (more fragmented) a market is. Whereas the first indicator gives strong scores for high existing spending, the second indicator rewards countries where the long-term scope for growth is the greatest. These are typically markets where there is a lot of room for growth, innovation and development. Therefore, it does not surprise us to see Côte d'Ivoire and Ghana have moved up to first and second position, respectively. Indeed, many of the Sub-Saharan African markets score well on this component. Some of the more relatively well-developed regional markets, such as Botswana and Namibia, score less impressively.

The third indicator in the rewards part of the index system is **per capita food consumption growth** (five-year compound annual growth). Given that our index is designed to be forward-looking, this indicator is one of the main ways we gauge growth. Côte d'Ivoire and Mozambique hold high scores for this indicator, scoring 7/10 and 6/10, respectively.

Population size is the fourth indicator, with Nigeria as the standout market. The weakness of a small market such as Botswana is reflected here with its score of 1/10, which compares with 8/10 for Nigeria, for example. **GDP per capita** is the fifth indicator; almost all the countries score relatively poorly in this component. By this measure, the entire region has a long way to go.

The final reward indicator, **youth population**, was introduced as a way to factor in a more comprehensive demographic angle to our index. Many countries in Africa score very well here, as its youth demographic is one of the continent's great strengths. Many of the world's youngest countries by demography are in Africa.

The seven factors that make up the risk scores are: mass grocery retail (MGR) penetration, regulatory environment, short-term economic risk, income distribution, legal environment, economic openness, and availability of labour.

The first risk indicator we look at is **MGR penetration**. This is our main way of assessing how developed the overall consumer sector is. A higher MGR score is risk-positive in the sense that it reflects better developed routes to consumers. Very low MGR scores reflect the ongoing predominance of kiosks and markets with weak centralised distribution mechanisms. The second factor, **regulatory environment**, evaluates the complexity of regulations such as labelling and nutrition requirements. It also can be used to

gauge the state of the overall business environment. The more developed and mature markets usually score better here, and that is once again the case in Q416, with South Africa and Botswana scoring 7 and 6, respectively. This is a major area of weakness for nearly all the markets we rate in Africa.

The third factor, **short-term economic risk index**, assesses the degree to which the country approximates the ideal of non-inflationary growth with falling unemployment, contained fiscal and external deficits and manageable debt ratios. It is mainly the candidates towards the top of our index that do well on this criterion, underlining the link between economic stability and the overall attractiveness of the consumer market. Mozambique and Côte d'Ivoire are among the highest scoring markets with a score of 6, while Nigeria and South Africa score 4 and 2 respectively.

The fourth factor, **income distribution**, is measured by the proportion of private consumption accounted for by the middle 60% of earners. The regions scores fairly low, with almost all the countries scoring no higher than 5/10. This shows that the SSA region's middle income class still remains low in comparison to other emerging markets.

The fifth factor, **legal environment**, is a measure of the hurdles any producer is likely to face in areas such as starting and closing businesses, paying taxes, dealing with licences and registering property. Our top two markets, Côte d'Ivoire and Ghana, score high in the region for this indicator.

The sixth factor, **economic openness**, is a measure of how business-orientated an economy is and measures the level of foreign direct investment protectionism, tax rates and the level of government intervention. This indicator is one of our leading indicators for our top three markets, with Ghana and Mozambique scoring 5/10, while Ghana outperforms scoring 6/10. The final risk factor, **availability of labour**, measures the size of the labour force and its qualifications. A large labour force equipped with basic skills is advantageous to business choosing to operate in a country.

Market Overview

East Africa Market Overview

Recent Developments

- Investment in East Africa's dairy industry will be driven by acquisitions.
- Tanzania's drinks market will see robust growth due to its long-term growth opportunities.
- Kenya will remain the region's most attractive retail market as local players hold a strong presence in the market.

Market Drivers & Trends

More Dairy Consolidation To Come In Africa

Dairy companies will continue to pursue acquisitions in Africa, where we see strong dairy consumption growth potential, mainly because of low base effects. On the back of this, **Danone** has ramped up investment in the continent, with the acquisition of 40% of Kenyan dairy company **Brookside** and of a 49% stake in Ghanaian **Fan Milk International**. This will also help Danone diversify from its largest markets, France and Russia, where the consumer environment has deteriorated recently.

We believe dairy companies will continue to pursue acquisitions in Africa, where we see strong dairy consumption growth potential, mainly because of base effects. In fact, dairy consumption per capita in Africa is the lowest in the world, far below Asia and Latin America, where we already see strong growth opportunities. Consumption growth has for a long time been hampered by poor infrastructure and refrigeration systems preventing distribution and demand in the region. The growth in food retail has also made it easier for Western dairy brands to distribute their products. We believe this will boost dairy consumption in the region and help consumption per capita higher over the period.

Tuskys, Naivas Well Positioned In Retail

We have often discussed how relatively developed Kenya's organised food retail industry is compared with most of its neighbours. The food retail sector is dominated by domestic players, of which there are four that are well established. While we previously have focused on the largest player **Nakumatt**, and **Uchumi**, we believe that **Tuskys** and **Naivas** also look well positioned. These two players, which mainly operate hypermarkets and supermarkets, have combined annual sales of about USD300mn, according to the US Department of Agriculture. Tuskys is in fact the second biggest retailer by both annual sales and number of sales.

It is largely the strength of these four that has kept South Africa's **Shoprite** out of Kenya so far. If Shoprite or one of its competitors in South Africa were to make a move on Kenya as part of the ongoing push to set up businesses across Sub-Saharan Africa, Kenya could be one of the first countries where it makes sense to enter via an acquisition. This would also open up access to the wider East African Community (EAC) region, which includes equally promising economies such as Tanzania and Uganda, which boast strong demographics and economic growth prospects. Some of Kenya's leading retailers have been expanding regionally, which in our view will make them all the more attractive to some of Africa's largest retailers.

Away from Kenya, there are very few countries, if any, in the region that boast such a competitive food retailing industry dominated almost entirely by domestic companies. The long-term opportunities on offer in Kenya, combined with the fact that one can source a lot of retail space locally given the relatively well-developed nature of the wider food processing industry, suggest Kenya is too good an opportunity to miss. Logistically, in terms of getting products onto shelves, it seems that Kenya is in a different league from a lot of African countries, mainly because organised retail is still so underdeveloped elsewhere.

The fact that Kenya's food manufacturing/processing industry is generally considered to be the region's most developed is a big plus for the food retail industry. Locally produced goods are usually much cheaper. Therefore the leading retailers can pursue lower and middle-income traffic in Kenya much more realistically than in Tanzania or Uganda. Getting food to retail shelves is therefore likely to become easier and more efficient.

As logistical systems improve in Tanzania and Uganda, it stands to reason that big organised outlets will be able to sell food at competitive enough prices to appeal to the mass market. Another issue is accessing good-quality and affordable real estate. A lot of retailers with pan-African or, in Uchumi's case, pan-regional plans will very likely be more interested in establishing long-term platforms, because in time there are going to be some terrific opportunities.

Local Tanzania Colas Likely To Gain Market Share

Booming demand for carbonated drinks in Tanzania has increased competition in the country. We believe local players will win market share in the short term, as the slower-than-expected emergence of a stable middle class in the country is likely to push consumers towards these companies' lower-value soft drinks offerings.

We highlighted in a previous article that we see strong growth potential for the carbonated soft drinks industry in Tanzania. Indeed, the carbonated soft drinks sector has grown strongly over the past few years,

driven by consumers' rising incomes and increasing investment into the segment. Growth will be supported by the fact that soft drinks also appeal to lower-income consumers, as carbonates are often cheaper than bottled water, and prices of core carbonates rarely rise at the rate of inflation.

In this context, we believe international players are at a disadvantage to local players, which can offer similar drinks at much lower prices and in more convenient packaging (plastic instead of glass). **The Coca-Cola Company** announced a USD187mn expansion in Tanzania in 2012 and still dominates the local soft drinks market with its vast soda portfolio. However, several family-owned businesses have recently introduced their sodas to the market.

Coca-Cola's most successful competitor so far in Tanzania has been the **Bakhresa Group**, which has launched its Azam Cola. Bakhresa's soft drinks are often cheaper than more mainstream products, but the company's plastic bottle packaging (instead of glass for traditional Coca-Cola bottles) has also taken off strongly in recent months while glass bottle sales have almost come to a halt.

MeTL, a family conglomerate that sells everything from sugar and spaghetti to fuel and pens, is also set to expand its beverage portfolio in Tanzania. Mo Cola, named after Mohammed Dewji, chief executive of MeTL, will most likely undercut Coca-Cola's prices.

We believe prices will continue to be the main determinants for consumers in Tanzania, as the middle class has expanded only slowly and is still relatively fragile. Tanzania's middle class represents less than 20% of the population, compared with 20-50% in South Africa and more than 75% in North Africa. Zitto Kabwe, the country's shadow finance minister, has estimated that the country's middle class (defined as earning more than USD2 per day, according to the World Bank) represents between 5% and 11% of the population. The rest still lives in poverty, and any slowdown in growth will risk part of the population falling back into poverty. Indeed, our Country Risk team has downgraded Tanzania's economic outlook for 2014, now projecting real GDP growth of 7.1%, compared with 7.3% previously. Still, the majority of the population, albeit poor, spends 80% of their budget on food and drink, which will support growth in the value soft drinks segment.

Kenya Retail To Attract Major M&A Within Two Years

The structure and sophistication of Kenya's organised food retail industry is in a different league to its main East Africa peers, Tanzania and Uganda. Outside of South Africa, there are only a handful of countries in Sub-Saharan Africa (SSA) where retail channels are relatively well developed with organised retail sales

accounting for more than 10% of the overall market: they are Kenya, Botswana, Namibia, Zimbabwe and Zambia.

Out of these, Kenya stands out. Botswana and Namibia are relatively wealthy on a per capita basis but not especially scalable (combined population less than 5mn), so it has been relatively easier for them to formalise, especially given their proximity and economic linkages with South Africa. South African retailers are predictably well represented.

In Zimbabwe, there is an inverted trajectory. Zimbabwe's food and drink industry, including food retail, is well developed and there are a number of domestic retailers as well as South African retailers that are well-represented. A lot of investment into retail took place in the 1980s and early to mid-1990s, before the decade long slump in the economy that lasted until 2009. Zambia, with its solid economic growth history and relatively well developed institutions compared with many of its neighbours, has been a preferred retail investment opportunity - we note that Zambia is one of the SSA markets where South Africa's leading retailer by sales Shoprite has more than 15 stores. However, foreign retailers have driven Zambia's growth. The key point here is that in a lot of promising SSA economies, the South African retailers are building their businesses organically as there is generally a dearth of well-developed local retailers that have enough scale to make them acquirable.

In Kenya, South African food retailers are conspicuous by their absence. Our view for the past four to five years has been that we will not see Shoprite or its outward looking South African peers like Pick 'n' Pay and **Walmart**-owned **Massmart** enter organically (growth in South Africa is increasingly harder to come by). The competitive landscape in Kenya dictates this. There are four well-developed retailers competing and Kenya has historically been tougher for South African brands to crack, given the level of competition and quality that is present domestically in the food and drink sector. The leaders in Kenya's retail sector include Nakumatt, Uchumi, Tuskys and Navias.

Getting the Kenya strategy right potentially means getting the East Africa strategy right. Kenya, Tanzania and Uganda are the main economies in the EAC region, which is SSA's most integrated economic bloc, with more than 100mn consumers and terrific growth prospects, particularly with oil and gas projects expected to come online in Tanzania and Uganda. Meanwhile, Kenya's capital Nairobi is probably the continent's commercial hub ex-South Africa. Kenya's retail sector is large, and by 2018 we believe it will be worth more than USD5.5bn in annual sales. We expect one of the South African majors to enter well before this, and we believe a deal is likely within two years. Potential risks to this outlook include the fact that the

majority of the leading Kenyan retailers are family owned and in the past have not been willing to part with their businesses.

Tanzania Leads African Beer In Profitability

Tanzania is the most profitable major African beer market based on the operating performance of **Tanzania Breweries Limited**. A population above 40mn, relatively low per capita commercial beer consumption and a favourable economic outlook will ensure Tanzania remains amongst the most profitable regional markets over the 2020 forecast period.

More competition typically leads to lower margins and relatively more capital expenditure spending. In Ghana, for example, **Guinness Ghana Breweries** and **SABMiller's Accra Brewery Limited** are both positioned strongly and with per capita beer consumption relatively low, at about 6 litres per annum, there is a lot of room for growth. Guinness Ghana's capital expenditure represented 29.4% of total sales in its last financial year.

Our central thesis is clear: while there are reasons to challenge the narrative that almost all consumer sectors across key markets in Africa will generate real momentum and ultimately margin selling to a swelling middle class (*see 'The African Consumer: Myth vs. Reality,' September 4 2015*), particularly in less established sectors than beer for example, across much of the food and drink manufacturing landscape the outlook remains positive in key areas like the East African Community (EAC), for reasons we will outline.

It is important to distinguish food and particularly beverage manufacturing from food retailing (also covered by **BMI's** Food & Drink team). The economics of food retailing across Africa, with the exception of a few markets, are not nearly as developed (*see 'The African Consumer - Formal Food Retail To Emerge But Long Road Ahead,' September 15 2015*). Food retailing is structurally a much lower-margin business (typically 5-6% operating margins at best) and relies heavily on the strength of local and regional manufacturing, as well as local logistics and real estate.

Old Stories Still Sitting On The Main Table

The presence and attraction of the African beer industry, and much of the wider food and drink complex such as soft drinks, predates most other consumer sectors. Multinationals have been investing in African food and drink for more than three decades, buying up breweries from private and state-owned enterprises

and cultivating profitable monopolies in many cases. As a result, a strong argument can be made that industries such as beer represent the oldest type of consumer-focused investment in Africa.

As a lot of African countries have become wealthier over the past fifteen years, and beer, soft drinks and food manufacturers have been able to drive sales of their products, as many of these industries remain relatively under-developed in terms of overall maturity, based on key indicators like per capita consumption levels.

Even as a newer brigade of sectors and bolder business plans backed by new actors like Africa-focused private equity funds have come to the fore - embodied by examples such as the low-cost airline Fastjet (backed by Easyjet) tackling Southern Africa's lack of affordable air travel - the older stories still persist among the most promising opportunities.

With so much income generated through the informal cash economy across most of Africa, manufacturers with scale operating in sectors such as beer and soft drinks have come to be seen as dependable bellwethers in the assessment of the performance and challenges faced by companies operating across the continent.

Angle Is Key

In beer manufacturing, there are markets like Tanzania that are dominated by one company (SABMiller-owned Tanzania Breweries), meaning the industry structure works firmly in its favour (ably supported by the pace at which the economy is growing). In other markets like Uganda, you have more competition and idiosyncratic industry factors, such as the targeting of lower income consumers by producing low-cost beer, pitched as a safe substitute for the informal beer that still is so ubiquitous across so much of Southern, Eastern and Western Africa.

Even though per capita consumption of commercial beer is less than 15 litres across most of the continent, the real level of beer consumption is much higher. Historically, most multinationals have adopted a premiumisation approach by targeting incremental volume growth and generating value through relatively high price points, which is most aptly illustrated by Nigeria. Premiumisation and an industry structure that favours incumbents provide the raw material for outstanding operating margins, well in excess of 20% in most cases.

What is absent in Africa are markets where three or four manufacturers are competing, which is far more common in parts of Asia and Latin America. More competition is good for consumers and leads to faster volume growth, but is less positive for margins.

The lack of real competition has played a key part in making premiumisation the go-to strategy for most manufacturers. Given relatively high operating costs across so many African markets (fuelling generators being high among them), the economics of beer have been best served by premiumisation, which in large part explains why per capita consumption of commercial beer has not grown as quickly as might have been expected.

Although low-cost beer is a major opportunity, particularly in East Africa where it is more developed than in the West, the real driver of profitability will continue to be the premiumisation trend. This is why we are forecasting relatively modest growth on a per capita volume basis in the likes of Tanzania, Kenya and Uganda over our forecast period to 2020. In a country like Tanzania, where you have one dominant beer company (Tanzania Breweries) with operating margins in the 30% range, there is less incentive to aggressively push low-cost beer than there would be in a more competitive landscape.

Competitive Landscape

Table: Key Players In East Africa's Food & Drink Sector

Company	Country of Origin	Ownership	Sub-sector	Sales (USDmn), Last Financial Year
East African Breweries	Kenya	Parent company: Diageo	Alcohol - beer	707.0
Tanzania Breweries	Tanzania	Parent company: SABMiller	Alcohol - beer	627.8
Unga Group	Kenya	Partnership: US-based Seaboard Corporation (35%) Shareholders: Kenyan Government (71%); Commonwealth Development Corp (17%)	Food - diversified	185.1
Mumias Sugar	Kenya		Food - sugar	60.6
Sasini	Kenya	Private company	Tea and coffee	31.8
Williamson Tea	Kenya	Private company	Tea	29.0
Kakuzi	Kenya	Parent company: UK-based Camellia PLC (50.7%)	Tea and diversified agribusiness	19.2
Kapchorua Tea	Kenya	Private company	Tea	12.0
Eaagads	Kenya	Subsidiary of Kofinaf Company Limited	Coffee	1.1
Limuru Tea	Kenya	Private company	Tea	1.0
Kenya Orchards	Kenya	Private company	Food - diversified	0.7

Source: Bloomberg, trade press, BMI

Table: Key Players In East Africa's Mass Grocery Retail

Country	Company	Country of Origin	Ownership	Sales (reported currency)	Fiscal Year End	Format	No of Outlets
Kenya	Uchumi	Kenya	Private company	KES12.9bn	Jun-15	Hypermarket	5
						Supermarket	9
	Nakumatt	Kenya	Private company	na	na	Supermarket	50e
Uganda	Nakumatt	Kenya	Private company	na	na	Supermarket	8
						Shoprite Holdings	South Africa
Tanzania	Nakumatt	Kenya	Private company	na	na	Supermarket	4

Source: Company Information, Trade Press, BMI

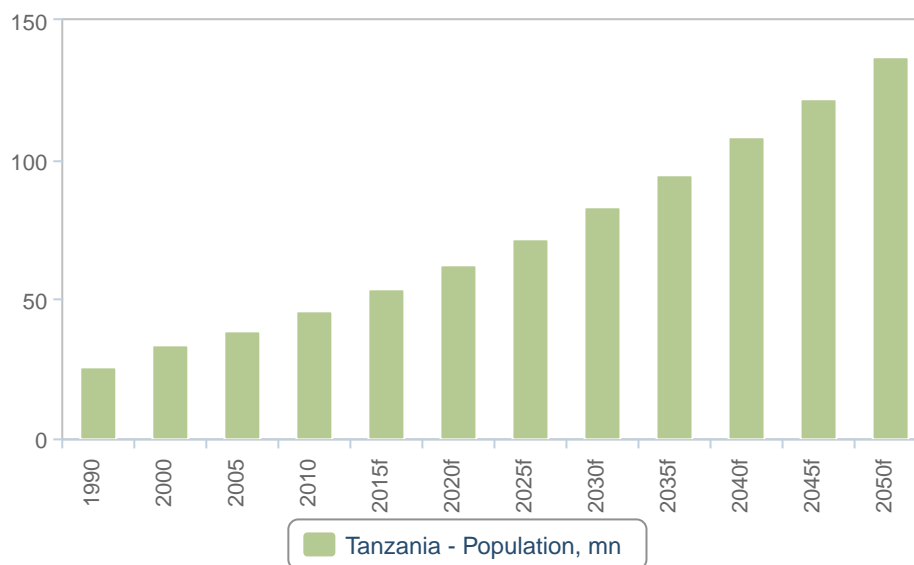
Demographic Forecast

Demographic analysis is a key pillar of **BMI**'s macroeconomic and industry forecasting model. Not only is the total population of a country a key variable in consumer demand, but an understanding of the demographic profile is essential to understanding issues ranging from future population trends to productivity growth and government spending requirements.

The accompanying charts detail the population pyramid for 2015, the change in the structure of the population between 2015 and 2050 and the total population between 1990 and 2050. The tables show indicators from all of these charts, in addition to key metrics such as population ratios, the urban/rural split and life expectancy.

Population

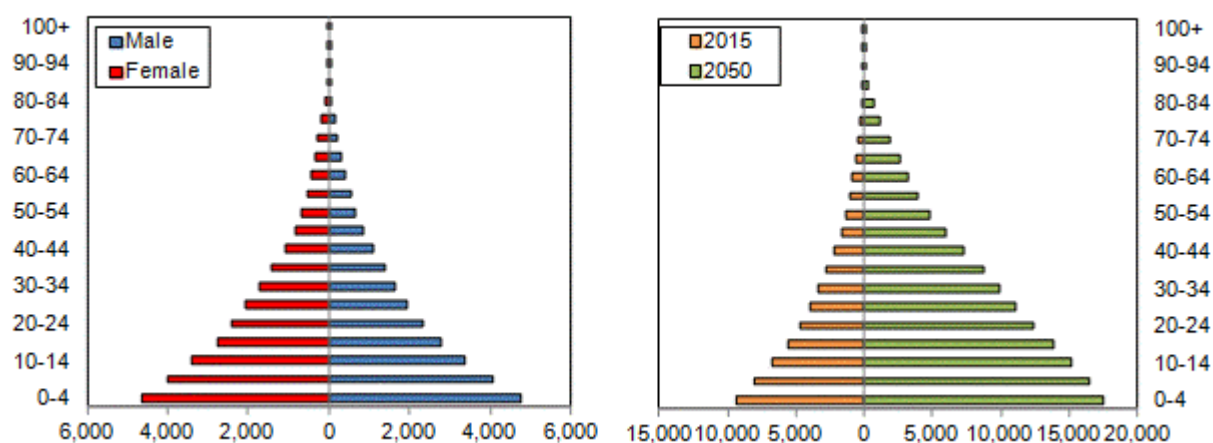
(1990-2050)



f = BMI forecast. Source: World Bank, UN, BMI

Tanzania Population Pyramid

2015 (LHS) & 2015 Versus 2050 (RHS)



Source: World Bank, UN, BMI

Table: Population Headline Indicators (Tanzania 1990-2025)

	1990	2000	2005	2010	2015f	2020f	2025f
Population, total, '000	25,458	33,991	39,065	45,648	53,470	62,267	72,032
Population, % y-o-y	na	2.6	3.0	3.2	3.2	3.0	2.9
Population, total, male, '000	12,608	16,910	19,394	22,665	26,574	30,992	35,900
Population, total, female, '000	12,849	17,080	19,671	22,982	26,896	31,275	36,132
Population ratio, male/female	0.98	0.99	0.99	0.99	0.99	0.99	0.99

na = not available; f = BMI forecast. Source: World Bank, UN, BMI

Table: Key Population Ratios (Tanzania 1990-2025)

	1990	2000	2005	2010	2015f	2020f	2025f
Active population, total, '000	13,054	17,744	20,295	23,641	27,590	32,573	38,575
Active population, % of total population	51.3	52.2	52.0	51.8	51.6	52.3	53.6
Dependent population, total, '000	12,403	16,247	18,769	22,006	25,880	29,693	33,457
Dependent ratio, % of total working age	95.0	91.6	92.5	93.1	93.8	91.2	86.7

Key Population Ratios (Tanzania 1990-2025) - Continued

	1990	2000	2005	2010	2015f	2020f	2025f
Youth population, total, '000	11,713	15,283	17,606	20,578	24,167	27,686	31,072
Youth population, % of total working age	89.7	86.1	86.7	87.0	87.6	85.0	80.6
Pensionable population, '000	690	963	1,163	1,428	1,712	2,007	2,384
Pensionable population, % of total working age	5.3	5.4	5.7	6.0	6.2	6.2	6.2

f = BMI forecast. Source: World Bank, UN, BMI

Table: Urban/Rural Population & Life Expectancy (Tanzania 1990-2025)

	1990	2000	2005	2010	2015f	2020f	2025f
Urban population, '000	4,807.5	7,583.2	9,705.8	12,833.6	16,900.9	21,879.5	27,804.7
Urban population, % of total	18.9	22.3	24.8	28.1	31.6	35.1	38.6
Rural population, '000	20,650.7	26,408.4	29,359.8	32,814.9	36,569.5	40,387.8	44,228.2
Rural population, % of total	81.1	77.7	75.2	71.9	68.4	64.9	61.4
Life expectancy at birth, male, years	48.5	49.9	55.1	60.6	64.1	66.2	67.6
Life expectancy at birth, female, years	51.5	51.1	56.1	62.8	66.9	68.6	70.4
Life expectancy at birth, average, years	50.0	50.5	55.6	61.6	65.5	67.4	69.0

f = BMI forecast. Source: World Bank, UN, BMI

Table: Population By Age Group (Tanzania 1990-2025)

	1990	2000	2005	2010	2015f	2020f	2025f
Population, 0-4 yrs, total, '000	4,641	5,907	7,008	8,135	9,398	10,427	11,486
Population, 5-9 yrs, total, '000	3,822	5,031	5,695	6,816	8,019	9,297	10,337
Population, 10-14 yrs, total, '000	3,249	4,344	4,901	5,625	6,750	7,961	9,248
Population, 15-19 yrs, total, '000	2,722	3,733	4,191	4,811	5,540	6,663	7,880
Population, 20-24 yrs, total, '000	2,247	3,166	3,599	4,107	4,717	5,441	6,559
Population, 25-29 yrs, total, '000	1,844	2,590	3,031	3,502	4,005	4,614	5,333
Population, 30-34 yrs, total, '000	1,510	2,066	2,429	2,917	3,393	3,900	4,507
Population, 35-39 yrs, total, '000	1,222	1,646	1,897	2,309	2,797	3,282	3,792
Population, 40-44 yrs, total, '000	1,036	1,322	1,488	1,786	2,194	2,687	3,175
Population, 45-49 yrs, total, '000	836	1,062	1,215	1,404	1,695	2,101	2,591

Population By Age Group (Tanzania 1990-2025) - Continued

	1990	2000	2005	2010	2015f	2020f	2025f
Population, 50-54 yrs, total, '000	676	891	976	1,142	1,329	1,615	2,014
Population, 55-59 yrs, total, '000	539	709	821	903	1,077	1,259	1,538
Population, 60-64 yrs, total, '000	416	555	643	755	839	1,006	1,181
Population, 65-69 yrs, total, '000	303	412	485	564	677	758	913
Population, 70-74 yrs, total, '000	200	279	339	408	476	577	650
Population, 75-79 yrs, total, '000	114	163	199	257	309	366	448
Population, 80-84 yrs, total, '000	51	76	96	141	163	200	240
Population, 85-89 yrs, total, '000	16	26	33	44	67	80	100
Population, 90-94 yrs, total, '000	3	5	7	10	14	22	27
Population, 95-99 yrs, total, '000	0	0	0	1	1	2	4
Population, 100+ yrs, total, '000	0	0	0	0	0	0	0

f = BMI forecast. Source: World Bank, UN, BMI

Table: Population By Age Group % (Tanzania 1990-2025)

	1990	2000	2005	2010	2015f	2020f	2025f
Population, 0-4 yrs, % total	18.23	17.38	17.94	17.82	17.58	16.75	15.95
Population, 5-9 yrs, % total	15.01	14.80	14.58	14.93	15.00	14.93	14.35
Population, 10-14 yrs, % total	12.76	12.78	12.55	12.32	12.62	12.79	12.84
Population, 15-19 yrs, % total	10.70	10.98	10.73	10.54	10.36	10.70	10.94
Population, 20-24 yrs, % total	8.83	9.32	9.22	9.00	8.82	8.74	9.11
Population, 25-29 yrs, % total	7.25	7.62	7.76	7.67	7.49	7.41	7.40
Population, 30-34 yrs, % total	5.93	6.08	6.22	6.39	6.35	6.26	6.26
Population, 35-39 yrs, % total	4.80	4.84	4.86	5.06	5.23	5.27	5.26
Population, 40-44 yrs, % total	4.07	3.89	3.81	3.91	4.10	4.32	4.41
Population, 45-49 yrs, % total	3.29	3.12	3.11	3.08	3.17	3.37	3.60
Population, 50-54 yrs, % total	2.66	2.62	2.50	2.50	2.49	2.59	2.80
Population, 55-59 yrs, % total	2.12	2.09	2.10	1.98	2.01	2.02	2.14
Population, 60-64 yrs, % total	1.64	1.63	1.65	1.66	1.57	1.62	1.64
Population, 65-69 yrs, % total	1.19	1.21	1.24	1.24	1.27	1.22	1.27
Population, 70-74 yrs, % total	0.79	0.82	0.87	0.89	0.89	0.93	0.90
Population, 75-79 yrs, % total	0.45	0.48	0.51	0.56	0.58	0.59	0.62
Population, 80-84 yrs, % total	0.20	0.23	0.25	0.31	0.31	0.32	0.33

Population By Age Group % (Tanzania 1990-2025) - Continued

	1990	2000	2005	2010	2015f	2020f	2025f
Population, 85-89 yrs, % total	0.07	0.08	0.09	0.10	0.13	0.13	0.14
Population, 90-94 yrs, % total	0.01	0.02	0.02	0.02	0.03	0.04	0.04
Population, 95-99 yrs, % total	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Population, 100+ yrs, % total	0.00	0.00	0.00	0.00	0.00	0.00	0.00

f = BMI forecast. Source: World Bank, UN, BMI

Glossary

Food & Drink

Food Consumption: All four food consumption indicators (food consumption in local currency, food consumption in US dollar terms, per capita food consumption and food consumption as a percentage of GDP) relate to off-trade food and non-alcoholic drinks consumption, unless stated in the relevant table/section.

Off-trade: Relates to an item consumed away from the premises on which it was purchased. For example, a bottle of water bought in a supermarket would count as off-trade, while a bottle of water purchased as part of a meal in a restaurant would count as on-trade.

Canned Food: Relates to the sale of food products preserved by canning. This is inclusive of canned meat and fish, canned ready meals, canned desserts and canned fruits and vegetables. Volume sales are measured in tonnes as opposed to on a unit basis to allow for cross-market comparisons.

Confectionery: Refers to retail sales of chocolate, sugar confectionery and gum products. Chocolate sales include chocolate bars and boxed chocolates; gum sales incorporate both bubble gum and chewing gum; and sugar confectionery sales include hard-boiled sweets, mints, jellies and medicated sweets.

Trade: In the majority of BMI's Food & Drink reports, we use the UN Standard International Trade Classification, using categories Food and Live Animals, Beverages and Tobacco, Animal and Vegetable Oils, Fats and Waxes and Oil-seeds and Oleaginous Fruits. Where an alternative classification is used due to data availability, this is clearly stated.

Drinks Sales: Soft drinks sales (including carbonates, fruit juices, energy drinks, bottled water, functional beverages and ready-to-drink tea and coffee), alcoholic drinks sales (including beer, wine and spirits) and tea and coffee sales (excluding ready-to-drink tea and coffee products that are incorporated under BMI's soft drinks banner) are all off-trade only, unless stated.

Mass Grocery Retail

Mass Grocery Retail: BMI classifies mass grocery retail (MGR) as organised retail, performed by companies with a network of modern grocery retail stores and modern distribution networks. MGR differs from independent or traditional retail, which relates to informal, independent-owned grocery stores or traditional market retailing. MGR incorporates hypermarket, supermarket, convenience and discount

retailing, and in unique cases cooperative retailing. Where supermarkets are independently owned and not classified as MGR, **BMI** will state so clearly within the relevant report.

Hypermarket: **BMI** classifies hypermarkets as retail outlets selling both groceries and a large range of general merchandise goods (non-food items) and typically more than 2,500sq m in size. Traditionally only found on the outskirts of towns, hypermarkets are increasingly appearing in urban locations.

Supermarket: Supermarkets are the original and still most globally prevalent form of self-service grocery retail outlet. **BMI** classifies supermarkets as more than 300sq m, up to the size of a hypermarket. The typical supermarket carries both fresh and processed food and will stock a range of non-food items, most commonly household and beauty goods. The average supermarket will increasingly offer some added-value services, such as dry cleaning or in-store ATMs.

Discount Stores: Although most commonly between 500sq m and 1,500sq m in size, and thus of the same classification as supermarkets, discount stores will typically have a smaller floor space than their supermarket counterparts. Other distinguishing features include the prevalence of low-priced and private label goods, an absence of added-value services, often called a no-frills environment, and a high product turnover rate.

Convenience Stores: **BMI**'s classification of convenience stores includes small outlets typically less than 300sq m in size, with long opening hours and located in high footfall areas. These stores mainly sell fast-moving food and drink products (such as confectionery, beverages and snack foods) and non-food items, typically stocking only two or three brand choices per item and often carrying higher prices than other forms of grocery store.

Cooperatives: **BMI** classifies cooperatives as retail stores that are independently owned but club together to form buying groups under a cooperative arrangement, trading under the same banner, although each is privately owned. The arrangement is similar to a franchise system, although all profits are returned to members. The term is becoming more archaic, with fewer cooperatives remaining that conform to this model. Most cooperative groups now have a more centralised management structure, operate more like normal supermarkets, and are thus classified as such in **BMI**'s reports.

Methodology

Industry Forecast Methodology

BMI's industry forecasts are generated using the best-practice techniques of time-series modelling and causal/econometric modelling. The precise form of model we use varies from industry to industry, in each case being determined, as per standard practice, by the prevailing features of the industry data being examined.

Common to our analysis of every industry is the use of vector autoregressions. Vector autoregressions allow us to forecast a variable using more than the variable's own history as explanatory information. For example, when forecasting oil prices, we can include information about oil consumption, supply and capacity.

When forecasting for some of our industry sub-component variables, however, using a variable's own history is often the most desirable method of analysis. Such single-variable analysis is called univariate modelling. We use the most common and versatile form of univariate models: the autoregressive moving average model (ARMA). In some cases, ARMA techniques are inappropriate because there is insufficient historic data or data quality is poor. In such cases, we use either traditional decomposition methods or smoothing methods as a basis for analysis and forecasting.

BMI mainly uses ordinary least squares estimators. In order to avoid relying on subjective views and encourage the use of objective views, **BMI** uses a 'general-to-specific' method. **BMI** mainly uses a linear model, but simple non-linear models, such as the log-linear model, are used when necessary. During periods of 'industry shock', for example when poor weather conditions impede agricultural output, dummy variables are used to determine the level of impact.

Effective forecasting depends on appropriately selected regression models. **BMI** selects the best model according to various different criteria and tests, including but not exclusive to:

- R2 tests explanatory power; adjusted R2 takes degree of freedom into account
- Testing the directional movement and magnitude of coefficients
- Hypothesis testing to ensure coefficients are significant (normally t-test and/or P-value)
- All results are assessed to alleviate issues related to auto-correlation and multi-collinearity

BMI uses the selected best model to perform forecasting.

Human intervention plays a necessary and desirable role in all of **BMI**'s industry forecasting. Experience, expertise and knowledge of industry data and trends ensure that analysts spot structural breaks, anomalous data, turning points and seasonal features where a purely mechanical forecasting process would not.

Sector-Specific Methodology

Within the Food & Drink industry, issues that could result in human intervention might include but are not exclusive to:

- Significant company expansion plans;
- New product development that might influence pricing levels;
- Dramatic changes in local production levels;
- Product taxation;
- The regulatory environment and specific areas of legislation;
- Changes in lifestyles and general societal trends;
- The formation of bilateral and multilateral trading agreements and negotiations;
- Political factors influencing trade;
- The development of the industry in neighbouring markets that are potential competitors for foreign direct investment.

Example Of Food Consumption Model

$$(\text{Food Consumption})_t = \beta_0 + \beta_1 * (\text{GDP})_t + \beta_2 * (\text{inflation})_t + \beta_3 * (\text{lending rate})_t + \beta_4 * (\text{foreign exchange rate})_t + \beta_5 * (\text{government expenditure})_t + \beta_6 * (\text{food consumption})_{t-1} + \epsilon_t$$

Sources

BMI uses the following sources in the compilation of data, developments and analysis for its range of Food & Drink reports: national statistics offices; local industry governing-bodies and associations; local trade associations; central banks; government departments, particularly trade, agricultural and commerce ministries; officially released information and financial results from local and multinational companies; cross-referenced information from local and international news agencies and trade press outlets; figures from global organisations, such as the World Trade Organization (WTO), the World Health Organization

(WHO), the UN Food and Agricultural Organization (FAO) and the Organisation for Economic Co-operation and Development (OECD).

Risk/Reward Index Methodology

BMI's Risk/Reward Index (RRI) provides a comparative regional ranking system evaluating the ease of doing business and the industry-specific opportunities and limitations for potential investors in a given market. The RRI system divides into two distinct areas:

Rewards: Evaluation of sector's size and growth potential in each state, and also broader industry/state characteristics that may inhibit its development. This is further broken down into two sub-categories:

- **Industry Rewards:** This is an industry-specific category taking into account current industry size and growth forecasts, and the openness of the market to new entrants and foreign investors, to provide an overall score for potential returns for investors.
- **Country Rewards:** this is a country-specific category, and the score factors in favourable political and economic conditions for the industry.

Risks: Evaluation of industry-specific dangers and those emanating from the state's political/economic profile that calls into question the likelihood of expected returns being realised over the assessed time period. This is further broken down into two sub-categories:

- **Industry Risks:** This is an industry-specific category whose score covers potential operational risks to investors, regulatory issues inhibiting the industry and the relative maturity of a market.
- **Country Risks:** This is a country-specific category in which political and economic instability, unfavourable legislation and a poor overall business environment are evaluated to provide an overall score.

We take a weighted average, combining industry and country risks, or industry and country rewards. These two results in turn provide an overall Risk/Reward Index, which is used to create our regional ranking system for the risks and rewards of involvement in a specific industry in a particular country.

For each category and sub-category, each state is scored out of 100 (100 being the best), with the overall index a weighted average of the total score. Importantly, as most of the countries and territories evaluated are considered by BMI to be 'emerging markets', our index is revised on a quarterly basis. This ensures that the index draws on the latest information and data across our broad range of sources, and the expertise of our analysts.

In constructing these indices, the following indicators have been used. Almost all indicators are objectively based.

Table: Food & Drink Risk/Reward Index Indicators**Rewards****Industry rewards**

Food and drink consumption per capita, USD	Indicator denotes overall breadth of market. Wealthier markets score higher.
Per capita food consumption growth, five-year compound annual growth, %	Lead Food & Drink growth indicator. Scores based on compound annual growth over our five-year forecast period.
Market fragmentation	Subjective score reflecting how relatively developed the industry is. Higher score reflects a more fragmented industry.

Country rewards

Population size, mn	Indicator denotes size of market.
GDP per capita, USD	Proxy for wealth. Size of population is important but needs to be considered in relation to spending power. High-income states receive better scores than low-income states.
Youth population, %	The size of the 0-15 age group as a percentage of the total working age population. Younger populations are generally considered to be more desirable.

Risks**Industry risks**

Mass grocery retail penetration, %	The proportional contribution of the organised food retailing sector; higher scores reflect better developed routes to consumers and more efficient internal trade systems.
Regulatory environment	Subjective score based on the industry-specific regulatory environment and the presence of potentially restrictive legislation.

Country risks

Short-term economic growth	Score from BMI's Country Risk Index (CRI). It evaluates likely growth trajectory over a two-year forecast period, based on BMI's forecasts and projections of business and consumer confidence.
Income distribution	Middle 60% of population as % of total spending. Higher score is an indicator of incomes being spread more equitably.
Lack of bureaucracy	From CRI. It evaluates the risks to business posed by official bureaucracy, the broader legal framework and corruption.
Market orientation	Subjective score from CRI to denote predictability of openness to foreign investment and trade.
Physical infrastructure	From CRI. Poor power/water/transport infrastructure act as bottlenecks to sector development

Source: BMI

Weighting: Given the number of indicators/datasets used, it would be inappropriate to give all sub-components equal weight. Consequently, the following weights have been adopted:

Table: Weighting

Component	Weighting
Rewards	60%
- Industry rewards	30%
- Country rewards	30%
Risks	40%
- Industry risks	20%
- Country risks	20%

Source: BMI