

Gulf Research Center
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GCC and Türkiye INDUSTRIAL SECTOR OUTLOOK

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GCC and Türkiye
INDUSTRIAL SECTOR OUTLOOK

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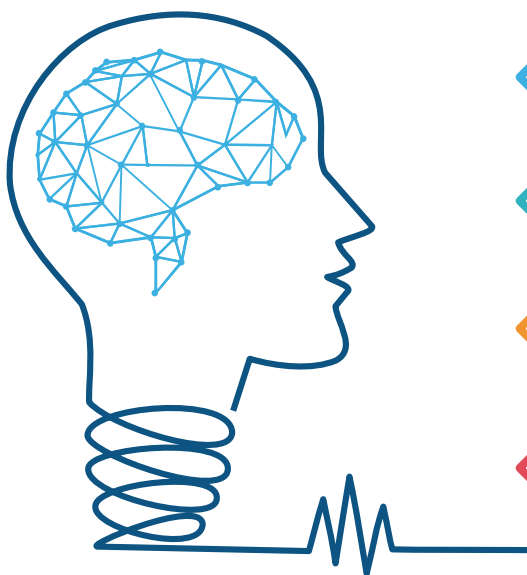
1. Executive Summary

1.1 Türkiye

Per International Trade Administration (ITA), Türkiye has established itself as a relatively stable emerging economy, having a steady banking system and a sound manufacturing sector. Owing to its futuristic development goals, the country boasts of a liberal legal regime for foreign direct investments (FDIs) among all Middle Eastern nations. Its investment incentive programs primarily include the General Investment Incentive Scheme, Priority Investment Incentive Scheme, Regional Investment Incentive Scheme, and Strategic Investment Incentive Scheme. The government has designed these incentive schemes to provide corporate tax reductions, income tax withholding allowances, customs duty exemptions, value-added tax (VAT) exemption, VAT refunds, support for social security premiums, interest rate support for investment loans, and incentivized land allocation. A few other initiatives and investments made for industrial growth in Türkiye are as follows:

- The Ministry of Industry and Technology increased FDI incentives for green projects in 2021.
- Türkiye had 87 bilateral investment agreements with various countries as of March 2022.
- The government of Türkiye provides tailored investment incentives for specific projects, such as those reducing foreign dependency and offering high-value-added solutions.
- The government revoked restrictions on foreign firms to operate in Free Zones (FZ).

1.1.1 Potential Future Outlook - Türkiye



One of the most diversified nations in Middle East



Have great potential in attracting FDI.



Reforms required regarding data localization and taxation.



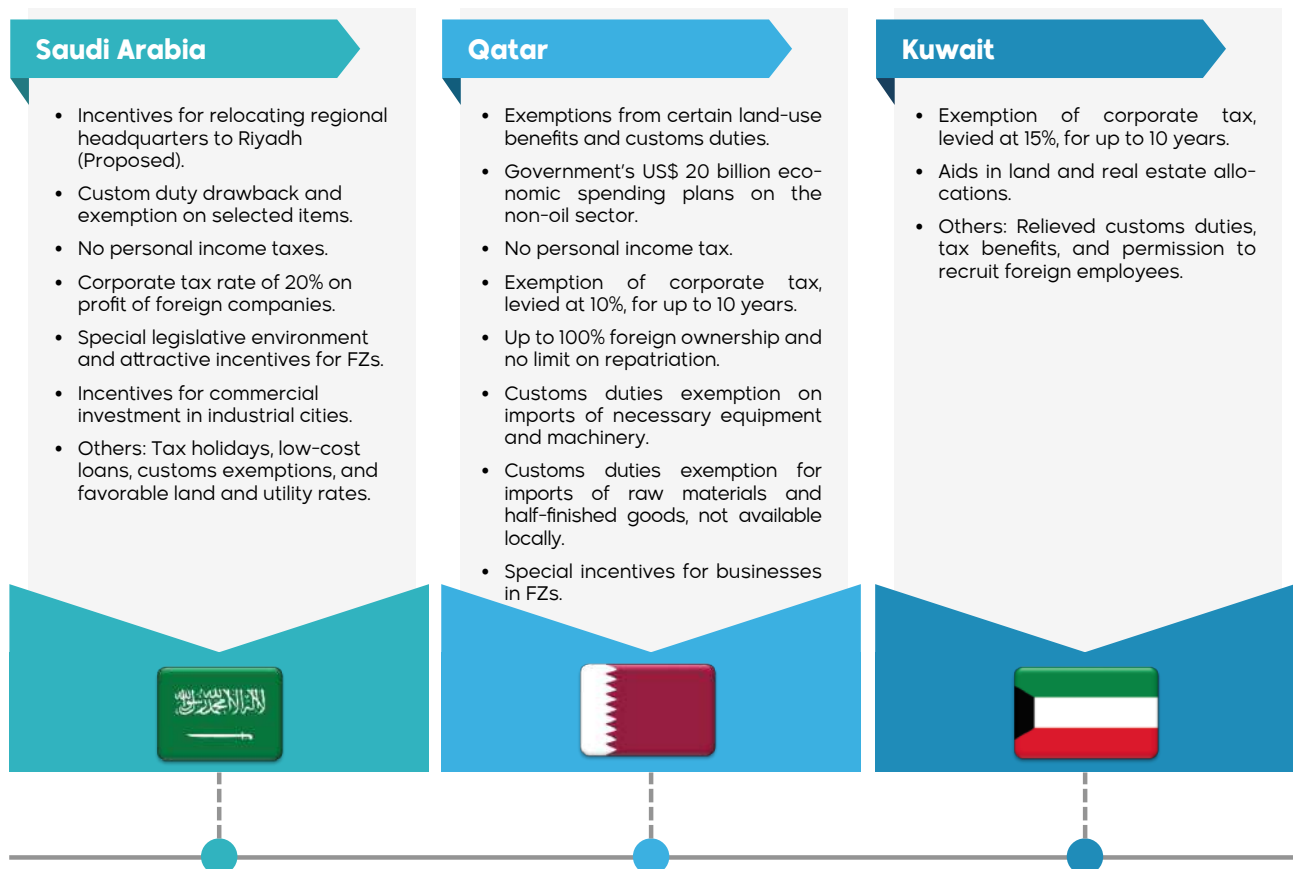
Türkiye's Vision 2023 failed in some aspects, owing to the disruptions from pandemic, and the subsequent earthquake in early 2023.



1.2 GCC

GCC is a regional organization of six countries—Saudi Arabia, the United Arab Emirates (UAE), Qatar, Kuwait, Oman, and Bahrain—set up in 1981. The alliance was formed to enhance its members' integration, coordination, and interconnection. Despite a few difficult years (due to the COVID-19 crisis, the Russia-Ukraine war, and the economic downturn), economic diversification efforts encouraged and bolstered industrial innovation in GCC countries in 2021. Most governments have successfully managed to capitalize on the vital aspects of their fiscal reform agendas. Saudi Arabia and Bahrain have reiterated their commitments to their fiscal balance programs, which aim to balance their budgets, albeit on dates past the originally planned dates due to changed economic conditions.

Further, Oman levied the value-added tax (VAT) in April 2021, emerging as the fourth country in the GCC (after Saudi Arabia, the UAE, and Bahrain) to implement the harmonized rate of 5%, agreed upon by the GCC in 2016. GCC economies strive to promote manufacturing, export, and logistics industries in a bid to develop more flexible, knowledge-based economies. A few of the initiatives taken by GCC countries to promote industrial growth are mentioned below:





UAE

- 100% repatriation of multiyear leases and capital.
- Less restrictions on laborers' movement into the country.
- Low entry barriers and easy access to infrastructure.
- Subsidized energy connections.
- FZs offer 100% exemptions on import and export tax, and commercial levies.
- Assistance for recruitment of labor.



Oman

- Competitive lease rates for certain areas and companies.
- Reduced utility rates.
- No capital gains tax.
- No tax on personal income.
- Corporate earnings taxed at 15%.
- Labor and employment incentives for qualifying companies.



Bahrain

- Assistance for opening and registration of business operations.
- Financial grants.
- Exemptions on raw material and equipment import.
- Duty-free access of products manufactured in Bahrain to markets in other GCC countries.





1.2.1 Potential Future Outlook - GCC



Saudi Arabia

- Focus on diversification creating tremendous potential for FDIs
- Several ongoing large-scale infrastructure development projects to support investors
- Ambitious framework of Saudi Vision 2030 attracting more FDIs
- Needs improvements on transparency, business predictability, and political instability



Qatar

- Tremendous exposure owing to FIFA Men's World Cup 2022
- Portrayed potential to handle difficult assignments in challenging environments
- Improved relations with most GCC countries
- Enormous potential to become a favored FDI destination in the Middle East by harnessing Qatar National Vision 2030



Kuwait

- Relatively stringent policies compared to other GCC countries
- Unfavorable business climate for private sector
- Need to revise several policies on various counts
- Low potential for attracting FDIs
- New Kuwait Vision 2035 can aid in reforms and attract investments



UAE

- One of the most attractive FDI destinations in the GCC
- Serves as a major trade and investment hub
- Expected to reap benefits from its inclusive FDI policies
- Availability of a broad network of FZs
- Abu Dhabi Economic Vision 2030 can be a game changer



Oman

- Free Trade Agreement with several nations
- Advantageous geographic location, potentially attracting significant investments
- Aid investors by reducing bureaucratic red tape
- Needs to focus on lowering Omanization percentage
- Oman Vision 2040 can boost investments



Bahrain

- Open and liberal state that enjoys close diplomatic ties with several developed nations
- Liberal approach to foreign investments
- Great potential for the expansion of non-oil sectors
- Needs to focus on reducing bureaucratic red tape
- Bahrain Economic Vision 2030 can further aid in attracting FDI



1.3 GCC and Türkiye – Summarized Comparison and Cooperation Opportunities

Türkiye is a neighbor of the GCC nations and is also a prominent manufacturing hub of the Middle East region, with hoe to diversified industries. In contrast, The GCC nations are endowed with oil reserves and their economy is strongly reliant on the revenue generated from the oil & gas industry. Presently GCC nations are embarking on economic diversification, as a means to shield against the adverse impacts of downturns in the oil & gas industry, and also for better economic stability. Hence, given Türkiye’s strong manufacturing know-how, GC nations can collaborate with the former to enhance their diversification efforts. In turn, Türkiye can benefit from the well-established chemical and petrochemicals industries of the GCC nations. Thus, Türkiye can provide business establishment knowledge and construction services in return of subsidized raw materials for its manufacturing industries. The below table compares the industrial sector’s contribution to GDP and major industries of each nation:

Table 1. Industrial Sector’s Contribution to GDP, By Country, 2021 (%)

Industry (Including Construction), Value Added (% Of GDP	Türkiye	Saudi Arabia	Qatar	Kuwait	UAE	Oman	Bahrain	World
(%) 2021	31.1	45.5	60.0	(2020) 45.4	47.5	50.6	44.8	27.6

Source: World Bank

Table 2. Main Industries, By Country

Main Industries, by Country	Türkiye	Saudi Arabia	Qatar	Kuwait	UAE	Oman	Bahrain
Main Industries	Automotive, Construction, Technology & Electronics, Food Processing, Furniture & Decoration, Iron & Steel, Textile & Apparel, Aerospace & Defense, Energy & Natural Resources, Industrial Machinery & White Goods, Packaging & Logistics, Gold & Jewelry Process, Chemical.	Petrochemicals, Ammonia, Industrial Gases, Sodium Hydroxide, Cement, Fertilizer, Plastics, Metals, Ship Repair, Aircraft Repair, Construction.	Chemicals, Petrochemicals, Plastics, Glass, Furniture & Decor, Food & Beverage, Electronics, Steel, Ship Building & Repair.	Chemicals & Petrochemicals, Fabricated Metal Products, Non-Metallic Mineral Products, Furniture & Decoration, Cement, Shipbuilding, Food Processing, Construction Materials.	Chemicals & Petrochemicals, Precious & Semi-Precious Stones, Construction, Fabricated Plastics, Heavy Industries, Machinery, Electrical Appliances, Renewable Energy Equipment.	Chemicals & Petrochemicals, Fertilizers, Construction, Cement, Marble, Gypsum, Building Products, Minerals, Food & Beverage.	Chemicals & Petrochemicals, Plastics, Engineering, Aluminum, Furniture & Decor,



2. Türkiye

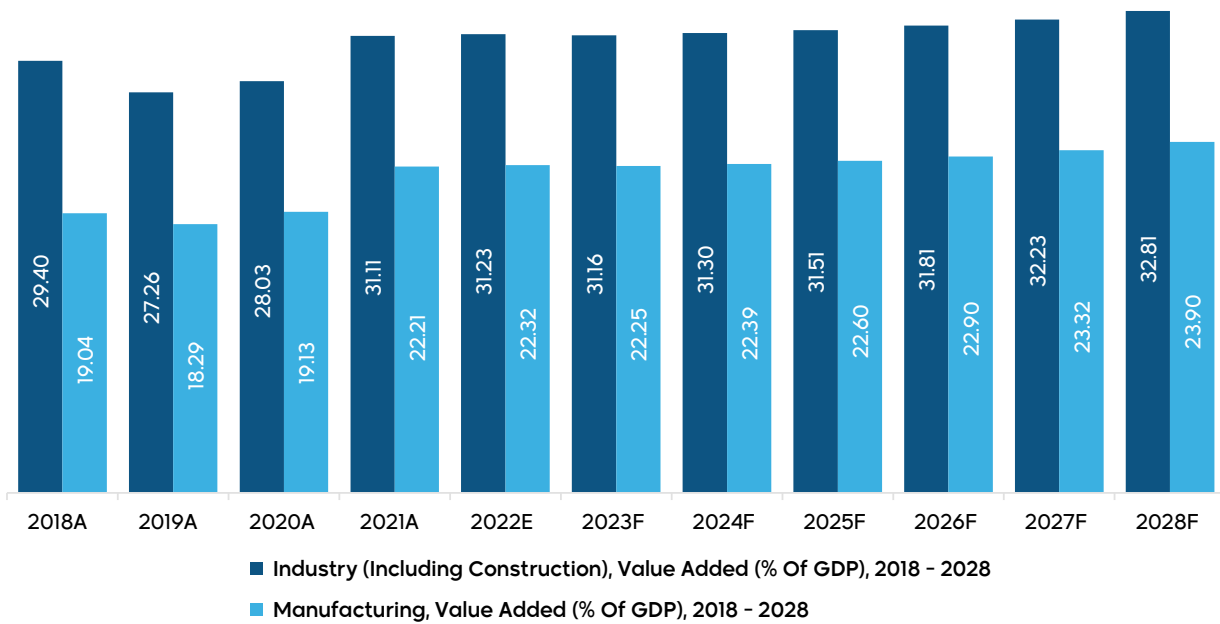
2.1 Introduction to Türkiye's Industrial Sector

2.1.1 Overview and Key Industry Trends

Türkiye is an emerging economy and is often grouped with newly industrialized countries. The continued growth of industries in the country is aided by its geopolitical position between Europe and Asia, young and energetic workforce, and incentives for local and foreign investors. The government of Türkiye is keen on increasing the competitiveness and efficiency of the Turkish industrial sector and expediting its transformation to an export-ready industry structure. 20% of the workforce in Türkiye has been employed by the industrial sector, comprising iron & steel, metallurgy, automotive, chemical, food processing, construction, technology and electronics, furniture and decoration, apparel, packaging and logistics, industrial machinery and white goods, defense, energy and natural resources, and gold and jewelry industries.

2.1.2 Industrial Market, Size and Forecast (2018–2028)

Figure 1. Türkiye's Industrial Market



A- Actual, E-Estimated, F-Forecasted || Source: A - World Bank, E & F - Analyst Team

World Bank Definition: Industry (including construction) corresponds to ISIC divisions 05-43 and includes manufacturing (ISIC divisions 10-33). It comprises value added in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 4. Note: For VAB countries, gross value added at factor cost is used as the denominator.

World Bank Definition: Manufacturing refers to industries belonging to ISIC divisions 15-37. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Note: For VAB countries, gross value added at factor cost is used as the denominator.

Note: The market numbers have been forecasted based on various parameters such as current GDP growth rate, sector's share in GDP, inflation rate, sector growth, investment in sector, Government's vision, company's offerings, import & export, and others



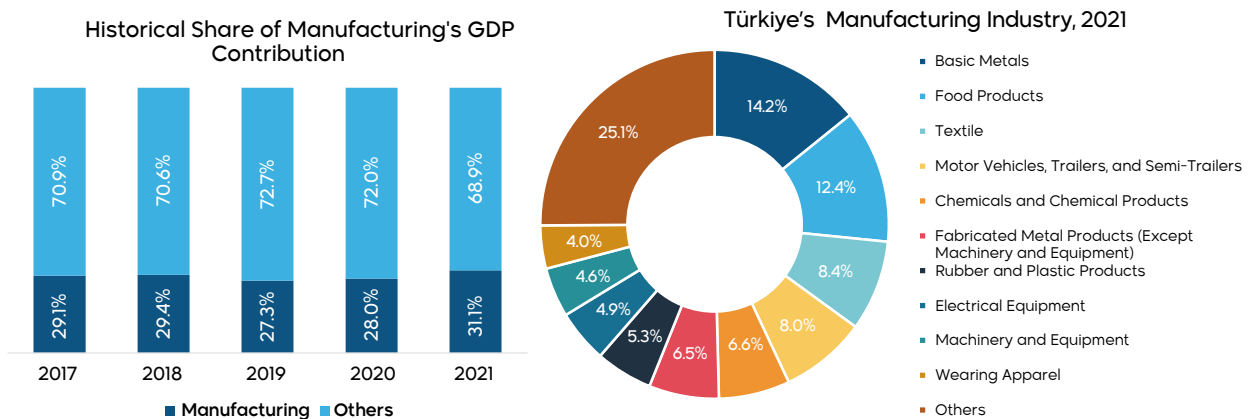
The above bar graphs are an indication towards how the industrial sector is expected to increase its contribution to Türkiye's GDP over the forecast period. Availability of skilled workforce is a prime advantage for the country. Additionally, rising focus of the government towards development of the industrial sector is expected to promote growth of the industrial sector.

2.2 Industrial Sector in Details

2.2.1 Type of Industries

The industrial landscape in Türkiye includes various industry types. The industrial sector contributed 31.1% to its national GDP in 2021, compared to 28.0% and 27.3% in 2020 and 2019, respectively, indicating the Turkish government's growing focus on industrial development.

Figure 2. Türkiye's Manufacturing Statistics



Source: Tuik Info, World Bank

The bar graph showcases the increment in the manufacturing sector's contribution to Türkiye's GDP. The country's manufacturing industry comprises several industries, such as food products, textiles, and automobiles. The pie chart depicts the contribution of the major sectors to the manufacturing industry's revenue. It also showcases the diversification within the manufacturing sector. Owing to such a wide range of verticals within the manufacturing sector, Türkiye's exports of manufactured goods are also diverse. Thus the country is not solely dependent on any specific industry, which acts as an advantage and protects the economy from a downturn in any specific industry.



2.2.2 Economic Contribution

2.2.2.1 Government Initiatives and Programs

Nestling at the juncture of Asia and Europe, Türkiye has a geographic advantage over its GCC compatriots. In addition to its geographic location—lower labor costs and flexible production capabilities make it an important manufacturing and distribution destination, which allows it to maintain its position in the global value chain.

In July 2019, Türkiye adopted the 11th National Development Plan (NDP) covering 2019–2023. Further, in September 2019, the country adopted the Industry and Technology Strategy 2023 to boost the production of advanced technologies and promote their adoption in the industrial sector. According to the government of Türkiye, players offering software and high-tech products face difficulties generating revenue during their inception years. Hence, the government offers subsidies to such companies, and lays out public procurement policies to aid in their business growth and support them to scale their production. These initiatives are the primary strategies, in line with Industry 4.0.

The automotive and aviation industries in Türkiye are the early adopters of advanced manufacturing technologies. In addition to the prominence of global players, both these industries are supported by several local suppliers. These suppliers stringently adhere to the latest standards and technological requirements. Other sectors—including chemicals, construction, consumer goods, electronics, machinery, mining, and iron & steel—also focus on adopting advanced manufacturing technologies and methods to remain competitive. As per the International Trade Administration (ITA), medium-tech and high-tech products comprise 36% and 3% of Türkiye's manufacturing exports, respectively. The country further strives to increase the contributions of medium-tech and high-tech products in manufacturing exports to ~44% and ~6% by the end of 2023.

According to the 2021 projections of the ITA, Türkiye would invest US\$ 1–1.5 billion annually to boost the adoption of Industry 4.0 solutions over the next 10 years. The investments would also be channelized toward improving technological infrastructure, such as fixed & mobile broadband services and fiber optics. Based on an estimated 4–7% increase in productivity, ITA estimates that Türkiye can save US\$ 10 billion annually on current manufacturing costs upon adopting Industry 4.0 technologies and concepts. To support the large-scale adoption of Industry 4.0, the Ministry of Industry and Technology of Türkiye established the General Directorate for National Technology (GDNT) in April 2020, a body dedicated to boosting technology implementation in industries. The ministry also grants support for the digital transformation of SMEs through The Scientific and Technological Research Council of Türkiye (TÜBİTAK) and the Small and Medium Enterprises Development Organization (KOSGEB).

Türkiye is prioritizing science, technology, engineering, and math (STEM) skill development in education to form the foundation for facilitating rapid digitalization. Turkish corporate entities are utilizing their Corporate Social Responsibility (CSR) activities to boost STEM skills. In July 2022, a leading Turkish multinational household appliances manufacturer launched a STEM education initiative intending to encourage women to pursue careers in STEM and related fields. The initiative was designed for women pursuing their third or final year of undergraduate studies in STEM areas.

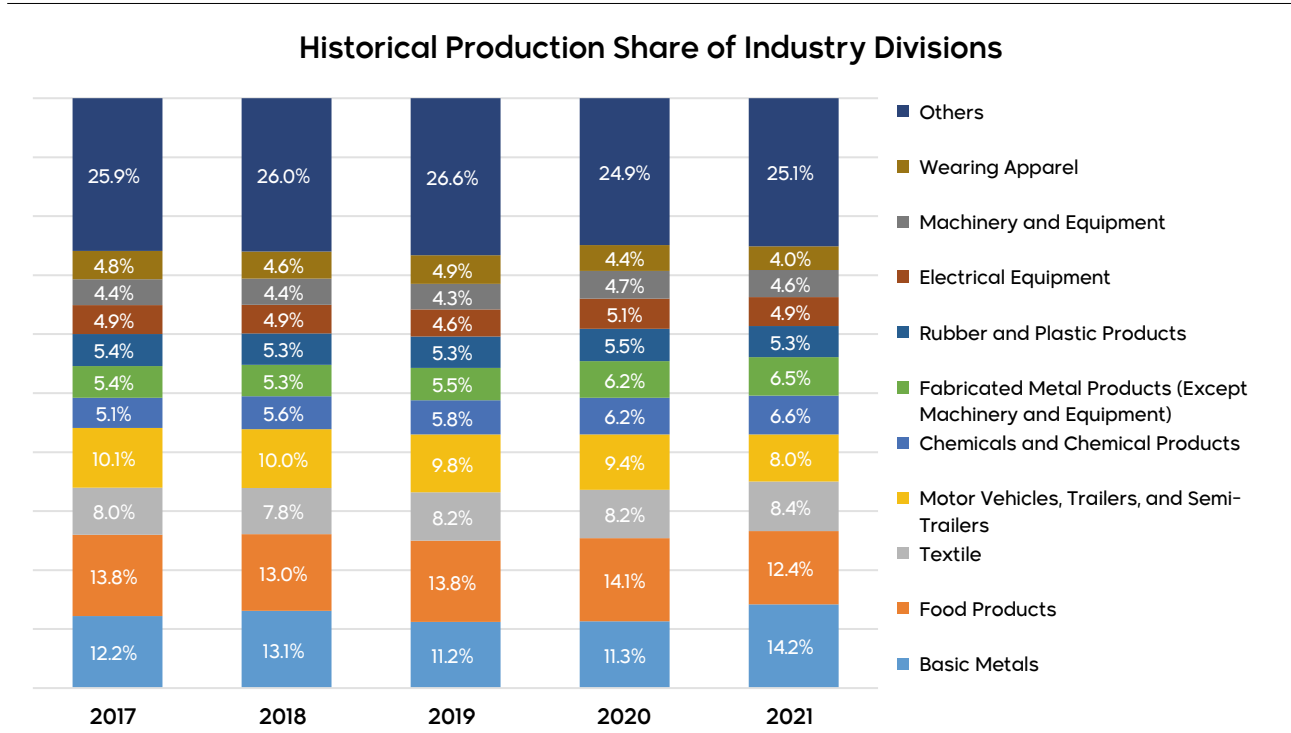


2.2.3 Industrial Production

2.2.3.1 Manufacturing

Owing to a diversified industrial sector, Türkiye is well-hedged from risks associated with dependence on a single industry. The expansionist monetary policy of Türkiye allowed the economy to grow by ~2% in 2020 despite the disruptions from the pandemic. The country plans to invest significantly in over 300 product groups across the aerospace, chemicals, defense, electronics, machinery, semiconductor, and pharmaceuticals industries. The production values for different Turkish industries in 2021 are depicted below:

Figure 3. Manufacturing, by Type (%)



Source: Tuik Info

2.2.3.2 Construction

The construction sector accounted for 5.4% of the Turkish GDP and employed more than 1.5 million people in 2021. The sector's contribution to the overall economy reaches ~30% when the direct and indirect impacts on related industries are considered. The COVID-19 pandemic, however, rendered the sector fragile and would require much time to recover. Some construction projects were delayed, while others were suspended indefinitely in 2020. In addition, the mounting interest rates and the unstable international currency exchange rates led to higher financing costs. Thus, material, equipment, and labor costs increased, causing the sector to contract by 3.5% in 2020.

Further, housing sales to non-Türks decreased by 10.3% (40,812 units) in 2020 compared to 45,483 units in 2019, as inferred from data of Turkish Statistical Institute. The pandemic led to the rise in work-from-home trends and the adoption of new working models, adversely impacting general leasing activities and investments in 2020. However, the Turkish government is implementing several policy reforms to boost the construction sector. The Ministry of Environment and Urbanization announced an action plan through which it intends to transform 1.5 million houses within 2025.

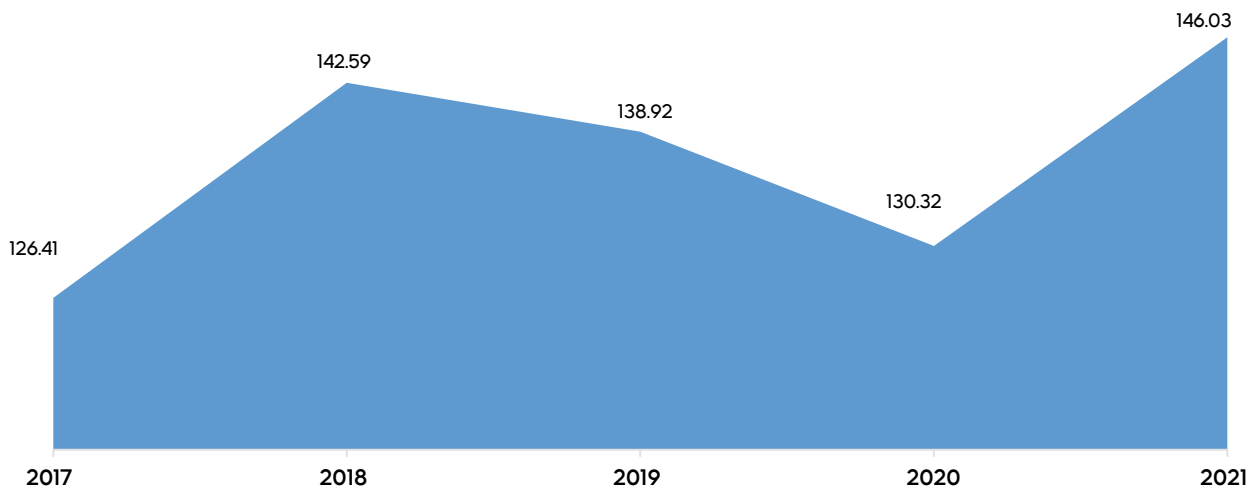


The action plan also states that 300,000 houses, including 100,000 from Istanbul, would be transformed yearly.

2.2.3.3 Mining

The mining industry is a significant contributor to the Turkish economy. It provides employment and raw materials essential for all sectors of the economy and generates government revenues through exports. Türkiye is also one of the world's most favorable and dynamic mining destinations, and ~40% of the potential mining sites in the country are still unexplored. The government encourages private investments to prioritize the development of mining. More than 20 foreign mining companies have a presence in Türkiye, including large and mid-tier companies from the US, Canada, the UK, and Australia. These enterprises are engaged across the full spectrum of mining activities, from exploration to smelting.

Figure 4. Mineral Production in Türkiye (Million MT)



Note: MT = Metric Tons // Source: CEIC Data

The above chart depicts the total mineral production in the country. Temporary movement bans and supply chain disruptions led to a significant decline in the sector's productivity. Natural stones' production decreased from 7,141 thousand MT in 2019 to 6,468 thousand MT in 2020, whereas total mineral production declined to 130.32 million MT in 2020 from 138.92 million MT in 2019. However, dynamic preventive measures of the Turkish government to counteract the pandemic strongly aided the sector to bounce back and record the highest production levels between 2017 – 2021. Türkiye's mining industry primarily produces metals and industrial minerals, while mineral fuel production is mostly limited to the production of lignite coal. Türkiye was the world's leading miner of boron, accounting for most of the world's production in 2022, due to their high-grade deposits from primal volcanic activity. Additionally, the country has exceptional, well-established mining and extraction plants. Boron is mined to produce minerals such as apatite, colemanite (calcium magnesium carbonate), dolomite, and sylvinit (potassium chloride salt). Apart from boron, Türkiye is also a leading producer of gypsum and feldspar.

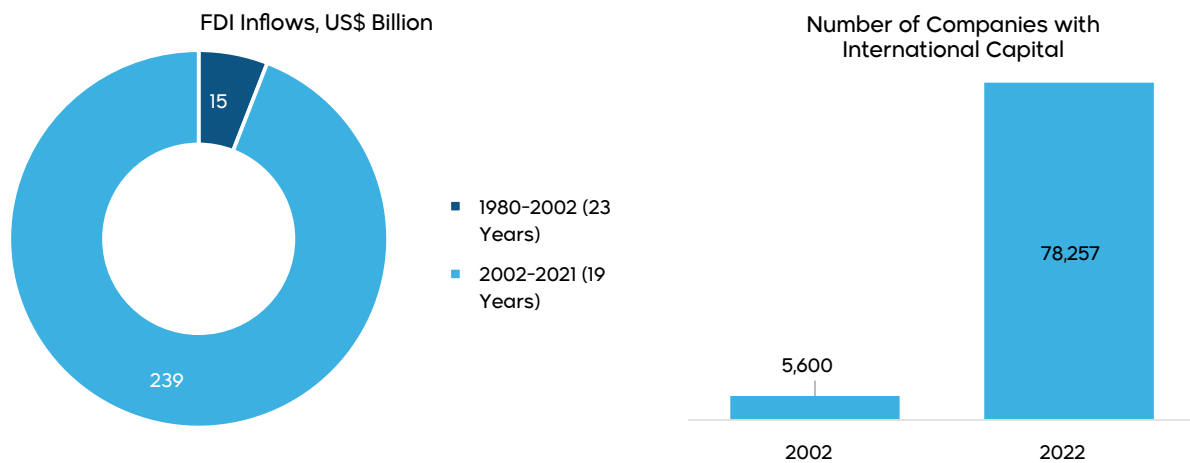
Türkiye has several gold reserves, which are assumed to be formed via Late Mesozoic and Tertiary formations, related to Mesozoic and Cenozoic volcano plutonic events. Moreover, the country is the fifth largest gold consumer in the world after India, the US, Saudi Arabia, and China,



respectively. Gold production in Türkiye officially started in 2001 with ~1.4 MT of gold, and it reached ~45 MT in 2021 with a gradual rise every year. The announcement of a new gold mine in Koza Altın in Eastern Türkiye’s Ağrı province in June 2021 further added to the gold mining operations of the country. The new mine is expected to have 20 MT of gold with a market value of US\$ 1.2 billion and 3.5 MT of silver reserves with a market value of US\$ 2.8 million.

2.2.4 Capital Investments and Major Investors

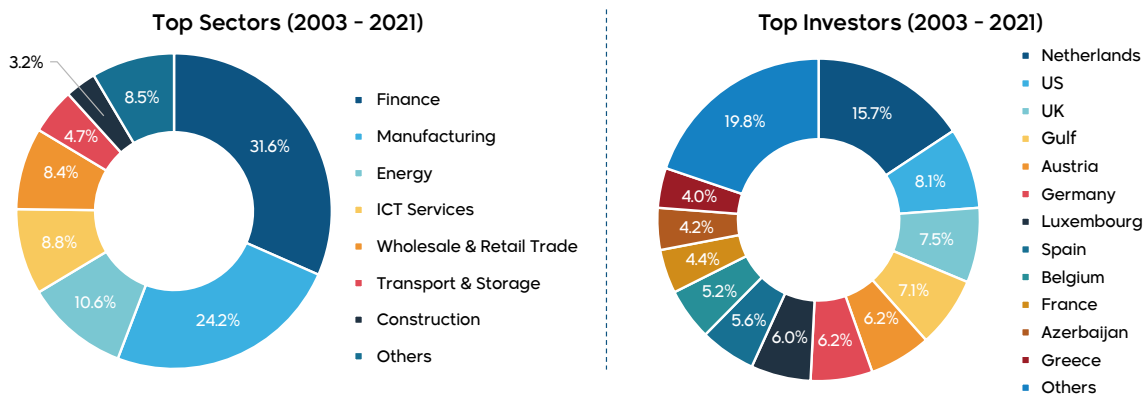
Figure 5. FDI Inflows in Türkiye



Source: Central Bank of the Republic of Türkiye, World Bank, UNCTAD, and ITA

The above pie chart depicts the contrast in FDI inflows between 1980 – 2002 and 2002 – 2021. The period between 2002 – 2021 witnessed an above 15 times rise in FDI inflows, when compared with that of the period between 1980 – 2002. Policy reforms, development of educational systems, improvement in infrastructure, and incentives for investors were key factors in boosting the growth of FDI inflows. The bar graph depicts the comparison between 2002 and 2022, with respect to number of foreign companies who invested in Türkiye.

Figure 6. Investments in Türkiye



Source: Central Bank of the Republic of Türkiye, World Bank, UNCTAD, and ITA

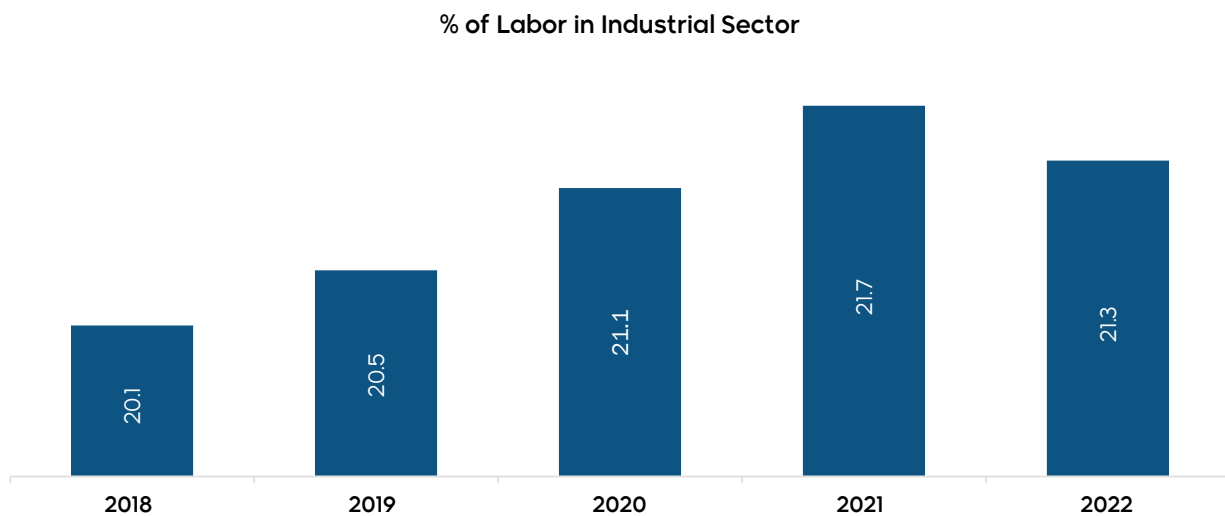


As depicted in the chart, Türkiye has successfully increased its FDI inflows in the past two decades. Manufacturing is one of the most attractive sectors, which has attracted the most FDIs in the past decade. The country receives the largest share of investments from the Netherlands, the US, and the UK, together. European nations have been dominant investors in Türkiye, considering the geographic proximity. The Turkish government is adopting relatively homogeneous and transparent strategies. It is expected to bolster growth, halt the depreciation of Turkish Lira, and promote the country's image as an investment destination.

2.2.5 Industrial Labor and Regulatory Outlook

Türkiye has one of the largest labor forces among all Middle Eastern countries. The country has adopted new regulations for complying with the 19th International Conference of Labour Statisticians (ICLS) Resolutions by the International Labour Organization (ILO) and the relevant EU regulations. Labor laws framed by the Ministry of Labor are the primary legislation guiding the functioning of employees and employers in Türkiye. The Law of Unions and Collective Bargaining Agreements specify rules applicable to collective bargaining arrangements and unions. The Work Health and Safety Law guides employers in maintaining healthy and safe workplaces, while the International Workforce Law and other legislation provide and clarify implementation and enforcement guidelines.

Figure 7. % of Labor in Industrial Sector



Source: Tuik Info

As can be seen from the above the number of paid laborers in the industrial sector of Türkiye has been witnessing an upward trend and has not been significantly affected by the negative impacts of the pandemic or economic downturn globally. While the % share dipped slightly in 2022, the number of laborer increased to 6,725 thousand heads, from 6,472 thousand heads in 2021. Türkiye is one of the most significant manufacturing economies of the Middle Eastern region, and hence always ensured a steady supply of skilled workforce through an evolving education system. Focus on STEM at educational institutions strongly aided in the growth of different industrial sectors.



Notably, the Turkish Government is undertaking step to mitigate the multiple and compound barriers of the labor market, faced by the young population in Türkiye. Improvement of economic conditions, rise in pay scales, and provision for gathering adequate work experience are among the primary focus points been addressed by the government. Additionally, the government's focus on improving the education sector is expected to further lower the challenges, faced by the young population, in the future.

2.2.6 Technological Advancements

Türkiye is one of the most advanced manufacturing centers in the Middle East. The government encourages technology adoption and supports industry verticals through various initiatives and reforms.

Türkiye is progressing significantly with its 5G evolution. Telecom operators have conducted substantial 5G trials in the country. Its deployment is expected to immensely benefit the banking, healthcare, and media sectors.



Local telecom operators are accelerating the implementation of the Internet of Things (IoT) in industrial projects.



Integration and alignment with EU standards and regulations, coupled with exposure to best practices, are among the factors driving top-of-the-line IT solution deployment in Türkiye.

The Cybersecurity industry has ample opportunities with the rising penetration of Industry 4.0 solutions within the industrial sector.

In August 2020, Türkiye inaugurated a tech center, constructed by spending US\$ 200 million. It was constructed to be a regional hub for innovative studies. It creates an extensive curriculum for digital industrial transformation by taking inputs from senior managers, engineers, and operators from various industries. The center is expected to offer 400,000 hours of cost-free training to at least 40,000 industrial employees.



2.2.7 Upcoming Industrial Projects

**May
2023**

In May 2023, a leading Turkish veterinary medicine manufacturer announced its plan to establish a second production facility in Sincan, Ankara.

**May
2023**

In May 2023, a leading Turkish cosmetic brand announced plans to invest ~US\$ 5 million to construct a factory in Sinop Organize Sanayi Bölgesi (OSB). The expansion aims to increase the brand's production capacity of a multipurpose care oil.

**April
2023**

In April 2023, a leading diversified group in Turkey announced its plans to invest ~US\$ 70 million in increasing the capacity of its tissue paper factory. With this investment, the group intends to ramp up its production capacity to ~250 thousand MT annually.

**April
2023**

In April 2023, a leading automotive manufacturer from China announced its plan to open a factory in Turkey as part of its strategy to enter European markets.

**January
2023**

In January 2023, a leading Japanese car manufacturer announced its plans to manufacture the first Turkey-made plug-in hybrid passenger car. The plant at Sakarya will also become the company's first European plant equipped with a vehicle battery production line. As of July 2023, production has begun in the factory for a coupé-like plug-in hybrid SUV and its batteries.

**November
2022**

In November 2022, a leading air conditioner manufacturer announced its plan to invest ~US\$ 4 million to double the currently available R&D space by April 2024. As of April 2023, all necessary paper works were completed, and construction had begun.

**July
2022**

In July 2022, a leading Turkish glass manufacturer invested ~US\$ 193 million in a new frosted glass plant at Tarsus Organized Industrial Zone (OIZ). The plant is expected to have an energy industry specific glass processing line with an annual capacity of 20 million sq. m. and a furnace with a capacity of ~600 MT/day. As of March 2023, an additional US\$ 82 million is being spent to develop a sand preparation facility to secure sustainable resources for its production processes and proactively mitigate the risks associated with disruptions in supply chain.





2.3 Industry Dynamics

2.3.1 Drivers

2.3.1.1 Increase in Construction and Sales of Residential Units

The construction sector has transformed the skyline of Istanbul and other cities in Türkiye over the last decade. This progress has resulted in renewed and expanded transport infrastructure in the country from the Aegean region to the Caucasus region, thereby supporting the formation of new communities. The sector has been at the forefront of the country's recent economic development targets, as it accounts for a large share of its national GDP. Commercial, industrial, infrastructure, energy & utility, institution, and residential construction are the main segments of the Turkish construction market. The residential construction segment led the market in 2022, which can be attributed to the growing demand from low-income and middle-income families.

In January 2023, the government announced the largest-ever social housing project in Türkiye to help many low-income families become homeowners amid skyrocketing real estate prices and rents. A few months after this announcement, the government released details of another new initiative targeting middle-class residents looking for cost-effective housing. According to government officials, the goal of the latter initiative was to create 500,000 housing units, making 250,000 acres of land suitable for reconstruction, and generating 50,000 jobs across all Turkish provinces by 2028. As a result of such initiatives, the inclination toward buying houses is increasing in Türkiye. The number of homes sold climbed by 10.6% in January 2023 compared to January 2022, reaching a total of 97,000,708. Istanbul accounted for the highest percentage (17.8%) of homes sold, totaling 17,415 homes. Thus, a rise in construction activities positively impacts the upstream and downstream industries, driving the overall growth of the construction industry.

2.3.1.2 Proliferation of Mining Sector

Türkiye is nestled in the Tethyan-Eurasian Metallogenic Belt and is one of the most mineral-rich nations in the world. It has some of the world's largest mineral deposits. Despite concerns regarding political instability, the government of Türkiye has been increasingly prioritizing the progress of its mining sector. It plans to increase the national export volume to US\$ 500 billion, with an aim to raise the value of mineral exports to US\$ 15 billion by 2023. Türkiye has 4,500 mineral reserves and 53 mineable minerals and metals, excluding coal and petroleum. According to the Ministry of Energy and Natural Resources, Türkiye's mining exports reached a record high of US\$ 5.9 billion in 2021 from US\$ 565 million in 2000, recording a tenfold increase over the last 20 years and a 40% year-on-year surge. Moreover, mining accounts for 1.17% of Türkiye's GDP and is a major source of employment, with over 126,000 persons working in all areas of the mining industry.

In 2021, China, the US, Spain, Bulgaria, Belgium, Italy, India, Sweden, Germany, and France were the top 10 export partners of Türkiye. Indonesia, Uzbekistan, Hong Kong, Albania, and Serbia were its important trade partners for mining products. The top 3 countries to whom Türkiye exported gold were UAE, Nepal, and Malaysia, accounting for 48.5%, 3.2%, and 2.2% of the total gold export, respectively. The country gained a total revenue of US\$ 4.28 billion through gold export in 2021.

The government of Türkiye is taking various initiatives to attract FDIs in the mining sector, which is evident from its comprehensive incentive policies. Additionally, the country is making efforts to revive electricity generation through lignite and coal-fired power by making new power plant development plans and rehabilitating state-owned, old power plants. These efforts are driving the mining activities for coal products.



2.3.2 Challenge

2.3.2.1 Hurdles in Implementing Industry 4.0

Despite having a geographic advantage, being seated at the juncture of Europe and Asia, Türkiye is losing its importance in the global manufacturing sector. This is mainly due to a shift in the global manufacturing base to China and other Asian countries over the past decade. Thus, the adoption of Industry 4.0 has become necessary to improve or maintain the country's competitiveness. Adapting public and commercial sector policies to promote digitalization, incorporating them into supply chains, and satisfying workforce needs are just a few new issues that Industry 4.0 brings.

While the «Industry 4.0» movement is meant to benefit human workforces, it also leads to changes in the nature of competitiveness in the industrial sector. Similar to other countries, preparing workforces through intensive training and gathering funding for capital investments are the major challenges associated with the rollout of Industry 4.0 in Türkiye. The main challenges in the implementation of Industry 4.0 in Türkiye are as follows:

01

Operating Environment and Networking Capabilities: Companies need to select network architecture carefully. Efficient networking is not possible without a well-established infrastructure.

02

Low Data Availability and Silos: Owing to the extensive use of legacy systems in Türkiye, data silos (inaccessible pockets of data) continue to present significant challenges in data processing and analysis. Compatibility issues with modern systems further lead to low data generation from machines and availability. Although migration to the cloud can aid in mitigating such challenges, companies find it difficult to undertake migration activities amid the current economic downturn.

03

Skilled Workforce Requirements: Technology adoption must be complemented by skilled workforces. While Türkiye has been revising their educational policies to prepare skilled future workforces, the present workforce may lack the required skill sets required to handle high-tech solutions. This also results in the country's dependence on expatriates.

04

International Vendors and Data Localization Regulations: Several global vendors are plying their trade in the country. Yet data localization regulations often play spoilsport. Hence, Türkiye needs to encourage local vendors to support Industry 4.0 adoption.

05

Cyberattacks and Cybersecurity: A wide-scale technology adoption necessitates proper security solutions for protecting IT assets and data. The lack of local vendors and trust issues with global vendors hinder the adoption of IT solutions, thereby hampering Industry 4.0 implementation.

The high cost of implementation, sustainability, and complex structure of production processes are other notable difficulties encountered by the industrial sector during the large-scale adoption of Industry 4.0. Moreover, the lack of Türkiye's prominence in developing manufacturing technologies, limited awareness about Industry 4.0 in some sectors, and difficulties in appointing workforces



handling digital operations aggravate the challenges associated with the implementation of Industry 4.0.

2.3.2.2 Rebuilding after Earthquake

Per World Bank’s Global Rapid Post-Disaster Damage Estimation (GRADE) Report estimates, the two earthquakes in February 2023 resulted in an estimated US\$ 34.2 billion in direct physical damages in Türkiye. The amount is equivalent to 4% of the country’s 2021 GDP and affected approximately 7.4% of the total population of Türkiye directly. 53% (US\$18 billion) of the total damage was associated with direct damages to residential buildings, 28% of the damage (US\$ 9.7 billion) in non-residential buildings such as healthcare facilities, government buildings, academic institutions, and private sector buildings, and 19% of damage (US\$ 6.4 billion) was related to public infrastructure such as roads, power transmission, and water supply. The report also estimated that recovery and reconstruction costs could be twice as high, and GDP losses associated with economic disruptions will also compound the cost of the earthquakes. As a result of the earthquake, textiles, automotive, high-tech, manufacturing, and construction industries were most impacted. Within those industries, exports such as textiles, steel, and cement specifically saw the greatest disruptions. Hence, owing to a shift in focus on rebuilding the damaged areas, a lower focus is expected on the development of the industrial sector temporarily. However, several steps have been undertaken to boost the recovery process and ensure resiliency, such as:

- The Fair Labor Association issued guidelines to warrant clear communication from the suppliers, including the impact of the disaster on their supply chain, to all parties sourcing from Türkiye.
- Turkish government launched a temporary wage support scheme and banned layoffs in 10 cities to protect workers and businesses from the financial impact of the disaster.
- Hatay Airport, which had remained closed to repair its runway prior to the earthquake, was repaired on an urgent basis for commercial and humanitarian flight movements.
- A recovery strategy for the manufacturing sector was formulated by the Strategy and Budget Presidency, in association with the United Nations and the European Union. The highlights of the same are given in the below table:

Table 3. Summarized Recovery Strategy:

Priorities	Short-term (1 year)	Medium-term (1-3 years)	Long-term (3-5 years)
Reconstruction			
Infrastructure/equipment needs of manufacturing businesses	<ul style="list-style-type: none"> • Reconstruct damaged infrastructure in OIZs and small industrial areas (SISs) • Support temporary workforce and equipment for OIZs, SMEs and SISs • Provide temporary accommodation for labor force working in manufacturing • Provide energy infrastructure and utilities to SMEs 	<ul style="list-style-type: none"> • Establish and/or reconstruct small industrial sites • Provide green energy and water supply for OIZs and SISs 	<ul style="list-style-type: none"> • Rehabilitate small industrial sites with a greener and inclusive perspective



Priorities	Short-term (1 year)	Medium-term (1-3 years)	Long-term (3-5 years)
Recovery			
Retain, replace and develop workforce	<ul style="list-style-type: none"> Provide wage subsidies for businesses Extend specific incentives to employ vulnerable groups 	<ul style="list-style-type: none"> Expand vocational training and skills development Provide decent and inclusive living spaces for OIZ workforce 	<ul style="list-style-type: none"> Establish subsidized job placement programme Establish incubators for creative entrepreneurs
Business continuity	<ul style="list-style-type: none"> Provide loan, debt and tax relief for businesses 	<ul style="list-style-type: none"> Provide loan subsidies to purchase equipment Extend incentives 	<ul style="list-style-type: none"> Stimulate local demand through cash assistance and procurement
Business transformation ↕	<ul style="list-style-type: none"> Increase digitalization level of SMEs Increase remote working opportunities for employees 	<ul style="list-style-type: none"> Support model factories to help affected businesses on lean manufacturing Expand model factory services to support inclusive recovery period 	<ul style="list-style-type: none"> Support twin transition of SMEs in post-disaster recovery process Enact investment promotion for emerging business opportunities
Resilience and disaster risk reduction in the manufacturing sector	<ul style="list-style-type: none"> Identify hazardous production facilities 	<ul style="list-style-type: none"> Complete Disaster Prevention Plan and an Emergency Action Plan for OIZs Establish database and possible contingency stock of emergency equipment for businesses 	<ul style="list-style-type: none"> Create entrepreneurial accelerators to support ideas and solutions for greater disaster resilience Undertake disaster resilient industry planning

Source: Strategy and Budget Presidency

2.3.2.3 Inflation

Per the Turkish Statistical Institute, the inflation rate was 85.5% in October 2022. The continuous devaluation of the Turkish Lira (TL) resulted in skyrocketing inflation rates in the country, resulting in decreased consumer spending. It further led to high prices of commodities, causing decreased demand for goods and services within the country and exacerbating the decline in industrial production. The government had tried to combat the inflation rate by lowering interest rates for loans, which was able to check the depreciation by some extent. However, present inflation rates still challenge industrial production, and continue to hamper the industrial sector's growth. To maintain or increase the value of TL without increasing interest rates, the Central Bank and the government plans to take workaround steps, without which freezing of financial assets may become necessary.

2.3.3 Opportunities

2.3.3.1 Surging Investments in Manufacturing Sector

Türkiye is capable of manufacturing a huge range of products. Products ranging from door pulls and handles, clingfilm, ceramic sinks, and antiseptic wet wipes are often shipped to the US. Germany often imports toilet seats, toilet seat covers, toilets, metal poles, and leather notebooks from the country. Türkiye's other important manufactured goods trade partners include Spain, Hong Kong, and the UK.

Although China has gained dominance in the global manufacturing sector, Türkiye continues to be one of the world's most attractive low-labor-cost countries. Moreover, the availability of natural resources and skilled laborers, and supportive government initiatives aid in the continuous growth of this sector. Well-developed infrastructure, a customs union between the EU and Türkiye, and a well-established logistics network are added advantages for the country. Additionally, Türkiye has trade agreements with several other countries, which provides significant opportunities for its manufacturing sector.



Türkiye plans to invest heavily in the implementation of advanced industrial solutions over the next decade. It has rolled out the 2023 Industry and Technology Strategy with an aim to raise the manufacturing sector's GDP contribution by a significant margin. Medium-tech products comprise 36% of Türkiye's manufacturing exports, while high-tech products comprise 3%. By 2023, Türkiye intends to raise the former to 44% and the latter to over 6%. Further investments are required to modernize Türkiye's technical infrastructure, including fiber optics and fixed & mobile internet services. Science, technology, engineering, and math (STEM) abilities are being prioritized in the education sector as Türkiye progresses towards digitalization.

2.3.3.2 Growing Aerospace & Defense-related Equipment and Components Manufacturing

The Turkish defense industry is continuing its efforts to meet the country's needs and is involved in projects ranging from design to mass production of weapons, aircraft, and drones, among others. The country also focuses on innovation through research & development (R&D) and various ecosystem coordination studies to ensure financing and sustainability. Western embargoes on crucial equipment of drones, choppers, and military vehicles had led the country to focus on rapid localization of the industry. It aided Türkiye in manufacturing and developing its helicopters, warships, submarines, Unmanned Aerial Vehicles (UAV), and warplanes without relying on imported products. According to official data, the annual budget allocated for research and development (R&D) in the aerospace and defense industry reached US\$ 1.5 billion in 2022, up from US\$ 49 million in 2002. A Turkish company, which started as an R&D center, is now one of the few players with the know-how of "flow-forming" technology to produce mission-critical rocket body parts. Such development is strongly associated with a focus on the localization of the aerospace and defense industry.

Additionally, improvements in relationships with several nations have led to the lifting of several such embargoes and increasing exports of military and defense products. Per the Presidency of Defense Industries (SSB), Türkiye's defense industry surpassed its export target of 2022 and is aiming to reach US\$ 6 billion in 2023. Revenue from foreign defense exports rose by 42% between 2020 and 2021, with overseas contracts making up as much as 90% of revenue for some Turkish players. SSB also claims that ~2,000 firms operated within the industry in 2022 and has formed an ecosystem that completed more than 750 successful projects, reached a turnover of over US\$ 10 billion, and exported US\$ 4.4 billion worth of products. The Turkish defense industry's 2023 targets are highly diversified and range from land vehicles or missiles to aviation and space. Under the aviation and space category's manufacturing, the National Combat Aircraft (MMU), jet training and light attack aircraft, and unmanned fighter jets are notable. In June 2023, Kuwait signed a contract with Türkiye to buy US\$ 367 million worth of TB2 drones from a leading Turkish firm through direct negotiations between the two governments. Similarly, Pakistan bought several UAV in April 2023, while Kyrgyzstan purchased two different UAVs in January 2023. With a rising focus on exports of such vehicles, the manufacturing of components and equipment is expected to offer great growth opportunities for the industrial sector.







2.3.3.3 Increasing Additive Manufacturing

Türkiye is witnessing a strong increase in additive manufacturing demand, specifically from the aerospace, defense, automotive, electronic appliances, and medical sectors. The industry is still nascent and has innovative applications in various sectors, such as industrial equipment manufacturing and jewelry. Per ITA, Türkiye accounted for 1.3% of global additive manufacturing usage in 2021 and had a market size of US\$ 336 million. Additionally, approximately 500 3D printers, of which were polymer-based, were being used in the manufacturing sector. The country's industrial sector is increasingly improving its large-scale additive production capabilities by using



advanced 3D printers, advanced printing materials (including biomaterials), and Computer-Aided Design (CAD) & (Computer-Aided Manufacturing) CAM programs. Additional focus is being given to multilayer additive manufacturing, rapid prototyping and 3D printing technologies, robotics and mechatronics, and flexible manufacturing. In January 2022, Turkish Aerospace Industries (TAI) acquired an EBAM 300 Series electron beam additive manufacturing system from Sciaky, enabling it to print large-sized titanium aerostructures. The latter is a Phillips Service Industries, Inc. (PSI) subsidiary and a prominent metal 3D printing solutions supplier. The contract between TAI and Sciaky included collaboration to optimize TAI's use of the 3D printing machine and its technology. Additionally, owing to the rise in additive manufacturing, a growing number of startups in the country are focused on the same. Presently around 20 startups are plying their trade. Their businesses are based on the design and manufacture of 3D metal printers, 3D modeling and slicing software development, 3D printed medical device manufacturing, development and manufacture of 3D printed filaments and resins, among others. Such trends are expected to enhance the country's industrial sector while promoting the growth of finished goods exports.

2.3.4 Macroeconomic Factors Impacting the Sector

GOVERNMENT		<ul style="list-style-type: none"> Multiple real estate projects in Turkey are currently undergoing completion on government-owned land, following the public-private partnership model. Within this framework, a construction company, acting as the private entity, has to take up the responsibility for building and executing the projects under the supervision of government authorities. In turn, the government authorities ensure the adherence to quality standards, specifications, legal compliance, and financial security throughout the processes involved.
ECONOMICAL		<ul style="list-style-type: none"> Since Türkiye was severely damaged by earthquakes in February 2023, it experienced slow economic developments in the first quarter. In February 2023, industrial output decreased at the fastest rate since the start of the COVID-19 pandemic. Data from April 2023 indicates a small rise in the manufacturing Purchasing Managers' Index (PMI) while inflation fell. Despite this, consumer optimism decreased throughout the month as the nation elected a new president and parliament in May 2023.
SOCIAL		<ul style="list-style-type: none"> Türkiye has a rich and diverse cultural heritage, with influences from Europe, Asia, and the Middle East. The country's underlying social forces are shaped by its historical and cultural context and geopolitical location. Additionally, the country has a young population, with more than 45% of the population under 30. The Turkish population is well-educated and has an affinity for adopting technology. Such dynamics offer great opportunities for businesses in Türkiye.
TECHNOLOGICAL		<ul style="list-style-type: none"> Industry 4.0 is changing the structure of international trade. Manufacturing is one of the key industries in international trade. The manufacturing industry, which accounts for a notable export share in Türkiye, faces formidable obstacles in its efforts to manage and create contemporary products. Industry 4.0 renders production more inventive, which benefits global trade. The rationale is that the use of sophisticated robotic machinery and automation in the production process lower labor costs, increasing a nation's ability to compete on the global level.
ENVIRONMENTAL		<ul style="list-style-type: none"> As a member of the Customs Union with the EU, Türkiye is required to conform its legislation to EU <i>acquis</i> in the areas of competition, intellectual property, common trade policy, and free movement of products. Only industrial goods and agricultural products that have been processed are included in the Türkiye-EU Customs Union. A few judgments made by the association council apply to agricultural products. In addition to abolishing customs fees, the Customs Union mandates the removal of all discriminatory trade restrictions and/or practices that provide one party an unfair advantage over the other.
LEGAL		<ul style="list-style-type: none"> The Turkish mining sector has led to severe environmental impact with the production of dust and other airborne pollutants, which lower the air quality in nearby communities, resulting in air pollution. Mining operations also contaminate wastewater, particularly with metals such as copper, zinc, and lead. It is common for mining activities to necessitate the clearing of forests and other natural ecosystems to make room for infrastructure such as roads and mine pits.



3. GCC

3.1 Introduction to GCC's Industrial Sector

The Gulf Cooperation Council (GCC) industrial sector has a positive outlook despite looming challenges surrounding Gulf economies, such as a slowdown in global demand and inflationary pressures. GCC countries are taking several steps to promote industrial growth to diversify their industrial sector and move away from the oil & gas sector. The non-hydrocarbon sector of Bahrain is expected to exceed 4% growth in 2023, aided by a robust manufacturing sector. Oman is expected to continue its recovery and economic reinforcement over the medium term, supported by various structural reforms. The industrial sector of Qatar is driven by an upsurge in internal consumption, allowing the country to widen its fiscal balance surpluses. A recent bilateral free trade agreement (FTA) of the UAE with Asian countries supports the progress of its manufacturing sector.

3.1.1 Industrial Market, Size and Forecast (2018–2028)

The below bar graphs indicate how the industrial sector's contribution to each country's GDP is expected to grow over the forecast period. Promoting the industrial sector is given utmost importance by GCC nations, as it can allow them to move away from their dependence on oil & gas sector. This strategy would have a lower impact of price volatility of oil and gas globally. While the GCC nations are undertaking several steps to promote their industrial sector, certain fundamental challenges are expected to restrict growth. One is the dependence on expatriate labor, while the other significant challenge is the marginal weather. Focusing on mitigating the labor force challenges is required to be prioritized. Targeted educational programs at school and college levels can strongly aid in reducing dependence on expatriate labor. Improving logistical support and developing transportation infrastructure can also aid in mitigating the challenges associated with tackling marginal weather, while transporting finished goods or raw materials.

World Bank Definition: Industry (including construction) corresponds to ISIC divisions 05-43 and includes manufacturing (ISIC divisions 10-33). It comprises value added in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 4. Note: For VAB countries, gross value added at factor cost is used as the denominator.

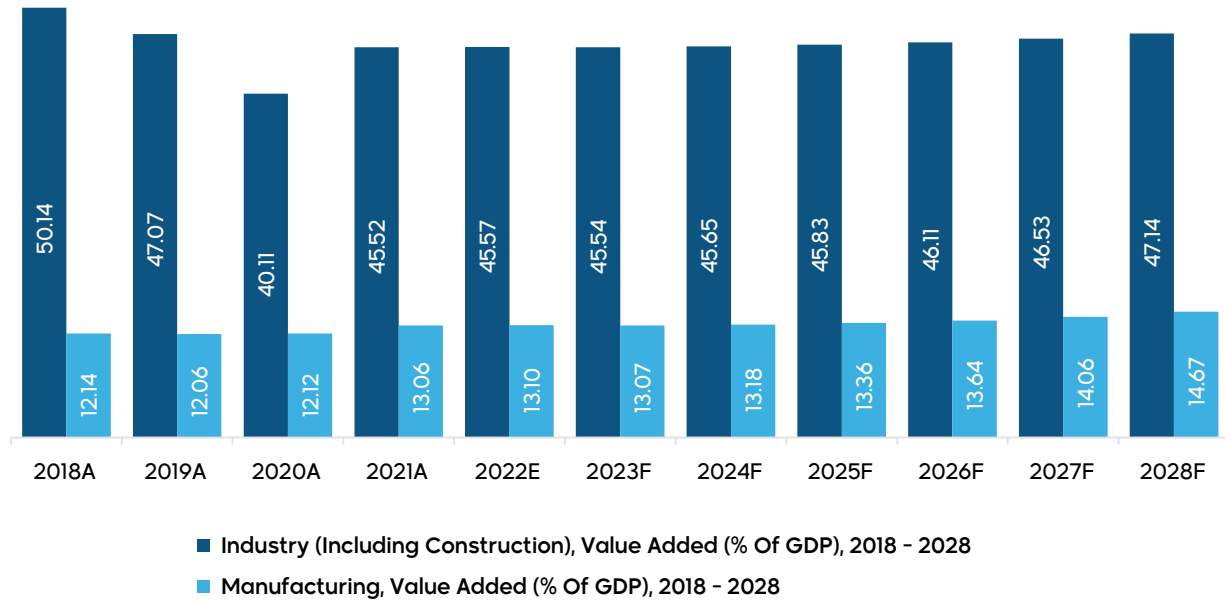
World Bank Definition: Manufacturing refers to industries belonging to ISIC divisions 15-37. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Note: For VAB countries, gross value added at factor cost is used as the denominator.

Note: The market numbers have been forecasted based on various parameters such as current GDP growth rate, share in GDP, inflation rate, sector growth, investment in sector, Government's vision, company's offerings, import & export, and others



3.1.1.1 Saudi Arabia

Figure 8. Saudi Arabia's Industrial Market



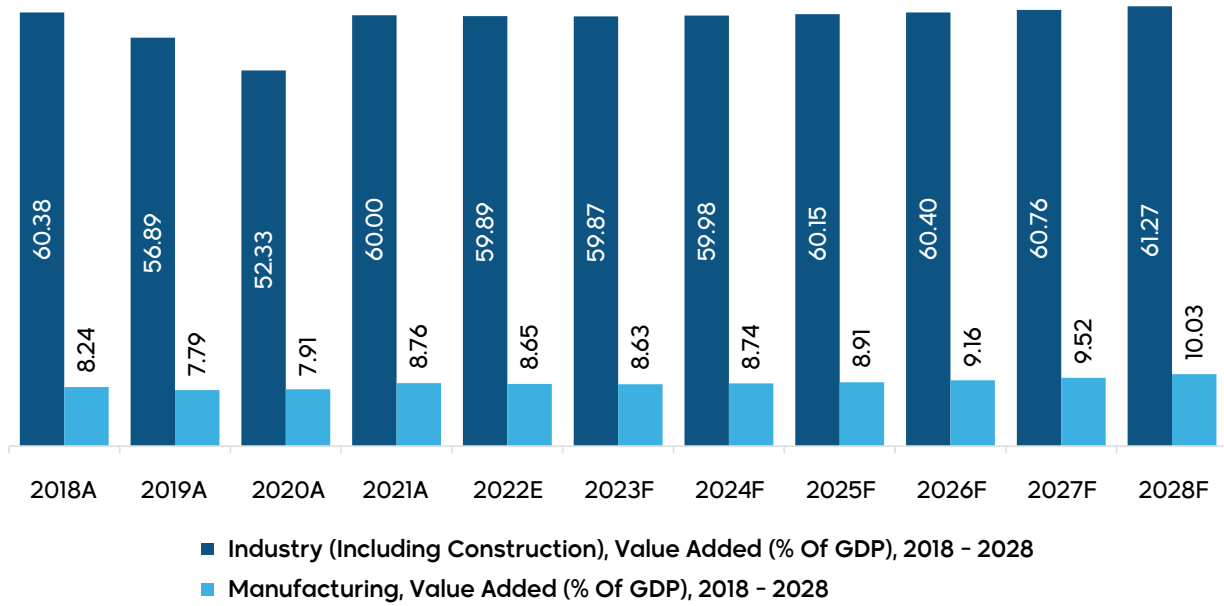
A- Actual, E-Estimated, F-Forecasted || Source: A - World Bank, E & F - Analyst Team

Due to the pandemic, the industrial sector's contribution to Saudi Arabia's GDP faced a slight dip in 2020. However, the manufacturing sector witnessed a slight growth, owing to the closure of several other sectors during the pandemic. During the forecast period, the manufacturing and industrial sectors are expected to continue increasing their share of GDP contribution, owing to the government's increased focus on increasing the industrial sector's contribution to GDP. National Industrial Strategy, launched in March 2022, aimed to increase the industrial sector's contribution to GDP to US\$ 240 billion, and industrial exports to US\$ 146 billion and above by 2030.



3.1.1.2 Qatar

Figure 9. Qatar's Industrial Market



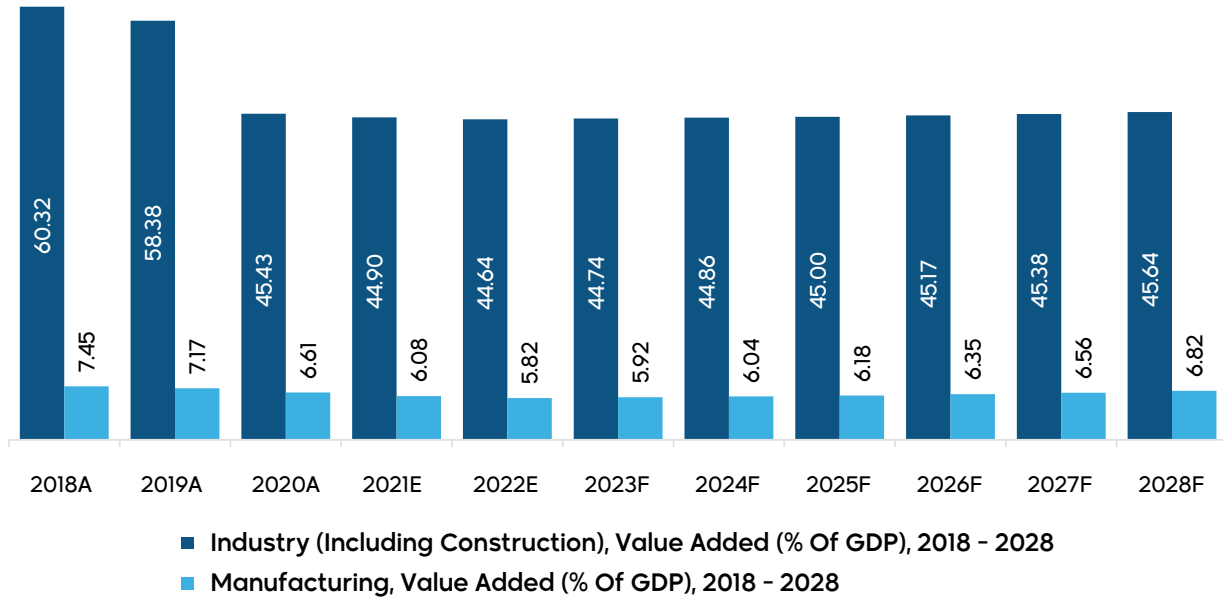
A- Actual, E-Estimated, F-Forecasted || Source: A - World Bank, E & F - Analyst Team

Qatar's manufacturing sector is a major driving force in Qatar's economic diversification, ably supported by Qatar National Vision 2030. The vision document primarily aims to increase the GDP contribution from non-oil sectors. Qatar National Manufacturing Strategy, a five yearly plan, focuses on creating sophisticated manufacturing value chains with the aim of transforming Qatar into a major hub for production. The industrial sector's contribution to Qatar's GDP declined in 2020 due to the disruptions caused by the pandemic. However, such decline was temporary, as evident from 2021's contribution. The rate is expected to be slightly low in 2022 and 2023, owing to external factors such as conflict in Europe and global economic downturn, which are expected to affect the country's export.



3.1.1.3 Kuwait

Figure 10. Kuwait's Industrial Market



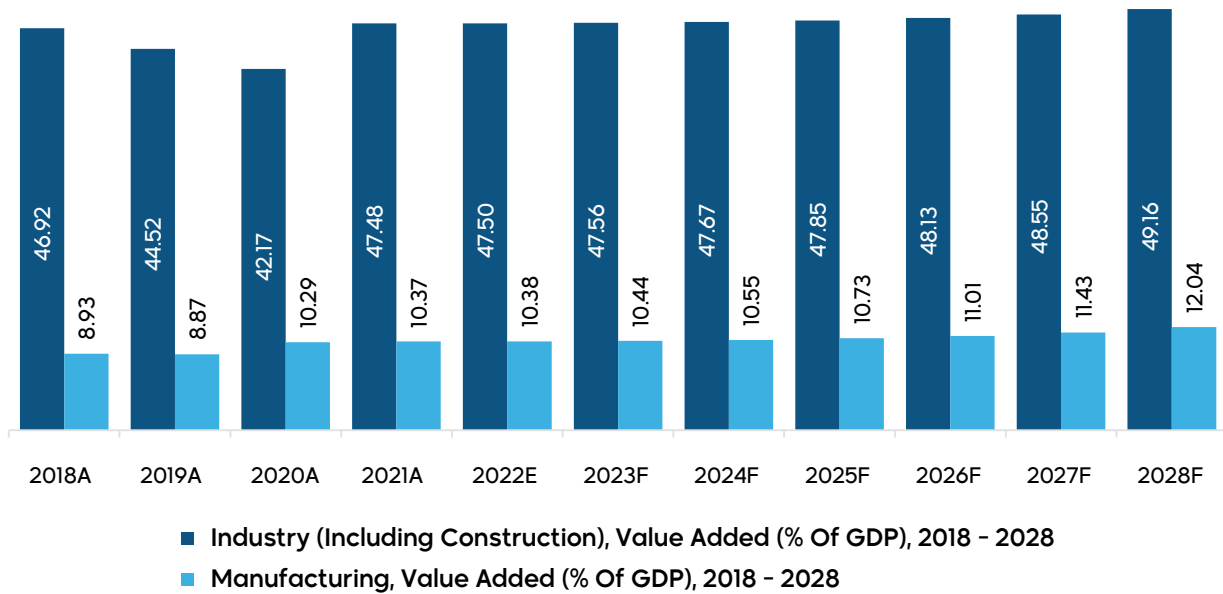
A- Actual, E-Estimated, F-Forecasted || Source: A - World Bank, E & F - Analyst Team

Kuwait's manufacturing sector's contribution to GDP has declined since 2019 and is expected to follow a similar trend until mid-2023. Such a trend can be attributed to fluctuating oil & gas prices leading to an economic downturn and lower domestic consumption in 2019. Post 2019 the pandemic affected the supply chain in 2020. 2021 and 2022 witnessed a global economic downturn and the Russia-Ukraine war, which affected the country's industrial sector. Post 2023, the country is expected to recover at a good pace, and the industrial sector's contribution to GDP is also expected to increase.



3.1.1.4 UAE

Figure 11. UAE's Industrial Market



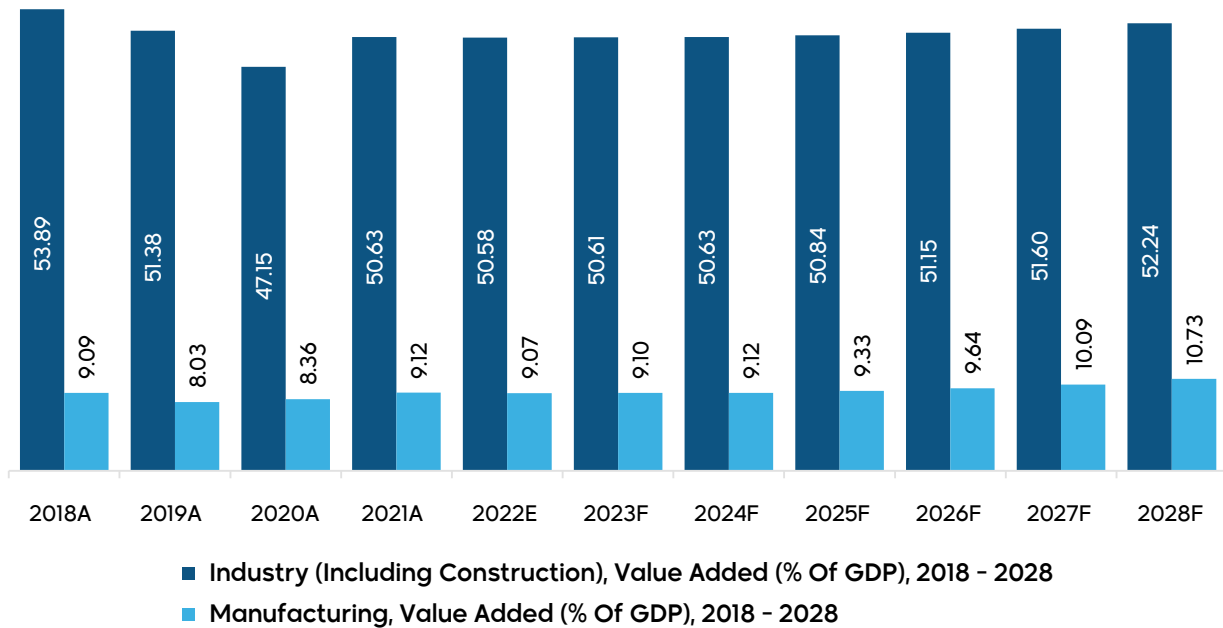
A- Actual, E-Estimated, F-Forecasted || Source: A - World Bank, E & F - Analyst Team

The rise in the manufacturing sector's GDP contribution in 2020 can be attributed to the decline in contributions from other major sectors. However, the values are expected to remain upward, owing to the nation's higher focus on economic diversification. It is evident from the industrial sector's contribution to GDP in 2021, which was even higher than in 2019. The launch of Operation 300bn in March 2021 was a step towards improving the country's industrial sector. It aims to support 13,500 industrial small and medium enterprises (SMEs) and substantially increase the industrial sector's contribution to UAE's GDP by 2031.



3.1.1.5 Oman

Figure 12. Oman's Industrial Market



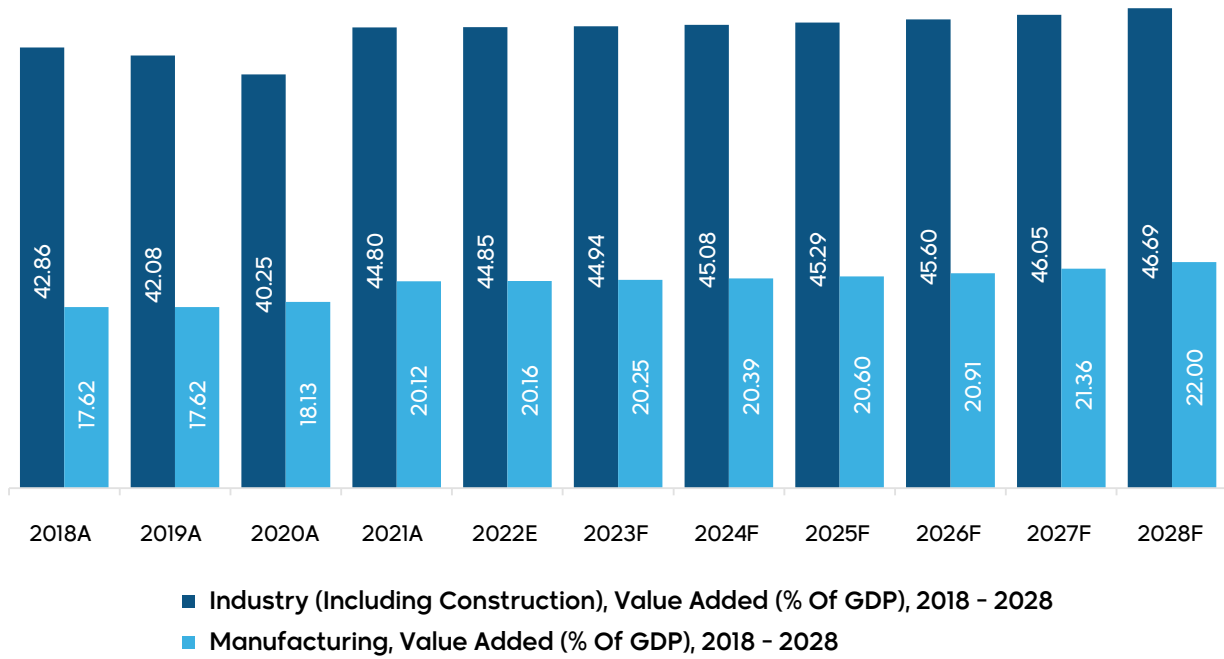
A- Actual, E-Estimated, F-Forecasted || Source: A - World Bank, E & F - Analyst Team

According to the Ministry of Commerce, Industry, and Investment Promotion (MoCIIP), the manufacturing sector's contribution to the Sultanate of Oman's GDP increased to US\$ 8.02 billion in 2021 from US\$ 6.32 billion in 2020. During the same period, according to the National Centre for Statistics and Information, there was a considerable increase in the volume of locally manufactured goods exported. Per MoCIIP, despite the COVID-19 pandemic and the back-to-back global economic downturn, Oman's industrial hubs continued to draw reassuring amounts of investment. The transformation of factories into smart factories is also expected to continue and is a strong driving factor of Oman's industrial segment's growth.



3.1.1.6 Bahrain

Figure 13. Bahrain's Industrial Market



A- Actual, E-Estimated, F-Forecasted || Source: A - World Bank, E & F - Analyst Team

Bahrain is home to an established and diverse manufacturing sector, with several established heavy industries and a growing cluster in light manufacturing (such as fast-moving consumer goods). Hence, the industrial sector quickly bounced back in 2021 from the pandemic-led disruptions in 2020. The manufacturing sector contributed approximately 14.1% of Bahrain's real GDP in 2021, making it the second largest non-oil sector following financial services. The manufacturing sector is the third largest employer in the labor market, employing 11% of the total workforce in the private sector. Under the auspices of Economic Vision 2030, the government aims to encourage local manufacturing and further support the manufacturing industry while sustaining diversification, innovation, and high-tech development.

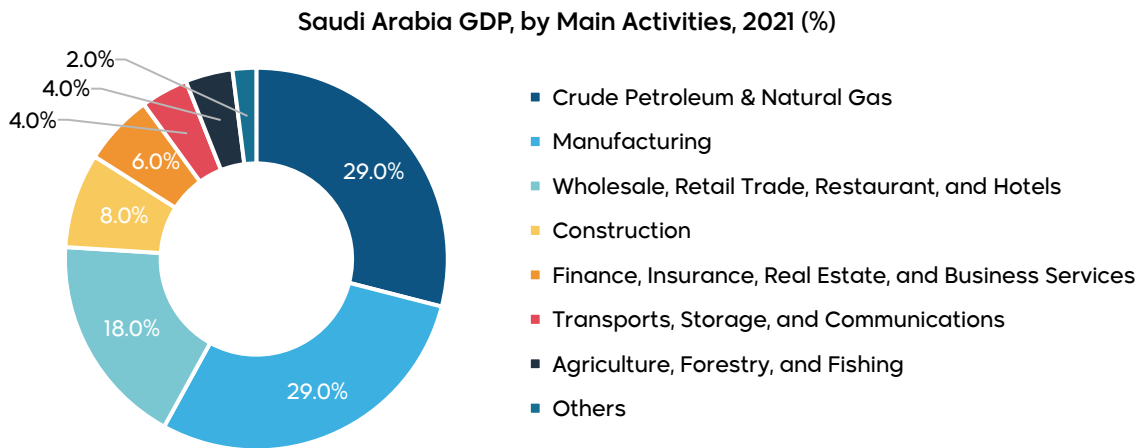


3.2 Industrial Sector in Details

3.2.1 Type of Industries

The industrial landscape in GCC is quite dynamic and is changing rapidly. Most of the countries in this region are focusing on foreign investments to develop the manufacturing, construction, and mining sectors. The pie charts below showcase various industries' contributions to each country's GDP. As depicted, the industrial sector is yet to acquire a majority stake in most GCC countries.

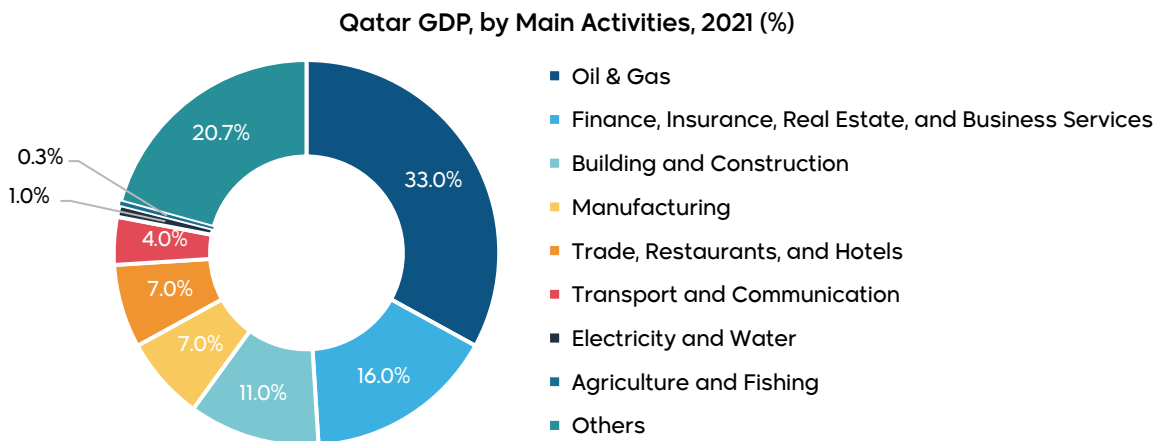
Figure 14. GDP, by Main Activities – Saudi Arabia, 2021



Source: Gulf Investment Corporation

In 2021, manufacturing and crude petroleum & natural gas sectors were equivalent contributors to the Kingdom's economy. Construction also had 8% share, and when combined with manufacturing, they accounted for 37% of Saudi Arabia's GDP, which was 32% in 2020. Such a large share showcases the country's pioneering efforts toward economic diversification. Additionally, such wide diversification of industries showcase the government's rising focus on promoting economic diversification.

Figure 15. GDP, by Main Activities – Qatar, 2021

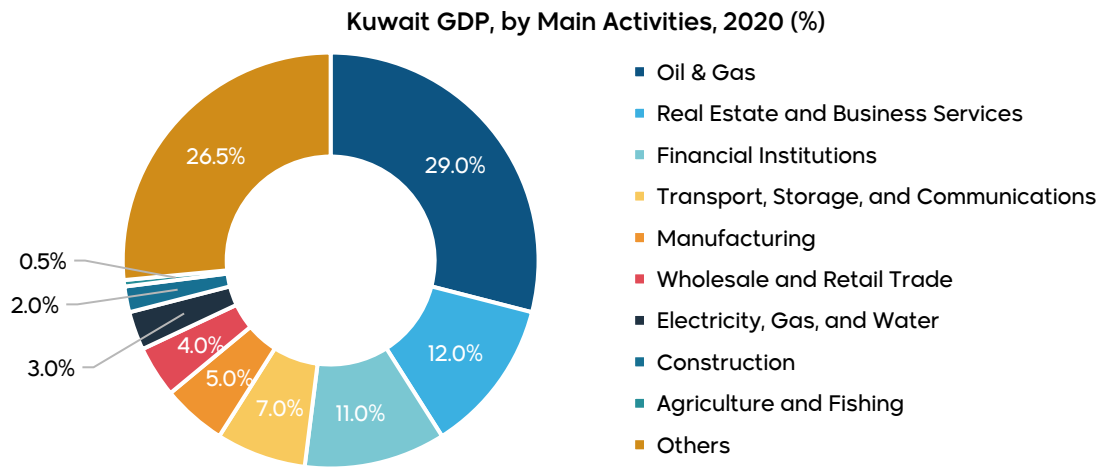


Source: Gulf Investment Corporation

In 2021, building and construction contributed 11% to Qatar's GDP, while manufacturing contributed 7%, compared to 10% and 6% in 2020, respectively. Growth can be attributed to the increased focus on hosting the FIFA 2022 Men's Football World Cup, which significantly boosted the construction industry and the domestic consumption of goods. Qatar's government is focusing on developing local and international talent pools to promote the manufacturing sector's growth organically by localizing key skills and competencies.



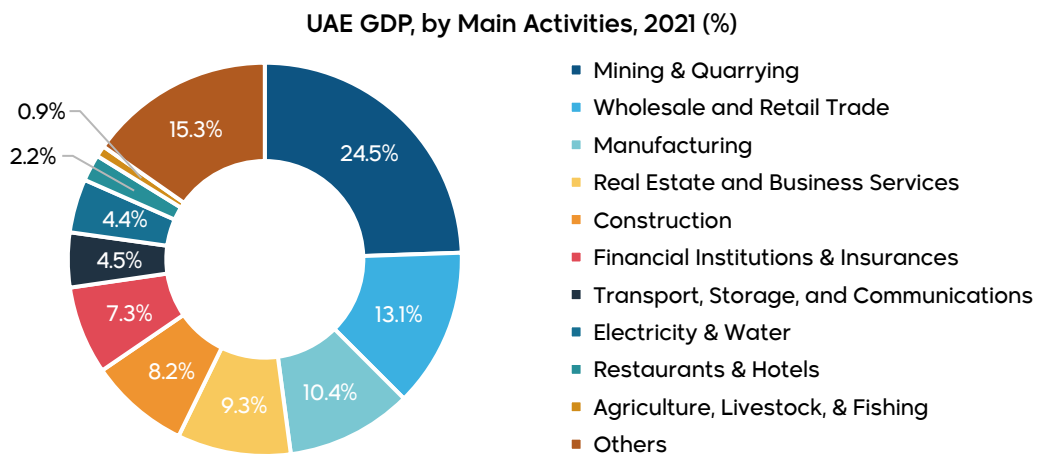
Figure 16. GDP, by Main Activities – Kuwait, 2020



Source: Gulf Investment Corporation; Note: 2021's statistics are unavailable for Kuwait

Manufacturing and construction combined contributed only 7% to Kuwait's GDP in 2020, while oil & gas was the largest contributor. Oil & gas had a 57% share in 2017, compared to 29% in 2020. While the pandemic did cause some decline in oil & gas's contribution, the economic diversification efforts promoted higher contribution from other sectors, while lowering oil & gas's contribution. The government is increasing the land available for industrial activities to promote and support the industrial sector's momentum. The government's set of intended mega-projects is designed to stimulate cross-sector growth, with a strong focus on manufacturing and logistics, including implementing several dedicated industrial and economic zones.

Figure 17. GDP, by Main Activities – UAE, 2021

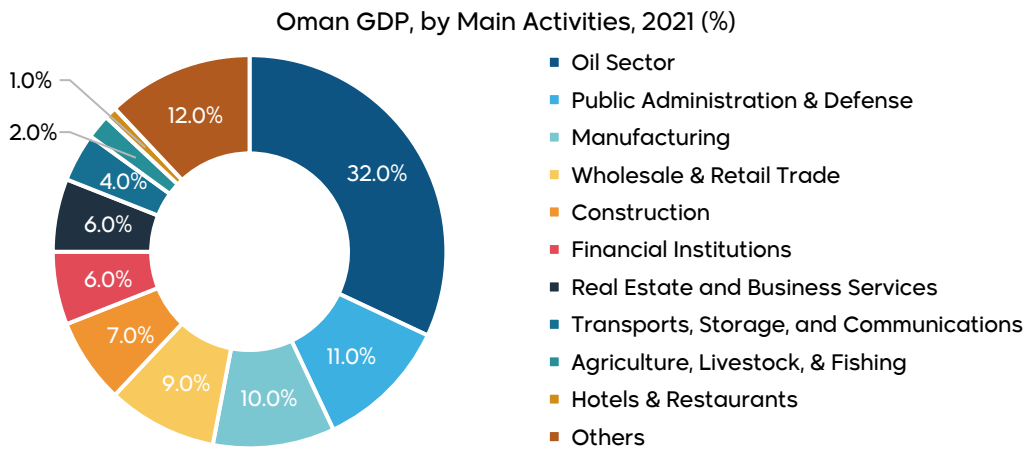


Source: Gulf Investment Corporation

UAE is one of the most diversified nations in the GCC, as evident from the above pie chart. The industrial sector is a large contributor to the nation's GDP, as seen from manufacturing's 10.4% share and construction's 8.2% share. The manufacturing sector's GDP contribution was valued at US\$ 43 billion, while construction was US\$ 34 billion at current prices (2021). The country has set up several free zones and Special Economic Zones in a bid to attract investments. Such zones offer various advantages and special rebates for priority industries such as manufacturing and construction. Considering all such factors, the manufacturing, construction, and mining sectors are expected to witness good growth rates in the country.



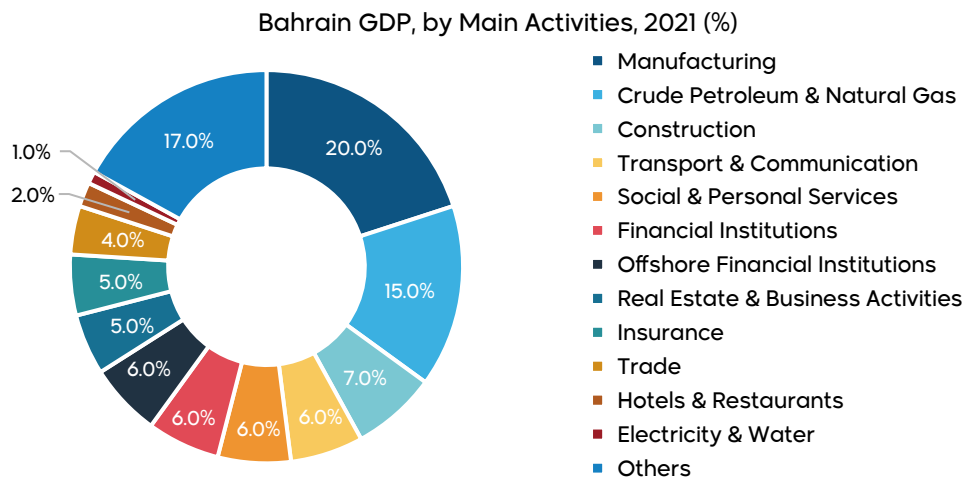
Figure 18. GDP, by Main Activities - Oman, 2021



Source: Gulf Investment Corporation

The oil sector was the largest contributor to Oman's economy in 2021, and the government is putting its best efforts into reducing the same while increasing the contribution from other sectors and promoting industrial diversification. Vision 2040 document of Oman strongly focuses on economic diversification, as the country plans to ensure that any downturn in the oil sector has minimal effect on the country's GDP. Oman's manufacturing sector is embracing Industry 4.0 and aiming to develop opportunities by utilizing the country's natural resources. Target industries include petrochemicals, construction, marble, gypsum, machinery, cables, electrical equipment & connectors, shipbuilding, cement & other construction materials, minerals, and food & beverage.

Figure 19. GDP, by Main Activities - Bahrain, 2021



Source: Gulf Investment Corporation

Among all GCC nations, Bahrain's industrial sector had one of the largest contributions % to the GDP in 2021. Bahrain has an established and varied manufacturing sector, including heavy industries and ever-growing light manufacturing (such as food and fast-moving consumer goods). The manufacturing sector is the third largest employer in the labor market, employing 11% of the total workforce in the private sector. Leading manufacturing activities in Bahrain include petrochemical production, food processing, and fabrication activities (products that are made on-site such as bakeries and custom tailoring activities).



3.2.2 Economic Contribution

3.2.2.1 Government Initiatives and Programs

Industrial reforms in Saudi Arabia are guided by the strategic framework document of Vision 2030. The country is focusing on boosting its education sector to ensure a steady pipeline of human resources per market needs. Additionally, the government of Saudi Arabia focuses on supporting small and medium enterprises (SMEs), which can significantly contribute to exports and create job opportunities. Owing to the realization of the necessity of expatriates' aid to achieve the desired economic growth, the Saudi Arabian government is trying to improve the quality of life and working conditions for non-Saudis. Moreover, the country plans to extend the expatriates' ability to possess real estate in certain areas, permit the establishment of private schools in such areas, and incorporate an efficient and prompt process for issuing visas and residence permits.

Per the World Bank, Qatar reported a 1.5% rise in its GDP at the end of 2021, in contrast to its contraction of 2.5% in 2020. The FIFA Men's World Cup organized in November–December 2022 and the rise in hydrocarbon prices boosted the near-term growth of the GDP in 2021. The government's proactive responses to the pandemic aided in minimizing the negative impacts on the economy and foreign direct investments (FDI). Under its National Vision 2030, Qatar is taking steps to boost FDIs by allowing up to 100% ownership for foreign firms in most economic sectors. Moreover, a new Public–Private Partnership (PPP) Law was introduced in May 2020 to promote economic diversification and create greater opportunities in the education and healthcare sectors, and environmental technology businesses.

The Kuwaiti government has been focusing on establishing a clear strategy for industrial development. As fluctuating oil prices have led to inconsistent GDP growth, the government is prioritizing industrial diversification. The government has launched several new economic reform policies aimed at building an economy based on high-productivity finance and service industries, enlarging the economic base and diversifying state income sources. The design and gradual adoption of 164 programs under the Kuwait Vision 2035 is expected to convert the country into a financial and trade hub, attracting foreign investors. The vision aims to increase the FDIs by three times, utilizing public–private partnerships, to invest US\$ 100 billion in total in infrastructure, along with establishing Kuwait as a global petrochemical hub.

The UAE is one of the most developed countries in the GCC and is a regional headquarter for several multinational companies. A new initiative called the Industrialist Program was launched in March 2023 for building local capacities and increasing Emiratisation in the industrial sector. The Ministry of Human Resources and Emiratisation (MoHRE), the Ministry of Industry and Advanced Technology (MoIAT), and the Emirati Talent Competitiveness Council (Nafis) are the authorities behind the program, which mainly aims to upskill national cadres and allow them to enter the industrial sector. The MoIAT also unveiled the "Make it in the Emirates" program in March 2021 to attract entrepreneurs, industrialists, innovators, and investors. The UAE government also emphasizes developments in food production and the agriculture sector. In March 2023, the Ministry of Climate Change and Environment (MOCCA) initiated the first session of the National Dialogue for Food Security, aimed at enabling productive discussions among stakeholders from the private sector and the government to enhance food security in the UAE.

In Oman, new tax incentives were announced in March 2021 to diversify the national economy and negate the effects of the economic slowdown, primarily, caused by the COVID-19 pandemic. Companies that began operating between January 2021 and December 2022, operating under the sectors aimed at economic diversification, were granted income tax exemption for 5 years from the date of registration. They also received incentives related to the payment of income tax and indefinite carry-forward for declared tax losses. Income tax rates for SMEs were lowered from 15% in 2020 to 12% in 2021. Further, in March 2022, the Muscat Stock Exchange (MSE) abolished restrictions on foreign ownership of listed companies, creating opportunities for more than 100 local firms. The Sultanate of Oman also plans to identify ~35 state-owned companies over the next 5 years to attract more investments. The move is expected to enhance market liquidity, attract investments, and boost valuations. It is also anticipated to provide easier access to companies seeking capital funding.

Bahrain is deemed as one of the most open nations in the Gulf region, as it has several free trade agreements (FTAs), exceptional infrastructure, and robust financial institutions. Moreover, the country is geographically bestowed to provide investors access to regional and international markets. 100% foreign ownership of a business or branch office is permitted in the country without the need for a local partner. Bahrain doesn't levy any tax on corporate income, capital gains, wealth, and personal income. In 2021, a global network of expatriates ranked Bahrain as the world's 12th most favorable destination for expatriates, with an improvement in rank from 23 in 2020. Although Bahrain's economy is dominated by state-owned enterprises (SOE), the government is promoting the private sector to play a more vital role in the advancement of the national economy.

In February 2023, a multifaith center of worship involving a mosque, a synagogue, and a church was inaugurated in the capital of UAE to demonstrate unity between Islam, Christianity, and Judaism. The construction of the building, along with the implementation of the Abraham Accords Declaration (a series of joint normalization statements between Israel, the UAE, and Bahrain), is considered a step toward the region's effort to reduce political tensions and improve investment opportunities from prospective foreign investors.

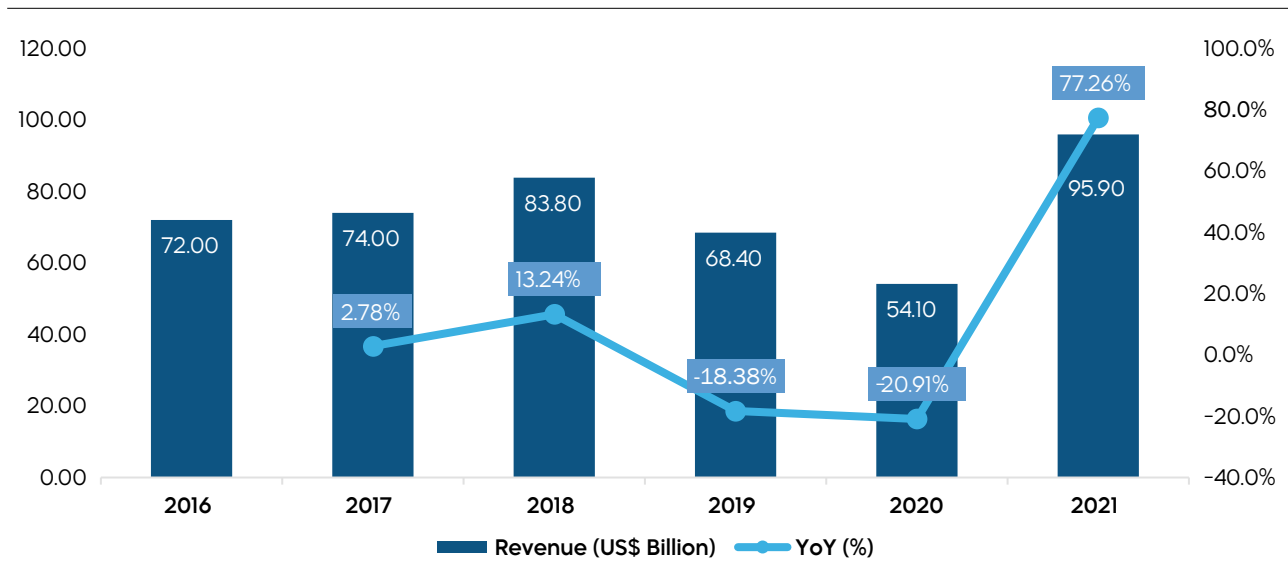


3.2.3 Industrial Production

3.2.3.1 Manufacturing

Different GCC countries have expertise in varied verticals. Governments of most of these countries are prompting industrial diversification. After oil & gas, the chemicals & petrochemicals industry is the second-largest manufacturing segment in the region. It directly and indirectly impacts several other economic sectors and significantly contributes to overall regional GDP and trade. Hence, the performance of the chemicals & petrochemicals industry substantially impacts the economic development of the GCC, and it is critical for the success of the region's economic diversification drive.

Figure 20. Chemical & Petrochemical Industry Revenue (US\$ Billion)



Source: Gulf Petrochemicals and Chemicals Association

The chemical & petrochemical industry is downstream to the oil & gas industry and is a significant contributor to the GCC nations' GDP. The above bar graph depicts the progress of the industry in the region. Most of the GCC nations are undertaking steps to increase the contribution to GDP from this sector. The Bahraini government has made the development of its petrochemicals industry as a top priority, as it has the potential to become a leading alternative to the exports generated from the oil & gas sector. Apart from chemicals and petrochemicals manufacturing, several other industries are gaining prominence in the region. Automotive sector is under the focus of the government of Qatar. The automotive sector in the country has strongly recovered from the adverse effects of the COVID-19 pandemic, and it has been posting high output rates. ~250% growth was recorded in two-wheeler sales in 2021, fueled by an upsurge in online food delivery services.

3.2.3.2 Construction

Several reforms and an increasing focus on infrastructure development have been driving the construction sector in the GCC. Most countries in the region focus on expanding their urban capacities by promoting the initiation and completion of different dwelling projects.



Additionally, the growing trend of smart cities is expanding the horizon for advanced buildings and transportation.

Saudi Arabia accounts for ~60% of the total healthcare expenditure of GCC countries. The country is actively pursuing privatization initiatives for its healthcare system, thus offering notable opportunities for foreign investors.

Like Saudi Arabia, the Qatari leadership also prioritizes the healthcare sector. The construction of new healthcare facilities—such as the Cedars Sinai facility in 2022 and the Northwestern Medicine facility in 2020—drive FDIs in this sector. After Qatar was selected as the host of the 2022 FIFA Men's World Cup, the construction industry became the largest non-minerals industry in Qatar, accounting for ~15% of its national GDP. The country quickly and steadily built a network of new hotels for guests and developed a state-of-the-art transportation system/infrastructure to meet tourists' and expatriates' needs. In May 2019, Qatar Rail started its first metro line and added 2 additional lines to the network, encompassing 37 stations in total. The COVID-19 pandemic led to materials shortages and supply chain disruptions, delaying several projects, including stadiums, hotels, and transportation infrastructure. However, all the projects were efficiently completed before the World Cup.

UAE's construction industry's value is expected to grow by 3.7–4.7% over the next five years. The focus on developing the industrial, transportation, and energy infrastructure is expected to drive the country's construction sector. The UAE government plans to implement a series of projects to accelerate economic development and transform the country into a comprehensive hub for all sectors. It aims to attract US\$ 149.8 billion in FDIs over the next 9 years.

In Kuwait, an upsurge in demand for public housing is projected to drive long-term residential construction growth. The Public Authority for Housing and Welfare of the Kuwaiti government plans to build 250,000 housing units by implementing a public-private partnership model in the next 15 years. This plan includes 11,000 units under the Sabah Al-Ahmad project and is expected to house up to 100,000 people upon completion. The South Al-Mutlaa City project will have the capacity to house 28,000 families upon completion.

In Bahrain, government-funded, large-scale infrastructure projects primarily drive the growth of the construction sector, and also have a positive spillover effect on the upstream and downstream industries. The modernization & expansion project of Bahrain Petroleum Company (BAPCO) worth US\$ 7 billion, the King Hamad Causeway transportation infrastructure project worth US\$ 3.5 billion, and housing and resort projects worth US\$ 2.2 billion are a few of the examples of such projects.

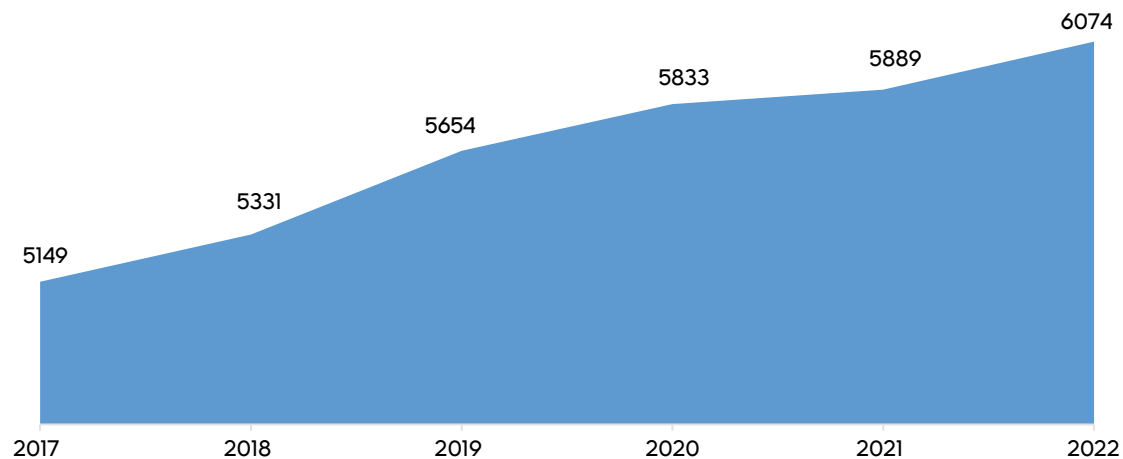
3.2.3.3 Mining

Mining sectors do not contribute large shares to GCC economies, but the scenario is evolving drastically. The push for industrial diversification in these countries and the adoption of renewable energy across the world are the key factors propelling mining activities in GCC. The mineral-intensive energy transition has led to a substantial surge in demand for numerous minerals and metals, which are used in the manufacturing of wind turbines, solar panels, advanced batteries, and electric vehicles, among other components. Aluminum and copper are two critical metals, which are abundantly available in GCC countries. In a bid to increase the mining sector's contribution to GDP and decrease reliance on imported minerals, there is greater interest in boosting mining activities. Bauxite, from which aluminum is derived, is abundantly present in the region and is being



increasingly mined. The rise in mining activities is a step towards promoting economic diversification and hence is expected to receive plenty of government support in the coming years. The below graph showcases the rising amount of Aluminum being mined in the region.

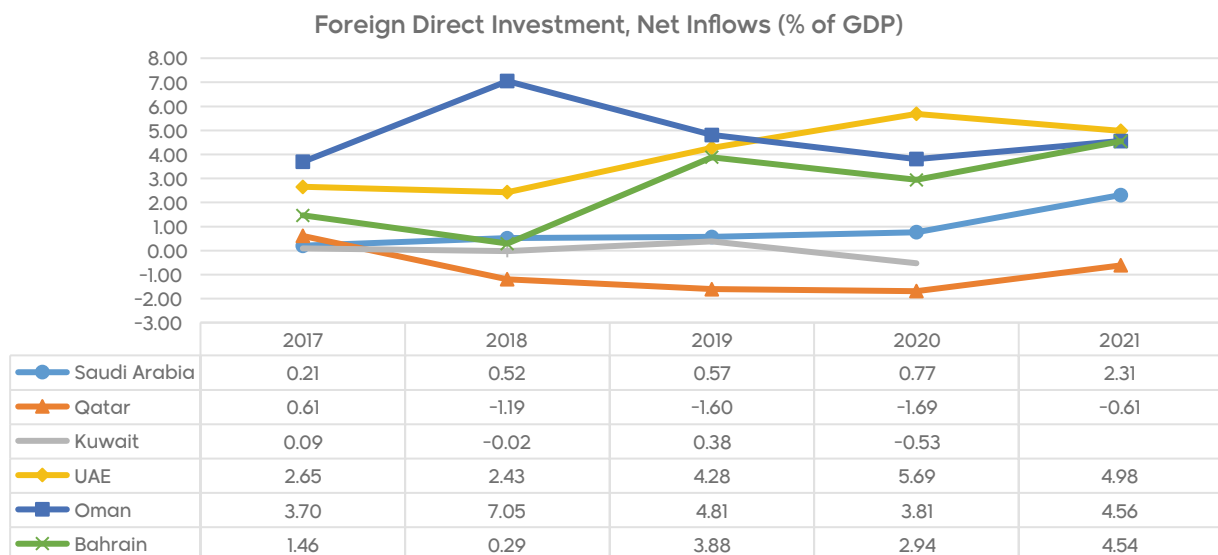
Figure 21. Aluminum Production in GCC (Thousand MT)



Source: International Aluminium Institute

3.2.4 Capital Investments and Major Investors

Figure 22. Foreign Direct Investment, Net Inflows (% of GDP)



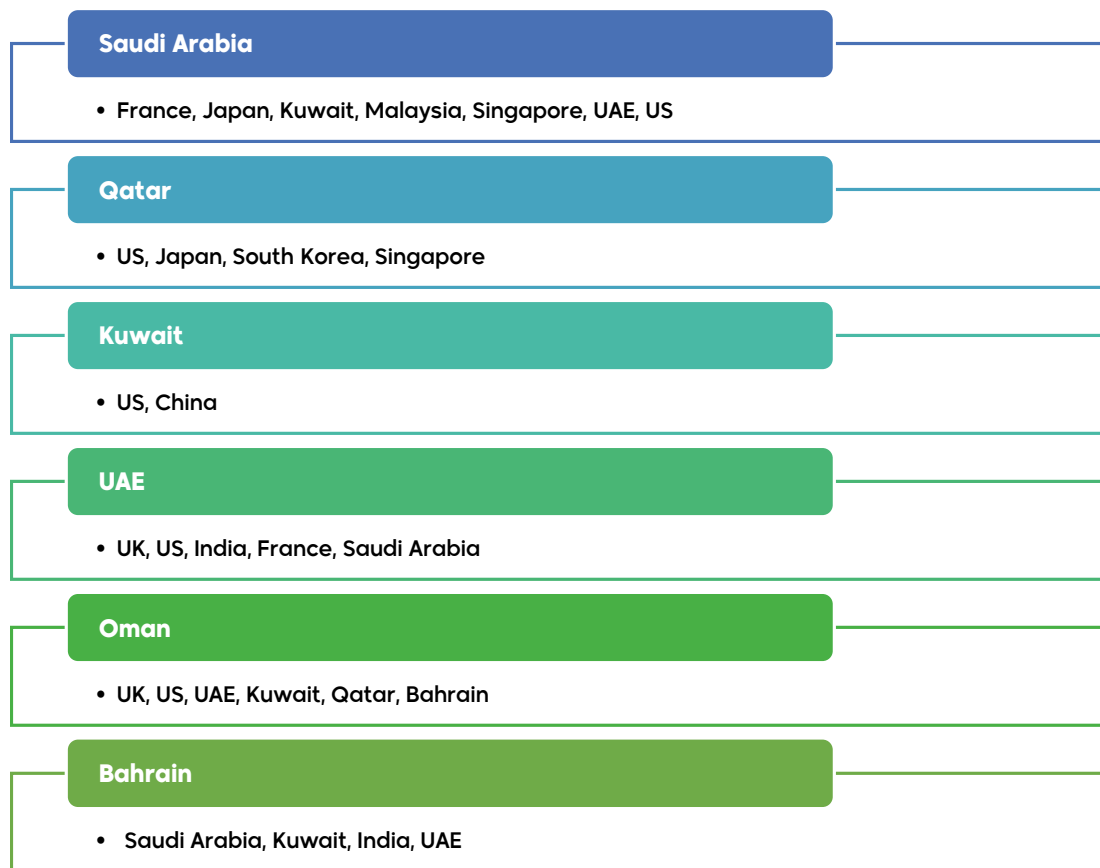
Source: World Bank, UNCTAD, and ITA

World Bank Definition: Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors, and is divided by GDP.



The above line graph depicts the amount of FDI attracted by each GCC nation from 2017 to 2021. As is evident, UAE, Oman, Bahrain, and Saudi Arabia have consistently attracted large amounts of FDI, primarily due to favorable policies. The other countries in the GCC are undertaking several steps to boost FDI, especially in the industrial sector, for two major reasons. Firstly, it can strongly boost the country's economy and promote employment and skill development. Secondly, it can aid the nation's diversification efforts while promoting the industrial sector and achieving the goals stated in Vision documents.

Figure 23. Biggest Investors, By Country, 2021



Source: World Bank, UNCTAD, and ITA

The above image depicts the largest investors for each GCC nation in 2021. As apparent, the US and European nations are some of the largest investors in GCC nations. The above image also shows trade between GCC nations, specifically from financially strong nations such as Saudi Arabia and UAE. All the GCC nations are focusing on economic diversification, and the same is clearly stated in their Vision documents. As suggested by the above data, most GCC nations have been successful in attracting higher amounts of FDI in 2021 when compared to 2017. This suggests that the governments are taking positive steps in the right direction to promote industrial growth.

FDI inflow in the GCC hit US\$ 44 billion in 2021, overcoming the draught of investments experienced in 2020 amid the COVID-19 pandemic. The UAE attracted the highest amount of FDIs with US\$ 20.6 billion, while Saudi Arabia, Oman, and Bahrain drew US\$ 19.8 billion, US\$ 3.6 billion, and US\$ 1.7 billion,

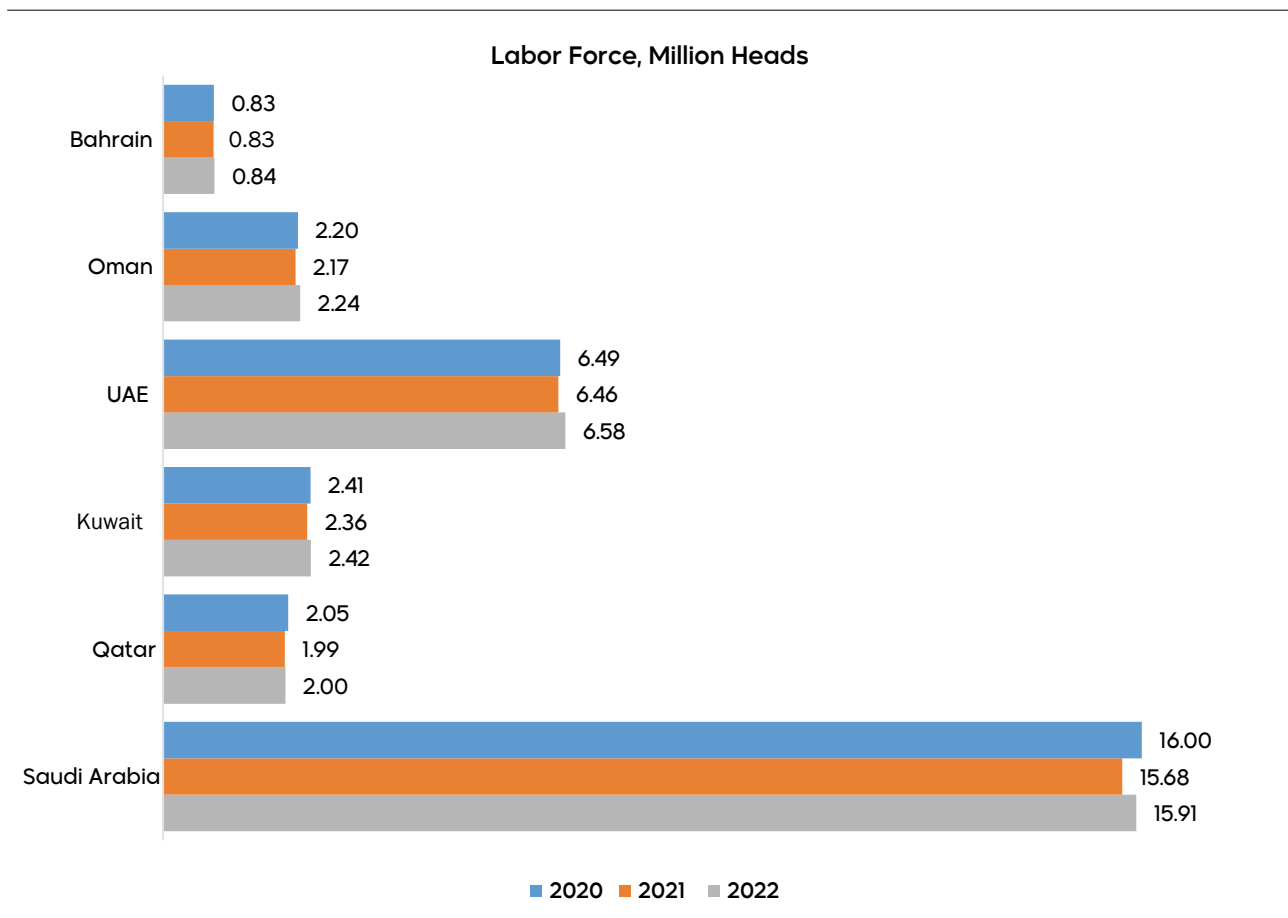


respectively. Challenges such as conflicts in Europe, higher interest rates in major economies, and negative sentiment in financial markets are expected to continue to limit FDI inflows in GCC in 2023 to some extent. Additionally, while tariffs are relatively low, several non-tariff barriers to trade exist and pose substantial constraints on foreign ownership of businesses and real estate in a few of the countries in this region.

3.2.5 Industrial Labor and Regulatory Outlook

Despite global disruptions, GCC countries have continued to receive investments, leading to a buoyant labor market, creating new jobs across multiple sectors and geographies in the region. The COVID-19 pandemic had caused a significant reduction in the number of employed persons in the region since several expatriates decided to return to their homelands. They mostly rejoined the worksites post Q4 of 2021 after the reopening of borders, which led to a positive recovery of the labor market in 2022. According to estimates by several private recruitment firms, salaries across GCC nations are expected to rise by an average of ~5% in 2023. Saudi Arabia and the UAE are in a strong financial position and are facing relatively low inflationary pressure. The economic growth of both countries is further supported by higher hydrocarbon prices. Hence, the labor market experiences an upswing in both these countries.

Figure 24. Labor Force, GCC Countries (Million Heads)



Source: World Bank



As depicted by the image, the labor force in all GCC nations witnessed a slight decline in 2021, owing to the disruptions from the pandemic. Several expatriate laborers, who had returned to their home nations, were unable or unwilling to return, leading to a decline in the workforce. Saudi Arabia will continue to possess the largest labor force strength in 2023, followed by UAE.

3.2.6 Technological Advancements

Industries in GCC countries are increasingly deploying innovative technologies to build new business models and deliver modern solutions. It is imperative for these economies to adopt such technologies to overcome disruptions caused by the COVID-19 pandemic and achieve the long-term ambitions of diversifying away from oil & gas. Lockdowns and social distancing measures led to increased dependence on digital technologies for communicating remotely with colleagues via video conferencing, practicing telemedicine for remote diagnostics, conducting digital banking for online payments and money transfers, and performing e-commerce operations, among others. Moreover, the rising number of data centers and telecom operators striving to introduce new 5G networks help address challenges associated with technology infrastructure.

Qatar Vision 2030 emphasizes on the modernization of information and communication technology (ICT) as it is imperative for transforming the industrial sector and attracting international investors. Similarly, the Economic Diversification Plan of Kuwait Vision 2035 aims to reform and digitalize its economy, transforming the country into a smart commercial hub. As per the ITA, the UAE prioritizes artificial intelligence (AI), which is forecasted to contribute 14% of the national GDP by 2030 (US\$ 96 billion). The contribution of AI to the GDP of the UAE is projected to rise by 33.5% during 2018–2030. UAE AI Strategy 2031, part of the UAE government's Centennial 2071 plans, aims to improve operational efficiencies in industries such as transportation, space, renewable energy, technology, education, and environment.

Oman is developing its ICT infrastructure to trim the digital divide through its National Broadband Strategy. The strategy envisions delivering broadband services to more than 90% of the urban population by 2030, achieving an overall penetration rate of 75%. The Ministry of Communications and Information Technology (MCIT) governs the ICT sector in Saudi Arabia. It is focused on establishing a robust and cutting-edge digital architecture to support the goals of Vision 2030. Saudi Arabia was among the first GCC countries to launch 5G networks in 2019, and 60 of 118 governorates had 5G connectivity at the end of the second quarter of 2022. Saudi Arabia plans to provide Wi-Fi 6 and 3GPP 5G NRU standard-based wireless technology support for its wireless ecosystem.



3.2.7 Upcoming Industrial Projects

March 2023

In March 2023, the Ministry of Industry and Mineral Resources of Saudi Arabia announced that the industrial sector in Saudi Arabia attracted foreign and joint investments worth more than US\$ 144 billion. Vision 2030 is guiding the country's growth path with several projects that are in progress. King Salman Park in Riyadh and Qiddiya Project are a few of the ongoing largescale construction projects in the country. In February 2023, Saudi Authority for Industrial Cities and Technology Zones (Modon) announced that a total of 1,171 food factories were operational in the country at the end of 2022. Modon signed an agreement with a leading food company to allocate new land in Dammam Second Industrial City. These developments are in accordance with the goals of the National Industry Strategy and the initiatives of the National Industrial Development and Logistics Program (NIDL).

March 2023

Qatar announced 135 new FDI projects in 2022, from 82 projects in the previous year. In November 2022, a UAE-based manufacturer of disposable food packaging products launched its own manufacturing plant in Doha's new industrial area. Further, an ammonia-7 project (worth ~US\$ 1 billion) located in Mesaieed Industrial City (MIC) with a capacity of 3,500 metric tons/day is expected to become the world's largest blue ammonia facility upon its completion due in the first quarter of 2026. Kuwait is developing an industrial city for the production of chemicals and other products by investing US\$ 320 million at Al- Shadadiya; the project would include more than 1,000 factories. As of March 2023, ~32% of the city's projects were completed and are expected to contain three main industries covering chemicals, food, and various light products.

March 2023

In March 2023, the Ministry of Energy and Minerals of Oman signed a mining concession agreement with a British company to extract nickel and its derivatives. This company is the first international company to invest in Oman's mining sector in the last 25 years. The first three years of the exploration and evaluation phases are estimated to require a total investment of US\$ 25-30 million.

January 2023

In January 2023, an investment firm and a US-based technology-focused manufacturer signed an investment deal to develop a Good Manufacturing Practice (GMP) certified facility for the manufacturing of essential raw materials for advanced biologics. Further, in March 2023, a UAE-based conglomerate opened four new factories to produce value-added food products. Three of the factories are based in the Dubai Investment Park facility and would process value-added meat, poultry, and seafood items. The fourth factory is located in Jebel Ali Free Zone (JAFZA) and will process herbs and spices. As of April 2023, 3 new food processing plants, with a total value of ~US\$ 232 million, were under construction in Abu Dhabi's Khalifa Economic Zones (KEZAD).

November 2022

In November 2022, a leading US brand signed a project deal worth US\$ 4 billion with a leading Saudi Arabian real estate developer to build a complex in the outskirts of Muscat. The project would include several villas, hotels, stores, and a golf course. As of March 2023, the project is ongoing at good pace, and aid of expat laborers, from Pakistan, India, and Bangladesh, is being taken for the same.

October 2022

In October 2022, Bahrain's Economic Development Board (EDB) announced that direct investment during the first three quarters of 2022 amounted to US\$ 921 million. ~30% of the investments, amounting to US\$ 290 million, were made by 25 manufacturing and logistics companies, which are expected to offer 1,200 job opportunities in the next 3 years. In March 2023, EDB stated that a leading Indian insulation materials manufacturer and a wristwatch manufacturer are investing US\$ 45 million to launch their operations in Bahrain.



3.3 Industry Dynamics

3.3.1 Driver

3.3.1.1 Burgeoning Construction Sector with Rapidly Growing Population

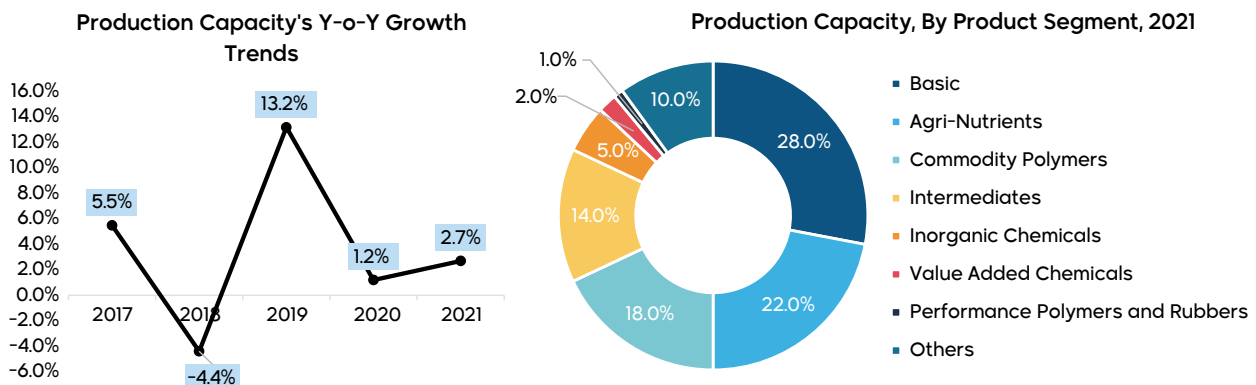
The GCC is renowned for its ambitious real-estate projects that meet the demand for both commercial space and homes. The region's rapidly expanding population, and subsequently increasing demand for housing and other infrastructure projects are among the factors boosting the construction sector. Saudi Arabia alone has planned, developed, and carried out construction projects worth US\$ 895.8 billion or more to date to meet these demands. Further, projects worth US\$ 830.6 billion are in various stages of planning, development, and execution in the UAE.

The construction industry in the GCC is expected to grow rapidly at an average annual growth rate of 3.5-4% in 2023-2024, outpacing the growth rate of the overall economy in the near and medium term. This growth can be ascribed to the establishment of regional headquarters by global enterprises, the concluded World Expo 2020 in Dubai, continued investment in infrastructure projects, and a growing real estate market. The new City of Neom is being constructed in Saudi Arabia, which is anticipated to cost over US\$ 500 billion. The city would have access to cutting-edge technologies and sustainable infrastructure. The ongoing and upcoming projects for the expansion of a transportation network and the building of important airports and seaports would further contribute to the development of the construction industry in the GCC.

3.3.1.2 Abundant Availability of Feedstock and Government Support for the Chemical Sector

The chemical industry in the GCC has been flourishing over the past few decades due to the availability of plentiful, inexpensive feedstock and modern infrastructure and backing from the government. The petrochemical industry in GCC nations has a competitive advantage since these countries are leading oil and gas producers globally. Per the Gulf Petrochemicals and Chemicals Association (GPCA), the petrochemicals industry in the GCC grows at an average rate of 5.6% and contributes ~7% to global chemical production.

Figure 25. GCC Chemical Industry Snapshot

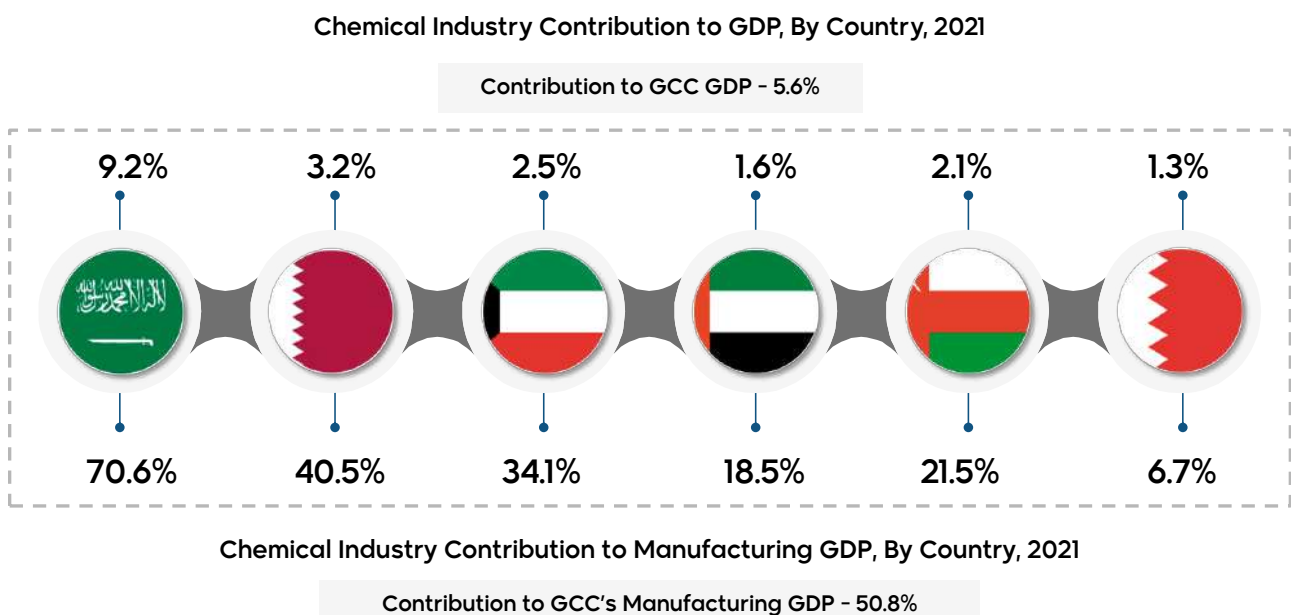


Source: GPCA



Several macroeconomic factors have led to uneven growth of the petrochemical industry in the GCC in the past few years, as evident from the line graph. In 2019, the industry witnessed significant growth, while the pandemic caused a severe downfall in 2020. However, with the lifting of travel bans and the opening of international borders, the industry witnessed an upswing in 2021. The present geopolitical conflict between Russia and Ukraine is leading to an uncertain economic outlook in Europe and adversely affecting the GCC chemical industry. However, its impact is expected to decline by early 2024 as the economies stabilize from the effects of the pandemic and the war. As evident from the above pie-chart, most of the chemicals are produced to act as raw materials for downstream industries. Hence, a downturn in any downstream industry significantly hampers the chemical industry's production and vice versa.

Figure 26. GCC Chemical Industry Snapshot



Source: GPCA

While the chemical industry's overall contribution to the GCC nation's GDP was relatively low in 2021, the % contribution to the manufacturing sector's GDP contribution was relatively high for most GCC countries. It showcases that the chemical industry was one of the largest manufacturing sector contributors in 2021 and is expected to be a more significant contributor by 2030.

The GCC chemical industry had a positive trade balance of ~56.5 million MT, up by 12% year-on-year. With 24% and 11.6% of all exports in 2021, respectively, China and India remain the major destinations for GCC chemical exports. Adopting environment-friendly production techniques further adds to the popularity of chemical produce of these countries. Further, per GPCA estimates, adopting innovative solutions led to a 1.8% decrease in greenhouse gas (GHG) emissions in 2021 against the previous 8-year average.

Saudi Arabia is the largest producer and exporter of petrochemicals in the GCC, and it continues to focus on the expansion of its petrochemical industry. In 2020, Aramco announced a successful acquisition of 70% stakes in Saudi Basic Industries Corporation (SABIC) from the Public Investment Fund (PIF), Saudi Arabia's sovereign wealth fund, for a total purchase price of US\$ 69.1 billion. Other countries in GCC are also looking forward to raising their investments in the petrochemicals



sector. For instance, a Qatari petroleum company announced the final investment decision with an US based chemical company to build an ethylene project of 2.1 million MT/year capacity in Ras Laffan; the project marks the company's largest investment in petrochemicals in Qatar with a valuation of US\$ 6 billion. Thus, feedstock availability and government support propel the growth of the chemicals sector in the GCC.

3.3.2 Challenge

3.3.2.1 Attracting FDIs in Manufacturing

An increase in FDI inflow is likely to make the export-oriented manufacturing sectors in the GCC more competitive, decreasing the dependency of national economies on hydrocarbon income. Switching the sources of capital investment and emphasizing on attracting FDIs with a manufacturing focus can help mitigate the adverse effects of oil price volatility on government and private-sector investments. This strategy mainly resembles investment strategies in rival manufacturing hubs such as India, Thailand, and Vietnam. As a result, manufacturing activities in GCC countries gain from the scale, stability, and R&D capabilities made possible by significant capital inflows. Additionally, rising manufacturing FDIs in the GCC would result in the development of large-scale manufacturing facilities that can produce more affordable and competitive outputs. They would also help improve manufacturing supply chains' resilience and flexibility and promote the adoption of Industry 4.0 technologies.

On the other hand, the lack of focus on non-oil sectors, perceived and real political risks, and a limiting business environment are among the factors impeding the inflow of FDIs in GCC countries. According to the International Monetary Fund (IMF), after a spike in the early 2000s, FDI inflows into GCC nations have leveled off and are now hovering at an average of 1.5% of the region's GDP. Widespread national ownership and a relative shortage of safeguards for international investors present further barriers to FDI inflows in the manufacturing sector. These constraints restrict the growth of this sector in most GCC countries despite having some degree of liberalization.

3.3.2.2 Reliance on Imported Equipment

GCC nations rely heavily on imported machinery, an integral component of industries. Hence, disruptions such as the COVID-19 pandemic and the Russia-Ukraine war heavily affect the machinery import supply chain. It results in severe disruptions to continuous production in industrial facilities. The dependence on imports from foreign manufacturers, directly or through Foreign Government Sales (FGS) [for military equipment] may require high-level intervention from officials. Additionally, the Intellectual Property (IP) is held by the exporter. Hence, the GCC nations cannot grow and exploit the knowledge and know-how of manufacturing such equipment and machinery. Such dependence restricts the growth of the industrial sector to some extent. A shift from this reliance on external suppliers removes the risk in the supply chain, and hence GCC nations are increasing their focus on localization.

3.3.2.3 Marginal Climate

GCC nations are characterized by marginal climate, referring to poor soil quality, high temperatures, and low annual rainfall. It challenges industrial growth in various ways. Firstly, it often leads to the lower operational life of machinery. Secondly, the climate leads to lower growth in the agricultural sector and inhibits the food processing industry. Thirdly, the marginal climate often leads to lower functioning capability of laborers and reduced efficiency, which also restrains the development of the industrial sector. Moreover, the region is highly dependent on desalinated water, which restrains the setting up of high-growth but water-intensive industries, such as semiconductor manufacturing. While the climate cannot be changed, adopting sustainable advanced methods,



such as aquaculture and renewable energy-powered desalination plants, is expected to lower the restraint's impact by a large extent.

3.3.3 Opportunities

3.3.3.1 Rising Investments in Construction Market

According to the International Statistical Institute (ISI), the total population of the GCC region nearly doubled over 20 years, increasing from 26.2 million in 1995 to 56.4 million in 2021. The residential, commercial, healthcare, hospitality, infrastructure sector, and healthcare sectors experience huge demands for their offerings owing to the surging population. Due to uncertainties and price volatility in the oil market, GCC countries focus more on investing in economic expansion.

Misk Foundation has detailed the master plan of the Nonprofit City of Prince Mohammed Bin Salman. Following the general master plan of the city, there will be 6,000 flats with floor layouts, 500 villas and townhouses, and residential spaces with room for 18,000 people. More than 306,000 sq. m. area is likely to be devoted to commercial space in this city, and 20,000 people are anticipated to work there. 99,000 sq. m. of area has been set aside for retail, entertainment, and food & beverage establishments that would cater to residents and guests. Bouygues Bâtiment International (BBI), a subsidiary of Bouygues Construction, announced a joint venture worth US\$ 0.99 billion with Saudi Almabani General Contractors and the Qiddiya Investment Company (QIC) to build Six Flags Qiddiya. With the planned space for sports and wellness, nature and environment, parks and attractions, motion and mobility, and arts and culture, this project is likely to become Saudi Arabia's future capital of entertainment, sports, and arts.







3.3.3.2 Localization of Defense Industry

GCC nations are relatively large spenders on imported military and defense equipment. Imported military technology and weapons often lack standardization since several manufacturers are involved. The interoperability of such weapons is also diminished in GCC and allied forces since each GCC nation purchases different weapons and equipment from diverse suppliers. Moreover, such imports also lead to a lack of standardization in guideline and training. Local manufacturing of such military equipment can offer a good growth opportunity for the industrial sector in GCC. With localization of defense industrial activity being a shared goal across GCC, the nation can work together to boost the opportunity. Adoption of a regional approach, wherein different countries focus on building the capability for the region as a whole, can greatly benefit all GCC nations. For instance, Saudi Arabia can utilize its vast land area to focus on air force related vehicles and equipment, while UAE can utilize its coastline for developing maritime equipment. Incentivizing military manufacturing investments, can be the first step towards realizing this opportunity, followed by formal programs and effective governance.

Under the auspices of Vision 2030, the Saudi government has already expressed its interest in increasing the localization of the defense industry. To better fulfill their localization objectives, the government has divided the military industry into various priority areas with subsequent localization targets for each. Examples of notable priority areas include arms & ammunition, defense platforms & structural components, and maintenance and repair operations in aerospace and navy. Additionally, the government established the General Authority of Military Industries (GAMI) responsible for supervising, regulating, and empowering the defense sector and the Saudi Arabian Military Industries (SAMI) to meet the strategic localization targets. They mainly consolidate local companies and assets and aim to develop new and existing local industries and technologies. Other GCC nations are also expected to follow the path of Saudi Arabia and increase their focus on defense industry localization within their respective boundaries.



3.3.4 Macroeconomic Factors Impacting the Sector

<p>GOVERNMENT</p>		<ul style="list-style-type: none"> • Saudi Arabia has one of the most advanced and sophisticated mining regulations in the GCC, and the minerals industry is one of the foundations of the country's economy. The nation is richly endowed with 15 commercially valuable minerals. The mining industry in Saudi Arabia employs ~250,000 workers, and it contributes ~US\$ 17 billion to the national GDP (i.e., nearly 15%) and accounts for ~US\$ 7 billion of gross exports from the country.
<p>ECONOMICAL</p>		<ul style="list-style-type: none"> • GCC nations have been updating their laws, incentive measures, and initiatives in recent years to draw foreign investments to their mostly unexplored mining sector. To promote foreign investments in infrastructure development and mining exploitation, GCC countries have created mining concessions and specific import duty exemptions. • Governments of GCC countries have been working on creating clear, investor-focused mining rules for the past 10 years. For instance, Saudi Arabia recently passed mining laws to promote investments and provide a uniform regulatory framework for promoting economic growth and diversification.
<p>SOCIAL</p>		<ul style="list-style-type: none"> • Many nations across the world, including the affluent Gulf countries, are undergoing social transformations and experiencing profound demographic changes in local societies. Population dynamics would play a significant role in the next 10 years, posing important questions about labor and immigration laws, inclusive economic growth, market liberalization, women's and young people's inclusion, and the political systems of each state. • In contrast, Gulf countries in the Arabian Peninsula are all situated in arid regions, with more than 80% of their people residing in urban areas. Saudi Arabia is home to ~61.7% of the total population of the GCC. As a result, the demand for construction projects is growing with the increasing population.
<p>TECHNOLOGICAL</p>		<ul style="list-style-type: none"> • Businesses are becoming more adaptable and flexible owing to predictive analytics, virtual reality, AI, robotics, and assembly line automation. This is contributing to the improvement of industrial production levels in the UAE. Abu Dhabi recently introduced a smart manufacturing index, which is a measure that gives private sector businesses the means to improve their expertise on Industry 4.0 technologies. • A smart manufacturing index offers business leaders a road map for assessing the production and readiness levels of their facilities, and it suggests transformational measures and best practices to take advantage of advanced manufacturing. It also offers business leaders a road map for assessing the production and readiness levels of their facilities, and it suggests transformational measures and best practises to take advantage of advanced manufacturing.
<p>ENVIRONMENTAL</p>		<ul style="list-style-type: none"> • The adverse effects of mining on the environment may entail soil quality, biodiversity, air quality, spatial degradation, and mining terrain modifications. Additionally, the mining industry contributes measurably to greenhouse gas emissions, including carbon dioxide. • Mining operations frequently start with deforestation, thereby impacting the carbon dioxide absorption ability of the environment. Moreover, the use of explosives and fossil fuels for energy during mining operations results in a rise in greenhouse gas emissions.
<p>LEGAL</p>		<ul style="list-style-type: none"> • As a member of the Customs Union with the EU, Türkiye is required to conform its legislation to EU <i>acquis</i> in the areas of competition, intellectual property, common trade policy, and free movement of products. Only industrial goods and agricultural products that have been processed are included in the Türkiye-EU Customs Union. A few judgments made by the association council apply to agricultural products. In addition to abolishing customs fees, the Customs Union mandates the removal of all discriminatory trade restrictions and/or practices that provide one party an unfair advantage over the other.

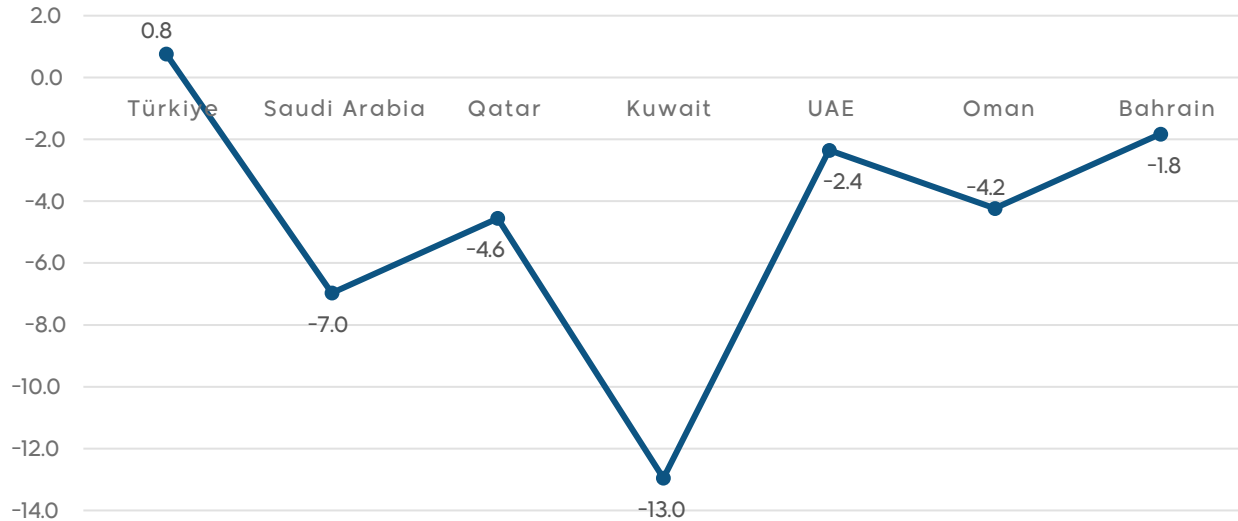
Source: The Analyst Team



4. Country Level Impact of COVID-19 Pandemic on Industrial Sector

Over the years, the industrial sector in the Middle East has managed to grow by harnessing rapid investments made by several governments and attracting foreign direct investment (FDI). However, the sudden onset of the COVID-19 pandemic adversely affected manufacturing facilities in most verticals across the region, leading to low production volumes and export. During the pandemic, key business economies such as the US, China, South Korea, Germany, France, and India shut down their non-essential industry operations by imposing lockdowns. This disrupted the supply of automotive, textiles, chemicals, electronics, and other product categories. For instance, the automotive sector recorded a 20% decline in manufacturing in 2020 globally. The estimated negative impact of the COVID-19 pandemic on the growth of the industrial sector in various countries is depicted below.

Figure 27. Impact of COVID-19 Pandemic on Industry's Contribution to GDP

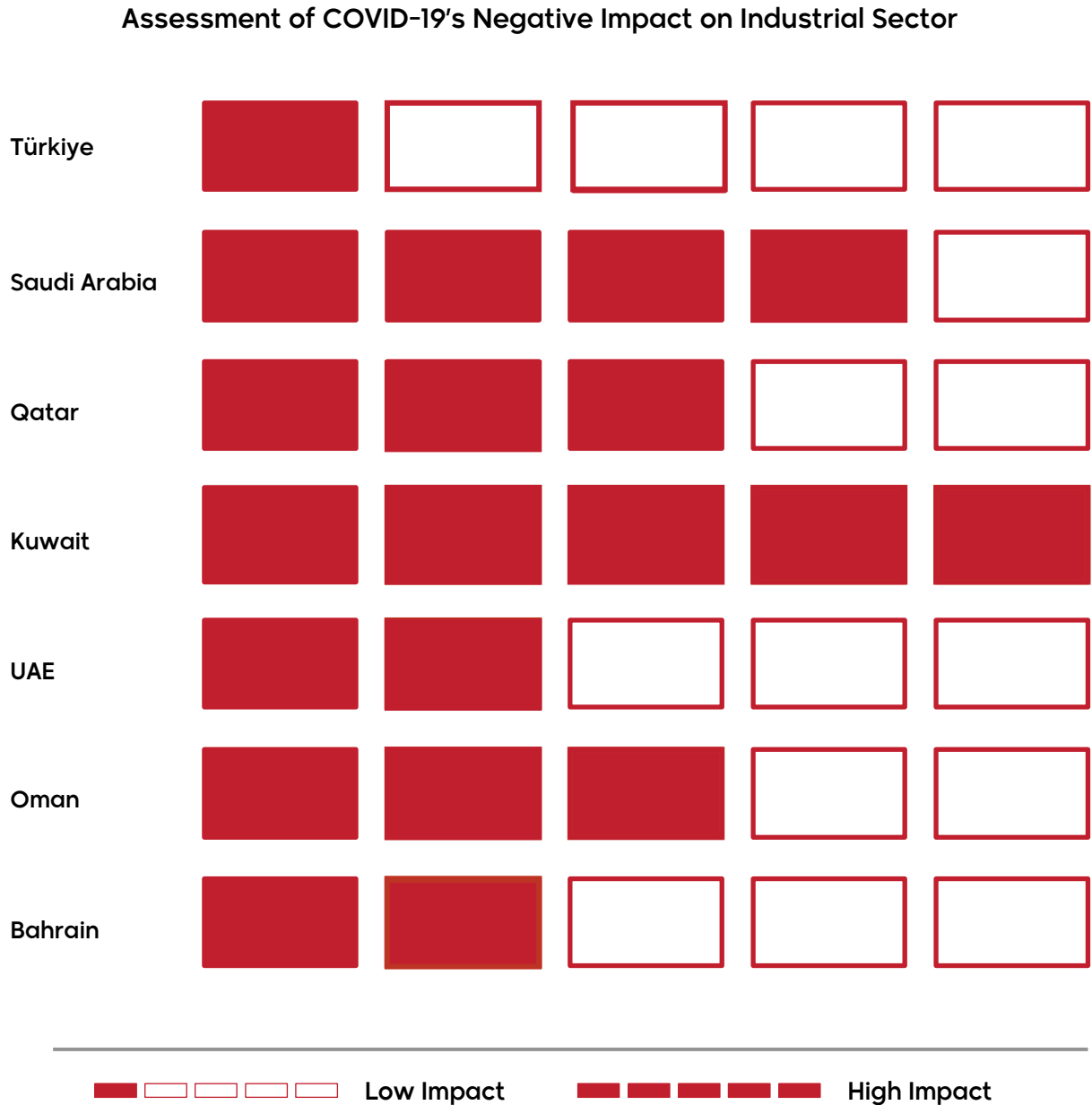


Source: World Bank

The above figure depicts the % decline in industrial [Industry (Including Construction), Value Added (% Of GDP)] contribution to GDP for each country in 2020, from 2019. All the GCC nations witnessed a decline, while Türkiye witnessed a slight growth. Türkiye's growth can be attributed to the well-planned countermeasures for tackling the spread of the virus. While the GCC nations had also executed several measures to counter the pandemic, high dependence on imported raw materials and expatriate labor resulted in a downturn of the industrial sector. The pandemic had disrupted the supply chain of raw materials, while laborers returned to their home nations, and returned back post lifting of movement restrictions. Hence production was hampered, leading to the decline.



Figure 28. Impact of COVID-19 Pandemic



Source: World Bank and The Analyst Team

The above image showcases the estimated negative impact of the pandemic on each country's industrial sector. The same was deduced from the overall GDP growth, domestic consumption, changes in the industrial production index, and unemployment rate, among others. Kuwait and Saudi Arabia's industrial sectors were estimated to be most affected by the pandemic, while UAE and Bahrain's industrial sectors are deemed the least affected in GCC. Further country-level details on the impact of the pandemic are provided in the next section.



4.1 Country-Level Implications

Türkiye



- Türkiye managed to contain the spread of SARS-CoV-2 by implementing lockdowns and with support from its robust health services infrastructure.
- Industrial production recorded a slight decline owing to the shutdown of export markets.
- The country prevented severe consequences as the internal consumption of goods and services remained high.

- Saudi Arabia suffered severe consequences of the COVID-19 pandemic due to disruptions in industrial production.
- Fluctuating oil prices further exacerbated the situation.
- Global supply chain disruptions hampered industrial import and export activities.

Saudi Arabia



Qatar



- The pandemic led to reduced hydrocarbon sales, which led to a decline in the GDP of Qatar.
- However, better industrial diversification allowed the country to be hedged against severe economic downturns.
- Construction activities resumed fast to continue preparation for the FIFA Men's World Cup 2021.

- Heavy dependence on the oil & gas sector and unstable global oil prices caused led to adverse effects on the economy of Kuwait during the COVID-19 pandemic.
- Kuwait's fiscal deficit sharply rose, while the General Reserve Fund almost got exhausted.
- Economic stress from the pandemic triggered illegally forced resignations and salary cuts.

Kuwait



UAE



- The COVID-19 pandemic caused moderate disruptions in the economy of the UAE, primarily due to closed international markets.
- The pandemic accelerated UAE's efforts to attract FDI and promote economic growth.
- Better industrial diversification allowed the country to shield itself from severe economic downturns.

- The COVID-19 pandemic led to weak economic growth and higher budget deficits in Oman.
- The government reduced its spending and increased taxation to counter the indebted finances.
- The Sultanate also prioritized Omanization, to shield Omanis from facing financial distress.

Oman



Bahrain



- Bahrain escaped any extreme repercussions of the COVID-19 pandemic mainly due to the diversification of industries.
- The Government of Bahrain announced a US\$ 344 million liquidity fund for assisting troubled companies in reorganizing their financial obligations.

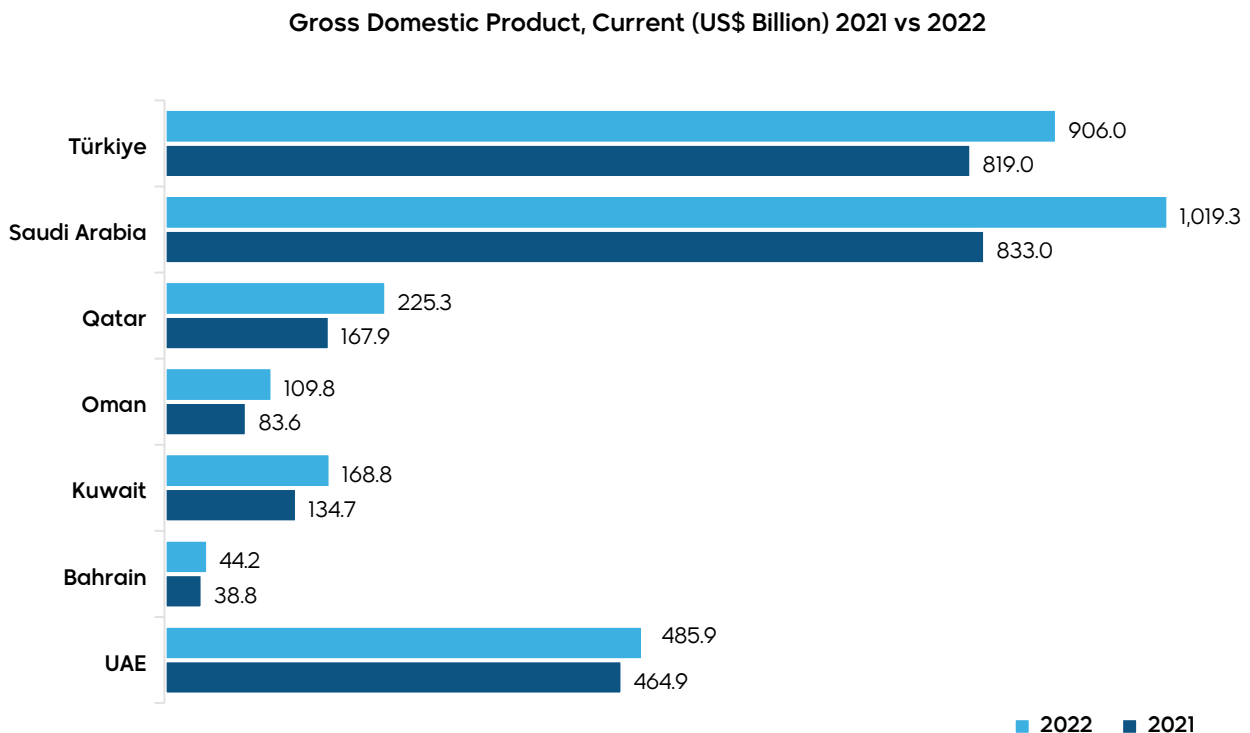


5. GCC and Türkiye Industrial Outlook Comparison

5.1 GDP and Contribution to GDP, GCC vs Türkiye -

The GDP and GDP contribution comparison between GCC and Türkiye are as follows:

Figure 29. GDP, Current (US\$ Billion)

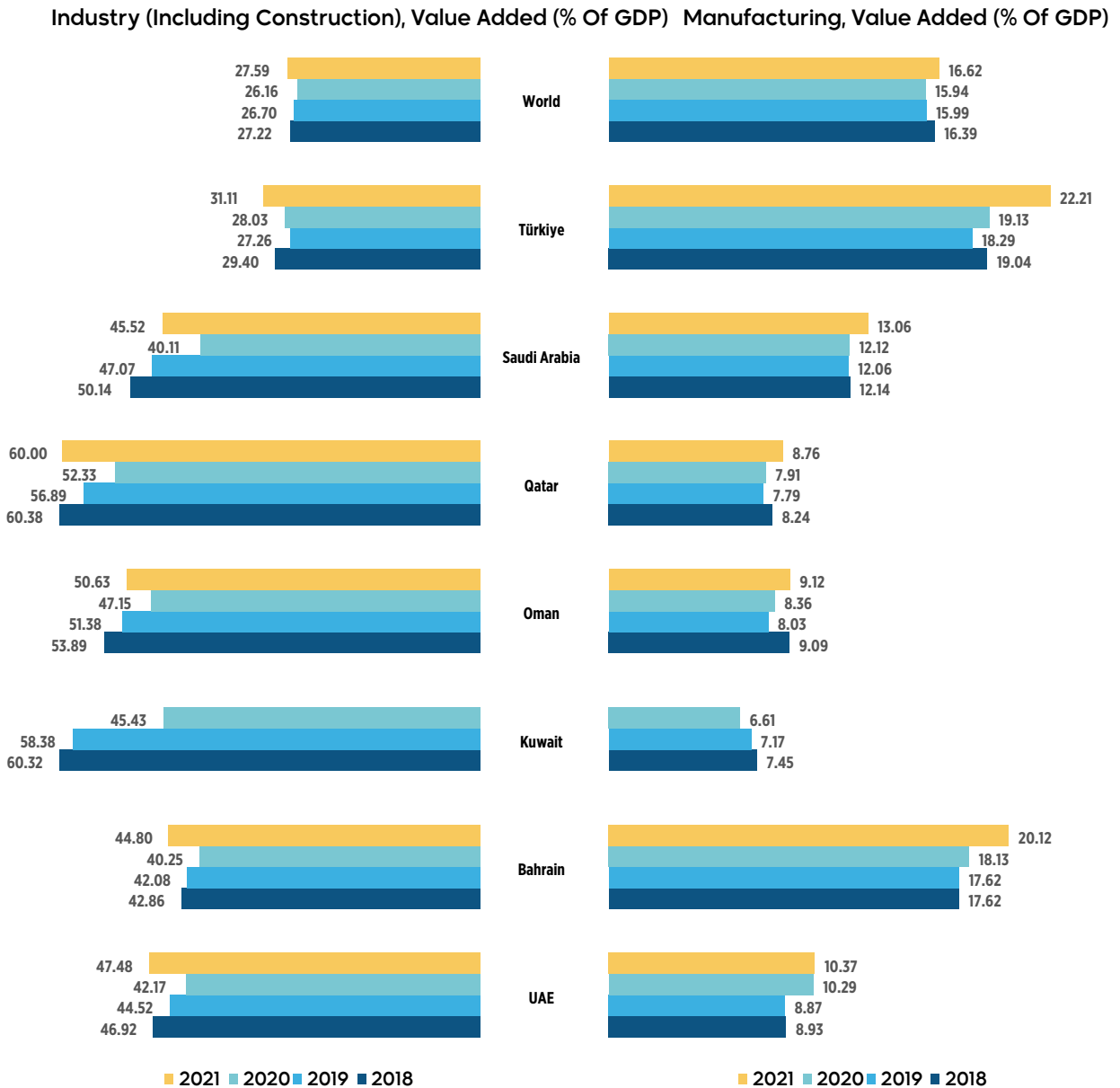


Source: World Bank

The above figure provides a comparison between the GDP of Türkiye and the GCC nations. As can be seen, Türkiye had a larger GDP than most GCC nations. However, Saudi Arabia have significantly increased the gap between its and Türkiye's GDP. Despite the difference, Türkiye has a more diversified economy and hence is better hedged from any downturn in any specific industry. However, as GCC nations moves forward with their transformation, as per 'Vision' documents, their GDP is expected to improve significantly.



Figure 30. GDP Contribution Statistics



Source: World Bank

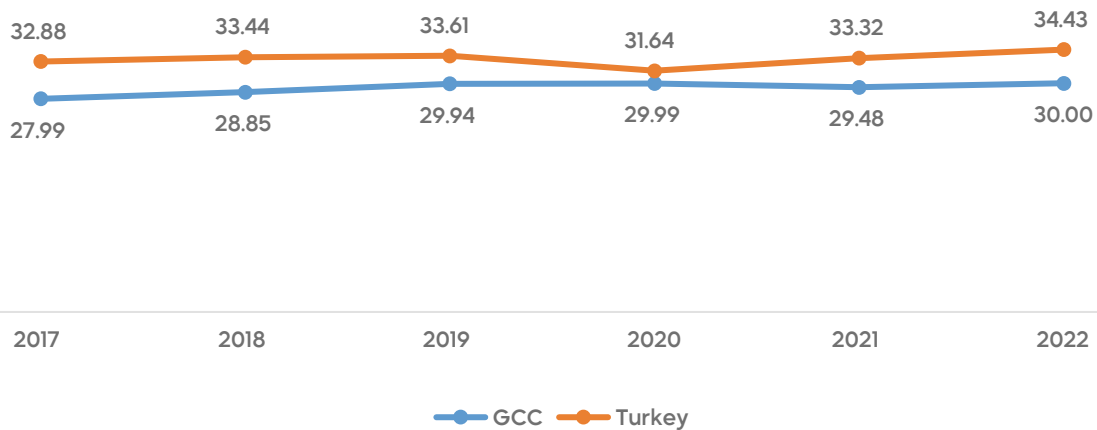
The above graphs compares industry and manufacturing's contribution to GDP of each country, and the world, per data from the World Bank. It is inferred that most GCC nations had been successful in increasing industry's contribution to GDP, whereas, owing to wider economic diversification, industry's contribution to Türkiye's GDP was comparatively low. However, it doesn't indicate that the government of Türkiye is focusing on improving the sector. 2021's data clearly showcases that industry, and manufacturing's contribution to GDP of Türkiye improved significantly over the past three years. Most GCC countries are highly focused on development



of the industrial sector to diversify their GDP contribution and reduce their dependency on the oil & gas sector. It is evident from the graphs, which clearly showcases the growth in contribution by industry and manufacturing, in 2021, compared to past three years, in most GCC nations.

5.2 Labor Strength Comparison, GCC vs Türkiye -

Figure 31. Comparison of Labor Force Strength, Türkiye and GCC (Million Heads)



Source: World Bank

As showcased in the above line graph, Türkiye possessed a larger labor force than all the countries of GCC combined. The focus on strengthening the education system has ensured a steady flow of skilled workforce for the country. The availability of an ample skilled workforce offers a unique collaboration opportunity for Türkiye and GCC nations. Countries such as Kuwait and Bahrain can either outsource their manufacturing to Türkiye or insource labor from the latter to enhance the manufacturing sector in their respective countries.

5.3 Competitive Industrial Performance (CIP) Indexes

Table 4. CIP Indexes, 2021

2021		Türkiye	UAE	Saudi Arabia	Qatar	Bahrain	Oman	Kuwait
Competitive Industrial Performance (CIP) Indexes	CIP Score	0.12	0.12	0.09	0.05	0.05	0.05	0.04
	CIP Rank	27	29	35	50	51	56	62
	CIP Quintile	Top	Top	Upper Middle	Upper Middle	Upper Middle	Upper Middle	Middle
Per Capita indicators	Manufacturing Value Added (MVA) Per Capita	2339.38	4282.03	2356.6	5461.08	3858.3	1617.13	1626.66
	Manufactured Exports Per Capita	2328.28	16649.76	3262.22	2308.19	5805.32	4387.72	4506.97



2021		Türkiye	UAE	Saudi Arabia	Qatar	Bahrain	Oman	Kuwait
Share of Medium- and High-Tech Activities	Medium- and High-Tech MVA Share in Total MVA	0.34	0.41	0.37	0.5	0.25	0.45	0.32
	Medium- and High-tech Manufactured Exports Share in Total Manufactured Exports	0.42	0.11	0.31	0.74	0.29	0.38	0.07
Share of National Aggregates	Manufacturing Value Added Share in Total GDP	0.18	0.1	0.13	0.09	0.17	0.09	0.07
	Manufactured Exports Share in Total Exports	0.88	0.52	0.43	0.12	0.74	0.48	0.31
Manufacturing Export Indexes	Share of Medium and High-Tech Activities in Manufacturing Export Index	0.47	0.13	0.35	0.84	0.33	0.43	0.08
	Manufactured Exports per Capita Index	0.06	0.44	0.09	0.06	0.15	0.12	0.12
	Industrial Export Quality Index	0.69	0.33	0.39	0.48	0.55	0.46	0.2
	Share of Manufactured Exports in Total Exports Index	0.9	0.53	0.44	0.12	0.76	0.49	0.32
Market Value Adjustment (MVA) Indexes	Industrialization Intensity Index	0.43	0.37	0.38	0.41	0.36	0.38	0.27
	Share of Medium and High-Tech Activities in Total MVA Index	0.42	0.5	0.45	0.61	0.3	0.55	0.39
	MVA Per Capita Index	0.07	0.12	0.07	0.15	0.11	0.05	0.05
	Share of MVA in GDP Index	0.44	0.25	0.31	0.22	0.42	0.22	0.16

Source: United Nations Industrial Development Organization (UNIDO)

According to UNIDO, industrial competitiveness is key to inclusive and sustainable industrial development (ISID). It shapes sectoral specialization and consequent structural change. It thus also determines the industry's contribution to overall prosperity and long-run sustainable growth. CIP considers countries' productive capacity, intensity of industrialization, and impact on the world market as major components of industrial performance. As can be seen, Türkiye performs better than all GCC nations since the country has a particularly high capacity to produce and export manufactured goods. By contrast, most GCC countries have a relatively low CIP ranking. The region's high dependency on the oil & gas industry has led to trade deficits in manufactured products. Surplus obtained from crude oil and natural resource exports is

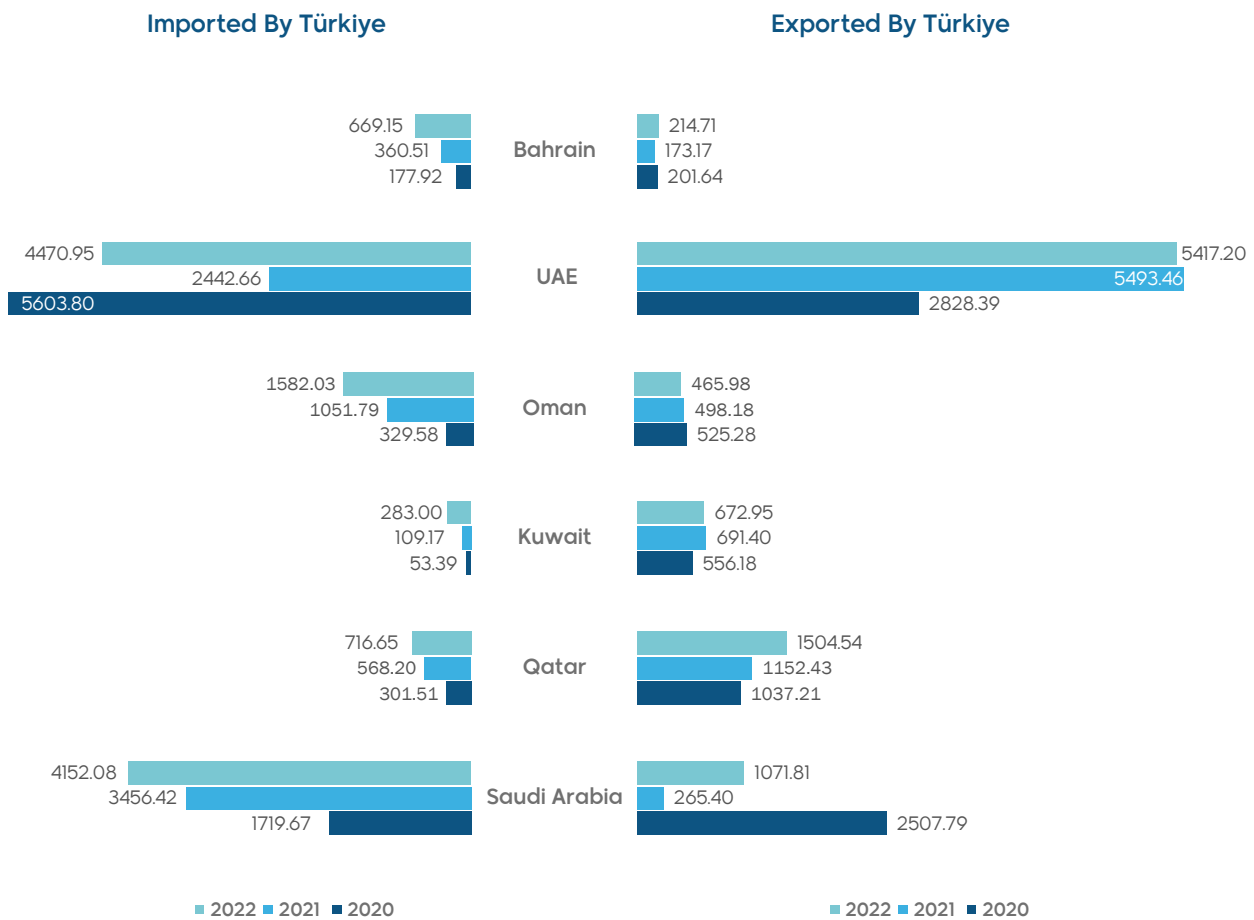


insufficient to compensate such deficits, and various manufacturing industries' development is necessitated. Furthermore, as the international community moves towards green energy, the potential negative impact on GCC's future oil & gas export and economic growth intensifies, stressing the need for further efforts to hasten regional industrial diversification.

5.4 Opportunities for Cooperation and Investment Between GCC Countries and Türkiye

Economic relations between Türkiye and the Gulf states are considerably improving. Türkiye's associations with Saudi Arabia and the UAE have followed a positive trend in recent times. Turkish-Qatari relations are also witnessing growing and continuous cooperation at various levels, with high coordination on many regional and international issues. Türkiye has also agreed to strengthen bilateral relations with Oman, by increasing cooperation in diverse fields such as agriculture, education, and industry. The following image showcases Türkiye's trade pattern with GCC countries:

Figure 32. Türkiye's Trade Relations with GCC Countries



Source: International Trade Centre



The above images depict the trade value of Türkiye's trade with the GCC nations for 2020 – 2022. As evident from the images, UAE and Saudi Arabia were the largest GCC-based trade partners of Türkiye. The latter have been engaged in several bilateral relation with Saudi Arabia and UAE, which has aided in strengthening the bonds between the countries and improve trade relations.

Table 5. Türkiye's Export and Import Statistics with GCC

Trade Partner 2020		Exported By Türkiye			Imported By Türkiye		
		2021	2022	2020	2021	2022	
Saudi Arabia	Value (US\$ Million)	2507.79	265.40	1071.81	1719.67	3456.42	4152.08
	Most Traded Item	Carpets and other textile floor coverings	Mineral fuels, mineral oils and products of their distillation, etc	Carpets and other textile floor coverings	Plastics and articles thereof	Plastics and articles thereof	Plastics and articles thereof
Qatar	Value (US\$ Million)	1037.21	1152.43	1504.54	301.51	568.20	716.65
	Most Traded Item	Furniture, bedding, mattresses, etc	Furniture, bedding, mattresses, etc	Furniture, bedding, mattresses, etc	Aluminum and articles thereof	Aluminum and articles thereof	Aluminum and articles thereof
Kuwait	Value (US\$ Million)	556.18	691.40	672.95	53.39	109.17	283.00
	Most Traded Item	Dairy produce, birds' eggs, natural honey, etc	Dairy produce, birds' eggs, natural honey, etc	Articles of apparel and clothing accessories, not knitted or crocheted	Organic chemicals	Organic chemicals	Organic chemicals
UAE	Value (US\$ Million)	2828.39	5493.46	5417.20	5603.80	2442.66	4470.95
	Most Traded Item	Natural or cultured pearls, precious or semi-precious stones, precious metals etc	Natural or cultured pearls, precious or semi-precious stones, precious metals etc	Natural or cultured pearls, precious or semi-precious stones, precious metals etc	Natural or cultured pearls, precious or semi-precious stones, precious metals etc	Natural or cultured pearls, precious or semi-precious stones, precious metals etc	Natural or cultured pearls, precious or semi-precious stones, precious metals etc
Oman	Value (US\$ Million)	525.28	498.18	465.98	329.58	1051.79	1582.03
	Most Traded Item	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	Ships, boats, and floating structures	Furniture, bedding, mattresses, etc	Fertilizers	Fertilizers	Fertilizers



Trade Partner 2020		Exported By Türkiye			Imported By Türkiye		
		2021	2022	2020	2021	2022	
Bahrain	Value (US\$ Million)	201.64	173.17	214.71	177.92	360.51	669.15
	Most Traded Item	Tobacco and manufactured tobacco substitutes	Nuclear reactors, boilers, machinery, and mechanical appliances etc	Dairy produce, birds' eggs, natural honey, etc	Aluminum and articles thereof	Aluminum and articles thereof	Aluminum and articles thereof

Source: International Trade Centre

The above table depicts the trade value of Türkiye's trade with the GCC nations for 2020 – 2022, along with the most traded items. Minerals, chemicals, and precious stones were some of the most imported items by Türkiye, from GCC, while GCC nations imported food items and finished goods from Türkiye.



Although Türkiye is a leading gold producer, the high domestic consumption of gold requires Türkiye to import gold from other countries. UAE can offer great trade opportunities for gold to Türkiye. Similarly, Türkiye's well-developed jewelry manufacturing sector can offer great trade partnerships with Dubai's duty-free shopping centers.

Developing good trade relations with Kuwait can offer Türkiye a steady source of hydrocarbons in return for various fish-based products. Similarly, Bahrain can support Türkiye's growing demand for Aluminum by exchanging tobacco and medical products.

5.4.1 Emerging Industries in Türkiye and Localisation

Türkiye has a young, sizable population, a dynamic entrepreneurial class, and is geographically situated between Europe and Asia, making it an important manufacturing and distribution hub. The country leverages lower labor costs and flexible production capabilities to position itself in the global value chain. Over the last decade, manufacturing's share of GDP has increased to 18.83%, and Türkiye aims to boost it to 21% by 2023 through its 2023 Industry and Technology Strategy. Advanced manufacturing is being adopted by industries such as automotive, aviation, consumer goods, electronics, chemicals, machinery, steel, construction, textiles, energy, and mining. Türkiye aims to increase its exports of medium-tech products to 44% and high-tech products to nearly 6% by 2023. The government of Türkiye supports technology initiatives and major procurements, creating opportunities for international technology companies. Over the next decade, Türkiye is expected to invest between US\$ 1-1.5 billion annually to integrate industry 4.0 solutions into manufacturing.

5.4.2 The Emerging Sectors in Türkiye are-

 Energy	<p>Türkiye has witnessed significant growth in its energy sector in line with its economic expansion. The country has set several targets for the sector by 2023, including developing an energy exchange, increasing renewable energy's share to 30%, and harnessing hydropower to the fullest. According to the OECD, Türkiye has recorded the fastest annual growth rate, making it an attractive destination for energy investments</p>
 Telecommunication	<p>The telecommunication industry is a lucrative investment sector in Türkiye, with significant advancements in fixed and mobile broadband subscriptions. Investors are actively pursuing various initiatives in this field. Türkiye's goals in the telecommunication industry include the development of the satellite sector and the provision of support for data centers. As per the 2020 sector report, the industry's size adjusted for inflation stands at 15.27 billion Turkish liras. Therefore, the telecommunication industry in Türkiye presents an attractive investment opportunity.</p>



	Textile	<p>Türkiye has a rich and well-established history in the textile industry. Technological advancements have surged demand for textiles, creating significant employment opportunities, export potential, and investment incentives. The sector is closely linked to the agricultural and industrial sectors, making it an attractive investment opportunity for many investors.</p>
	Automobile	<p>Türkiye's automotive sector is on the rise. In recent years, Türkiye has moved from focusing on assembly density to large production capacity and design. The Turkish Automobile Joint Venture Group's data shows a significant increase in vehicle production. Türkiye also ranks 5th in European automotive production, and 30 of the top 50 global suppliers have production facilities in the country. These factors make the automotive sector a highly attractive investment opportunity.</p>
	Defense	<p>Türkiye has been actively pursuing the development of its domestic defense production capabilities for several reasons. The political situation, particularly the invasion of Ukraine, has presented a valuable opportunity for Türkiye to take advantage of the rift between Russia and NATO. As Russia may be unable to fulfill foreign defense contracts, countries may look to Türkiye to meet their requirements, creating a potentially lucrative gap in the market. Strengthening its defense industry would also bring significant economic opportunities for Türkiye, especially considering its poor economic scenario. With soaring inflation, a weak TL, and high government debt levels, Türkiye needs a financial boost. Turkish defense exports were valued at over US\$ 4 billion in 2022, up from US\$ 3.1 billion in 2021, highlighting the importance of achieving domestic defense production goals.</p>

5.4.3 EMERGING INDUSTRIES IN GCC REGION

The GCC has emerged as a significant global trade hub due to its remarkable achievements across various industries. The UAE's logistics centers, which have gained international recognition, and Saudi Arabia's remarkable progress in renewable energy are just a few examples of the GCC states contributions to the world's leading hubs. Despite factors such as inflation and war, many investors worldwide intend to increase their FDI over the next three years. As per the annual Foreign Direct Investment Confidence Index, the GCC countries, including the United Arab Emirates, Qatar, and Saudi Arabia, are the most appealing emerging markets for investors. The most emerging sectors where the GCC nations are establishing innovative standards and attracting investors are-

Energy and Power

Energy and Power is one of the most promising sectors in GCC. Despite continuing to produce billions of barrels of oil annually, the governments are working to diversify its economy. Nations are focused in developing multiple innovative projects, such as the King Salman Energy Park (SPARK), a global industrial hub for energy-related manufacturing services. The UAE is also investing in renewable energy, with projects like Abu Dhabi's Shams Solar Park and DEWA's concentrated solar power facility setting world records.

Manufacturing

Since GCC is focusing on economic diversification for better hedging against a downturn in the oil & gas industry, boosting the manufacturing sector's contribution is one of the most preferred options. Given the challenges faced in developing the manufacturing sector, Türkiye can strongly aid GCC by supplying workforce and technical know-how. Hence it can act as a great cooperation initiative between Türkiye and the GCC nations.



Construction

The GCC's construction sector is expected to see significant growth in the short to medium term, surpassing the wider economy with estimated growth rates of 3.5-4% annually between 2023-2024. This positive forecast is attributed to the increase in project finance availability from the record-high energy export revenues, and the GCC's long-term plans for energy and non-energy sector development.

The construction industry has an extensive pipeline of projects, with a range of contracts yet to be awarded in various sectors, including energy, water, power, transport infrastructure, commercial and residential real estate, and industrial developments. Both domestic and foreign contractors, consultants, and suppliers are expected to benefit from this prosperous construction sector, with ample opportunities to participate in lucrative GCC contracts from 2022 until 2026.

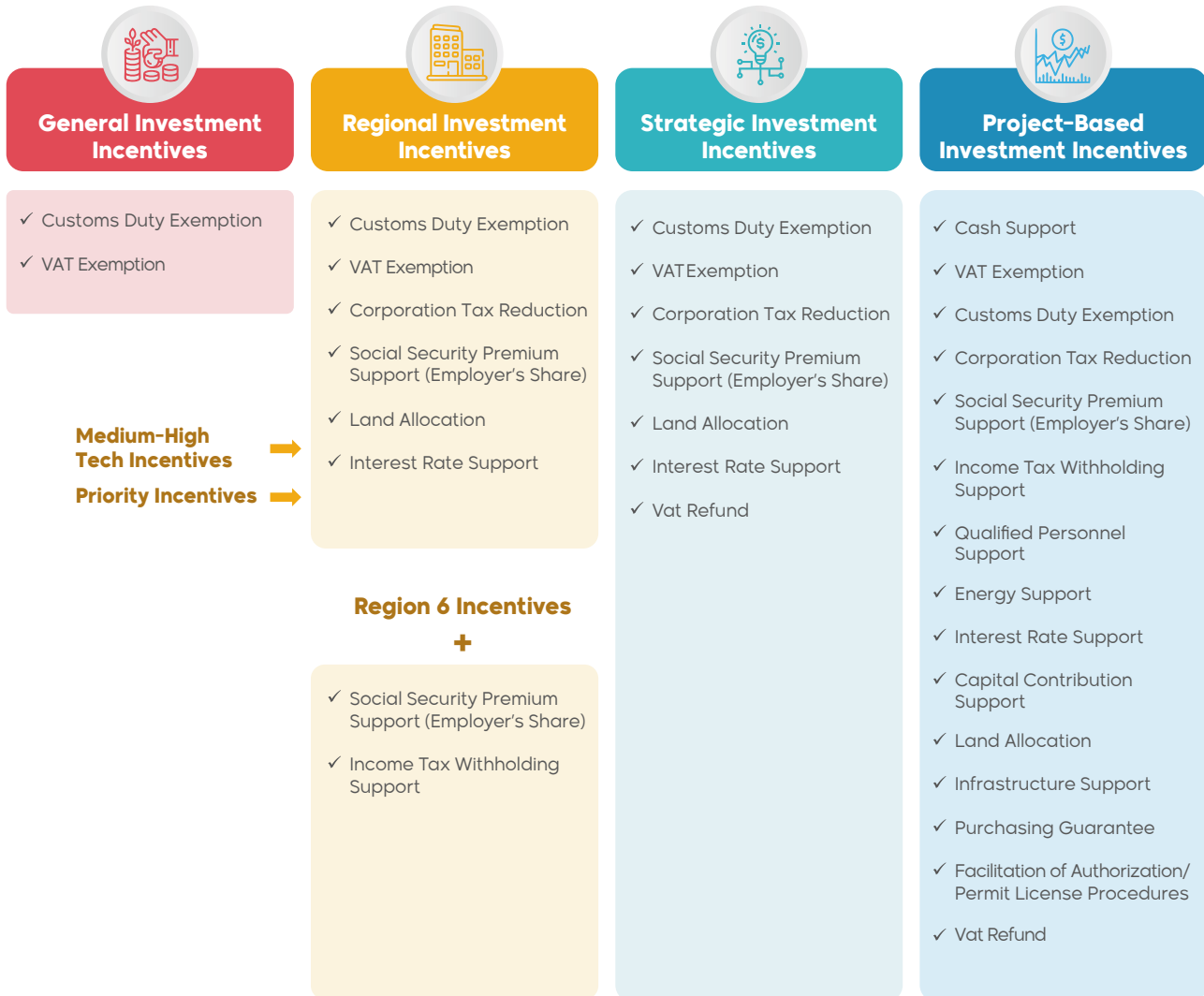


5.4.4 Localization in the GCC Region

In recent years, several countries in the Middle East, particularly in the GCC region, have launched ambitious programs to expand and diversify their manufacturing capabilities. These endeavors aim to cater to local and regional demand while positioning the countries as export hubs. Typically, the projects form part of an overall state-led economic development plan. Due to its potential for growth and strategic significance, nations are seeking help of technology for localization and has become a priority for these countries. Currently, high-tech manufacturing is concentrated in a few countries, none of which are in the Middle East, with their companies serving as global providers. The COVID-19 pandemic exposed the region's vulnerability to supply chain disruptions and tested its resilience. This made it challenging, and sometimes impossible, for companies to secure the technology they rely on. Governments and regional authorities in the Middle East are accelerating their initiatives to take advantage of localization opportunities, as are large global tech manufacturers with similar interests. In the GCC, three categories of tech products are ideal for localization. These categories include advanced materials such as smart materials, nanomaterials, and bio-plastics, advanced components like electronic semiconductor components and battery components, and advanced finished products like general-purpose robots, IoT devices, space systems, and 3-D printers. Some of these products are innovative and disruptive, while others meet the urgent needs of regional companies in various sectors.

5.5 Challenges and Possible Solutions

In Türkiye, the industrial sector has faced setbacks since the onset of the COVID-19 pandemic. However, Türkiye has been able to bolster its economic growth owing to its futuristic goals such as a boost in FDIs, public-private partnerships, custom duty exemptions, and investment loans. Frequent regulatory changes, additional duties, and weak taxation policies present major challenges faced by industries in Türkiye. However, the country is aware of the impact of these issues and is seeking solutions to stabilize the national economy, improve regulatory processes by making policies and government initiatives more transparent, encourage regional investments, and enhance project based-investments, among others.



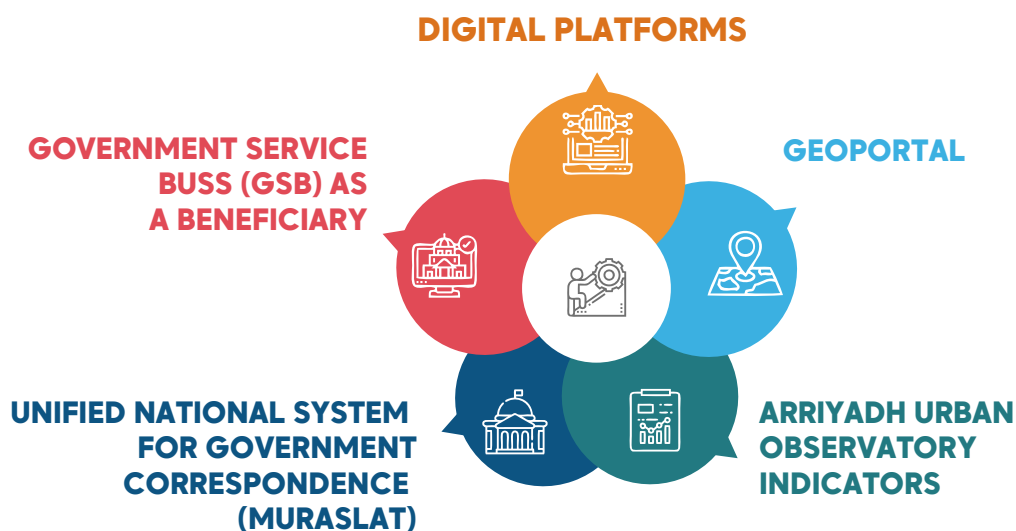
Similar to Türkiye, GCC countries also face challenges in economic growth, infrastructure development, and investments and regulatory issues.

Foreign companies may face certain obstacles while setting up their offices in the UAE. For example, the cost of operations may increase slightly due to the application of VAT. Additionally, as in most nations, companies that fail to comply with the tax system or delay their registration can face fines. Nevertheless, the UAE seeks economic development by encouraging domestic and foreign companies to establish their businesses in the country. The UAE has been a permanent Middle Eastern destination for international investors and a regional trade hub. Attributes such as infrastructure, open environment, tolerant values, and flexible immigration regulations have attracted many investors in recent years. In January 2022, the Ministry of Finance (MoF) announced its plan to introduce a federal Corporate Tax (CT) on business profits effective for financial years starting on or after 1 June 2023. The CT regime was designed to incorporate global best practices and curtail businesses' compliance burden. CT was made payable on the profits of UAE businesses as reported in their financial statements prepared under international accounting standards, with minimal exceptions and adjustments. The reason for the same can be ascribed to the UAE's aspirations of becoming a leading global business hub and expediting



its transformation to attain its strategic objectives. The introduction of CT reiterates the nation's commitment to adhere to international standards for tax transparency and preventing harmful tax practices. Additionally, foreign investors interested in establishing a presence in any of the seven emirates maintain a large degree of independence when managing the immigration process requirements, policies, and regulations for foreign employees. Several other advantages include the presence of several free trade zones, banking confidentiality guaranteed by law, and onshore jurisdictions. Thus, the overall review is good for doing business and setting up a company in UAE.

Saudi Arabia, one of the growing countries in the GCC, offers lucrative opportunities for businesses. However, regulations and cultural differences create challenges for companies to set up their businesses in this country. Government-controlled enterprises in Saudi Arabia are increasingly introducing local content requirements for foreign firms. The Saudi Arabian government is making the rules around allocating larger quotas for hiring Saudi nationals progressively stringent. To overcome these challenges, Saudi Government has introduced various government policies and initiatives:



Inflationary pressures and supply chain problems highly impact businesses in Oman. However, the country capitalizes on the fair share it has in the market for batteries, fiber optic cables, and marble. The government has simplified its processes, slashing the number of days it takes to open a business and obtain labor visas for foreign workers. Housing fees have been reduced to 3% from 5%, and laws around foreigners owning property have been relaxed to boost FDIs. Some other initiatives are:



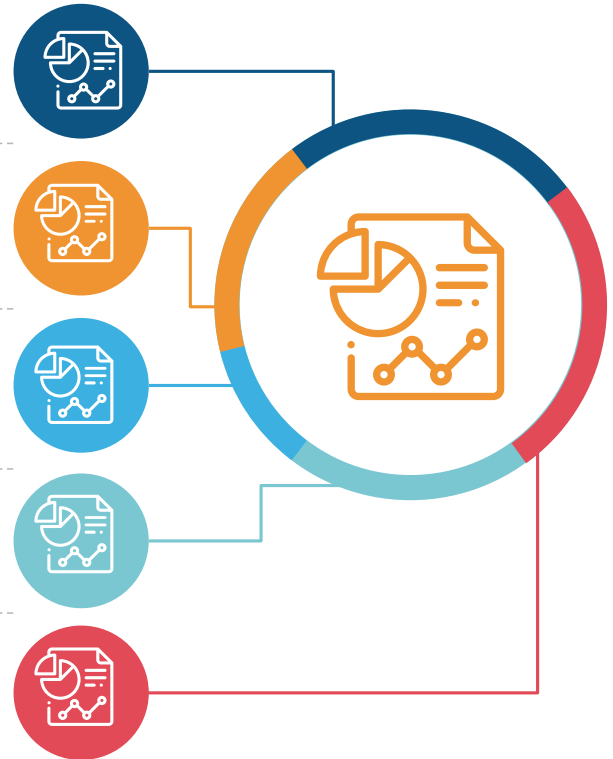
Ejadah, a system to measure individual performance and institutional proficiency.

Digital Transformation Projects such as national platform for suggestion and complaints, unified guide for government services and others.

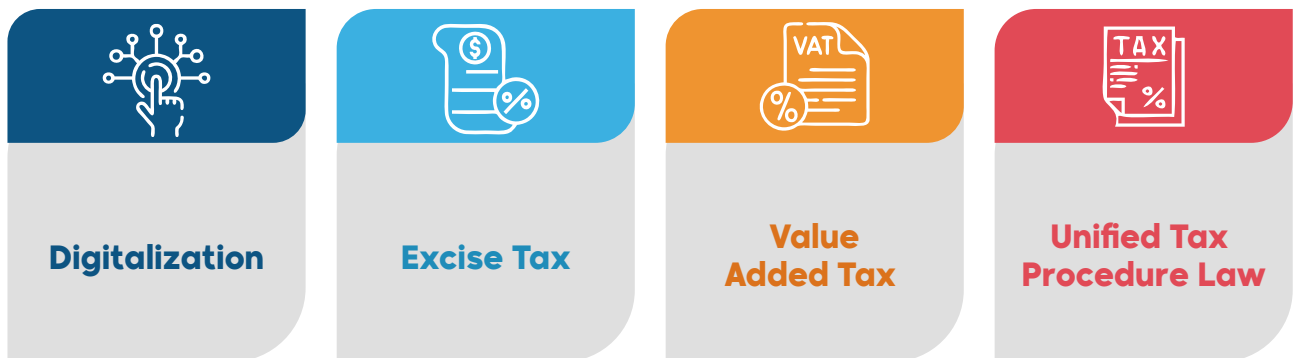
SME-related initiatives; Riyada card regulations, new regulations for Sanad centers, supporting craft industry and others.

Revision of financial laws and executive bylaw.

Establishment of government financial system (Maliyah).



Businesses in **Kuwait** face issues such as contradictory policies, lack of transparency in decision-making, reversal of tenders once awarded, and high business establishment costs. To overcome these challenges the country has started improvements in:

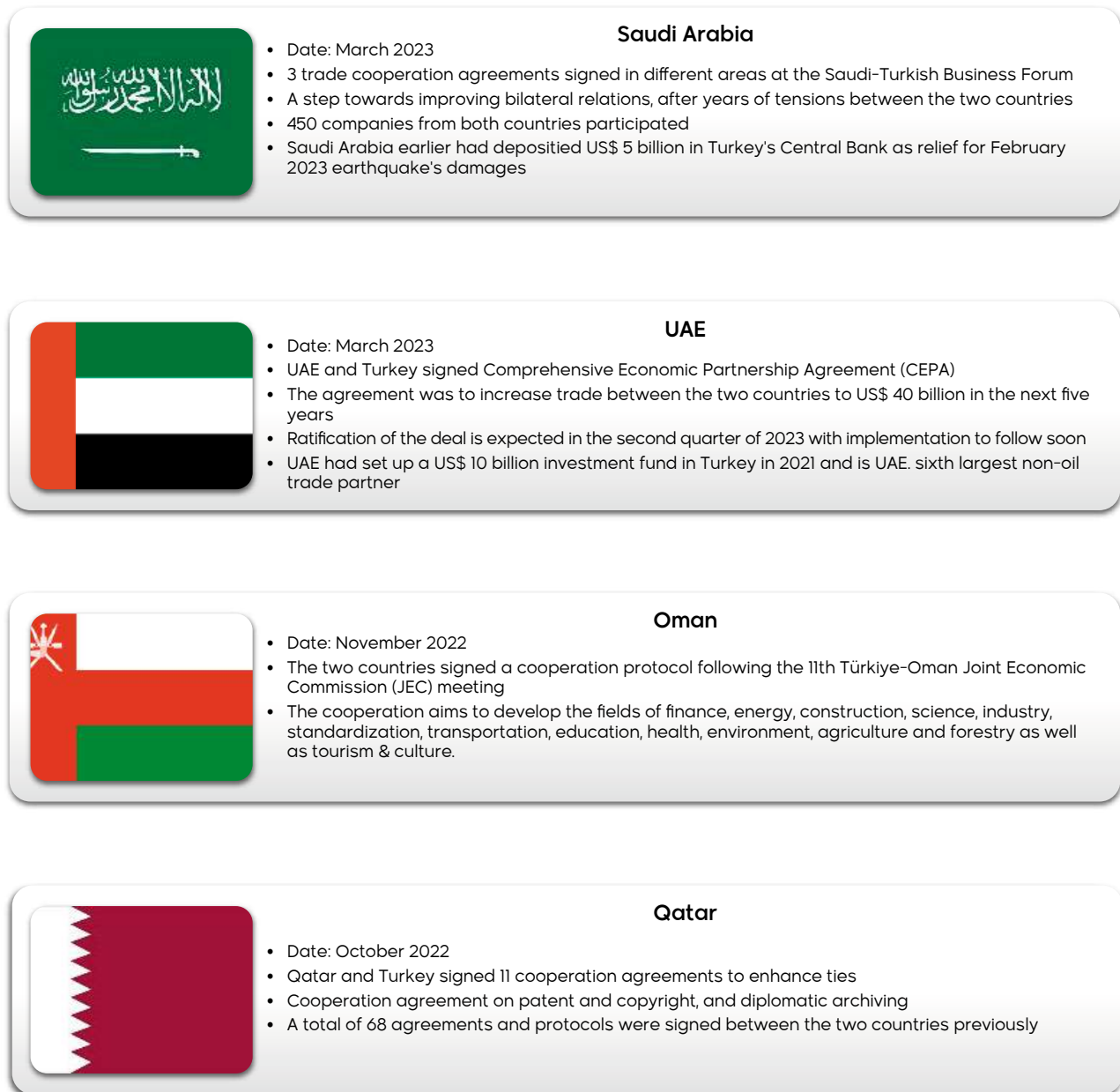


Bahrain and **Qatar** are also focusing on the development of their economy with the economic diversification and investment in improving industries such as ICT, education, healthcare and others. The government is promoting speedy processes, tender dispute resolutions and performance bond waivers for small and medium businesses.



5.6 The Top Existing Cooperation Projects

Figure 33. Top Existing Cooperation Projects





6. Appendix

6.1 Word Index

Table 6. List of Abbreviations

Abbreviation	Expansion
AI	Artificial Intelligence
APAC	Asia Pacific
BAPCO	Bahrain Petroleum Company
BI	Business Intelligence
CAGR	Compound Annual Growth Rate
CBT	Central Bank of Türkiye
CFR	Code of Federal Regulations
COVID-19	Coronavirus Disease 2019
CSR	Corporate Social Responsibility
EC	European Commission
EU	European Union
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
FZ	Free Zone
GCC	Gulf Cooperation Council
GDNT	General Directorate for National Technology
GDP	Gross Domestic Product
GHG	Greenhouse Gas
IEA	International Energy Association
IoT	Internet of Things
ISA	International Society of Automation
ITA	International Trade Administration
KSA	Kingdom of Saudi Arabia
MEA	Middle East and Africa
MOCCA	Ministry of Climate Change and Environment
MoHRE	Ministry of Human Resources and Emiratization
MoIAT	Ministry of Industry and Advanced Technology
MSE	Muscat Stock Exchange
MT	Metric Ton
NDP	National Development Plan

Abbreviation	Expansion
OECD	Organisation for Economic Co-operation and Development
PESTLE	Political, Economic, Social, Technological, Legal, and Environmental
PPP	Public-Private Partnership
R&D	Research & Development
SAM	South America
SEZ	Special Economic Zone
SME	Small & Medium Enterprises
SOE	State Owned Enterprises
STEM	Science, Technology, Engineering, and Mathematics
SWOT	Strengths, Weaknesses, Opportunities, and Threats
UAE	United Arab Emirates
UK	United Kingdom
US	United States
US\$	US Dollar
VAT	Value Added Tax
WHO	World Health Organization
Y-o-Y	Year on Year

Source: Analyst Team

6.2 Key Sources

Table 7. Key Sources

Bahrain Petroleum Company	International Trade Administration
Boursa Kuwait / Kuwait Stock Exchange	Ministry of Climate Change and Environment, UAE
Central Bank of Bahrain	Ministry of Human Resources and Emiratization, UAE
Central Bank of Kuwait	Ministry of Industry and Advanced Technology, UAE
Central Bank of Türkiye	National Center for Statistical Information, Oman
Central Bank of the UAE	Organisation for Economic Co-operation and Development
Central Informatics Organisation, Bahrain	Observatory of Economic Complexity
Central Statistical Bureau, Kuwait	Organisation of the Petroleum Exporting Countries
Federal Competitiveness and Statistics Centre, UAE	Planning and Statistics Authority, Qatar
General Authority for Statistics, Saudi Arabia	Qatar Central Bank
Gulf Cooperation Council	Saudi Central Bank
Gulf Investment Corporation	Türkish Statistical Institute / Tuik Info
Gulf Petrochemicals and Chemicals Association	United Nations Conference on Trade and Development
International Labour Organization	World Bank
International Monetary Fund	World Health Organization
Institute of International Finance	World Trade Organization



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