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Unlocking Growth: How the Gulf Security Sector Can Lead Economic Diversification

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The Arab Gulf States Institute in Washington

Building bridges of understanding

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The Arab Gulf States Institute in Washington (AGSIW), launched in 2015, is an independent, nonprofit institution dedicated to increasing the understanding and appreciation of the social, economic, and political diversity of the Gulf Arab states. Through expert research, analysis, exchanges, and public discussion, the institute seeks to encourage thoughtful debate and inform decision makers shaping U.S. policy regarding this critical geostrategic region.

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About the UAE Security Forum

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The past half century has seen unprecedented modernization and growth among the oil-rich Gulf Cooperation Council countries, which today rank among the world leaders in per capita income. However, GCC leaders recognize that oil resources alone cannot sustain economic prosperity over the long term, and so are seeking to create a diversified private sector that generates income from a variety of thriving industries. The transformation of Gulf economies requires a restructuring from existing patterns of state-led industrialization and dependency on government expenditure, to new policies that promote economic inclusion of men and women, citizens and non-nationals, in these dynamic and youthful societies. To further our understanding of how the GCC countries, especially the United Arab Emirates, can achieve this ambitious goal, UAESF 2017 will outline the major challenges for and roadblocks to economic transformation, as well as opportunities for success.

Under the patronage of H.E. Sultan Al Mansoori, the minister of economy of the United Arab Emirates, the second annual UAE Security Forum brings together decision makers and business leaders to identify promising opportunities for private sector growth and innovation with special attention to the security sector, as an engine of economic growth, job opportunities, and technological advancement. For more information visit www.uaesf.org.

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Executive Summary

The Gulf Arab states have been investing in their military capacities for decades. That spending commitment has mirrored a growing ability and willingness to shape the security environment of the wider Middle East and North Africa region, as evidenced in direct military interventions in Bahrain, Yemen, and Libya and military support in Syria. With this increased capacity and political will also come an opportunity for economic diversification. The vast reorganization of fiscal policy in the Gulf Arab states has upended decades of practice in cyclical government spending tied to oil revenue. Efforts to reduce government expenditure include the spin-off of state-owned assets and ventures to the private sector.

Defense industries and the security sector at large are a key target of potential private sector investment, employment opportunity and growth, and a means for the state to share the expense of technology development. Moreover, defense industries can have a multiplier effect on economic development, as an incubator of new technology and a hub of knowledge creation. To be most effective, state and private investment must work in partnership to create a pipeline from K-12 science education to manufacturing training, market analysis, production, and delivery. This paper offers a brief survey of current defense industry market and production capacity in the Gulf Arab states and articulates the rationale for diversification in the security sector.

Introduction

The Gulf Arab states' track record over the past two decades in military expenditure is well-documented. There has been a massive investment in equipment and technology, as well as investment in training and human capital. As with other sectors of high government investment, the current fiscal reality and demand for diversification has reached the defense industry. It too must demonstrate its return on investment, most practically in the ability to spin-off new businesses. Job creation for nationals remains the best indicator, along with demonstrated defense capacity, of money well-spent.

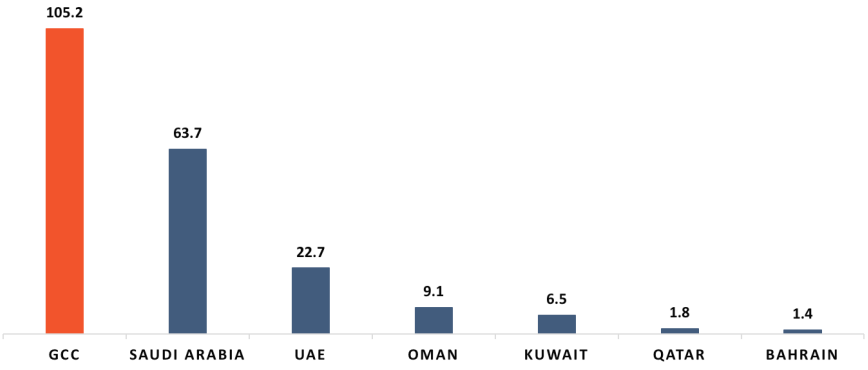
As natural-resource wealth has also been directed at large state investments, including massive infrastructure spending and social services, defense procurement has included policies and incentives for localized economic development. The use of offsets, which require a local investment from the sale of large defense contracts, has had some hit or miss success in generating sustainable and knowledge-intensive growth. As the Gulf states have become more sophisticated in both their procurement needs and development agendas, governments are requiring more from their defense sales partners, and creating strategies for sustainable long-term growth.

The multiplier effect of defense industrialization and private sector investment is complex. It involves the creation of an ecosystem of knowledge creation, training, understanding of domestic and regional market demands, and the growth of a business model that is both efficient and high quality. Diversification of the industry does not mean a simple sell-off; it is the creation of a development pipeline.

GCC Military Expenditure and Defense Procurement at a Glance

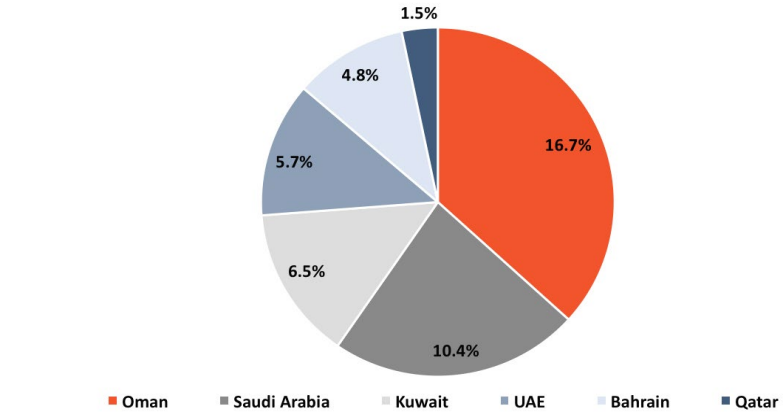
In terms of government expenditure and annual budgets, defense spending is dominant across the Gulf Cooperation Council states. The two largest defense budgets are in Saudi Arabia and the United Arab Emirates, though Oman's defense spending is the highest in terms of the percentage of gross domestic product. In 2016, Saudi Arabia's defense spending accounted for an estimated 27.6 percent of total government expenditure, and many analysts suggest that number could be much higher than estimated, given rising commitments in active military engagement in the region. For the UAE, military expenditure topped $22 billion in 2016, and an active procurement pipeline has continued through 2017 with large orders for aircraft and weaponry. Though smaller in relation to its regional peers in outlays, as a proportion of GDP, Oman's military expenditure makes up a substantial part of its economic capacity.

Figure 1: GCC Military Expenditure 2016 (In Billions of Dollars)



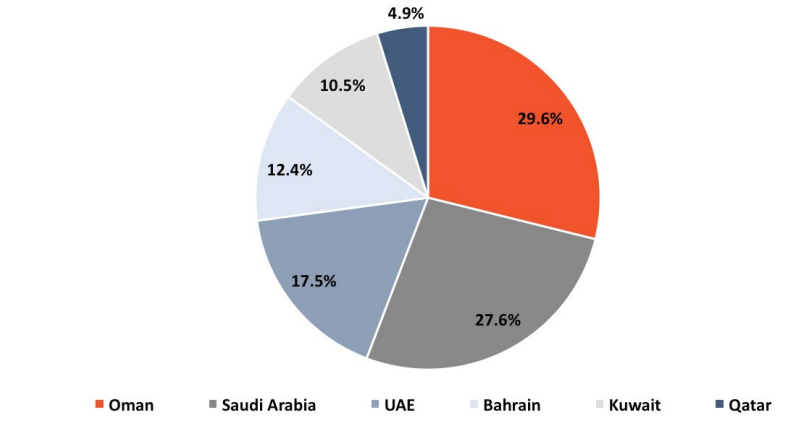
Source: SIPRI

Figure 2: GCC Military Expenditure as % of GDP 2016



Source: SIPRI

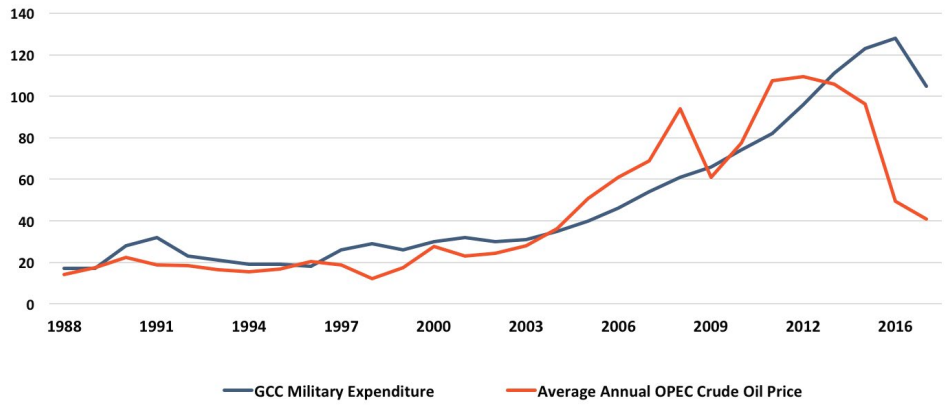
Figure 3: GCC Military Spending as % of Government Spending in 2016



Source: SIPRI

GCC states have continued to prioritize defense budget allocations, even in times of reduced revenue from natural resources. Looking at the oil price history over the past decade, defense spending remains resilient, if not ascendant. It is only during the very recent, and extreme, decline of government resource revenue since 2015 that there has been some reduction in military spending, though still not as sharp as the oil price curve decline. This has been combined with new public policy initiatives, backed by strong leadership commitments to slim down public sector spending.

Figure 4: GCC Military Expenditure (In Billions of Dollars) and Crude Oil Price 1988-2016



Source: SIPRI, OPEC

This slight reduction in spending is matched with government policy to promote the sector as a green field for foreign investment and opportunity for domestic production. The overall result in the next decade could be what some consultancies have called the "$30 billion opportunity."[1] The consultancy Strategy& arrived at the $30 billion estimate based on stated goals of current economic diversification plans of the main military purchaser in the region, Saudi Arabia, in its Vision 2030 plan. Strategy& argues that Vision 2030 "requires that 50 percent of the country's defense procurement be sourced 'onshore.' If other nations were to set a similar goal of 50 percent, then given current procurement and services expenditure of $60 billion annually, that would mean that local products and services could be worth more than $30 billion a year."

Domestic defense design and production will of course take time. Aligning GCC domestic policy frameworks to support diversification in defense industries with investors and market-ready technologies will require new kinds of partnerships between the public and private sectors. Existing models of offsets and localization efforts will require their own redesigns.

Technology Transfer, Offsets, and Localization: What Works?

Traditional policy mechanisms to transfer knowledge and technology from defense expenditure and foreign arms purchases have been via offset programs. Yet, to date, there is a mixed performance record in the Gulf on these programs. Offsets are industrial compensation arrangements that governments create as a condition for purchasing goods and services from foreign suppliers. They serve as guarantees that large item purchases from foreign militaries will also create some local economic benefit, either in manufacturing, investment in other industrial sectors, or localized job opportunities.

Offsets are part of a larger economic development strategy used by the Gulf Arab states to focus investment locally and provide opportunity for citizens ...

Offsets are part of a larger economic development strategy used by the Gulf Arab states to focus investment locally and provide opportunity for citizens, much in the way that commercial agency laws were structured to guarantee local partnerships from foreign investment through franchises and localized production of goods and services. For example, in order to open a branch of a foreign company, from a retail bank to a soda bottling factory, a foreign investor would seek a local partner as 50 percent owner in the domestic company.[2] In offset programs, there are two basic program designs: direct offsets, where the compensation is in the form of local capacity building and manufacturing, often in the form of hardware components; and indirect offsets, where the foreign supplier may make contributions to alternate nonmilitary sectors

1 Haroon Sheikh, Bob Mark, and Bassem Fayek, "The Emerging GCC Defence Market: The $30 Billion Opportunity," *Strategy&*, July 25, 2017.

2 Nicholas Angell, "An Overview of Legal Structures in the GCC Countries - Issues of Risk and Strength," *World Services Group*, December, 2006.

or government programs.[3]

Some of the weaknesses of traditional offset models include job creation in nontechnology-intensive sectors, which don't encourage knowledge transfer. There are offset programs in four of the six GCC states. (Bahrain and Qatar do not have formal programs and defense procurement is more centralized.) For example, Saudi Arabia began its offset program in 1984 and has created 36 companies with a total capitalization of $4.5 billion, and perhaps as few as 4,000 jobs (as of 2016, Oliver Wyman estimates). Moreover, offsets and large procurements are vulnerable to corruption and pay-for-play returns. The Saudi-British al-Yamamah program is one example, led by Prince Turki bin Nasser, who was arrested as part of recent investigations into corruption in the kingdom.[4]

Kuwait's offset program started in 1992 and began a process of revision in 2015. (New restrictions and policy advisories have not yet been released.) Between 1992 and 2015, there were a few security sector firms that grew from domestic offset initiatives, particularly in information technology and cybersecurity, including Future Technology Systems and Kuwait Computer Services.[5] However, the minimum required of defense contracts for local investment has been relatively low, at 35 percent, requiring foreign firms with large contracts with the UAE government to reinvest a limited portion of the proceeds locally. For this reason and others, the Kuwaiti offset program is under review.

New pressures on public finance in the Gulf states include the need for job creation for young nationals. The labor market remains a key driver of offset and industrialization priorities. But there are also means as the owners of capital, as Gulf states and their investment vehicles are increasingly creating ownership opportunities within the security sector. This trend is clear within the UAE industrial capability strategy. In 2013, Mubadala, one of the UAE's sovereign wealth funds, increased its ownership stake to 41 percent in Piaggia Aerospace, an Italian manufacturer of unmanned aerial systems. While the UAE has long acquired platform designs from foreign firms for local use and manufacture, more recently, the UAE strategy has been to buy the technology, firm, and domestic manufacturing.[6]

In November, Mubadala subsidiary Strata, the aerospace industry supplier set up in 2010, finalized an agreement to build a new advanced manufacturing facility to make carbon fiber parts for Boeing's 777X aircraft.[7] As Florence Gaub and Zoe Stanley-Lockman argue, the UAE strategy to combine investment opportunities with offset policy and a growing manufacturing sector have, over a decade, created the opportunity for a national unification of defense service businesses. There are more than 80 companies registered across the UAE in shipbuilding,

3 Anshu Vats and Mark Serrano, "Military Self-Reliance in the GCC: From Purchasing Power to Industry Powerhouse," *Oliver Wyman*, December 2016.

4 Richard Spencer, "Saudi Royal behind Al-Yamamah Arms Deal Held in Crackdown on Corruption," *The Times*, November 11, 2017.

5 Florence Gaub and Zoe Stanley-Lockman, "Defense Industries in Arab States: Players and Strategies," *Chaillot Papers, European Union Institute for Security Studies* 141 (March 2017).

6 Ibid.

7 Michael Fahy, "Dubai Airshow: Mubadala's Strata Agrees to Build Boeing Carbon Fibre Parts Plant," *Zawya*, November 12, 2017.

aviation, unmanned systems, and land systems, including armored vehicles. The defense and security sector is now managed under an umbrella organization, Emirates Defense Industries Company, as a result of a merger between Mubadala Development Company, Tawazun Holding LLC, and Emirates Advanced Investments Group.

To meet the potential growth in job and knowledge creation, the state investment needs a strategic view that goes beyond procurement. In each of the six GCC states' economic diversification plans, there are goals and incentives to grow the private sector and industrial capacity. In the UAE and Saudi Arabia, these plans are explicitly geared toward the defense and security sectors.

Country	Plan	GCC Economic Diversification Goals
Saudi Arabia	Vision 2030, National Transformation Program	Though the third biggest worldwide military spender, Saudi Arabia spends only 2 percent of defense budget domestically. Vision 2030's goal is to localize at least 50 percent of defense spending by 2030, so as to reduce foreign expenditure, and stimulate and diversify the national economy by developing the following defense-related sectors: (i) industrial equipment, (ii) communication, and (iii) information technology. Currently, the national defense industrial sector is limited to only seven companies and two research centers. Through the General Department for Local Manufacturing Support, established following the announcement of Vision 2030 on April 25, 2016, the kingdom has started with less complex industries (i.e. spare parts, armored vehicles, and basic ammunition) and hopes to advance to more complex equipment (e.g. military aircrafts).
United Arab Emirates	UAE 2021, Abu Dhabi 2030, National Innovation Strategy, Abu Dhabi Economic Vision 2030	The interest of the UAE in building defense capabilities is linked to investment in the aerospace sector, as indicated in the Abu Dhabi Economic Vision 2030. The emirate is intent on "developing its capabilities in the manufacturing and maintenance of civil and military aerospace equipment and parts, defense electronics and other equipment and space apparatus."
Qatar	Qatar National Vision 2030	The Qatar National Vision 2030 does not indicate specific ambitions to develop a defense industry. Rather, it aims toward a "diversified economy that gradually reduces its dependence on hydrocarbon industries," and "enhances the role of the private sector."
Kuwait	New Kuwait 2035	Vision plan Kuwait 2035 does not go into depth to elaborate a plan for developing the defense industry. However, the vision indicates a commitment to "develop a prosperous and diversified economy to reduce the country's dependence on oil export revenues."
Oman	Oman 2020	Oman's Vision 2020 does not specify defense industries as a priority in diversification. Instead, it identifies five promising sectors for providing job growth for nationals and expanding the private sector: manufacturing, transport and logistic services, tourism, fisheries, and mining.
Bahrain	Bahrain Economic Vision 2030	Bahrain's goal is to drive economic growth by developing the private sector through "enhancing productivity and skills," diversifying and building the economy by focusing on existing high-potential sectors, and capturing emerging opportunities. The vision stresses a commitment to create economic opportunities "beyond the financial sector" to diversify non-oil economic growth in three particular sectors: (i) tourism, (ii) business services, (iii) manufacturing and logistics.

A Closer Look at Emirati and Saudi Defense Industries

The Saudis and Emiratis aspire to build their arms-production capacity, and both have taken aggressive steps toward realizing their ambitions. Riyadh and Abu Dhabi have enhanced their maintenance, repair, and overhaul services designed to support air force and commercial air carrier operations. Both countries now design and manufacture light weapons, unmanned systems, armored personnel carriers and military support vehicles, and other niche military and aerospace hardware. The UAE also manufactures ships and landing craft for the navy. The procurement of locally manufactured weaponry since 2012, when measured in U.S. dollars, represents between 2 and 9 percent of all defense purchases made by the two countries. Exports of domestically produced military hardware, however, is modest, though a few pending deals might indicate significant improvements.

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United Arab Emirates

The defense industry in the UAE is most advanced in the maritime domain, where Abu Dhabi Ship Building (ADSB) dominates and acts as a prime contractor and systems integrator. The focus on ship building is consistent with the UAE's long-range plans to project power along the littoral, as well as the blue waters south and west of the Arabian Peninsula.[8]

There are two major enterprises supporting ADSB. Abu Dhabi Systems Integration, a subsidiary of ADSB, teams with the Italian firm SELEX Sistemi Integrati to focus on electronic and weapons systems design, development, and integration. It also supports maintenance and repair operations. Gulf Logistics and Naval Support is a joint venture between ADSB and BVT Surface Fleet, a British firm related to BAE Maritime Systems. GLNS provides support services for maritime systems, including logistics and training.

As the UAE grows its maritime capabilities to protect its interests in the Red Sea, the Gulf of Oman, and beyond, ADSM is likely to expand as it capitalizes on its role as the primary provider of naval systems for the country. Export opportunities to other GCC states will likely increase, as well. ADSB has already sold landing craft to Kuwait and Bahrain, one of the notable export successes for a Gulf-based defense manufacturer.[9] There is an advantage for all GCC states in creating an inter-GCC market that is both compatible in systems technology and military use and also a driver of regional investment.

Saudi Arabia, like the UAE, aims to increase its naval capacity in the Red Sea and along Africa's

8 Theodore Karasik and Jeremy Vaughn, "Middle East Maritime Security: The Growing Role of Regional and Extraregional Navies," *The Washington Institute for Near East Policy*, Policy Note 41 (September 2017): 3.

9 ADSB sold three large landing craft and five smaller craft to Kuwait. The order for two 64-meter and one 42-meter landing ships was finalized in 2013, with deliveries beginning in 2016. The sales were proceeded by the export of a 64-meter craft to Oman in 2006 and the transfer of two 42-meter ships to Bahrain in 2010. The total value of the orders has not been reported.

east coast. ADSB is positioned to became a major supplier to the kingdom in the coming years.

UAE industries are active in the land and air domains, as well. While not as successful as ADSB, Mahindra Emirates Vehicle Armouring and NIMR Automotive have established significant capacity. Mahindra is based in Ras Al Khaimah, where it provides engineering services, develops prototype vehicles, and manufactures armored vehicles. Most of its armored vehicles are custom made from existing car and truck platforms. Mahindra's products are designed to provide a secure means to transport people and cash. The firm also produces a range of light-armored personnel vehicles for use by military, paramilitary, and police forces.

NIMR Automotive is based in Abu Dhabi and supplies the UAE armed forces with armored vehicles. The military vehicles manufactured by NIMR are rebranded designs acquired from the South African concern Denel. The UAE is purchasing NIMR products in large numbers. The NIMR II Ajban 440A 4x4 chassis, Enigma 8x8 infantry fighting vehicle, and N35 armored personnel carrier have all been tested under wartime conditions by Emirati forces operating in Yemen.

The export potential for NIMR products is significant. Algeria has signed contracts to assemble NIMR vehicles locally. Turkey and Egypt may soon import armored vehicles produced by NIMR and other UAE-owned companies. The UAE has leveraged investments in its air force as a means for establishing a variety of aerospace companies. Most of these firms are dedicated to maintenance, repair, and overhaul (MRO) of UAE's military planes. These services also undergird the UAE's world-class civilian air transportation capacities.

Building on its MRO capabilities in the aerospace industry, and the foresight and ambitions of Ali Al Dhaheri, the UAE has created the industrial base for the production of unmanned aerial vehicles.

Building on its MRO capabilities in the aerospace industry, and the foresight and ambitions of Ali Al Dhaheri, the UAE has created the industrial base for the production of unmanned aerial vehicles (UAVs). Abu Dhabi Autonomous Systems Investments (ADASI) and Adcom Systems, which is owned by Dhaheri, are two of the leading UAV companies operating in the UAE. ADASI has teamed with the Austrian firm Schiebel to locally manufacture the Camcopter S-100. Adcom has been partnering with a range of companies, including firms from South Africa and Ukraine, to produce the Yabhon United 40 (Smart Eye 2) platform. This Medium Altitude, Long Endurance UAV is designed to conduct near-realtime assessment of combat and battle damage; intelligence, surveillance, and reconnaissance; communications relay; border surveillance; humanitarian aid; and other special missions.

A number of subsidiary firms of Mubadala support UAE's burgeoning aerospace sector: Al Yah Satellites Communications Company works on satellite systems; Bayanat offers geospatial services, such as surveying and mapping; and, Strata. Tawazun Holding has been actively working to develop and produce munitions and light weapons for the UAE armed forces. In 2012, Tawazun formed a joint venture with Denel Dynamics of South Africa – branded Tawazun Dynamics – to support the development, manufacture, assembly, and integration of precision-guided air munitions.

Saudi Arabia

Saudi Arabia has not experienced the successes realized by its smaller neighbor, the UAE. However, the kingdom's Vision 2030 strategy strives to indigenize 50 percent of its military equipment budget by 2030. Presently, the Saudis spend just 2 percent of their defense acquisition budget on locally manufactured equipment and services. The kingdom's ambitions are poorly aligned with its current and near-term industrial capacity. It will take strong, persistent, and long-term commitments and investments from the upper-most levels of the Saudi government to build the industrial and technical foundations needed to enable a robust defense industry, one capable of meeting the country's long-term strategic requirements.

Like the UAE, Saudi Arabia is acquiring foreign companies to undergird its bid to create military-industrial capacity. The efforts have focused on armored personnel carriers, UAVs, and MRO services.

The Armored Vehicles & Heavy Equipment Factory is a subsidiary of Military Industries Corporation, a state-owned enterprise. It is charged with leveraging technology transfers to develop industrial foundations and factories. Presently, the enterprise produces the Al Shibl 1 and 2 light-armored vehicles employed by the kingdom's Ministry of Defense.[10]

The Abdallah Al Faris Company for Heavy Industries manufactures two variants of Al Fahd – the AF-40-8-1 Armored Personnel Carrier and the AF-40-8-2 Armored Fighting and Reconnaissance Vehicles. The armored vehicles have been produced at a factory in Dammam since 1998. The firm also manufactures the Al-Faris 8-400 armored personnel carrier, used by Saudi land forces.

The King Abdulaziz City for Science and Technology (KACST) and King Abdullah University of Science and Technology (KAUST) have partnered to pursue UAV technologies. KASCT's National Center for Aviation Technology produces a family of UAVs, branded Saker 2, Saker 3, and Saker 4, primarily for research and education. The efforts of KACST and KAUST lay the technological foundations for a more robust drone development and production of drones for the Saudi military.

Evaluating UAE and Saudi Defense Industrialization Strategies

The UAE and Saudi Arabia have prioritized efforts to localize their manufacture of weapons, military equipment, and maintenance services. The Saudis have focused UAV technologies, the production of armored vehicles, and MRO services for the aerospace sector. These three sectors of industry appear to operate in isolation. For example, the experience and knowledge gained in the support of MRO services have not been transferred to the UAV development efforts taking place at KACST. The UAE has done a better job of leveraging its MRO services activities to the benefit of its growing drone and UAV development programs. This, and its efforts to partner with foreign companies to access technology, hardware, and infrastructure

10 "Regional Focus – Middle East and Africa," *Jane's 360*, June 13, 2016.

explains why the Emiratis' UAV industry is outpacing that of its Saudi counterparts.

The UAE has also been better at absorbing technology, acquiring foreign companies and their manufacturing capabilities, and prioritizing industrial capacity that helps achieve its larger strategic needs. Abu Dhabi's ability to manufacture ships capable of operating in blue waters and along the littoral match its long-term objective of forward deployment of military assets in defense of UAE interests in the region. Riyadh holds similar maritime ambitions, but has been slow to acquire the technology and infrastructure needed to support the manufacture of naval vessels.

Abu Dhabi and Riyadh will continue to build their respective efforts to localize defense manufacturing, yet they are unlikely to yield their reliance on imported weaponry.

Abu Dhabi and Riyadh will continue to build their respective efforts to localize defense manufacturing, yet they are unlikely to yield their reliance on imported weaponry. There are underlying reasons. One, both countries have the financial wherewithal and access to foreign supplied military equipment and capabilities. As a result, they have been able to procure the weapons they want, including, for example, state-of-the-art fighter aircraft, air and missile defenses, battle tanks, ships, and communication equipment. Their respective national security strategies and warfighting doctrines are built around the capabilities they have assembled, not the other way around.

Conclusion

The Gulf Arab states have placed a premium on the acquisition of superior technology and weaponry in order to ensure their security. So long as qualitative superiority is required, the GCC states will find it challenging to manufacture locally the types of weapons they want and need. Abu Dhabi's efforts to exploit offsets and technology transfers could change the dynamics and certainly create an important market for manufacturing and assembling defense products attractive to a regional client base. The goal may not be full production pipelines of all defense and security needs, but rather a selective approach that allows the best of globally available technology to be acquired and, in part, transferred for local production.