CEMENT
BUSINESS
RESEARCH

THE GULF AND NORTH AFRICA

Regional Report to 2022

THERE IS NO DATA IN THIS VERSION

A Market Due Diligence Report – Published Q1 2018

REGIONAL SUMMARY

Introduction

The first extensive Multi-Client report currently available from us covers the Gulf and North Africa. This report analyses the following countries' financial data/cement markets/industry base: Algeria, Egypt, Kuwait, Morocco, Oman, Qatar, Saudi Arabia, Tunisia and the UAE.

We chose this region for its first extensive report for several reasons. Firstly, this is a region that interests many investors ranging from cement producers to equipment manufacturers to funding institutions. Secondly, this region has and is still experiencing some significant geopolitical events which have an impact on the cement sector. Finally, this region exhibits cultural similarities and there is significant trading interaction among the various markets within the region. This report has 2016 as a base year, provides an estimate for 2017 and projections to 2022.

Methodology

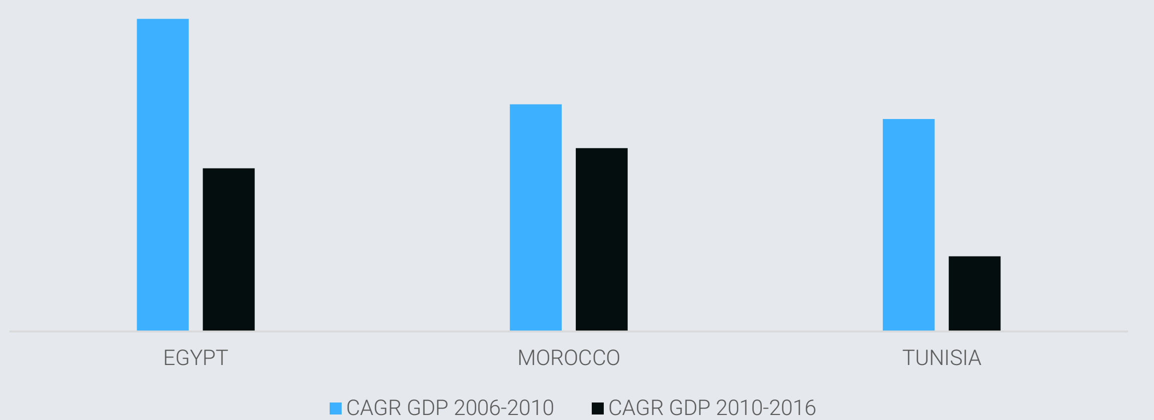
Five Cement Business Research team members have been involved in the production of this report. All contributors have considerable experience in the cement sector in diverse functions. The expertise of the team members includes: strategy & finance, marketing, research, technical, environmental and operations.

The research for this report was based on extensive desktop research, Cement Business Research's database and interviews with several market participants. Below we provide the overall regional findings.

The Basic Facts

The region has been experiencing some significant geopolitical events, the Arab Spring being the most important. The ripple effects of the turmoil in Syria, Iraq, Libya and other places is also keenly felt in the region. As a result, many countries included in this report have exhibited a subdued macroeconomic performance. Since 2011, GDP growth in the North African countries included in this report has shown a major slowdown compared to previous years.

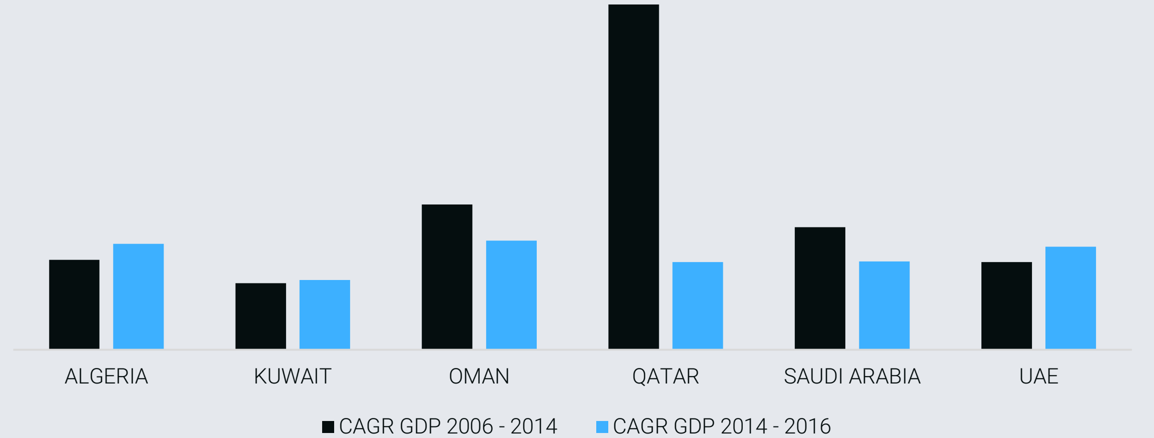
FIGURE: CAGR GDP GROWTH (NORTH AFRICA COUNTRIES)



Source: IMF

On the other hand, the decline in value of internationally traded fossil fuels has impacted the GDP growth in Hydrocarbon based economies in the region.

FIGURE: CAGR GDP GROWTH (HYDROCARBON ECONOMIES)

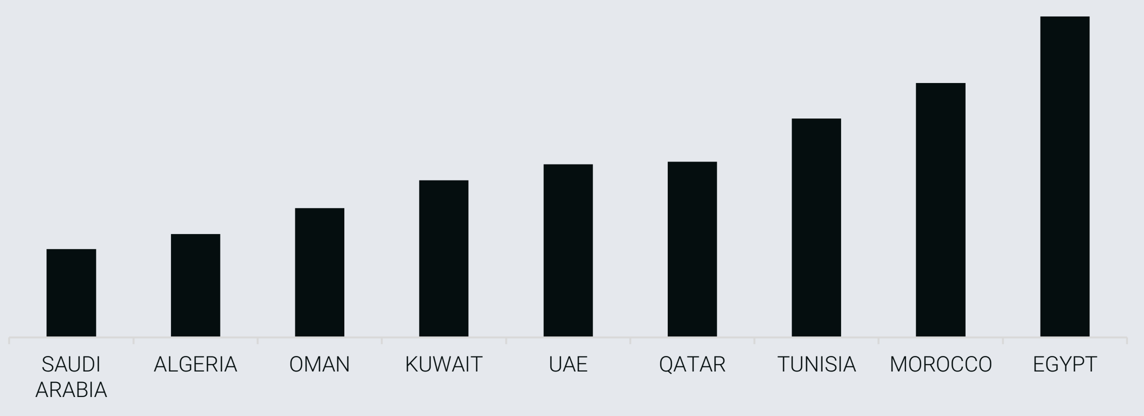


Source: IMF; Official Statistics; Industry Data

Kuwait has managed to stay at the same levels of economic growth. The UAE has recovered its significant economic reversal following the recent global financial crisis and Algeria showed some growth. Oman, Qatar and Saudi Arabia have all declined significantly.

There is some recovery expected in almost all countries in the region.

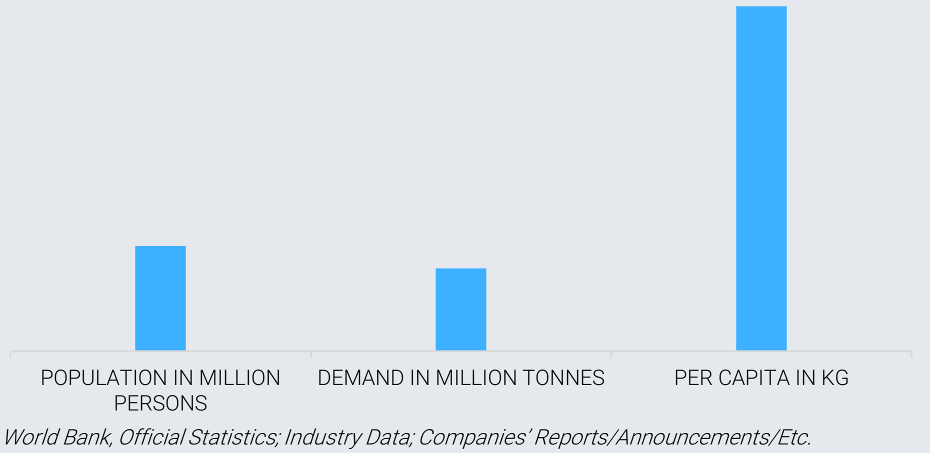
FIGURE: CAGR GDP GROWTH PER COUNTRY (2016-2022)



Source: IMF; Official Statistics; Industry Data

In 2017 the regional cement market showed the following characteristics:

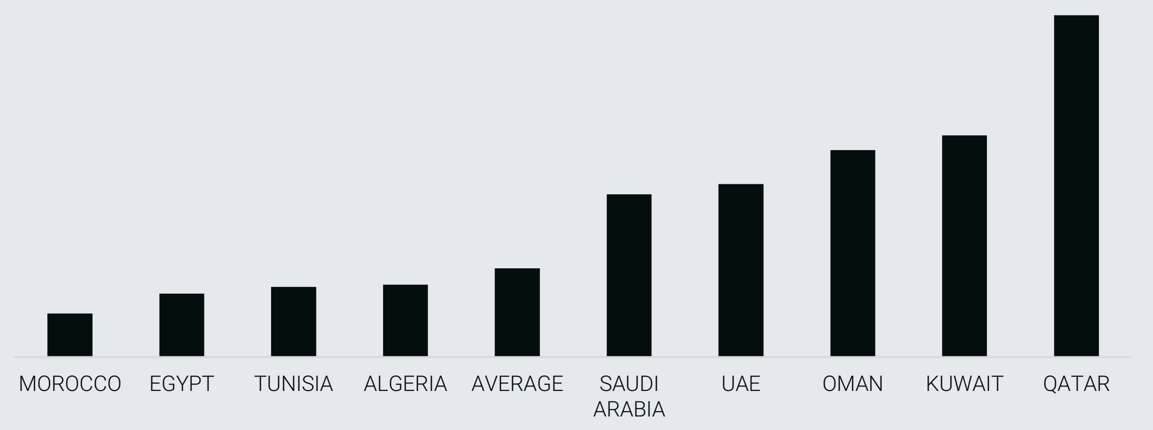
FIGURE: REGIONAL CEMENT MARKET DATA



Source: UN, World Bank, Official Statistics; Industry Data; Companies' Reports/Announcements/Etc.

These figures yield the following per capita consumption in each country:

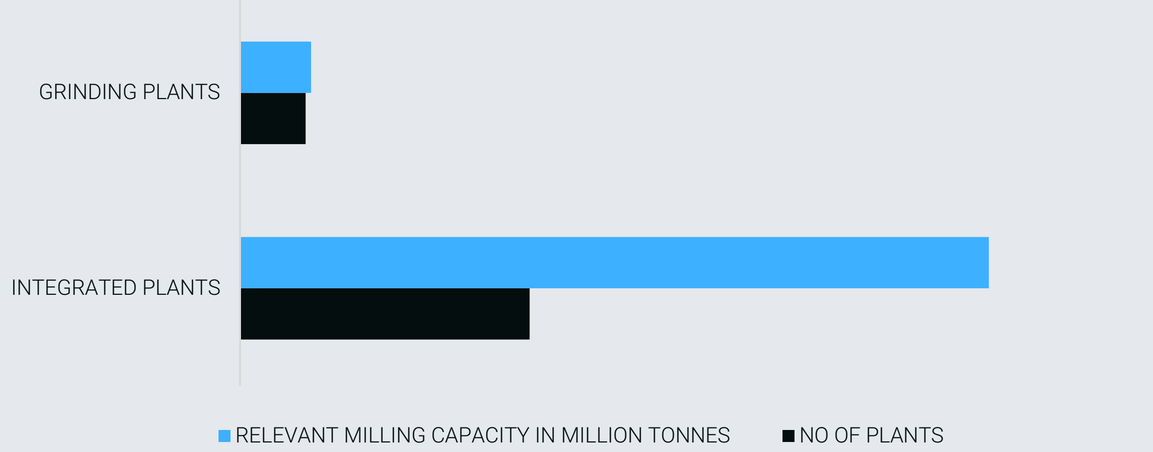
FIGURE: PER CAPITA CONSUMPTION IN KG (2017)



Source: Cement Business Research's Analysis

This demand is met by a regional supply of around … million tonnes as follows:

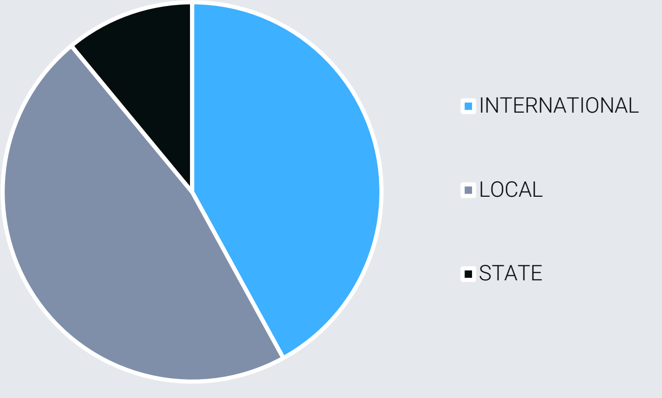
FIGURE: NUMBER OF PLANTS AND CEMENT MILLING CAPACITY IN THE REGION (2017)



Source: Cement Business Research's Research

The ownership of these assets is diverse and is divided into international players (with presence outside the market examined), local producers (with presence only in one country) and the State (including the Military in Egypt). The ownership of the assets in the region has the following profile:

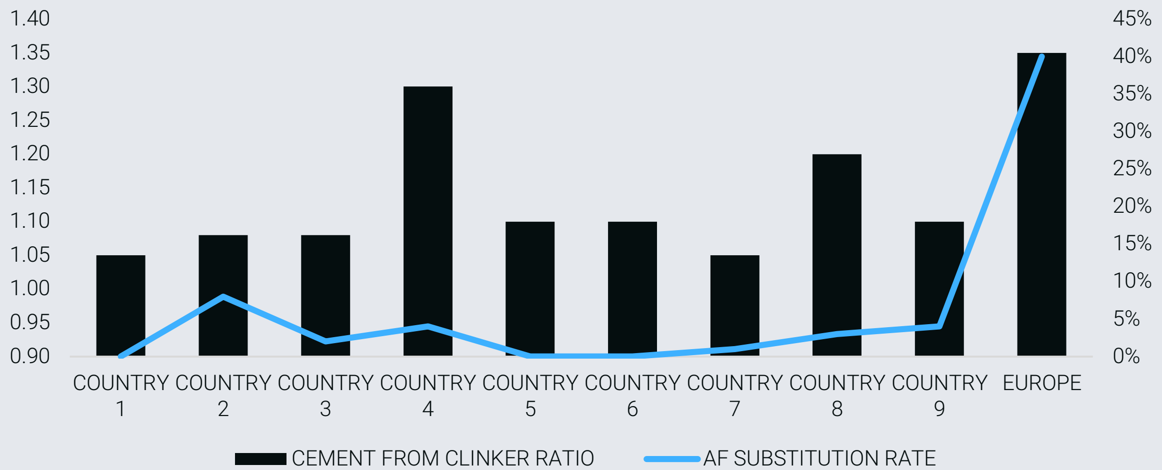
FIGURE: NATURE OF OWNERS IN THE REGION



Source: Cement Business Research's Analysis

There are various types of cement sold in the region, with major differences in types sold even in adjacent countries. Cement to clinker ratios (how much cement is produced from a tonne of clinker used) are relatively low compared to Europe. The main extender used is limestone as there is limited availability of pozzolan and flyash and slag have to be imported from outside the region. Even limestone addition is limited by an inherent conservatism with specifiers and end users preferring to use "pure" cements. For fuel sourcing the region has seen a major shift from gas and oil to imported coal and petcoke over the last decade. Alternative fuels are rarely used and the substitution rates (of fossil fuels) is very low. Also in the last decade, the policy of state subsidies of power costs is rapidly fading away as budgets tighten.

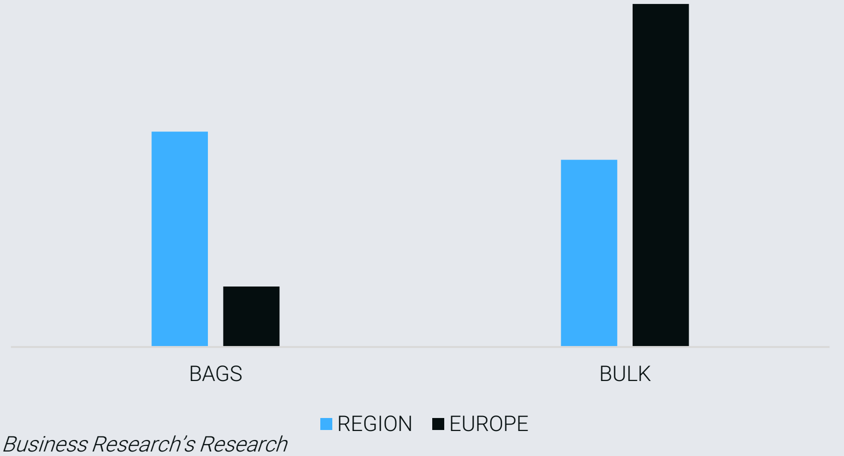
FIGURE: ALTERNATIVE FUELS SUBSTITUTION RATE AND CEMENT TO CLINKER RATIOS



Source: Cement Business Research's Database and Analysis

The degree of vertical integration in the region is fairly low. The absence of international cement players impedes the proliferation of vertical integration. Cement is sold in both bags and bulk. North African countries tend to sell more cement in bags whereas in the Gulf, bulk cement is more prevalent.

FIGURE: BAGS VERSUS BULK IN THE REGION AND EUROPE



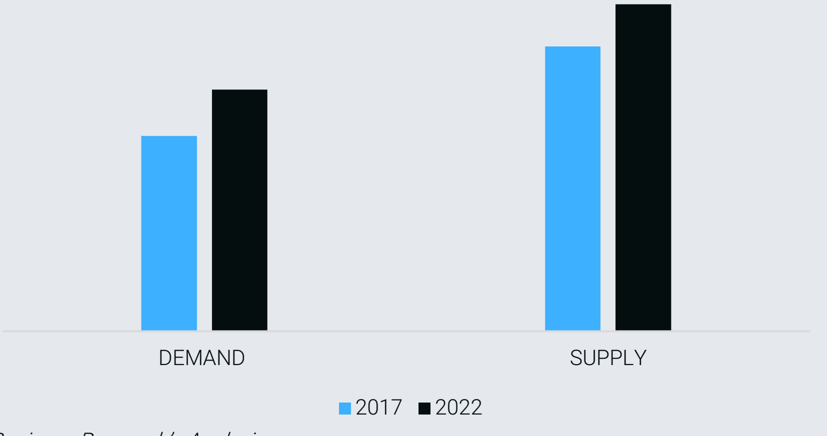
Source: Cement Business Research's Research

Distribution channels vary from market to market and from bags to bulk. Invariably, bags are sold via wholesalers whereas bulk is sold directly.

Projections

The region's consumption is projected to grow at a CAGR of around …% between 2017 and 2022. This results into an overall demand of around … million tonnes. During the same period, supply is expected to grow by …% to … million tonnes (capacity additions include new projects that are judged as certain or almost certain by our team).

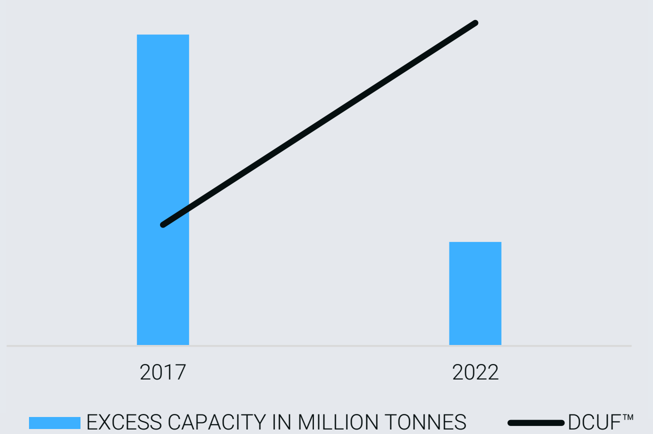
FIGURE: DEMAND AND SUPPLY (2022)



Source: Cement Business Research's Analysis

As a result, excess capacity in the region will shrink from … million tonnes in 2017 to … million tonnes in 2022. At the same time, Domestic Capacity Utilisation Factors (DCUF™ - A Cement Business Research proprietary tool) will improve from …% in 2017 to …% in 2022.

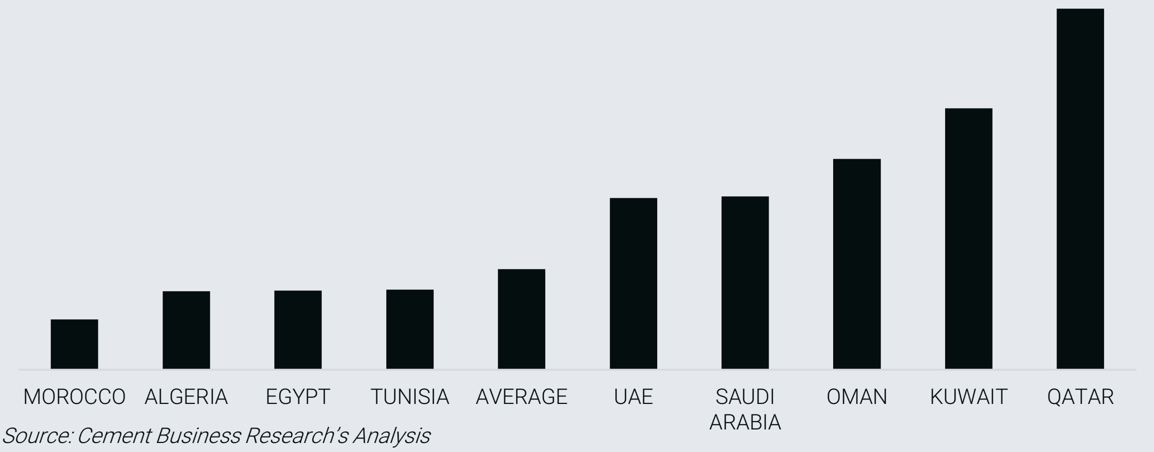
FIGURE: EXCESS CAPACITY AND DCUF™ FOR THE REGION (2017 AND 2022)



Source: Cement Business Research's Analysis

The resultant per capita consumption for each market in the region will develop as follows:

FIGURE: PER CAPITA CONSUMPTION IN KG PER PERSON (2022)



Source: Cement Business Research's Analysis

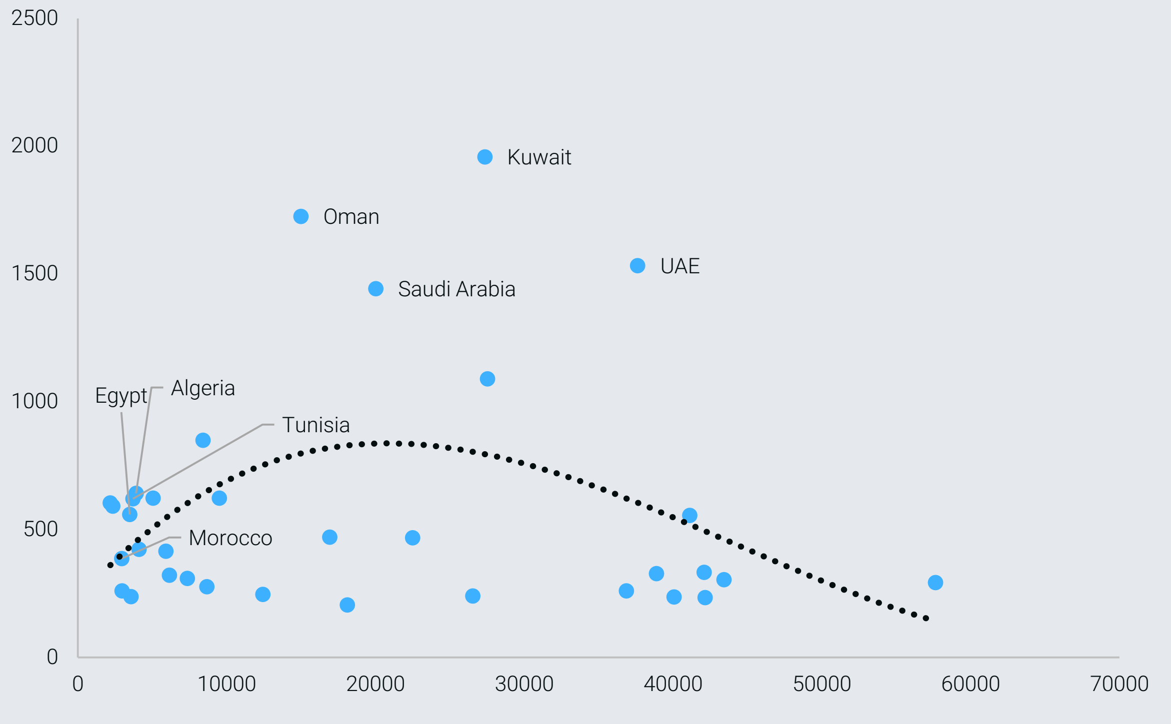
Projected demand is risk adjusted by using the following analysis:

For each market the following questions are assessed:

- Is there a need for such growth?
- Does the market / industry / country have the capability to deliver such growth?
- Does the country have the funding to support this growth?

Additionally, each market is assessed by comparing per capita consumption and its position in the Cement Economic Curve (CEC).

FIGURE: CEMENT ECONOMIC CURVE

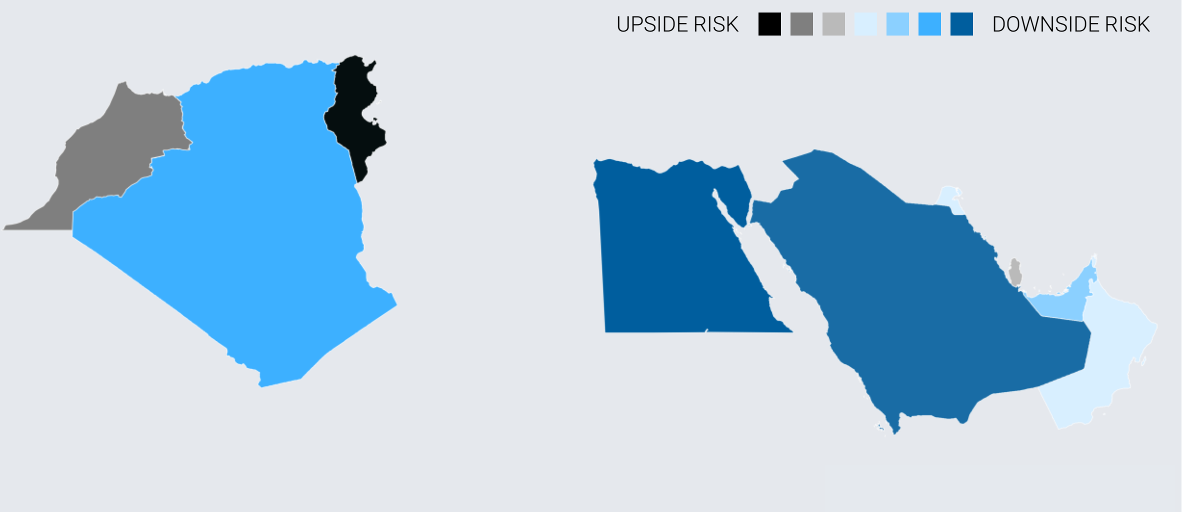


Source: Cement Business Research's Analysis

The location of each market in the Cement Economic Curve indicates that most markets in this report are above the trendline. In some cases (Gulf States) the CEC shows that most of these markets are outliers – being the highest cement consumers globally. It is seen that for most markets, GDP will have to show significant increases in order to push per capita consumption higher. This may indicate a plateauing effect in these countries, although the short to medium term demand may show a different pattern.

The risk adjusted demand projections for the region are shown in the map below.

FIGURE: WHERE IS THE RISK IN DEMAND PROJECTIONS



Source: Cement Business Research's Analysis

Exporting and Importing Requirements

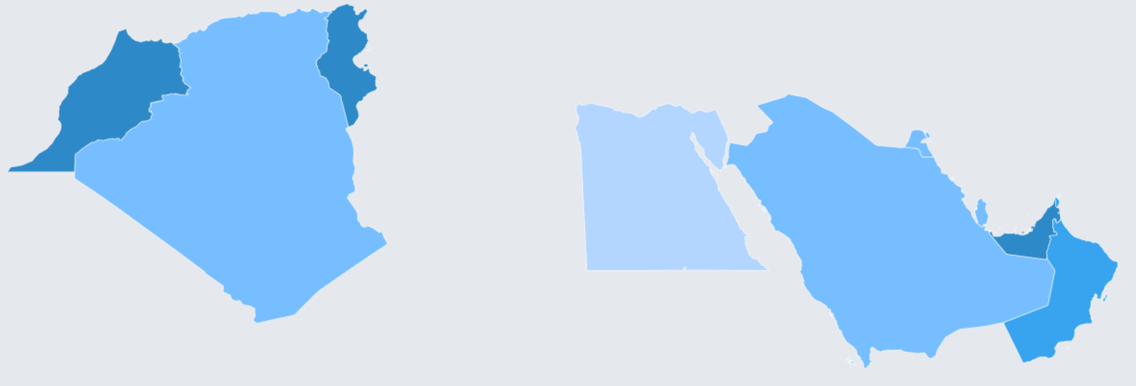
The DCUF™s of most markets in the region and the overall regional DCUF™ indicate that many cement producers in the region have a strong propensity to export their excess capacity. We examine the capability of each country to do so. Conversely, there are several markets that require imports. We also analyse their ability to do so efficiently. There are two tools we use to carry out this analysis. The first being the International Trading Assessment Matrix (ITAM™ - a Cement Business Research proprietary tool), an analysis based on the examination of the following criteria:

- Trade supporting legislation
- Port infrastructure and capacity
- Existence of coastal plants
- Cost of haulage

- Economics of trading

The findings of the ITAM™ analysis are shown below:

FIGURE: ITAM™ FINDINGS FOR THE REGION



Source: Cement Business Research's Analysis

The above analysis indicates that the countries with a need to export will find such an initiative challenging as both their ITAM scores and the availability of destination markets are low. The importing countries also face challenges in supporting their imports driven growth going forward.

Industry Structure and Dynamics (ISD™ - A Cement Business Research Proprietary Tool)

ISD™ assesses four aspects of the industry:

1. Nature of market participants. This examines the nature of the participants and determines their behaviour going forward.

2. Consolidation Index. This examines the level of fragmentation in an industry and compares it with other markets. This determines the behaviour and level of competition

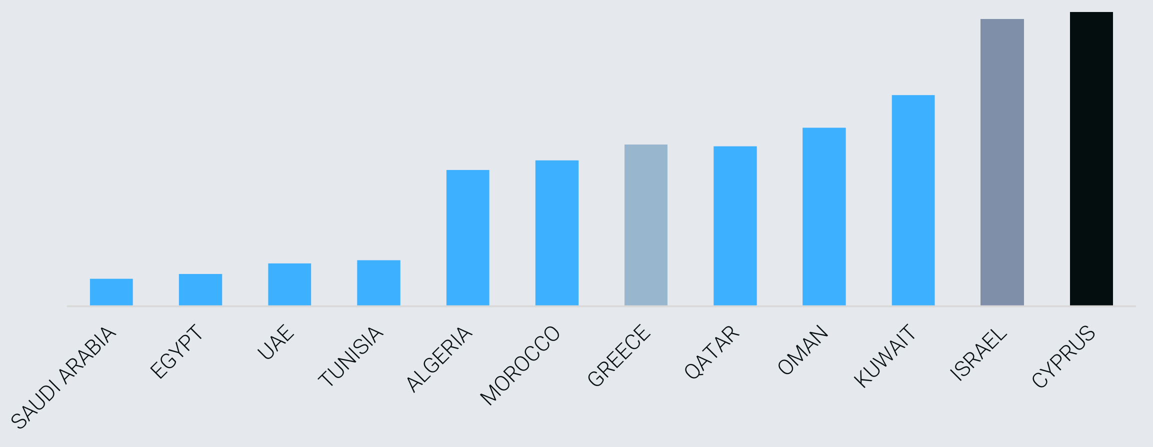
in a market.

3. Industry assets and data. This examines the assets of the industry in terms of age, size, cost structure, quality issues, environmental issues, and cost inflation going forward.

4. Industry profitability. This provides an indicative profitability level for each industry.

The Consolidation Indices for the region are shown below:

FIGURE: CONSOLIDATION INDEX



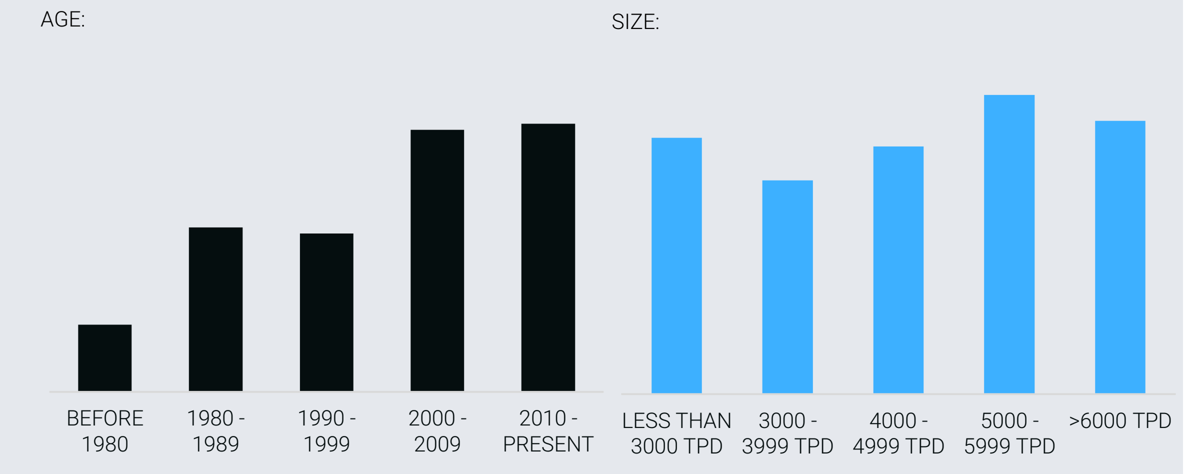
NB: we have added Greece, Lebanon and Cyprus as a comparison. Greece is a consolidated market and Lebanon and Cyprus are two of the most consolidated markets in the region.

Source: Cement Business Research's Research, Database and Analysis

The above analysis indicates that several markets within the report are highly fragmented.

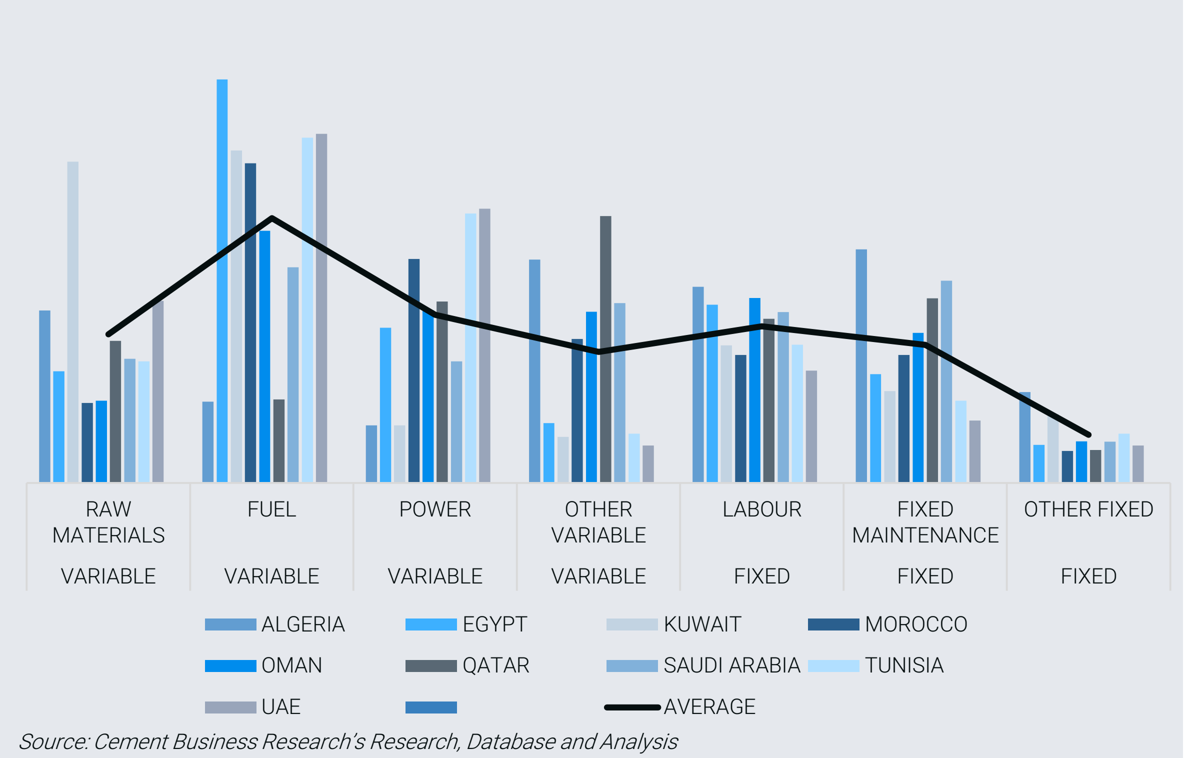
The regional industrial assets show the following characteristics:

FIGURE: AGE AND SIZE OF KILNS



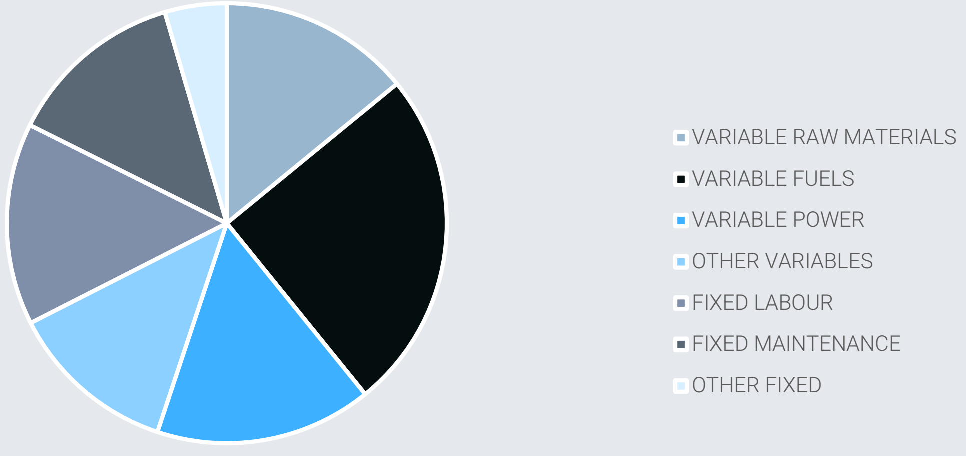
Source: Cement Business Research's Research, Database and Analysis

FIGURE: BREAKDOWN OF PRODUCTION COSTS



Source: Cement Business Research's Research, Database and Analysis

FIGURE: REGIONAL BREAKDOWN OF PRODUCTION COSTS

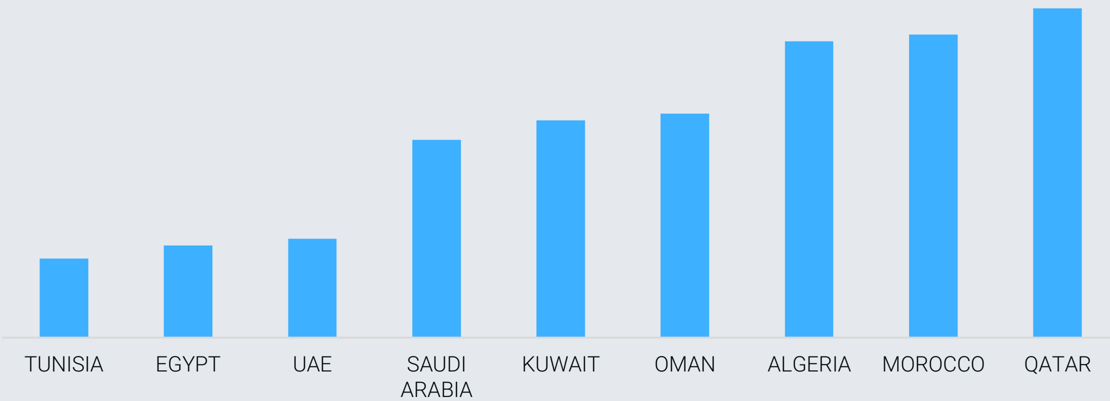


Source: Cement Business Research's Research, Database and Analysis

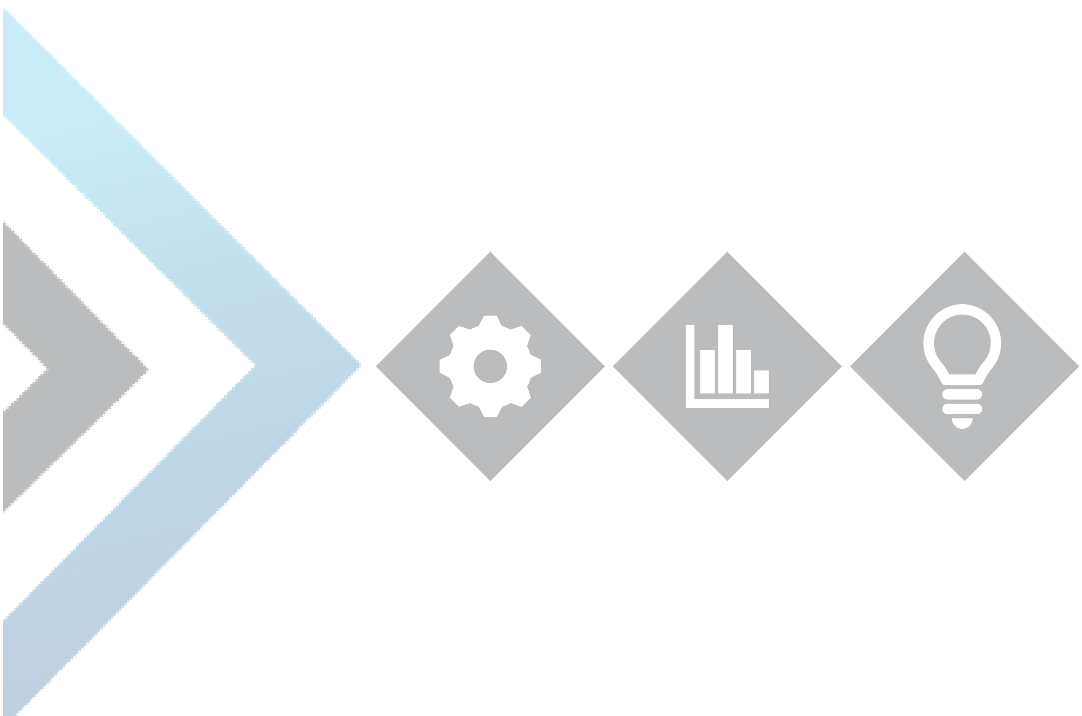
The above analysis indicates that the region boasts many newly installed assets (utilising Best Available Technology - BAT) and that these are relatively large-scale plants. In other words, there may be limited opportunities for production cost improvements due to technology. The cost breakdown indicates significant variations between the countries mainly driven by energy subsidies. The overall cost breakdown indicates that energy costs at around ...% of total production costs are still low when compared with Western plants.

The combination of the varying cost structures and the significant variation in cement prices lead to a wide range of profitability profiles in the region.

FIGURE: REGIONAL PROFITABILITY PROFILES



Source: Cement Business Research's Analysis



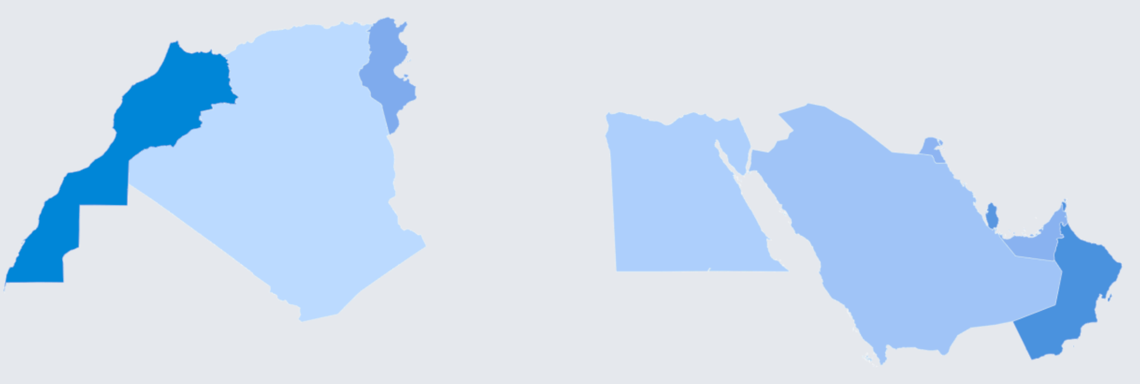
General Considerations And Conclusions

All above analysis and insights are synthesised to provide an investor's view of each industry. To do this Cement Business Research has derived its proprietary tool: Cement Business Research Ranking Tool (CBRRT™). This is a forward-looking analysis which assesses each industry on the following characteristics:

- Attractive Supply – Demand balance
- Attractive Industry Structure and Dynamics
- Capability to Export / Import
- Industry projected profitability
- License to Operate
- Potential M&A activity

As a result of the above analysis the regional CBRRT™ picture is as follows:

FIGURE: CBRRT™ GRADING FOR ALL MARKETS IN THE REGION



Source: Cement Business Research's Analysis

The CBRRT™ rankings for this region vary from a score of … to a score of … (maximum being fifty).