

Egypt

Consumer & Retail Report

Includes 5-year forecasts to 2023



Contents

| | |
|---|-----------|
| Key View..... | 4 |
| Consumer Outlook | 4 |
| SWOT | 6 |
| Consumer & Retail SWOT | 6 |
| Industry Forecast..... | 7 |
| Consumer Spending | 7 |
| Household Characteristics | 14 |
| Consumer Demographics | 17 |
| Market Overview | 23 |
| Retail Trends | 23 |
| Consumer & Retail Glossary..... | 29 |
| Consumer & Retail Methodology..... | 33 |

© 2019 Fitch Solutions Group Limited. All rights reserved.

All information, analysis, forecasts and data provided by Fitch Solutions Group Limited is for the exclusive use of subscribing persons or organisations (including those using the service on a trial basis). All such content is copyrighted in the name of Fitch Solutions Group Limited and as such no part of this content may be reproduced, repackaged, copied or redistributed without the express consent of Fitch Solutions Group Limited.

All content, including forecasts, analysis and opinion, has been based on information and sources believed to be accurate and reliable at the time of publishing. Fitch Solutions Group Limited makes no representation of warranty of any kind as to the accuracy or completeness of any information provided, and accepts no liability whatsoever for any loss or damage resulting from opinion, errors, inaccuracies or omissions affecting any part of the content.

This report from Fitch Solutions Macro Research is a product of Fitch Solutions Group Ltd, UK Company registration number 08789939 ('FSG'). FSG is an affiliate of Fitch Ratings Inc. ('Fitch Ratings'). FSG is solely responsible for the content of this report, without any input from Fitch Ratings. Copyright © 2019 Fitch Solutions Group Limited.

THIS COMMENTARY IS PUBLISHED BY FITCH SOLUTIONS MACRO RESEARCH and is NOT a comment on Fitch Ratings' credit ratings. Any comments or data included in the report are solely derived from Fitch Solutions Macro Research and independent sources. Fitch Ratings' analysts do not share data or information with Fitch Solutions Macro Research.

Key View

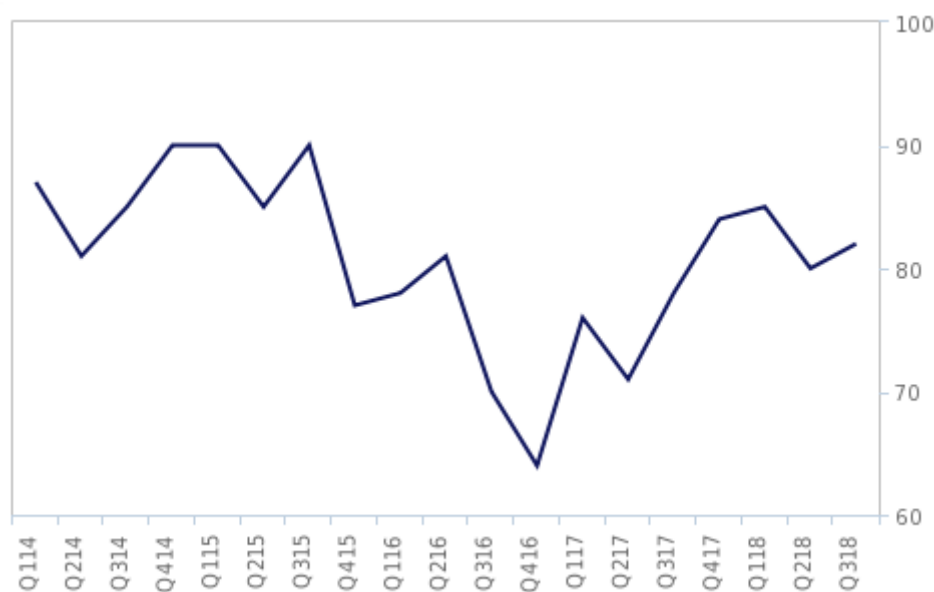
Consumer Outlook

Key View: The outlook for Egyptian consumer spending remains tepid in 2019 with challenges ahead, but in comparison with last year the outlook is one of recovery, albeit on a slow trajectory. Austerity measures, inflationary pressure and unemployment, especially within the millennial and Gen Z consumer groups will continue to weigh on consumer purchasing power in the short term.

The 2019 year will mark the beginning of a slow recovery for the Egyptian consumer, with private final consumption expanding by a projected 2.4% from 1.1% in 2018, this is in comparison to the 4.7% and 4.2% growth recorded in 2016 and 2017 respectively.

This brightening outlook is feeding through into consumer confidence, with Egypt's Q318 reading (latest available data) up 5% y-o-y, but still a considerable way off the highs witnessed in 2015. Consumer confidence readings are likely to be choppy in 2019, as austerity measures implemented in 2018 feed through to the consumer and further subsidy cuts are likely in 2019.

Consumer Confidence Trending Upwards
Egypt - Consumer Confidence Index, (2014-2018)

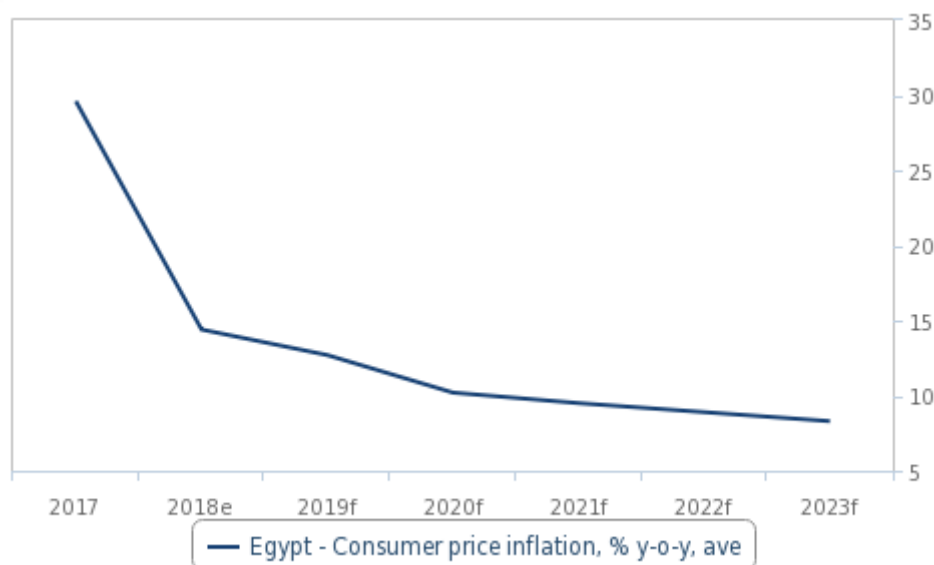


Source: Nielsen, Fitch Solutions

A cut in energy subsidies, which triggered increases in fuel, electricity and transportation fares has already filtered through to impact household budgets, but we expect the government to implement another round of IMF-stipulated subsidy cuts by mid-2019, which will again have a negative influence on Egyptian consumers' purchasing power.

Inflation while ticking down year on year remains elevated and will likely spike again on the back of further subsidy cuts mid-year. We project inflation in Egypt to average 12.7% in 2019 down from 14.4% in 2018.

Price Levels Remain Elevated
Egypt - Consumer Price Inflation, % y-o-y ave (2017-2023)



Fitch Solutions/Central Bank of Egypt

Unemployment having expanded in 2018 is forecast to tick down in 2019 and this is already starting to play out, with unemployment rates in Q418 (latest reading) at 8.9% compared to the 10.6% recorded in Q118, according to the World Bank. While this would traditionally be viewed as a positive development for consumer spending, the fact the unemployment while decreasing, remains elevated and coupled with the fact that a large percentage of this unemployment is youth unemployment (the key consumer demographic) at 34.3% in 2018, further feeds into our view of tepid and slow recovery outlook for the Egyptian consumer.

SWOT

Consumer & Retail SWOT

SWOT Analysis

Strengths

- Egypt is becoming increasingly urbanised, supporting the rise of modern retail formats.
- The country has the largest population in the Arab world. It therefore offers retailers substantial long-term growth opportunities.
- Its popularity with tourists provides opportunities for luxury, food services and hospitality sectors.
- Large gas deposits will act as a brace for future growth.

Weaknesses

- The majority of Egyptian households, especially in rural areas, are low-income consumers, with disposable income of less than USD10,000 annually.
- There is a lack of good quality retail space, with retailers reliant on the construction of new shopping centres, which is likely to extend beyond our forecast period.
- Persistently high youth unemployment and low female labour force participation restricts growth in household incomes, giving retailers less opportunity to sell non-essential products.
- Little opportunity exists at the top end of the income distribution, with the number of households earning more than USD50,000 remaining negligibly small over our forecast period.

Opportunities

- The country's increasingly affluent and youthful population is adopting modern spending habits. This will boost the demand for non-essential items such as household goods, clothing and footwear over the medium-to-long term.
- Income levels are rising rapidly in the country, with strong growth at the lower end where households earning more than USD5,000 will grow by a CAGR of 13.1%, over the next four years.
- The retail property market is set to grow strongly, with supermarkets, hypermarkets, department and speciality stores and modern shopping malls transforming the retail formats available for domestic and international retailers.
- While credit card uptake is among the lowest in the MENA region, at less than 10% of the population, we expect consumers to benefit from increasing access to formal financial services over the medium-to-long term.

Threats

- Hikes to domestic energy prices will significantly impact spending patterns over the coming years as households devote a greater share of their incomes to fuel.
- High inflation poses an ongoing threat to the retail sector due to its negative influence on households' purchasing power, which threatens consumer spending.
- Popular discontent towards austerity measures could derail the government's stabilisation attempts.
- The instability of the region and the country could negatively affect confidence in the industry, particularly if high levels of instability return.

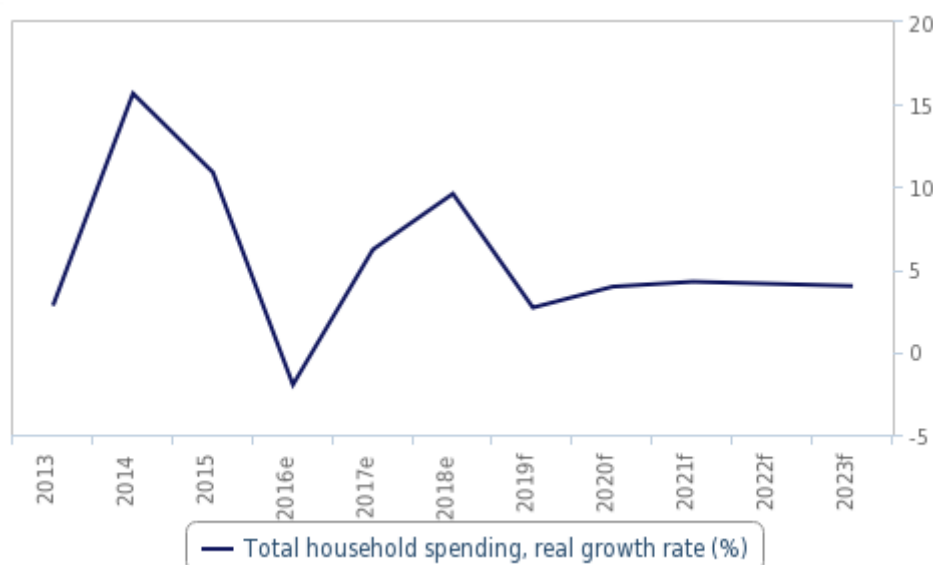
Industry Forecast

Consumer Spending

Total Household Spending

Consumer spending growth in Egypt recovered well over 2018, from negative growth in the previous two years. However, overall household spending growth will remain below its potential, following inflationary pressures caused by the country's sharp currency devaluations. We forecast real household spending growth to come in at 2.7% y-o-y in 2019, accelerating to an average of 3.8% over the medium term (2019-2023). Fuel subsidy cuts and ongoing inflationary pressures will weigh on consumer spending, with inflation still set to average double-digit rates over 2019.

Total Household Spending, Real Growth, % y-o-y
Total Household Spending, Real Growth, % y-o-y (2013-2023)



e/f = Fitch Solutions estimate/forecast. Source: Egypt CAPMAS, Fitch Solutions

We forecast real household spending to grow at an annual average of 3.8% over 2019-2023. While nominally, household spending is growing at double digit rates in both local currency and US dollars, a steep currency devaluation and high inflation rates are driving the majority of this growth. In local currency terms, we expect total household spending to reach EGP3.2trn (USD165bn) in 2023, up from an estimated EGP2.0trn (USD110bn) in 2019. We expect consumer spending activity to pick up considerably over the course of our forecast period (2019-2023), as the continued implementation of IMF reforms drives economic growth and encourages investment by both consumers and retailers.

TOTAL HOUSEHOLD SPENDING (EGYPT 2017-2023)

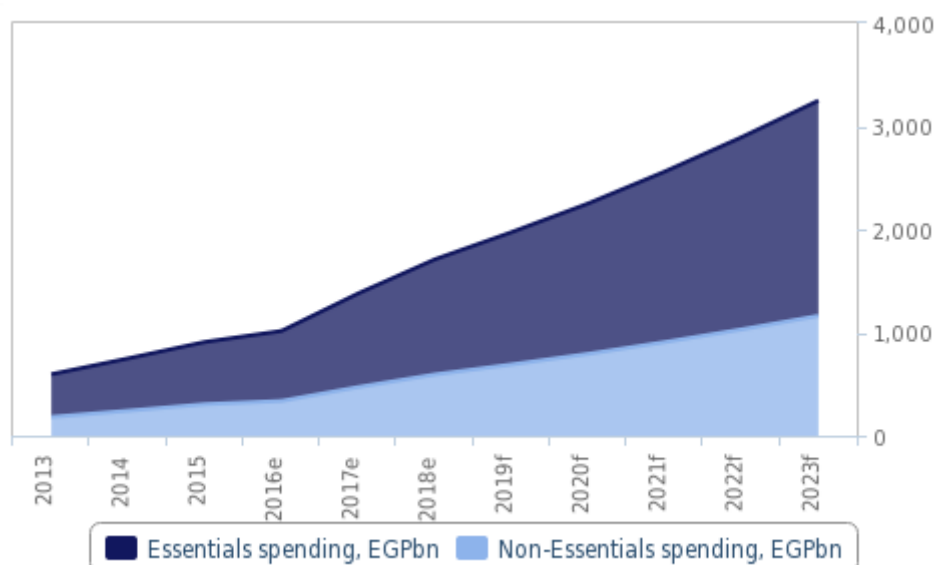
| Indicator | 2017e | 2018e | 2019f | 2020f | 2021f | 2022f | 2023f |
|---|---------|---------|---------|---------|---------|---------|---------|
| Total household spending, EGPbn | 1,378.5 | 1,709.2 | 1,972.5 | 2,250.9 | 2,560.9 | 2,893.5 | 3,248.1 |
| Total household spending, USDbn | 77.24 | 95.91 | 109.52 | 123.00 | 136.58 | 150.31 | 164.46 |
| Total household spending, EGP % y-o-y | 35.83 | 23.99 | 15.40 | 14.12 | 13.77 | 12.99 | 12.26 |
| Total household spending, USD % y-o-y | -23.44 | 24.17 | 14.19 | 12.31 | 11.04 | 10.05 | 9.41 |
| Total household spending, EGPbn, 2010 prices, % y-o-y | 6.22 | 9.60 | 2.70 | 3.97 | 4.27 | 4.14 | 4.01 |

e/f = Fitch Solutions estimate/forecast. Source: Egypt CAPMAS, Fitch Solutions

Essential And Non-Essential Spending

The next five years will bring slight changes to household spending allocations for essential and non-essential spending. Proportionally, spending on non-essential items is expected to grow its share over our medium term period. However, essential spending still dominates household budgets: food and non-alcoholic drinks, housing and utilities, clothing and footwear, transport and communications collectively account for 65% of total spending in 2019. However, as household incomes continue to rise, we expect this figure to decline to 64.2% by 2023. We do not expect explosive growth in the retail sector, as the country's economy is still in need of structural changes, but the projected improvements will benefit retailers across the whole economy.

Essential and Non Essential Spending
Essential and Non Essential Spending (2013-2023)



e/f = Fitch Solutions estimate/forecast. Source: Egypt CAPMAS, Fitch Solutions

Spending on essential items is forecast to grow from EGP1.3bn (USD71.2bn) in 2019, to EGP2.1bn (USD106bn) by the end of 2023. The food and non-alcoholic drinks sub-sector will contribute the most to the relative decline in essentials spending. Grocery spending will decrease from 32.8% of total household spending in 2019 to 31.9% by 2023, down from 45% in 2005. The influx of new players and the expansion of the existing ones will bring competitive price pressures in the sector and Egyptian consumers will benefit from relatively cheap groceries, which will in turn result in the slower growth of sales values. However, spending on housing and utilities and transport is likely to increase. We expect more households to begin making larger purchases, including apartments and cars. Rising utilities costs will also contribute to higher spending within the essentials category.

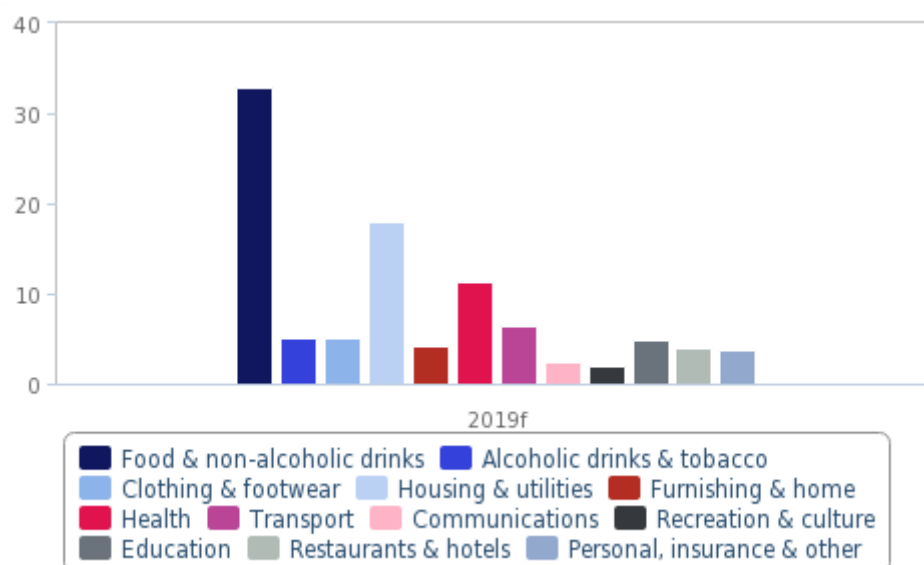
ESSENTIAL AND NON ESSENTIAL SPENDING (EGYPT 2017-2023)

| Indicator | 2017e | 2018e | 2019f | 2020f | 2021f | 2022f | 2023f |
|--------------------------------------|-------|---------|---------|---------|---------|---------|---------|
| Essentials spending, EGPbn | 907.5 | 1,116.1 | 1,282.3 | 1,458.0 | 1,653.5 | 1,863.2 | 2,086.7 |
| Non-Essentials spending, EGPbn | 471.0 | 593.1 | 690.2 | 793.0 | 907.4 | 1,030.3 | 1,161.4 |
| Essentials spending, % total | 65.83 | 65.30 | 65.01 | 64.77 | 64.57 | 64.39 | 64.24 |
| Non-Essentials spending, % total | 34.17 | 34.70 | 34.99 | 35.23 | 35.43 | 35.61 | 35.76 |
| Essentials spending, USDbn | 50.85 | 62.63 | 71.20 | 79.67 | 88.19 | 96.79 | 105.65 |
| Non-Essentials spending, USDbn | 26.39 | 33.28 | 38.32 | 43.33 | 48.40 | 53.52 | 58.80 |
| Essentials spending, EGP % y-o-y | 33.81 | 22.98 | 14.89 | 13.70 | 13.41 | 12.68 | 12.00 |
| Non-Essentials spending, EGP % y-o-y | 39.92 | 25.94 | 16.37 | 14.88 | 14.44 | 13.54 | 12.72 |

e/f = Fitch Solutions estimate/forecast. Source: Egypt CAPMAS, Fitch Solutions

Combined spending on non-essentials will make modest gains over the forecast period as some shifts in consumer preferences take place. Spending on health-related products will outperform the overall retail industry, growing at 15.4% over 2019-2023. The gains in the sub-sector are coming from a fairly low base, and is a result of increased household incomes. We expect Egyptian consumers to spend more on health products and services as increased budgets allow them to afford more qualified and expensive private care. Health spending as a percentage of total spending will increase to 11.9% in 2023, up from 11.3% in 2019. As the public healthcare system suffers from corruption and incompetence, and older consumers demand more and better health services, spending on health will increase significantly.

Total Household Spending Breakdown % total
Total Household Spending Breakdown % total (2019-2019)



f = Fitch Solutions forecast. Source: Egypt CAPMAS, Fitch Solutions

The furnishing and home, and restaurants and hotels segments are expected to see their share of consumer spending remain flat over our forecast period to 2023. We project that the influx of new retail chains and the expansion of current players will gradually increase the competitiveness in non-essentials sub-sectors and put downward pressure on prices. At the same time, while we do project robust growth in household spending in local currency terms (14.7% annual average between 2019 and 2023), this partly reflects inflationary pressures and we expect Egyptian consumers to be conservative about making large, aspirational purchases, at least over the short term (e.g. 2019/2020).

Food, Drink And Tobacco

We forecast food and non-alcoholic drinks spending to amount to EGP649bn (USD36bn) in 2019, while alcoholic drinks and tobacco will account for an additional EGP99bn (USD5.5bn). We forecast food and non-alcoholic drinks spending to grow at a CAGR of 12.9% between 2019 and 2023 in local currency terms, and 10.6% in USD terms.

Food spending will account for roughly 94% of total food and non-alcoholic drinks spending, over the medium term, while non-alcoholic drinks will account for 3.8%. Spending on food will be worth EGP611bn in 2019. Strong growth will take this to EGP979bn, by the end of 2023. However, over the next five years, spending on non-alcoholic drinks will grow at a faster rate than spending on food, averaging 13.4% y-o-y growth, compared to 12.8% y-o-y growth. Spending on non-alcoholic drinks will grow from EGP25bn in 2019, to EGP41bn, by the end of 2023.

Spending on alcoholic drinks accounts for roughly two thirds of total spending on alcoholic drinks and tobacco products in Egypt. In 2019, spending on alcoholic drinks will be worth EGP67bn, growing by an average of 14.8% a year, taking it to a value of EGP115bn by the end of 2023.

It is important to note that while most Egyptians do not drink in public, many purchase alcohol to drink privately at home. In the past, there have been bans placed on alcohol consumption in the country. In 2013, plans were announced to ban the sale of alcohol, a move pushed forward by Islamist hardliners in the government. These plans were shelved and this has allowed spending in this category to rise. It remains to be seen whether a future ban may be put in place.

| FOOD AND DRINKS (NON-ALCOHOLIC, ALCOHOLIC AND TOBACCO) SPENDING (EGYPT 2017-2023) | | | | | | | |
|---|--------|--------|--------|--------|--------|--------|----------|
| Indicator | 2017e | 2018e | 2019f | 2020f | 2021f | 2022f | 2023f |
| Food and non-alcoholic drinks spending, EGPbn | 466.19 | 567.71 | 648.70 | 734.28 | 829.44 | 931.48 | 1,040.20 |
| Food spending, EGPbn | 439.37 | 534.73 | 610.80 | 691.18 | 780.57 | 876.41 | 978.53 |
| Non-alcoholic drinks spending, EGPbn | 17.66 | 21.74 | 24.99 | 28.43 | 32.25 | 36.35 | 40.72 |
| Alcoholic drinks and tobacco spending, EGPbn | 66.85 | 85.01 | 99.43 | 114.69 | 131.71 | 149.98 | 169.47 |
| Alcoholic drinks spending, EGPbn | 45.10 | 57.38 | 67.14 | 77.46 | 88.97 | 101.32 | 114.51 |
| Tobacco spending, EGPbn | 21.75 | 27.63 | 32.29 | 37.23 | 42.74 | 48.65 | 54.96 |
| Food and non-alcoholic drinks spending, EGP % y-o-y | 31.46 | 21.78 | 14.27 | 13.19 | 12.96 | 12.30 | 11.67 |
| Food spending, EGP % y-o-y | 31.32 | 21.70 | 14.23 | 13.16 | 12.93 | 12.28 | 11.65 |
| Non-alcoholic drinks spending, EGP % y-o-y | 34.01 | 23.10 | 14.97 | 13.76 | 13.45 | 12.71 | 12.02 |
| Alcoholic drinks and tobacco spending, EGP % y-o-y | 42.63 | 27.16 | 16.97 | 15.35 | 14.83 | 13.87 | 13.00 |
| Alcoholic drinks spending, EGP % y-o-y | 42.78 | 27.23 | 17.00 | 15.38 | 14.86 | 13.89 | 13.01 |
| Tobacco spending, EGP % y-o-y | 42.30 | 27.02 | 16.89 | 15.30 | 14.79 | 13.83 | 12.97 |
| Food and non-alcoholic drinks spending, USDbn | 26.12 | 31.86 | 36.02 | 40.12 | 44.24 | 48.39 | 52.67 |

| Indicator | 2017e | 2018e | 2019f | 2020f | 2021f | 2022f | 2023f |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Alcoholic drinks and tobacco spending, USDbn | 3.75 | 4.77 | 5.52 | 6.27 | 7.02 | 7.79 | 8.58 |
| Food and non-alcoholic drinks spending, EGP per household | 19,875.86 | 22,851.20 | 25,391.71 | 28,032.56 | 30,819.28 | 33,918.44 | 37,137.34 |
| Alcoholic drinks and tobacco spending, EGP per household | 2,850.08 | 3,421.66 | 3,891.94 | 4,378.64 | 4,893.77 | 5,461.20 | 6,050.43 |
| Food and non-alcoholic drinks spending, EGP per capita | 4,778.83 | 5,712.80 | 6,412.05 | 7,132.97 | 7,922.69 | 8,753.15 | 9,621.07 |
| Alcoholic drinks and tobacco spending, EGP per capita | 685.25 | 855.42 | 982.81 | 1,114.16 | 1,258.04 | 1,409.34 | 1,567.47 |

e/f = Fitch Solutions estimate/forecast. Source: Egypt CAPMAS, Fitch Solutions

Clothing And Footwear

Clothing and footwear currently accounts for a relatively modest portion of overall household spending, forecast at 5.1% of the total in 2019. We expect clothing and footwear spending to grow from EGP100bn (USD5.6bn) in 2019 to EGP162bn (USD8.2bn) in 2023. This is due to increasing demand from the 20-39 year-old age bracket and households in the USD10,000-plus income bracket. Despite this growth, its share of overall household spending is forecast to fall slightly to 5% by 2023, as other sub-sectors grow more strongly. This will also be due to the growing prominence of fast fashion and greater competition, which will drive down prices.

The country's youthful and increasingly urbanised population will be the main driving force behind growth in the demand for clothing and footwear over the coming few years. Major fast-fashion retailers such as **H&M** are already established in the country, while modern shopping malls continue to be developed in order to attract the attention of international brands that may wish to gain a foothold in the market.

| CLOTHING AND FOOTWEAR SPENDING (EGYPT 2017-2023) | | | | | | | |
|---|----------|----------|----------|----------|----------|----------|----------|
| Indicator | 2017e | 2018e | 2019f | 2020f | 2021f | 2022f | 2023f |
| Clothing and footwear spending, EGPbn | 71.59 | 87.59 | 100.34 | 113.83 | 128.82 | 144.91 | 162.05 |
| Clothing spending, EGPbn | 57.74 | 70.65 | 80.93 | 91.81 | 103.91 | 116.88 | 130.70 |
| Footwear including repair spending, EGPbn | 13.85 | 16.94 | 19.41 | 22.02 | 24.92 | 28.03 | 31.34 |
| Clothing and footwear spending, EGP % y-o-y | 32.56 | 22.35 | 14.56 | 13.44 | 13.18 | 12.48 | 11.83 |
| Clothing spending, EGP % y-o-y | 32.56 | 22.35 | 14.56 | 13.44 | 13.18 | 12.48 | 11.83 |
| Footwear including repair spending, EGP % y-o-y | 32.56 | 22.35 | 14.56 | 13.44 | 13.18 | 12.48 | 11.83 |
| Clothing and footwear spending, USDbn | 4.01 | 4.91 | 5.57 | 6.22 | 6.87 | 7.53 | 8.20 |
| Clothing spending, EGP per household | 2,461.73 | 2,843.58 | 3,167.99 | 3,505.01 | 3,860.79 | 4,255.96 | 4,666.39 |
| Footwear including repair spending, EGP per household | 590.39 | 681.95 | 759.74 | 840.56 | 925.88 | 1,020.64 | 1,119.06 |
| Clothing spending, EGP per capita | 591.88 | 710.89 | 800.00 | 891.86 | 992.49 | 1,098.31 | 1,208.91 |
| Footwear including repair spending, EGP per capita | 141.95 | 170.49 | 191.85 | 213.88 | 238.01 | 263.39 | 289.91 |

e/f = Fitch Solutions estimate/forecast. Source: Egypt CAPMAS, Fitch Solutions

Household Goods

We forecast expenditure on household goods to grow at a CAGR of 13.9% throughout our forecast period (in local currency terms), rising from EGP43bn (USD2.4bn) in 2019 to EGP71bn (USD3.6bn) by 2023. This still does not represent a particularly significant portion of household expenditure (and it has more long-term potential for growth beyond our forecast period). Of this, the largest proportion will be spent on household appliances, with spending expected to reach EGP14.6bn in 2019. This category will also record the strongest growth over 2019-2023, at 14.6%.

Egyptians increasingly desire to have modern appliances in their homes, driving spending growth and presenting significant opportunities for retailers in this segment. Though the household goods market remains unsaturated, retail giants such as **IKEA** have already established themselves in the country. This will pose new challenges to domestic retailers, who will struggle to compete on price or product range.

| HOUSEHOLD GOODS SPENDING (EGYPT 2017-2023) | | | | | | | |
|--|----------|----------|----------|----------|----------|----------|----------|
| Indicator | 2017e | 2018e | 2019f | 2020f | 2021f | 2022f | 2023f |
| Household goods spending, EGPbn | 29.53 | 36.77 | 42.54 | 48.64 | 55.42 | 62.71 | 70.48 |
| Furniture and furnishings spending, EGPbn | 6.36 | 7.97 | 9.26 | 10.62 | 12.13 | 13.75 | 15.49 |
| Household textiles spending, EGPbn | 4.87 | 5.95 | 6.80 | 7.71 | 8.71 | 9.79 | 10.95 |
| Household appliances spending, EGPbn | 9.79 | 12.39 | 14.45 | 16.64 | 19.08 | 21.69 | 24.47 |
| Glass, tableware and utensils spending, EGPbn | 2.00 | 2.39 | 2.71 | 3.04 | 3.42 | 3.82 | 4.24 |
| Home & garden tools/equipment spending, EGPbn | 2.29 | 2.87 | 3.34 | 3.84 | 4.39 | 4.98 | 5.61 |
| AV, camera and computer spending, EGPbn | 3.04 | 3.70 | 4.24 | 4.80 | 5.42 | 6.09 | 6.81 |
| Toys, sports, gardens and pets spending, EGPbn | 1.19 | 1.50 | 1.74 | 1.99 | 2.28 | 2.58 | 2.91 |
| Household goods spending, EGP % y-o-y | 36.95 | 24.54 | 15.68 | 14.34 | 13.96 | 13.14 | 12.39 |
| Furniture and furnishings spending, EGP % y-o-y | 38.77 | 25.41 | 16.12 | 14.68 | 14.26 | 13.39 | 12.59 |
| Household textiles spending, EGP % y-o-y | 32.02 | 22.06 | 14.38 | 13.30 | 13.07 | 12.40 | 11.77 |
| Household appliances spending, EGP % y-o-y | 41.21 | 26.54 | 16.69 | 15.13 | 14.63 | 13.70 | 12.85 |
| Glass, tableware and utensils spending, EGP % y-o-y | 28.08 | 19.94 | 13.23 | 12.36 | 12.25 | 11.71 | 11.18 |
| Home & garden tools/equipment spending, EGP % y-o-y | 39.47 | 25.74 | 16.29 | 14.82 | 14.37 | 13.48 | 12.67 |
| AV, camera and computer spending, EGP % y-o-y | 31.87 | 21.99 | 14.36 | 13.28 | 13.04 | 12.37 | 11.74 |
| Toys, sports, gardens and pets spending, EGP % y-o-y | 38.74 | 25.41 | 16.14 | 14.69 | 14.25 | 13.38 | 12.58 |
| Household goods spending, USDbn | 1.65 | 2.06 | 2.36 | 2.66 | 2.96 | 3.26 | 3.57 |
| Household goods spending, EGP per household | 1,258.84 | 1,480.07 | 1,665.01 | 1,856.75 | 2,059.38 | 2,283.47 | 2,516.17 |
| Household goods spending, EGP per capita | 302.67 | 370.02 | 420.46 | 472.46 | 529.40 | 589.28 | 651.86 |

e/f = Fitch Solutions estimate/forecast. Source: Egypt CAPMAS, Fitch Solutions

Personal Care And Effects

Personal care and effects spending is forecast to account for EGP22bn (USD1.2bn) in 2019, growing at a CAGR of 12.3% over the next five years, taking it to a value of EGP34bn (USD1.7bn) by 2023. Spending on personal care and effects in Egypt has fallen since 2016 as inflation has caused consumers to prioritise spending in more essential areas and/or switch to affordable local brands over premium imported personal care products. However, we do expect this sub-sector to return to positive growth over 2019.

THIS COMMENTARY IS PUBLISHED BY FITCH SOLUTIONS MACRO RESEARCH and is NOT a comment on Fitch Ratings' credit ratings. Any comments or data included in the report are solely derived from Fitch Solutions Macro Research and independent sources. Fitch Ratings' analysts do not share data or information with Fitch Solutions Macro Research.

The greater proportion of spending on personal care and effects is accounted for by personal care products, forecast to be worth EGP18.2bn in 2019, while the personal effects segment is expected to be worth EGP3.6bn. Personal care and effects spending per capita is forecast to recover at a modest pace, growing at a CAGR of 10.4% over the medium term, taking spending from EGP215 per capita in 2019, to EGP311 by the end of 2023.

| PERSONAL CARE AND EFFECTS SPENDING (EGYPT 2017-2023) | | | | | | | |
|---|--------|--------|--------|--------|----------|----------|----------|
| Indicator | 2017e | 2018e | 2019f | 2020f | 2021f | 2022f | 2023f |
| Personal care and effects spending, EGPbn | 14.87 | 18.87 | 21.80 | 24.70 | 27.63 | 30.59 | 33.65 |
| Personal care products spending, EGPbn | 11.55 | 15.41 | 18.22 | 21.02 | 23.84 | 26.70 | 29.64 |
| Personal effects products spending, EGPbn | 3.32 | 3.47 | 3.57 | 3.68 | 3.79 | 3.89 | 4.01 |
| Personal care and effects spending, EGP % y-o-y | -22.75 | 26.89 | 15.49 | 13.31 | 11.87 | 10.73 | 9.99 |
| Personal care products spending, EGP % y-o-y | -26.76 | 33.35 | 18.27 | 15.34 | 13.43 | 11.98 | 11.03 |
| Personal effects products spending, EGP % y-o-y | -4.61 | 4.41 | 3.09 | 2.97 | 2.92 | 2.87 | 2.87 |
| Personal care and effects spending, USDbn | 0.83 | 1.06 | 1.21 | 1.35 | 1.47 | 1.59 | 1.70 |
| Personal care and effects spending, EGP per household | 634.11 | 759.66 | 853.13 | 942.83 | 1,026.52 | 1,113.96 | 1,201.27 |
| Personal care and effects spending, EGP per capita | 152.46 | 189.91 | 215.44 | 239.91 | 263.89 | 287.47 | 311.21 |

e/f = Fitch Solutions estimate/forecast. Source: Egypt CAPMAS, Fitch Solutions

Tourism Spending

Despite Egypt's popularity as a tourism destination, it is not known as a retail tourism hub. Its beaches and significant historical and cultural attractions remain the leading drivers in the tourism industry. However, several terrorist attacks on tourism infrastructure such as hotels and transport networks have negatively impacted tourist arrivals. After a significant decline in arrivals over 2015 and 2016, we do forecast significant growth in total arrivals over the medium term. In 2019, a forecasted 11.6mn tourists are expected to arrive in Egypt, growing 13.5% y-o-y, from 2018. Over the medium term, this growth will slow slightly but still be significant, forecast to grow at an average of 9% a year, taking total arrivals to 15.7mn tourists, by the end of 2023.

Key View: We maintain a conservative outlook for Egypt's consumer spending over the medium term. Inflationary pressures and subsidy cuts will weigh on consumer purchasing power. A rapidly expanding population, rising incomes and stronger economic growth amid key reforms will boost spending on both essentials and non-essentials, although essentials will continue to dominate at around 65% of total consumer spending.

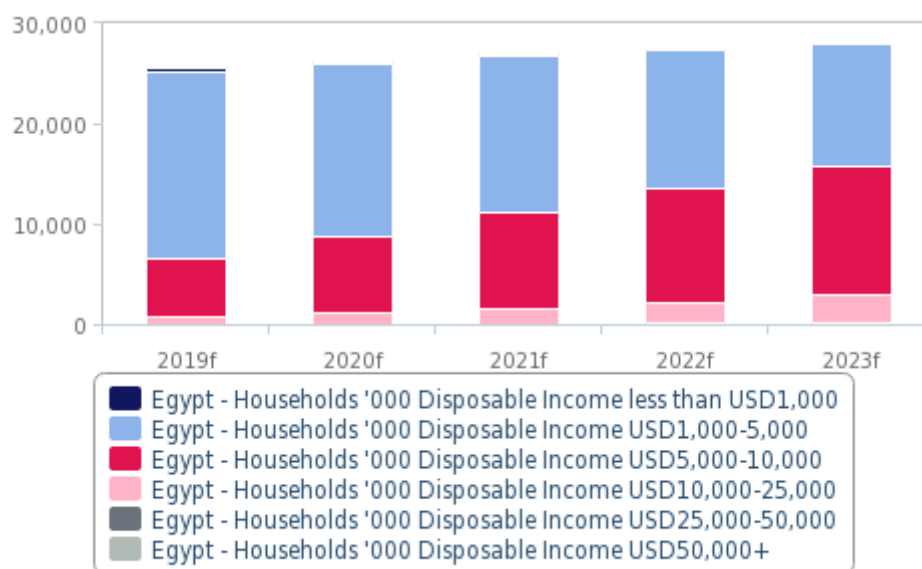
Household Characteristics

Key View: While income levels are still relatively low, improving economic conditions are feeding through to wages and increasing household incomes. The number of households is expected to grow rapidly over the next four years and lower inflation should keep real wage growth strong. Opportunities exist for MGR and FMCG majors as the population that earn above USD5,000 is expected to double over the next few years.

Latest Updates

- The country's total number of households will expand considerably over our five-year forecast period, growing from 25.5mn in 2019 to 28.0mn by 2023.
- Disposable income per household is forecast to grow at a CAGR of 13.2% in local currency terms, over the next five years.
- Egypt's middle class is still relatively small but will experience substantial growth over the coming years. We forecast the number of households with disposable income of USD10,000-plus will rise from 800,000 in 2019 to 2.9mn by 2023, accounting for 10.5% of all households.
- Little opportunity exists at the top end of the income distribution, with the number of households earning more than USD50,000 remaining negligibly small over our forecast period.

Purchasing Power And Demographic Trends
Household Income Breakdown (2019-2023)



f = Fitch Solutions forecast. Source: National sources, Fitch Solutions

Structural Trends

The overall increase in the number of households in Egypt is in line with the growth trajectory of the country's population, with the total number of households expected to grow from 25.6mn in 2019, to 28mn by 2023. The increase in the number of new households gives retailers an opportunity to build customer loyalty as they obtain greater access to new customers. Economic growth in Egypt also results in greater income for households, giving them greater spending power as disposable incomes increase.

Despite the economic conditions, disposable incomes are expected to experience rapid growth, at a forecast CAGR of 13.2%, in nominal terms, over the next five years. This will mainly be driven by returning economic growth and the gradual reduction in high inflation rates. We forecast household and per capita income to increase during our forecast period as Egypt's economy gradually

THIS COMMENTARY IS PUBLISHED BY FITCH SOLUTIONS MACRO RESEARCH and is NOT a comment on Fitch Ratings' credit ratings. Any comments or data included in the report are solely derived from Fitch Solutions Macro Research and independent sources. Fitch Ratings' analysts do not share data or information with Fitch Solutions Macro Research.

strengthens. Disposable income per household is forecast to reach EGP122,757 (USD6,216) by the end of 2023, a marked improvement on EGP76,405 (USD4,242) in 2019. As a result of this growth, households earning more than USD5,000 will witness the strongest gains, with this income bracket increasing from 25.8% in 2019 to 56.6% in 2023. This will boost the number of customers for premium and non-essential products.

The gap between the country's wealthiest and the poorest will be gradually narrowed by growth in overall household incomes over the next five years. Those households expected to earn more than USD10,000 are set to moderately grow over this period. By 2023, 10.5% of households will earn more than USD10,000, representing nearly 2.9mn households, up from an estimated 800,000 in 2019. Importantly, the expansion is set to accelerate towards the end of the forecast period. This will boost the number of customers for premium and non-essential products. If no detrimental economic or political events take place, the growth of Egypt's middle class might become one of the fastest in the world, bearing in mind the size of the country's population. This growth in household incomes will attract new players to the retail market, and this will help consolidate and modernise the industry. Brand penetration is currently very low in Egypt and the sector has some potential for strong long-term growth.

The events of the revolution in 2011 have had a negative effect on low-income consumers, with the amount of people living in poverty or extreme poverty rising, especially in rural areas. In 2019, 73% of households are forecast to earn between USD1,000 and USD5,000 and could be classified as low-income households without significant disposable income, which is why over two-thirds of household spending goes towards essentials such as food and drink, and housing and utilities, rather than luxuries.

Those who earn high incomes are often employed in the banking and insurance industries, or in technical or managerial roles in the petroleum industry, which can also be lucrative. The areas that have the most highly-paid individuals are Cairo, the financial hub, and Alexandria, which benefits from trade and shipping services. Retailers would ideally target these areas if they are involved in the sale of non-essential luxury goods, with the modern shopping malls being the ideal destination.

HOUSEHOLD INCOME DATA (EGYPT 2016-2023)

| Indicator | 2016e | 2017e | 2018e | 2019f | 2020f | 2021f | 2022f | 2023f |
|---|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|
| Households, '000 | 28,478.8 | 23,455.1 | 24,843.9 | 25,547.7 | 26,193.8 | 26,913.2 | 27,462.2 | 28,009.6 |
| Households, % y-o-y | 3.9 | -17.6 | 5.9 | 2.8 | 2.5 | 2.7 | 2.0 | 2.0 |
| Average working adults per household | 3.2 | 3.7 | 3.6 | 3.5 | 3.4 | 3.4 | 3.3 | 3.3 |
| Gross Income, per household, EGP | 49,531.83 | 64,582.42 | 75,017.66 | 86,625.93 | 98,341.51 | 111,122.04 | 124,890.13 | 139,177.00 |
| Gross Income, per household, USD | 4,924.40 | 3,618.75 | 4,209.53 | 4,809.76 | 5,373.85 | 5,926.51 | 6,487.80 | 7,046.94 |
| Gross Income, per capita, EGP | 14,255.4 | 18,863.4 | 22,058.3 | 25,612.3 | 29,199.3 | 33,112.2 | 37,327.5 | 41,701.7 |
| Gross Income, per capita, USD | 1,417.25 | 1,056.97 | 1,237.78 | 1,422.08 | 1,595.59 | 1,765.99 | 1,939.09 | 2,111.48 |
| Disposable Income, per household, EGP | 43,687.98 | 56,962.87 | 66,166.95 | 76,405.65 | 86,739.01 | 98,011.66 | 110,155.38 | 122,756.66 |
| Disposable Income, per household, USD | 4,343.4 | 3,191.8 | 3,712.9 | 4,242.3 | 4,739.8 | 5,227.3 | 5,722.4 | 6,215.5 |
| Disposable Income, per capita, EGP | 12,573.50 | 16,637.83 | 19,455.80 | 22,590.55 | 25,754.28 | 29,205.58 | 32,923.58 | 36,781.67 |
| Disposable Income, per capita, USD | 1,250.0 | 932.3 | 1,091.7 | 1,254.3 | 1,407.3 | 1,557.6 | 1,710.3 | 1,862.4 |
| Tax and social contributions, % of gross income | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 |
| Tax and social contributions, per capita, EGP | 1,681.87 | 2,225.53 | 2,602.47 | 3,021.79 | 3,444.98 | 3,906.64 | 4,403.97 | 4,920.04 |
| Tax and social contributions, per capita, USD | 167.2 | 124.7 | 146.0 | 167.8 | 188.3 | 208.4 | 228.8 | 249.1 |

THIS COMMENTARY IS PUBLISHED BY FITCH SOLUTIONS MACRO RESEARCH and is NOT a comment on Fitch Ratings' credit ratings. Any comments or data included in the report are solely derived from Fitch Solutions Macro Research and independent sources. Fitch Ratings' analysts do not share data or information with Fitch Solutions Macro Research.

| Indicator | 2016e | 2017e | 2018e | 2019f | 2020f | 2021f | 2022f | 2023f |
|---|---------|---------|---------|---------|---------|----------|----------|----------|
| Households '000 Disposable Income USD5,000+ | 7,786.3 | 2,744.0 | 4,492.9 | 6,587.1 | 8,824.8 | 11,198.8 | 13,570.9 | 15,866.6 |
| Households '000 Disposable Income USD10,000+ | 996.1 | 292.9 | 508.1 | 805.5 | 1,179.9 | 1,655.4 | 2,244.4 | 2,954.1 |
| Households '000 Disposable Income USD50,000+ | 4.5 | 1.3 | 2.2 | 3.4 | 5.0 | 6.9 | 9.4 | 12.4 |
| Households Disposable Income USD5,000+, % total households | 27.3 | 11.7 | 18.1 | 25.8 | 33.7 | 41.6 | 49.4 | 56.6 |
| Households Disposable Income USD10,000+, % total households | 3.5 | 1.2 | 2.0 | 3.2 | 4.5 | 6.2 | 8.2 | 10.5 |
| Households Disposable Income USD50,000+, % total households | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

e/f = Fitch Solutions estimate/forecast. Source: National sources, Fitch Solutions

Consumer Demographics

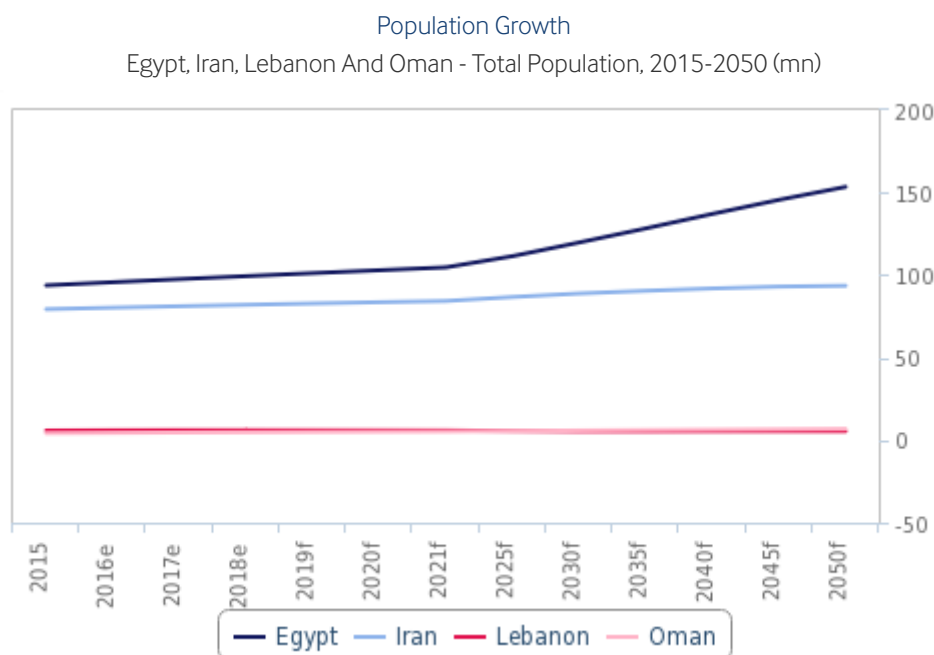
Key View: Egypt will present the largest consumer market in the Middle East, becoming an increasingly attractive destination for longer-term growth opportunities. The market will further boast a large and growing young adult population, which bodes well for innovative and modernised consumer products and services.

Demographic Trends

Looking at the demographic trends of a market gives insight into where future opportunities will emerge for consumer-facing industries. These are generally longer-term trends, taking place over multiple decades rather than our typical five-year forecast period. This section therefore provides analysis, charts and data up to 2050. The demographic trajectories of Egypt are analysed to enable a better understanding of the long-term population shifts and their impact from a consumer perspective.

Population Size

Egypt holds the largest consumer market among its Middle Eastern peers (Iran, Oman and Lebanon), with a population size of 93.8mn in 2015. The country will benefit from rapid population growth over the long term, with the population expected to reach 153.4mn by 2050. Its young consumer base will boost population growth, increasing live birth rates to 2.6mn by 2050, the highest among its regional peers.



e/f = Fitch Solutions estimate/forecast. Source: UN, Fitch Solutions

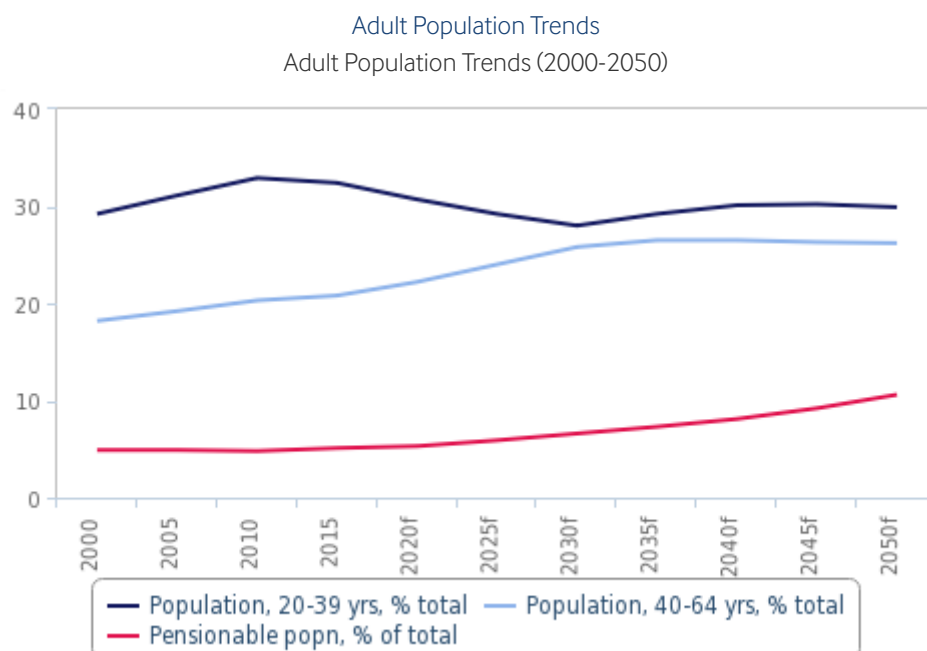
- Simply put, larger population sizes translate into larger consumer markets for companies to target.
- If a population continues to grow over our 2050 forecast period, it sends a positive signal to investors, as their target market is expanding.
- If a population shrinks, this poses a potential risk. This is particularly so if the shrinking is precipitated by a 'brain drain' among young, educated adults - an important slice of the population.

| POPULATION (EGYPT 2015-2050) | | | | | | | | | |
|------------------------------|----------------|-------|--------|--------|--------|--------|--------|--------|--------|
| Geography | Indicator | 2015 | 2020f | 2025f | 2030f | 2035f | 2040f | 2045f | 2050f |
| Egypt | Population, mn | 93.78 | 102.94 | 111.47 | 119.75 | 128.26 | 137.07 | 145.58 | 153.43 |

f = Fitch Solutions forecast. Source: UN, Fitch Solutions

Adult Population Trends

Companies looking to enter or expand in the Egyptian market will benefit from the country's large, young consumer population. We forecast the young adult population (aged 20-39 years old) to increase from 30.3mn to 45.8mn between 2015 and 2050. However, its proportion of the total population will decrease slightly from 32.4% in 2015 to 29.9% by 2050, on the back of rising middle-aged and pensionable consumers. By 2050, the middle-aged population will make up 26.2% of the total population, reaching a total of 40.1mn, up from 19.5mn in 2015. The country's pensionable population will increase from 4.8mn in 2015 to 16.2mn in 2050, though this group will still only account for 10.6% of the total population over the long term. Overall, the adult population will continue to be the dominant age group in Egypt, growing from 58% of the population in 2015, to 66.7% by 2050.



f = Fitch Solutions forecast. Source: UN, Fitch Solutions

- We have broken down the adult population into three groups: young adults (20-39 years old), middle-aged (40-64 years old) and pensionable population (65-plus years old). We have used their percentages of the total population to determine which age group will account for a larger or smaller share of the total population by 2050. This does not necessarily mean that a group will decline in total numbers if the percentage falls, just that other groups are growing faster.
- Young Adults (Trendsetters):** alcohol, technology (latest devices, e-commerce), fashion, personal care, restaurants, recreation, furnishing and home (lower end), transport (public, taxis, second-hand cars), experiences (holidays, unique/shareable activities), education, utilities, sporting goods.
- Middle Aged (Premiumisation):** spirits, personal effects, restaurants, recreation and culture, health, transport (premium brands, larger vehicles, new vehicles), financial products (life/home insurance), furnishing and home (antiques, renovations), hotels (domestic), education, utilities, garden products.
- Pensionable Population (Retiring, Out Of Workforce):** health, financial, traditional food and drink, convenience, culture, holidays, property, care services.

YOUNG ADULTS/ MIDDLE AGED/ PENSIONABLE POPULATION (EGYPT 2015-2050)

| Indicator | 2015 | 2020f | 2025f | 2030f | 2035f | 2040f | 2045f | 2050f |
|------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Population, 20-39 yrs, total, '000 | 30,344.4 | 31,611.7 | 32,520.6 | 33,488.9 | 37,441.0 | 41,283.1 | 43,984.3 | 45,825.7 |
| Population, 40-64 yrs, total, '000 | 19,473.2 | 22,846.7 | 26,718.8 | 30,888.0 | 34,017.1 | 36,274.3 | 38,240.2 | 40,131.6 |
| Population, 20-39 yrs, % total | 32.4 | 30.7 | 29.2 | 28.0 | 29.2 | 30.1 | 30.2 | 29.9 |
| Population, 40-64 yrs, % total | 20.8 | 22.2 | 24.0 | 25.8 | 26.5 | 26.5 | 26.3 | 26.2 |
| Pensionable popn, % of total | 5.1 | 5.3 | 5.9 | 6.6 | 7.3 | 8.1 | 9.2 | 10.6 |
| Pensionable pop., total, '000 | 4,748.2 | 5,485.6 | 6,563.3 | 7,863.3 | 9,339.8 | 11,082.5 | 13,427.6 | 16,237.3 |

f = Fitch Solutions forecast. Source: UN, Fitch Solutions

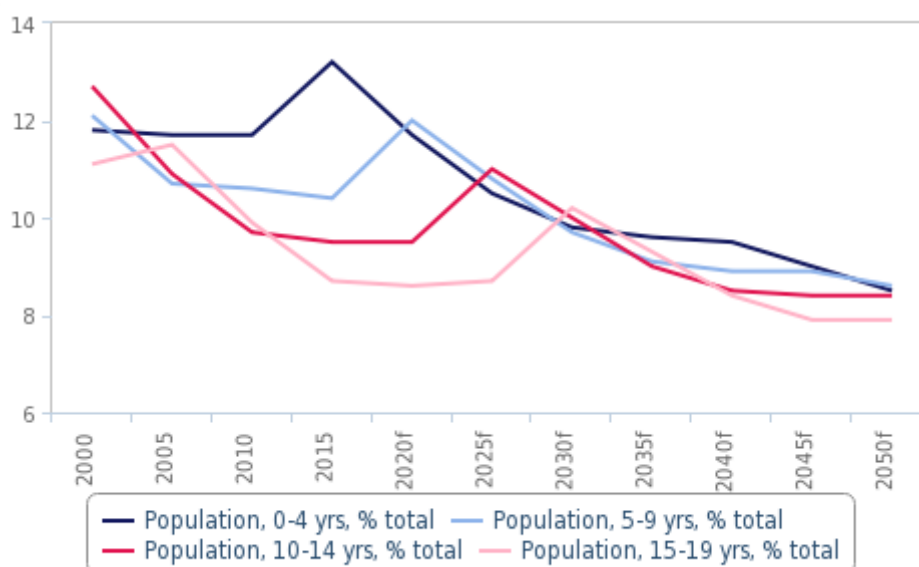
Babies, Children And Teenage Population

Egypt's youth population (those under the age of 20) will grow in absolute terms over 2015-2050, though it will fall in percentage terms owing to the expansion of the older generations. Overall, the youth population will grow from 39.2mn in 2015, to 51.2mn by 2050, but fall from 41.8% to 33.4% of the population.

The teenage population (aged 15-19 years) will see the largest gains in total numbers, with an additional 4.1mn people in the age group, growing from 8.1mn to 12.2mn between 2015 and 2050.

The babies and toddlers group, aged 0-4 years, will increase only gradually, reaching 13.0mn in 2050, up from 12.4mn in 2015. Young children will be the largest group in the youth population range, reaching a total number of 13.1mn in 2050, up from 9.8mn in 2015. Finally, the pre-teenagers group will increase from 8.9mn in 2015 to 12.9mn in 2050.

Babies, Children & Teenage Population Trends
Babies, Children & Teenage Population Trends (2000-2050)



f = Fitch Solutions forecast. Source: UN, Fitch Solutions

- We have broken down the non-adult population into four groups: babies (0-4 years old), children (5-9 years old), pre-teenagers (10-14 years old) and teenagers (15-19 years old). We have used their percentages of the total population to determine which age group will account for a larger or smaller share of the total population by 2050. This does not necessarily mean that a group will decline in total numbers if the percentage falls, just that other groups are growing faster.

THIS COMMENTARY IS PUBLISHED BY FITCH SOLUTIONS MACRO RESEARCH and is NOT a comment on Fitch Ratings' credit ratings. Any comments or data included in the report are solely derived from Fitch Solutions Macro Research and independent sources. Fitch Ratings' analysts do not share data or information with Fitch Solutions Macro Research.

- **Babies:** clothing and footwear, toys, games, personal care.
- **Children:** clothing and footwear, toys, games, confectionery, soft drinks.
- **Pre-Teenagers (Allowances):** fashion, recreation, technology (smartphones, apps, video games/consoles), restaurants (fast food/quick serve, fast casual), confectionery, sporting goods.
- **Teenagers (Minimum Wage):** restaurants (fast food/quick serve, fast casual), alcohol, tobacco (vaporisers), personal care (makeup), technology (smartphones, apps, video games/consoles), fashion, recreation, sporting goods.

POPULATION : CHILDREN AND TEENAGERS (EGYPT 2015-2050)

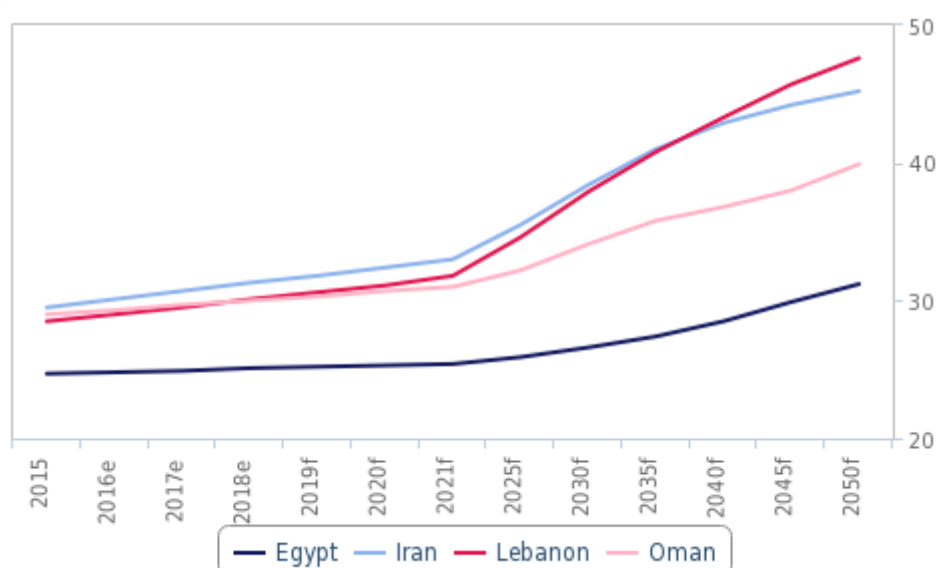
| Indicator | 2015 | 2020f | 2025f | 2030f | 2035f | 2040f | 2045f | 2050f |
|------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Population, 0-4 yrs, total, '000 | 12,374.4 | 12,071.6 | 11,678.5 | 11,686.0 | 12,305.1 | 13,008.5 | 13,165.7 | 12,993.7 |
| Population, 5-9 yrs, total, '000 | 9,797.3 | 12,302.0 | 12,005.3 | 11,623.0 | 11,634.2 | 12,255.3 | 12,960.3 | 13,120.0 |
| Population, 10-14 yrs, total, '000 | 8,903.4 | 9,762.1 | 12,264.2 | 11,973.1 | 11,593.0 | 11,605.7 | 12,227.4 | 12,933.0 |
| Population, 15-19 yrs, total, '000 | 8,137.2 | 8,861.8 | 9,720.1 | 12,223.4 | 11,934.2 | 11,556.1 | 11,570.0 | 12,192.1 |
| Population, 0-4 yrs, % total | 13.2 | 11.7 | 10.5 | 9.8 | 9.6 | 9.5 | 9.0 | 8.5 |
| Population, 5-9 yrs, % total | 10.4 | 12.0 | 10.8 | 9.7 | 9.1 | 8.9 | 8.9 | 8.6 |
| Population, 10-14 yrs, % total | 9.5 | 9.5 | 11.0 | 10.0 | 9.0 | 8.5 | 8.4 | 8.4 |
| Population, 15-19 yrs, % total | 8.7 | 8.6 | 8.7 | 10.2 | 9.3 | 8.4 | 7.9 | 7.9 |

f = Fitch Solutions forecast. Source: UN, Fitch Solutions

Median Age Of Population

Between 2015 and 2050, Egypt's median age will remain within the young adult range, boding well for retailers as consumption trends remain more or less consistent. This is also indicative of the country's large and growing youthful population. We forecast that the Egyptian median age will increase to 31.2 years over the long term to 2050, from 24.7 years in 2015. Egypt will then have the youngest consumer base among its Middle Eastern peers, with the regional average expected to be 41.0 years in 2050.

Median Age
Egypt, Iran, Lebanon And Oman, 2015-2050



e/f = Fitch Solutions estimate/forecast. Source: UN, Fitch Solutions

- This indicator works as a complement to our other population age forecasts, providing an average age of the population and how it is changing over time.
- Developed markets typically have a higher score for this indicator; they are ageing as people live longer and birth rates fall. Older generations can present an opportunity, if they are marketed to in the right way. Convenience, easy-to-open packaging and traditional ingredients are appealing to this group.
- Emerging markets tend to be lower in average age, as birth rates remain strong and populations grow. This bodes well for companies targeting trendsetting, younger generations entering the consumer market with higher levels of income than their parents. One area of risk is that youth unemployment can be quite high in these markets, capping the spending.

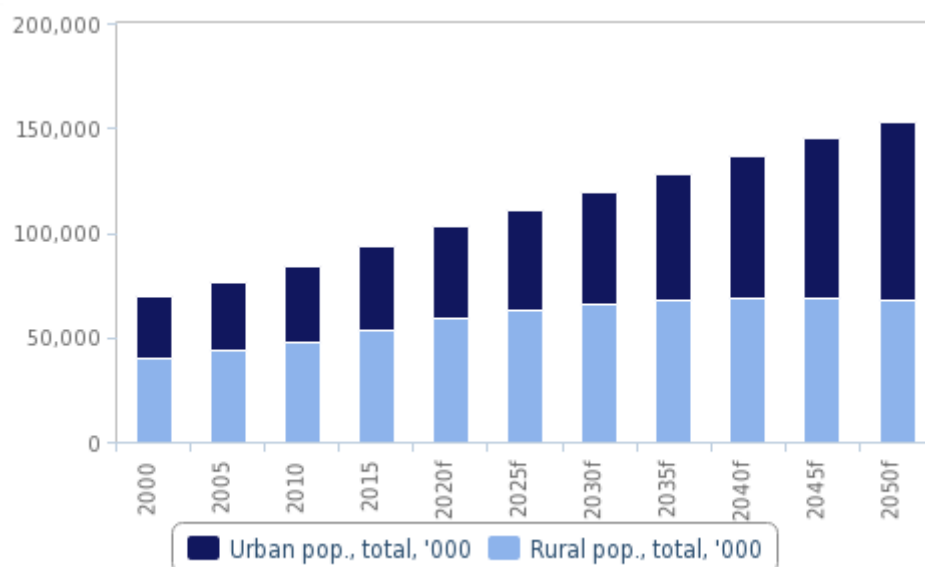
| POPULATION, MEDIAN AGE OF POPULATION (EGYPT 2015-2050) | | | | | | | | | |
|--|--------------------------|------|-------|-------|-------|-------|-------|-------|-------|
| Geography | Indicator | 2015 | 2020f | 2025f | 2030f | 2035f | 2040f | 2045f | 2050f |
| Egypt | Median age of population | 24.7 | 25.3 | 25.9 | 26.6 | 27.4 | 28.5 | 29.9 | 31.2 |

f = Fitch Solutions forecast. Source: UN, Fitch Solutions

Urban And Rural Split

Urbanisation will gain momentum in Egypt over 2015-2050, increasing from 43.1% to 56.5%. By 2050, we forecast 86.8mn people to live in urban areas, more than double the 40.5mn in 2015. Egypt's total urban population is boosted by its large population size, offering the largest urban consumer base, in absolute terms, among its regional peers. However, the percentage of urbanisation (less than 60% of the total population) is relatively low by regional standards. The vast majority of the Egyptian population is concentrated along the Nile river, as well as in the Nile basin. The three major cities in Egypt are the capital Cairo, Alexandria and Giza.

Urban & Rural Population Trends
Urban and Rural Population '000 (2000-2050)



f = Fitch Solutions forecast. Source: National sources, Fitch Solutions

- Markets with higher urbanisation levels are generally more attractive, due to developed logistics, concentrated consumers and higher spending levels, among other reasons.
- In contrast, consumers in rural regions are harder to reach and typically have lower spending power, making investment riskier, particularly in emerging markets.

| RURAL/URBAN POPULATION (EGYPT 2015-2050) | | | | | | | | |
|--|----------|----------|----------|----------|----------|----------|----------|----------|
| Indicator | 2015 | 2020f | 2025f | 2030f | 2035f | 2040f | 2045f | 2050f |
| Urban pop., % of total | 42.8 | 42.8 | 43.4 | 44.8 | 46.8 | 49.4 | 52.5 | 55.6 |
| Rural pop., % of total | 57.2 | 57.2 | 56.6 | 55.2 | 53.2 | 50.6 | 47.5 | 44.4 |
| Urban pop., total, '000 | 40,123.0 | 44,041.5 | 48,427.4 | 53,613.7 | 59,987.9 | 67,730.9 | 76,438.8 | 85,321.3 |
| Rural pop., total, '000 | 53,655.2 | 58,900.0 | 63,043.5 | 66,131.9 | 68,276.4 | 69,334.6 | 69,136.7 | 68,112.2 |
| Population per sq km, persons | 94.2 | 103.4 | 112.0 | 120.3 | 128.9 | 137.7 | 146.2 | 154.1 |

f = Fitch Solutions forecast. Source: National sources, Fitch Solutions

Male And Female Split

Egypt will have a fairly even split in its male and female population, maintaining a ratio of 1.0 throughout our long-term forecast period. The male population will increase to 77.2mn by 2050, up from 47.4mn in 2015, with the female population reaching a total of 76.3mn from a base of 46.4mn over the same period. Despite its large population size and substantial female population, Egypt is clouded by a very low female participation rate in the labour market. The World Bank recorded the country's female labour force participation rate at 22.2% in 2017, well below the global average of 49.6%, and also below regional peers Lebanon and Oman.

| POPULATION RATIO (EGYPT 2015-2050) | | | | | | | | |
|------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Indicator | 2015 | 2020f | 2025f | 2030f | 2035f | 2040f | 2045f | 2050f |
| Population, total, male, '000 | 47,408.9 | 52,045.8 | 56,328.9 | 60,457.8 | 64,693.2 | 69,059.2 | 73,270.0 | 77,147.3 |
| Population, total, female, '000 | 46,369.2 | 50,895.7 | 55,142.0 | 59,287.8 | 63,571.1 | 68,006.3 | 72,305.5 | 76,286.2 |
| Population ratio, male/female | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

f = Fitch Solutions forecast. Source: UN, Fitch Solutions

- Except for some extreme examples such as China, the male/female split tends to be about equal, with only a slight leaning towards one gender.
- The rise of the female consumer is becoming an important part of company strategy. They are beginning to tailor products, advertising and marketing - which were previously male-focused or neutral - to women.

Market Overview

Retail Trends

Although traditional, informal retail formats are still very prevalent, particularly in non-urban areas, the formal store format is increasingly making up more of the retail landscape in Egypt. Foreign investors are looking to take advantage of a growing economy, especially through franchise agreements with regional firms, as stability seems to be returning to the country and the risks appear to be abating. The growing, young population is driving growth and modernisation, while also demanding foreign brands in various sectors, including electronics and fashion.

Latest Updates

- The UAE-based retailer, Lulu Group International, will invest USD500mn in the Egyptian market over the next two years.
- **Nestlé** plans to invest USD52.6mn in expansion in Egypt by 2021. It will invest in new factories and product innovation.
- Nigeria-based **Jumia**, Africa's leading e-commerce player, plans to expand rapidly in Egypt, aiming to grow tenfold on a revenue basis and sixfold in the number of products it sells to 12mn by 2021.
- **Azadea Group**, which holds the franchise rights for over 50 brands in the MENA region, has opened 12 stores in the Mall of Egypt including **Inditex Group** brands (**Zara**, **Zara Home**, **Pull&Bear**, **Massimo Dutti**, **Bershka**), **Virgin Megastores**, **Sunglass Hut** and **Punt Roma**.
- **Retail Group Egypt**, which operates 92 stores for 20 global brands in Egypt, plans to add 12-14 new locations for the Spanish fashion brand **Mango** over the next two years.
- the Egyptian Tax Authority is requiring e-commerce platforms to begin charging value-added tax (VAT) on all transactions in goods that would be subject to VAT if sold offline.

Clothing And Footwear

The department store operators take a large slice of the fashion market, but there are many niche players as well. Most international fashion retailers enter Egypt through franchises. Retail Group Egypt, a subsidiary of Saudi-based **Fawaz Al Hokair Fashion Retail**, is the most prominent example, operating 92 stores for 20 international brands. It is also a major fashion retailer in its own right. Saudi Arabian operator **Al-Sawani Group** (ASG) has fashion stores in Cairo and Alexandria, while other regional groups such as **Alshaya Retail** from Kuwait, **MAC** from Saudi Arabia and Lebanon's Azadea Group are also present in Egypt, operating mostly through franchise agreements for international fashion brands.

Arafa Holding is one of the largest domestic retailers in Egypt's clothing and footwear sector, operating 47 Concrete-branded luxury retail outlets in the country. The company's operations are vertically integrated across three areas of activity: textile manufacturing, apparel and tailoring, and retail and distribution. Arafa is trying to expand its international presence, with its UK subsidiary **Baird Group** recently acquiring exclusive rights to the Ben Sherman brand in the UK and Ireland. Also, Arafa holds a 35% stake in **Gruppo Forall**, an Italian company that owns the luxury brand Pal Zileri. Arafa also partners with other well-known international brands such as Ermenegildo Zegna, Massimo Dutti, Zara and Debenhams.

Lebanon-based Azadea Group holds franchise agreements for a number of well-known international brands present in Egypt and in other markets in the MENA region, including Inditex's portfolio (Zara, Bershka, Pull&Bear, Massimo Dutti), Sunglass Hut and Punt Roma among others. Azadea entered Egypt back in 2005 and currently operates around 50 stores in Cairo and Alexandria. Most recently, the company opened 12 outlets in the new Mall of Egypt.

SELECTED CLOTHING AND FOOTWEAR RETAILERS

| Company | Parent/ ownership | Sub-sector | Revenues | Employees | Stores | Notes |
|------------------------|-----------------------------|---------------------------------|---------------------------|------------------------|--------|------------------------------------|
| Fawaz Alhokair Fashion | Fawaz Alhokair Group | Clothing, footwear, accessories | USD214mn (incl. abroad) | 11,000 (incl. abroad) | 92 | 20 franchised international brands |
| Azadea Fashion | The Azadea Group | Clothing, footwear, homeware | na | 12,000 (incl. abroad) | 43 | 13 franchised international brands |
| International Group | Fashion International Group | Clothing, womenswear | na | na | 29 | 13 franchised international brands |
| Landmark Group | Landmark Group | Clothing, footwear | na | na | 16 | Own mid-market brands |
| Inditex | Inditex | Clothing, accessories | USD2,720mn (incl. abroad) | 140,000 (incl. abroad) | 36 | Seven own brands; mid-market |

na = not applicable. Source: Company information, Fitch Solutions

Household Goods, Homeware And Home Improvement

Egypt's expanding middle class will drive impressive growth in the household goods sector across the forecast period, particularly within the household appliances sub-sector. There is considerable long-term potential within the sector, which remains relatively unsaturated and is attracting foreign investment. Major international retailers with a presence in Egypt's household goods sector include: Sweden-based **IKEA**, US-based **Ashley Furniture**, UAE-based **Home Centre**, and Spain-based Zara Home (part of Inditex Group). However, it is the domestic retailer **Dary**, owned by Egypt-based **CMB Group**, which leads the sector, operating 28 outlets as of October 2018.

CMB Group opened its first Dary Building & Decoration Centre in Egypt in 1997 and the group currently employs more than 2,000 staff. Whereas much of Egypt's household goods sector is based in and around Cairo, Dary has outlets throughout major towns and cities in the country. Dary Building & Decoration Centres take the UK-based **Homebase** stores as their model. After delaying its expansion plans as a result of the Arab Spring, the company has been increasing its footprint steadily since 2013.

In April 2015, US-based DIY major retailer **Ace Hardware** entered the country through a franchise agreement with the Egypt-based **Masader for International Trading**. Its first store opened in Cairo but the company has significant expansion plans, which include opening outlets across the country. Its second Ace Hardware store was due to open in the Sky Plaza Mall, Shorouk City, during the summer of 2016.

SELECTED HOUSEHOLD GOODS RETAILERS

| Company | Parent/ownership | Sub-sector | Revenues | Employees | Stores | Notes |
|------------------|-----------------------|----------------------------|----------|-----------|--------|-----------------|
| Ashley Furniture | Ashley Egypt | Homeware | na | na | 2 | - |
| Home Centre | Landmark Group | Homeware | na | na | 2 | - |
| Home Egypt | Home International Co | Homeware | na | na | 2 | - |
| Dary | CMB Group | Home improvement, hardware | na | na | 10 | Online presence |

na = not applicable. Source: Company information, Fitch Solutions

Electronics

Hypermarkets and department stores in Egypt offer streamlined ranges of consumer electronics brown and white goods. The country's largest specialist consumer electronics retail chain is **B.Tech**, a home-grown retailer with a genuine nationwide presence. Egypt's consumer electronics sector is expected to show strong growth across the forecast period, with retailers attracted by an underpenetrated market, and the growing demand for PCs, smartphones and tablets from a youthful consumer base. Other Egyptian consumer electronics retailers include: **Appliance Egypt** (which was founded in 1998 and specialises in computing and telecommunications equipment sales), and **Cairo Sales Stores** (a retailer of consumer electronics brown and white goods). Both of these retailers now provide online shopping services. US-based **RadioShack** is another major player in Egypt, with operations across the country, franchised by the local **Delta RS Group**. **Sharaf DG**, a UAE-based electronics retailer is the latest major player to announce entry into Egypt with the opening of its first store in the Mall of Egypt in 2016.

B.Tech has significant expansion plans as part of its strategy to remain Egypt's largest consumer electronics retailer. Between 2015 and the end of 2018, the company aimed to have increased its store count from 62 to 100. To achieve this, B-Tech's CEO (Mahmood Khattab) told Daily News Egypt in April 2015 that new investors would increase the company's capital from EGP88.5mn to about EGP300mn. Of the company's 2,000 employees, about half of them work in retail branches, 300 in storage, 200 in maintenance service centres and the remainder in other/corporate functions.

The first RadioShack opened in Egypt in 1998 in Nasr City. Since then, the store's footprint has increased to around 80 outlets run under a franchise agreement with Egypt-based Delta RS Group. The chain has a truly national reach, with stores in major towns and cities including Assiut, Sharm el Sheikh, Hurghada and Mansoura. Building on the success of the brand in Egypt, Delta RS is looking to expand it within other Middle Eastern countries including UAE, Jordan, Saudi Arabia, Lebanon, Qatar and Kuwait.

SELECTED ELECTRONICS RETAILERS

| Company | Parent/ownership | Sub-sector | Revenues | Employees | Stores | Notes |
|-------------|------------------|-------------|------------------|-----------|--------|-------------------------------------|
| Appliance | Appliance Egypt | Electronics | na | 500-1,000 | 9 | Present in the three largest cities |
| B.Tech | B.Tech | Electronics | EGP1.45bn (2014) | 2,000 | 63 | The largest retailer in the segment |
| Radio Shack | Delta RS | Electronics | na | 2,000 | 65 | Franchised by Delta RS Corp |

Source: Company information, Fitch Solutions

Department Stores

Most of the department stores are concentrated in the largest metropolitan areas, most notably Cairo and Alexandria. Traditional Egyptian department stores have declined over the years. **Omar Effendi** is the oldest department store in the country, with a history dating back to the 1850s. After a long period of being owned by the state, in 2006, a controlling stake in the store chain was sold to the Saudi **Anwal Group**. However, in 2011, the Egyptian State Council's Administrative Court decided to annul the sale of the company. This decision triggered long-lasting legal proceedings. Currently, the store chain remains in the hands of the state and operates 82 outlets in Egypt.

While Omar Effendi remains the largest department store chain in Egypt, over recent years, famous international brands have been expanding in the country, occupying retail space in the country's largest malls. **Debenhams**, an upmarket department store chain, is present in Egypt through a franchise agreement with Kuwait's Alshaya Retail, which operates two shops in the country.

Majid Al Futtaim, the Dubai-based conglomerate, is opening 100 additional Carrefour stores in Egypt, adding to 37 outlets it already operates in Egypt. Carrefour is one of the world's largest hypermarket and supermarket chains. Majid Al Futtaim has the exclusive franchise of the brand in 38 markets across the Middle East, Africa and Asia. The company had launched the first Carrefour branded store in Egypt in 2002. It currently operates 11 hypermarkets and 25 supermarkets. Marks & Spencer, a UK-based brand franchised

THIS COMMENTARY IS PUBLISHED BY FITCH SOLUTIONS MACRO RESEARCH and is NOT a comment on Fitch Ratings' credit ratings. Any comments or data included in the report are solely derived from Fitch Solutions Macro Research and independent sources. Fitch Ratings' analysts do not share data or information with Fitch Solutions Macro Research.

by UAE's Al-Futtaim Group, now has four locations in Cairo and Alexandria. In 2014, Marks & Spencer's Chief Executive Marc Bolland revealed ambitious expansion plans, aiming to open 250 new outlets outside the UK within three years. However, more recently, in reaction to slumping growth in China and the difficult economic situation in Russia, the company heads said they are rethinking their strategy.

| SELECTED DEPARTMENT STORE CHAINS | | | | | | |
|----------------------------------|----------------------|-----------------------------|----------|-----------|--------|------------|
| Company | Parent/ownership | Sub-sector | Revenues | Employees | Stores | Notes |
| Marks & Spencer | The Al-Futtaim Group | Department store | na | na | 4 | Mid-market |
| Debenhams | Alshaya Retail | Department store | na | na | 3 | Upmarket |
| Carrefour | The Al-Futtaim Group | Department and retail store | na | na | 37 | - |

na = not applicable. Source: Company information, Fitch Solutions

E-Commerce And Online Marketplaces

E-commerce still accounts for a small fraction of Egypt's total retail sales. Low bank account and credit card ownership rates, poor computer literacy and insufficient internet penetration rates were among the key factors inhibiting e-commerce growth in the country during the past five years. However, this does underscore the potential for growth in the future.

However, the situation is improving and by the end of 2015, the country boasted about 450 e-commerce websites serving around 30mn customers (the largest number in the Arab world). The increase in e-commerce comes from rising internet penetration rates, driven by the younger generation who are more familiar with technology. A number of international and domestic firms, such as Jumia and UAE-based **Souq.com**, are already active in Egypt's market, operating large online stores and selling clothing, electronics and household items.

Jumia is the most popular online marketplace in Africa, including Egypt, owned by **Africa Internet Group**, which, in turn, is backed by the German venture **Rocket Internet**. Jumia offers a wide selection of items, including clothing and footwear, electronics, household goods and accessories. Egypt is Jumia's second largest market after Nigeria. It operates in 23 African countries. Since its launch in Egypt in 2012, the company has been rapidly expanding its customer base, reaching the 1mn mark in 2016. To boost growth and counter low bank account penetration rates and the lack of trust in electronic payment systems, Jumia has been offering innovative payment methods, such as payment upon delivery by cash or credit card. In early 2016, Jumia's parent company Africa Internet Group raised EUR225mn from investors such as Goldman Sachs and MTL to further improve its operations in the existing markets and continue expansion in other markets. In 2017, sales for Jumia in Egypt increased 190% on a year-over-year basis as consumers dealing with inflation looked for low-cost options. Retailers, trying to reach larger audiences of potential shoppers, also relied more on Jumia in 2017.

Souq.com, part of the UAE-based **Jabbar Internet Group**, is the largest online retailer in the Arab world and Jumia's key competitor in Egypt. Often dubbed as the 'Amazon of the Middle East', Souq.com operates both as a retail site and as a marketplace for third-party sellers. In late 2015, the company reported sharply rising visitor traffic at Souq.com, which was led primarily by rising smartphone usage in the region. In February 2016, the retailer attracted USD275mn investment to continue expanding its business across the Middle East region to solidify its leading position.

In a bid to regulate the industry, the Egyptian Tax Authority has become a lot stricter, enforcing e-commerce platforms to begin charging value-added tax (VAT) on all transactions on goods that would be subject to VAT if sold offline. While some platforms have already responded and incorporated the 14% duty into their billing systems, only 2% of Egypt's e-commerce market is regulated, with the rest being unregistered and un-taxed.

SELECTED ONLINE RETAILERS

| Company | Parent/ownership | Sub-sector | Revenues | Employees | Stores | Notes |
|----------|-----------------------|----------------------------|----------|-----------|--------|---|
| Jumia | Africa Internet Group | Online, clothing, homeware | na | 200-500 | na | A branch of international online stores |
| Souq.com | Jabbar Internet Group | Online, clothing, homeware | na | na | na | A branch of UAE-based Souq.com |
| nfsak | Web Technology Co | Online, clothing, footwear | na | 50-200 | na | - |

na = not applicable. Source: Company information, Fitch Solutions

Pharmacies And Drugstores

Egypt's drugstore and pharmacies retail sector is heavily regulated. According to Egyptian law, pharmacies can be run only by licensed professionals, with a maximum of two outlets per licence. Officially, corporate entities are not allowed to operate pharmacies, but several companies such as **El-Ezaby Pharmacy**, **SEIF Pharmacy** and **Al' Image Pharmacy** (formerly known as **Ali & Ali Pharmacy**), operate larger networks of outlets across the country by finding innovative ways to go around these restrictions. The Egyptian government is regulating pharmaceuticals prices, with the aim of ensuring that products are affordable for low-earning citizens. However, the increasing wholesale cost of pharmaceutical products, combined with the gradual decline of the Egyptian currency, has led to recurring medicine shortages across the country. As a result, counterfeit drugs are becoming a major concern and online purchases of drugs such as the contraceptive pill are experiencing significant growth.

Launched in 2008, **Agzakhana.com** is unique to Egyptian pharmacies in that it has an online-only presence and operates through other pharmacies to access medicines it lacks. Vodafone Ventures currently holds a 30% stake in Agzakhana, which reportedly has an annual sales turnover of around EGP1bn. The pharmacy aims to acquire a 1% stake in Egypt's EGP80bn domestic pharmaceutical market, having seen its growth rates since 2014 increase by around 20% per month. The company's owners are also looking to expand into other suitable MENA markets.

Fouda Pharmacy is a small chain of community pharmacies and brands itself as Egypt's first electronic interactive pharmacy. Fouda's online service allows customers to send a photo of their doctor's prescription for the pharmacy to service the prescription and deliver it to the customer the same day. Through its adoption of web-based technology, the company has plans to expand its service beyond Egypt.

SELECTED PHARMACY CHAINS

| Company | Parent/ownership | Sub-sector | Revenues | Employees | Stores | Notes |
|----------------------|------------------------|----------------------------------|----------|-----------|--------|-----------------------|
| El Ezaby Pharmacies | El Ezaby Pharmacies | Pharmaceuticals | na | na | 90 | - |
| Misr Pharmacies | Misr Pharmacies | Pharmaceuticals, health & beauty | na | 350 | 11 | - |
| Al' Image Pharmacies | Al' Image Pharmacies | Pharmaceuticals, health & beauty | na | na | 11 | Only present in Cairo |
| SEIF Pharmacies | SEIF Group | Pharmaceuticals, health & beauty | na | na | 23 | - |
| Fouda Pharmacy | Fouda Pharmacy | Pharmaceuticals | na | na | 4 | - |
| Agzakhana | Ahmed & Sherif Shabana | Pharmaceuticals, health & beauty | na | na | na | Online presence only |

na = not applicable. Source: Company information, Fitch Solutions

Shopping Centres And Malls

Malls are not widely prevalent in Egypt, apart from in the largest cities such as Cairo, Alexandria and Giza (which is part of greater Cairo), due to the dominance of traditional informal retailers. Moreover, because of the population density in Cairo, space is at a premium, and finding suitable land is a significant challenge. As a result, shopping malls are clustered in the western and eastern suburbs, in particular at the outskirts where new suburbs are expanding. However, there is a lack of supply in the urban areas at the moment, as new developments are not completed quickly enough to satisfy demand.

The gradual move away from traditional retailers is being seen most in large urban areas, as the younger generation has grown up to be familiar with the mall format. There is still a lot of space in the market for multi-use malls. As the average income rises and Egyptians start looking for more comfortable ways to shop and for recreation, there is a lot of potential for the mall format. In 2015, almost 1.8mn sq m of new mall retail space was developed in Cairo alone, according to property consultants JLL, with more than 10 other developments being planned for 2016 and beyond.

Dubai-based Majid Al Futtaim has invested heavily in Egypt, having developed the City Centre malls in both Alexandria and Maadi. Their latest project, the Mall of Egypt, opened in March 2017 and became the country's largest mall with 165,000 sq m of retail space. This mall was a huge development: the mall itself cost EGP4.9bn and the associated local infrastructure (including 6,500 parking spaces) cost a further EGP250mn. The mall has already finalised leases for approximately 70% of its gross leasable area (GLA), which will deliver a mix of international and local retailers. High-end fashion outlets will be well represented and entertainment services will be provided by a large multi-screen cinema, indoor dry ski slope and family entertainment area. Majid Al Futtaim has a five-year investment plan in Egypt, which is expected to create more than 140,000 direct and indirect jobs.

Cairo's second largest shopping centre, the Mall of Arabia, is owned by Saudi Arabia-based Fawaz Al Hokair Group. Located in the capital's 6th of October City area, it currently has a GLA of around 160,000 sq m. The vast array of retail outlets includes both local brands and international brands, which include **Adidas, Cerruti, Mango, Reebok, Samsung, Timberland, Tommy Hilfiger, Zara and Zara Home**. The mall owners see further positive opportunities for growth and are reportedly looking to invest a further EGP13bn in developing more than 500,000 sq m of GLA within the Egyptian market over the coming years.

Consumer & Retail Glossary

Fitch Solutions' household spending data is based on the UN Classification of individual consumption by purpose (COICOP), which is a classification system used to define consumption expenditures incurred by households. This lists various categories and sub-categories defining the different categories of items on which households spend, and is the preferred model used in household expenditure surveys carried out by national statistics agencies from which Fitch Solutions' household spending data is sourced.

Where spending data is not readily allocated into the COICOP format, Fitch Solutions applies a rigorous and logical approach in allocating data to align with these categories, and if needed, apply aggregation methods or other techniques to achieve category level data.

Fitch Solutions' spending data defines spending in terms of three different types of consumer units: individuals (given as per capita), households and total economy.

- **Household** - is defined as a group of people living in the same residential unit. The number of households and average persons per household is sourced from national statistics. Where this data is unavailable, Fitch Solutions uses alternative best sources for the data, and where needed use best practice techniques to make an estimate. Households exclude institutionalised individuals, such as those in hospitals and military, religious and other institutions. Where national statistics include it, Fitch Solutions uses the relevant best practice to amend the data in order to keep all countries similar with respects to their definition.
- **Per household spending** - is defined as spending by each household unit.
- **Per capita spending** - is defined as spending by each individual person.

Below are definitions to the different indicators covered in our consumer & retail publications. For more details on what is included in each of the categories, please review: 'UN - detailed structure and explanatory notes', <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=5&Lg=1>

Food and non-alcoholic drinks spending - refers to the sum of food spending and non-alcoholic food spending. Details of what is included in these categories are given below.

Food spending - refers to the sum of spending on the following food items:

01.1.1 - Bread and cereals

01.1.2 - Meat

01.1.3 - Fish and seafood

01.1.4 - Milk, cheese and eggs

01.1.5 - Oils and fats

01.1.6 - Fruit

01.1.7 - Vegetables

01.1.8 - Sugar, jam, honey, chocolate and confectionery

01.1.9 - Food products, other.

Note that this refers to spending on food for home consumption and excludes food spending for consumption outside the home.

Non-alcoholic drinks spending - refers to the sum of spending on the following types of drinks:

01.2.1 - Coffee, tea and cocoa

01.2.2 - Mineral waters, soft drinks, fruit and vegetable juices

Note that this refers to spending on drinks for home consumption, and excludes spending for consumption outside the home.

Alcoholic drinks and tobacco spending - refers to the sum of spending on the following items/services:

Alcoholic drinks spending - refers to the sum of spending on the following items:

02.1.1 - Spirits

02.1.2 - Wine

02.1.3 - Beer

Tobacco spending - refers to spending on the following tobacco products: cigarettes; cigarette tobacco and cigarette papers; cigars, pipe tobacco, chewing tobacco or snuff. Excludes other smokers' articles.

Clothing and footwear spending - refers to the sum of spending on the following items/services:

Clothing spending - refers to the sum of spending on the following clothing items:

03.1.1 - Clothing materials

03.1.2 - Garments

03.1.3 - Other articles of clothing and clothing accessories

03.1.4 - Cleaning, repair and hire of clothing

Footwear, including repair, spending - refers to the sum of spending on the following items:

03.2.1 - Shoes and other footwear

03.2.2 - Repair and hire of footwear

Housing and utilities spending - refers to the sum of spending on the following items:

04.1 - Actual rentals for housing

04.2 - Imputed rentals for housing

04.3 - Maintenance and repair of the dwelling

04.4 - Water supply and miscellaneous services relating to the dwelling

THIS COMMENTARY IS PUBLISHED BY FITCH SOLUTIONS MACRO RESEARCH and is NOT a comment on Fitch Ratings' credit ratings. Any comments or data included in the report are solely derived from Fitch Solutions Macro Research and independent sources. Fitch Ratings' analysts do not share data or information with Fitch Solutions Macro Research.

04.5 - Electricity, gas and other fuels

Furnishing and home spending - refers to the sum of spending on the following items/services:

Furniture and furnishings spending - refers to spending on the following items:

05.1.1 - Furniture and furnishings

05.1.2 - Carpets and other floor coverings

05.1.3 - Repair of furniture, furnishings and floor coverings

Household textiles - refers to the sum of spending on the following items:

05.2.0 - Household textiles which includes items such as fabrics, bedding, linen, kitchen and bathroom linen, cloths and towels.

Household appliances - refers to the sum of spending on the following items:

05.3.1 - Major household appliances, whether electric or not

05.3.2 - Small electric household appliances

05.3.3 - Repair of household appliances

Glass, tableware and utensils - refers to the sum of spending on the following items:

05.4.0 - Glassware, tableware and household utensils which includes items such as cutlery, flatware, silverware, kitchen utensils, pans, non-electric household containers, waste bins etc.

Home and garden tools/equipment spending - refers to the sum of spending on the following items:

05.5.1 - Major tools and equipment

05.5.2 - Small tools and miscellaneous accessories

Goods and services for routine household maintenance - refers to the sum of spending on the following items:

05.6.1 - Non-durable household goods

05.6.2 - Domestic services and household services

Health spending - refers to the sum of spending on the following items/services:

06.1 - Medical products, appliances and equipment

06.2 - Outpatient services

06.3 - Hospital services

Transport spending - refers to the sum of spending on the following items/services:

THIS COMMENTARY IS PUBLISHED BY FITCH SOLUTIONS MACRO RESEARCH and is NOT a comment on Fitch Ratings' credit ratings. Any comments or data included in the report are solely derived from Fitch Solutions Macro Research and independent sources. Fitch Ratings' analysts do not share data or information with Fitch Solutions Macro Research.

07.1 - Purchase of vehicles

07.2 - Operation of personal transport equipment

07.3 - Transport services

Communications spending - refers to the sum of spending on the following items/services:

08.1 - Postal services

08.2 - Telephone and telefax equipment

08.3 - Telephone and telefax services

Recreation and culture spending - refers to the sum of spending on the following items/services:

09.1 - **AV, camera and computer** - refers to the sum of spending on the following items: AV equipment spending, including television, radio and CD players; cameras and video cameras, including sound recording equipment; computers spending, including all types of personal computers, software and peripherals; recorded media, including recordable CDs, cassette and recording films; AV, camera and computer repairs

09.2 - **Other major durables for recreation and culture**

09.3 - **Toys, sports, gardens and pets** - refers to the sum of spending on the following items: games, toys and hobbies spending, including items such as card, board, electronic games and hobbies, eg stamp collecting and video games; sport and camping equipment, including items such as sports equipment, and game specific footwear; gardens, plants and flowers, including artificial flowers, pots and pot holders; pet food/products and vet fees, including all pet related accessories.

09.4 - **Recreational and cultural services**

09.5 - **Newspapers, books and stationery**

09.6 -

Education spending - refers to the sum of spending on the following items/services:

10.1 - Pre-primary and primary education

10.2 - Secondary education

10.3 - Post-secondary non-tertiary education

10.4 - Tertiary education

10.5 - Education not definable by level

For more details on what is included in each of the above categories, please review 'UN - detailed structure and explanatory notes'.

Restaurants and hotels spending - refers to the sum of spending on the following items/services:

11.1 - Catering services

11.2 - Accommodation services

Personal, insurance and other spending - refers to the sum of spending on the following items

Personal care and effects spending - refers to the sum of spending on the following items:

12.1 - **Personal care products spending** - includes spending on hairdressing/personal grooming, small electric appliances for personal care, toiletries and other similar products.

12.2- **Personal effects products spending** - refers to the sum of spending on the following items:

12.3.1 - Jewellery, clocks and watches

12.3.2 - Other personal effects

12.3 - **Insurance** - includes all types of personal, home, health and transport insurance.

12.4 - **Other spending** - which includes social protection, financial services and other similar services etc.

Household goods (Fitch Solutions only category/Fitch Solutions calculation) - the sum of spending on furniture and furnishings, household textiles and appliances, glass, tableware and utensils, home and garden tools and equipment, AV, cameras and computers, toys, sports, gardens and pets.

Income Definitions

Gross income - refers to income received before tax and deductions.

Net income - refers to income received less any income taxes and social contributions.

Tax and social contributions, % of gross income - refers to tax plus social contribution rate as percentage of total gross income.

Consumer & Retail Methodology

Industry Forecast Methodology

Fitch Solutions' 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 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, which 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.

Fitch Solutions mainly uses OLS estimators, and in order to avoid relying on subjective views and to encourage the use of objective views, we use a 'general-to-specific' method. We mainly use 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 poor weather conditions impeding agricultural output, dummy variables are used to determine the level of impact.

Effective forecasting depends on appropriately selected regression models. Fitch Solutions 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.

Fitch Solutions uses the selected best model to perform forecasting.

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

Sector-Specific Methodology

In the Retail forecasts human intervention might include, but is not exclusive to, business environment changes; changes in consumer trends; the introduction of new technology; changing fashion trends; the expansion of retail capacity/stores; and regulatory changes.

Intervention can also be necessary with respect to the following factors: changing regional trends; demographic factors; infrastructure investment; macroeconomic indicators; and regulatory changes. Our analysts take into consideration both macro and industry factors when intervening, bringing together our country risk and industry knowledge to give a complete forecast of the industry.

During periods of 'industry shock', for example a deep recession, dummy variables are used to determine the level of impact.

The retail industry data can be divided into the following main categories: demographics, household structure, consumer price index (CPI) breakdown and total household spending.

- **Demographics** covers the different types of consumers by age group, sex and urban/rural population. This is important in highlighting the different consumer groups and the size of each group.
- **Household structure** includes indicators such as household size by number of people in the household, net/gross income per household/capita and number of households earning above USD5,000, USD10,000 and USD50,000. This gives an overview of the households within a country.
- **CPI breakdown** comprises indicators on the price index and annual change in price of all goods/services and the main categories of spending.

- **Total household spending** across the main categories of consumer spending.

The categories for household spending forecasts are:

- Food and non-alcoholic drinks;
- Alcoholic drinks and tobacco;
- Clothing and footwear;
- Housing and utilities;
- Furnishing and household goods;
- Health;
- Transport;
- Communications;
- Recreation and culture;
- Education;
- Restaurants and hotels;
- Personal care, insurance and other.

These main categories can then be divided into the following sub-categories:

Food and non-alcoholic drinks:

- Food
- Non-alcoholic drinks

Alcoholic drinks and tobacco:

- Alcoholic drinks spending
- Tobacco

Clothing and footwear:

- Clothing
- Footwear, including repair

Furnishing and home, and recreation and culture:

- Household goods spending
- Furniture and furnishings
- Household textiles
- Household appliances
- Glass, tableware and utensils
- Home and garden tools/equipment
- AV, camera and computer
- Toys, sports, gardens and pets

The following categories are forecast:

- **Demographics.** Fitch Solutions forecasts this data using UN and World Bank projected population levels as a benchmark, while objectively and subjectively intervening where necessary.

- **Household structure.** This data is forecast objectively based on Fitch Solutions' core country-specific macroeconomic data. This includes Fitch Solutions' views on population, household demographics and GDP.
- **Total household spending.** Using a selection of leading retail indicators and macroeconomic data from our Country Risk service, Fitch Solutions estimates each indicator of spending individually. This can be intervened subjectively to take into account qualitative information believed to be necessary. Once every individual spending indicator has been forecast, Fitch Solutions then uses this information, along with any other sector and macro views, to form headline total spending indicators.

Sources

For the Consumer & Retail sector, Fitch Solutions sources data primarily from national-level sources. This includes data from national statistics organisations, government ministries, and industry associations. Fitch Solutions uses national sourced data in conjunction with data available from Eurostat, the World Bank and the UN where needed. In some instances where full-time series data is not available, we use a combination of the above, coupled with industry expertise, to model industry data.



Fitch Solutions, 30 North Colonnade, Canary Wharf, London. E14 5GN, UK

Tel: +44 (0)20 7248 0468

Fax: +44 (0)20 7248 0467

Web: www.fitchsolutions.com

ISSN: 2513-9703

Copy Deadline: February 2019

© 2019 Fitch Solutions Group Limited. All rights reserved.

All information, analysis, forecasts and data provided by Fitch Solutions Group Limited is for the exclusive use of subscribing persons or organisations (including those using the service on a trial basis). All such content is copyrighted in the name of Fitch Solutions Group Limited and as such no part of this content may be reproduced, repackaged, copied or redistributed without the express consent of Fitch Solutions Group Limited.

All content, including forecasts, analysis and opinion, has been based on information and sources believed to be accurate and reliable at the time of publishing. Fitch Solutions Group Limited makes no representation of warranty of any kind as to the accuracy or completeness of any information provided, and accepts no liability whatsoever for any loss or damage resulting from opinion, errors, inaccuracies or omissions affecting any part of the content.

This report from Fitch Solutions Macro Research is a product of Fitch Solutions Group Ltd, UK Company registration number 08789939 ('FSG'). FSG is an affiliate of Fitch Ratings Inc. ('Fitch Ratings'). FSG is solely responsible for the content of this report, without any input from Fitch Ratings. Copyright © 2019 Fitch Solutions Group Limited.