Not a Flood, but a Rising Current: Chinese Weapons Sales to the Middle East

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China is a superpower growing politically, economically, and militarily, and has an international vision and global map of interests. Along with its political and economic programs, its security and military needs have also grown. Thus, there has been an increase in China's military budget in recent years, along with groundbreaking steps such as building its first independently produced aircraft carrier and establishing its first military base outside of China.[1] In October 2017, at the 19th Congress of the Chinese Communist Party, Chinese President Xi Jinping declared that by 2035 China would have a "modern" army and military sector, and would reach the level of "global superpower" by 2049 – the 100th anniversary of the establishment of the People's Republic of China.[2] As of 2018, China was ranked as the world's fifth largest arms exporter, although it is a distant fifth behind Russia and the United States. During the years 2014-2018, Chinese arms exports made up some 5.2 percent of total global arms exports, constituting an increase of 2.7 percent over the previous five years.[3]

Chinese military exports to the Middle East began in the mid-1970s, and peaked in the 1980s. Subsequently in decline, today they are negligible in comparison with arms transfers to the region from the United States, Russia, and Western countries. However, a change seems to be emerging, due to converging trends – the expansion of China's interests and its deepening economic relations in the Middle East, its military-industrial buildup, and the growing attraction of Chinese-made military technology. Noteworthy, for example, is the export of singular low cost products of sufficient quality

such as unmanned attack aircraft, which are offered for sale to countries in the region without the policy restrictions imposed by other superpowers.

For Israel, this apparent trend is a challenge on a number of levels: the potential that advanced weapon systems will fall into the hands of Israel's enemies, particularly Iran and its proxies; the appearance in the "neighborhood" of weapon systems where the technological familiarity with them is low and therefore it is more difficult to build a response to them; the lack of a commitment on the part of China (unlike the United States) to maintain Israel's qualitative military edge and the lack of communication channels with it on this issue; and increasing competition by China in the field of military exports, where Israel has enjoyed a relative advantage. All these issues warrant increased attention from Israel's defense establishment to China's military industries in general and to the Middle East in particular, the establishment of suitable channels of communication with the Chinese government on the issue, and clarification of the issue in discussions with the US administration.

In light of these developments, China's military exports to the Middle East and their potential influence on Israel's strategic environment are highly important, and are analyzed here through case studies of China's five key regional importers: Egypt, Iraq, Iran, Turkey, and Saudi Arabia. The chapter first surveys briefly the history of China's military exports to these countries and the Chinese weapons that are present in the region. It then describes current and future trends in the production of weapons in China and their potential supply to customers in the Middle East. Finally, it estimates the penetration of Chinese weapons in the coming years into the Iranian, Saudi, and Egypt militaries, under the influence of political, military, economic, and technological factors.

Most of the figures regarding arms acquisitions and the costs of arms deals is from the SIPRI (Stockholm International Peace Research Institute) database and from additional publicly available sources. Not included is the export of light weapons such as assault rifles, machine guns, and ammunition, as well as cybernetic warfare, which is very difficult to track. For the purpose of this article, the Middle East is defined as bordered by Iran in the east, Egypt in the west, Turkey in the north, and Yemen in the south.

Military Exports from China to the Middle East, 1975-2018

Chinese military exports to the Middle East began in 1975, and from then until 2018 the total sum, according to SIPRI, reached $12.84 billion (figure 1). The majority of sales – $8.8 billion – took place in the 1980s, when China exported considerable amounts of weapons to both sides in the Iran-Iraq War. During the 1990s, after the end of the Cold War, Chinese military exports to the Middle East declined to only $1.8 billion, most of it to Iran. The decline continued in the first decade of the 21st century, with exports of $1.4 billion, primarily to Iran and Egypt.

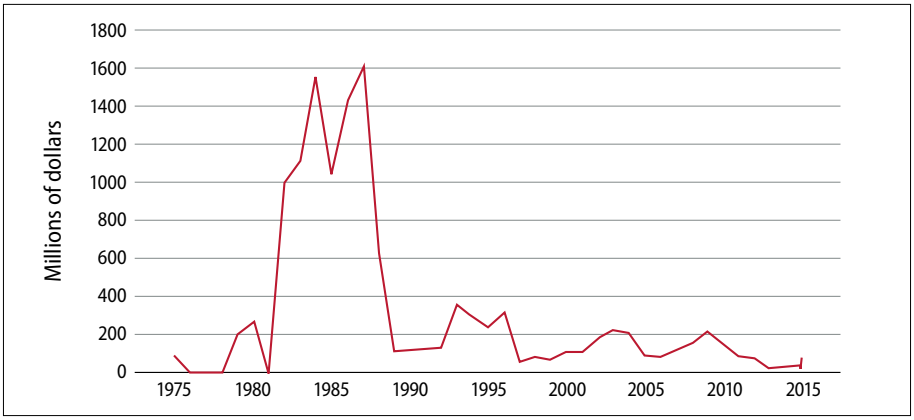

Figure 1: Chinese Military Exports to the Middle East, 1970-2018

Source: SIPRI 2018

Despite China's accelerated development in recent years, the decline in its weapons sales to the Middle East has continued in the current decade. From 2010 to 2018, Chinese military exports to the Middle East totaled $760 million – around 5.4 percent of China's total military exports during those years, which amounted to $13.9 billion (figure 2). To put this figure in a greater context, according to SIPRI, Russia's military exports to the Middle East during those years are estimated at $8.6 billion, 11 times as much as China's, while US military exports to the Middle East (not including Israel) are estimated at $35.2 billion, 46 times as much as China's (figure 3).

Egypt

Following Egypt's heavy losses in the Yom Kippur War, and against the background of Egypt's distancing from the Soviet Union, China signed its

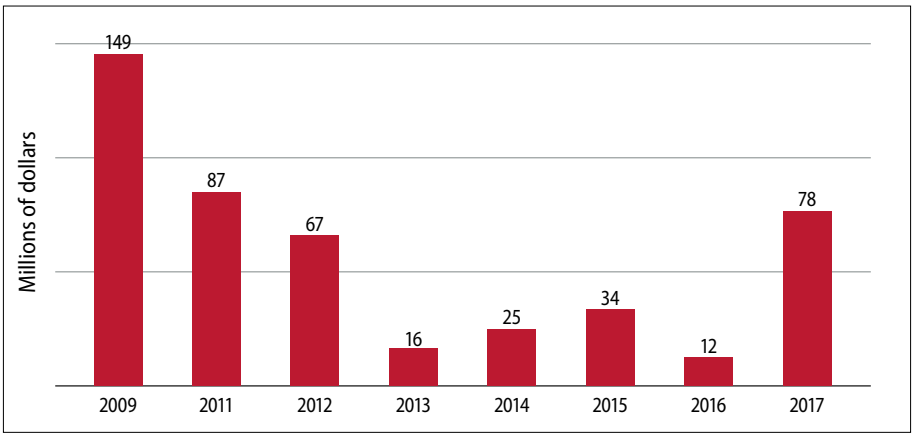

Figure 2: Chinese Military Exports to the Middle East, 2010-2018

Source: SIPRI 2019

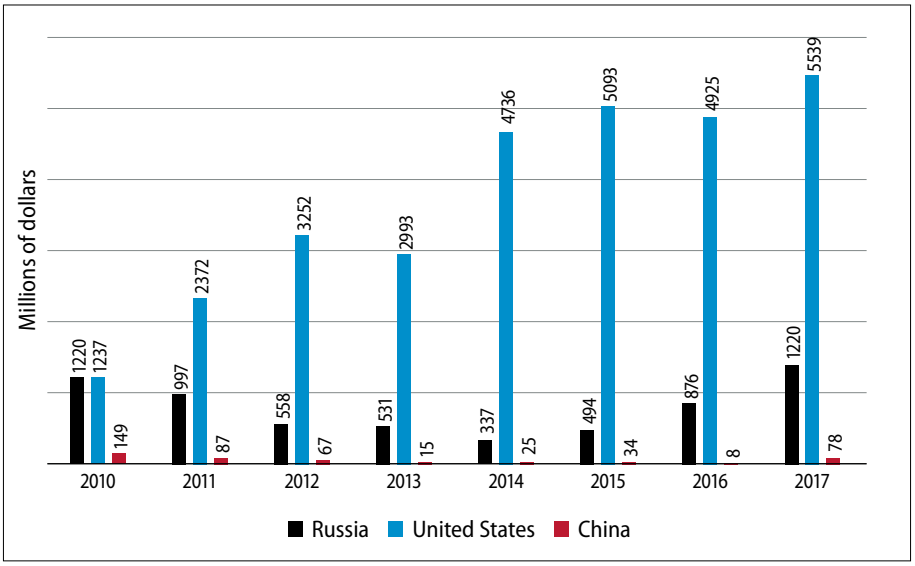

Figure 3: US, Russia, and Chinese Military Exports to the Middle East, 2010-2018

Source: SIPRI 2019

first weapons deal with Egypt in 1975; this was China's first weapons deal in the Middle East.[4] This deal, which centered on the acquisition of Xi'an H-6 bombers, was the beginning of a series of arms deals between China and Egypt. In the 1980s, Egypt purchased extensively from China, including vessels such as submarines, destroyers, and missile boats, as well as aircraft, including F-7B and J-6 jet fighters (China permitted Egypt to assemble the latter on its territory).

From the 2000s to date, Egyptian purchases from China have focused mainly on aircraft. For example, in the framework of the campaign against the Islamic State in the Sinai Peninsula, Egypt began to purchase various kinds of advanced unmanned aerial vehicles (UAV), including the CH-4B and Wing Loong 1. As part of an agreement signed with the Chinese company Xi'an Aisheng Technology regarding the transfer of technologies for strengthening the capabilities of Egypt's unmanned aerial vehicle industry, Egypt began producing the ASN-209 reconnaissance UAV within its territory.[5] In addition, it purchased 120 K-8 Karakorum training aircraft, 110 of which were assembled in Egypt. Another expression of the technological cooperation is a space agreement on launching Egypt's second earth observation satellite, MisrSAT2, which includes training Egyptian personnel in the field of remote sensing.[6] The value of Egypt's arms deals with China from the first deal in the 1970s until today is estimated at approximately $3 billion. However, from 2010 to 2018, China's military exports to Egypt amounted to only 7 percent of China's military exports to the Middle East during those years.

Iraq

Military relations between China and Iraq began in the 1980s, at the height of the Iran-Iraq War. According to SIPRI, Iraqi acquisitions were mainly aerial, and included J-6 and F-7B fighter jets, Xi'an H-6 bombers, and HN-5A anti-aircraft missiles. In terms of land forces, Iraq primarily acquired Type-59 and Type-69A1 main battle tanks and additional armored fighting vehicles such as Type-63. As to naval power, Iraq acquired 200 HY-2 anti-ship missiles. Iraqi acquisitions from China reached over $4.2 billion during this period. From the end of the war until the first decade of the 21st century, acquisitions from China ceased and only renewed in 2015, when, as part of a $17 million deal, Iraq acquired four CH-4B unmanned aerial attack vehicles, along with 20 FT-9 bombs and 20 AR-1 air-to-air missiles. In March 2018 it was reported that China offered Iraq HJ-10A anti-tank guided missile systems mounted on Chinese VN-1 APCs.[7]

Iran

Military relations between China and Iran also began early in the 1980s, during the Iran-Iraq War. Following the Islamic Revolution and the severing of relations between the United States and Iran, China became one of Tehran's main weapons suppliers. Iranian interest in Chinese military products was

mainly in the field of missiles. Iran acquired knowledge and production infrastructure that it needed from China, or a negligible amount of weapons for reverse engineering toward self-production. Thus, in time Iranian industries produced Iranian versions of Chinese weapons. From the early 1990s until the mid-2000s, Iran produced hundreds of Noor and Tondar anti-ship missiles based on the Chinese missiles C-802 and C-801 respectively, as well as Kowsar missiles based on the C-701 and C-704 missiles, and Nasr missiles based on the Chinese C-705.[8] Some of the Iranian-developed missiles based on Chinese technologies were transferred to Hezbollah and Hamas, and used in clashes against Israel. For example, in the Second Lebanon War in the summer of 2006, Israel's missile ship *Hanit* was damaged by what was apparently an Iranian version of the Chinese C-802, which was fired from the Beirut coast; Hezbollah also fired 122mm Chinese cluster rockets at civilian targets in northern Israel.[9] In 2011, IDF forces captured six Iranian missiles from the ship *Victoria* based on the C-704 that were intended for Hamas in Gaza,[10] thus preventing serious risks to the gas rigs and naval forces. Between 2010 and 2018, China's military exports to Iran amounted to 28 percent of China's total military exports to the Middle East.

Aside from missiles, China has also assisted Iran in developing unconventional weapons. According to the CIA, China was one of Iran's main suppliers of knowledge in the field of chemical warfare, and mainly helped Iran with producing and assembling chemical warheads on ballistic missiles. In the nuclear realm, China supplied Iran with a number of civilian research reactors for the purpose of training nuclear engineers, and helped develop uranium resources "for civilian purposes." A report by the US Department of Defense claimed that China also assisted Iran with its military nuclear program, but the amount and nature of this assistance are unknown.[11] According to a US Treasury Department report published in July 2017, Iran received electronic components for its nuclear program through the Chinese electronics company Emily Liu and companies affiliated with it, as early as 2014.[12]

Turkey

According to SIPRI, Turkish acquisitions from China began in 1998 with the purchase of WS-1B rocket launchers. From 2002 to 2012, Turkey acquired 200 B-611 short range ballistic missiles. Even though Turkey's membership in NATO is a significant anchor in Turkey's foreign and defense policy, it

has continued to consider expanding its military cooperation with China. Thus, in September 2013, the Chinese corporation CPMIEC won a tender for the acquisition of missile defense systems. From Turkey's perspective, the option of collaboration with the Chinese corporation at the production stage was a central consideration. From China's perspective, the fact that a NATO member was interested in acquiring advanced systems from China enabled it to present itself as a supplier of advanced weapons, a kind of "quality assurance."[13] The deal sparked considerable indignation at NATO, and was presented by Turkey's Western allies as a potential "Trojan horse." The Americans vehemently opposed the deal, and after numerous delays Turkey announced the complete cancellation of the tender in November 2015.[14] Since this incident, no additional weapons deals with China have been reported.

Saudi Arabia

According to SIPRI, Saudi acquisitions from China began in the 1980s, with the purchase of DF-3A (CSS2) ballistic missiles, with a range of thousands of kilometers, for $450 million. The deal was carried out secretly and only made public in 2014, when Saudi Arabia first presented the missiles. In 2007, DF-21 ballistic missiles and PLZ-45 self-propelled guns (SPGs) were also acquired. Since 2010, Saudi Arabia has mainly acquired unmanned aerial vehicles from China, such as the Wing Loong 1 and CH-4B, which in the future will be produced in Saudi Arabia.[15] In 2017, five Wing Loong 2 UAVs were transferred to Saudi Arabia in a $20 million deal, seemingly as part of a wider transaction.

Current Trends in the Production of Chinese Weapons

Since the 1990s, China's military industry has undergone reforms, with the aim of providing for the growing defense needs of the developing superpower. Chinese defense industries have streamlined business practices, reduced internal bureaucracy, shortened development processes and modernized production processes, improved quality control, and advanced military-civilian synergy in the development of systems, from the earliest theoretical stage to the supply stage. These changes were designed to help China compensate for technological gaps versus its competitors in the global weapons market.[16] China's military industries are currently improving the quality of products in

all fields, as well as overall production capacity, and are gradually reaching the level of Russia and even Western countries in certain fields.[17]

China's five-year plans, which define the political-military, economic and social challenges and responses for the next five years,[18] are an important tool to identify directions and trends in Chinese weapons exports, as are the weapons exhibitions that China holds or attends. These plans, which propound key national objectives, indicate that at the current time, China's military industries are advancing (in order of priority) the development of missile and space systems, aircraft, naval systems, and ground forces equipment. These weapons, even though they are not at the level of corresponding weapons produced by the West or Russia, aim to bridge the technological gaps with competitors, and transform the Chinese army into a modern military that can handle the complex challenges at the republic's long borders and far beyond them.[19]

Missiles

According to a US Department of Defense report, Chinese production of ballistic missiles, cruise missiles, surface-to-air missiles, and air-to-air missiles – for China's military and for export – has significantly improved in recent years, mainly thanks to upgrading the initial assembly stages and the production facilities of rocket engines. The performance of most of China's ballistic missiles and cruise missiles is close to that of corresponding products produced by the Western countries and Russia, and some of them are even intended for export. In December 2017, a pair of mobile launchers carrying Chinese SY-400 short range ballistic missiles was observed at a military parade in Qatar,[20] thus making Qatar the third country in the Middle East that has acquired Chinese-made ballistic missiles, alongside Saudi Arabia and Turkey. At the same time, Chinese surface-to-air missile systems based on Russian models are still far behind,[21] demonstrated by the fact that Russia recently supplied China with new S-400 air defense systems.[22] In addition, the Chinese company CPMIEC exports the FD-2000 advanced air defense system – an export version of the HQ-9 system that is in operational use in the artificial islands in the South China Sea, among other places. The system is based on the Russian S-300 air defense system, but its interception range is lower than that of the Russian system, reaching only 125 km.[23]

Air

China's commercial and military aviation industry has advanced in recent years to the production of large transport aircraft, fourth and fifth generation fighter jets, modern UAVs with reconnaissance and attack capabilities, and helicopters. The 13th five-year plan (2016-2020) involves focus on research, development, and innovation issues, including the development of helicopters, UAVs, aircraft, and even satellites.[24]

China's commercial aviation industry has invested considerably in technologies for producing integrated circuits, avionics, and other components that contribute to the military aircraft industry. However, China still depends on external sources, for example in the field of reliable high performance engines. China's infrastructure and experience at producing civilian aircraft are improving, as evidenced by China's development of transport aircraft for both the military sector and the civilian sector. Noteworthy here is the C-919 civilian passenger plane, produced by COMAC, which is expected to compete with Boeing and Airbus in the coming decade.[25] Another achievement for China's aviation industry occurred in December 2017 with the maiden flight of the largest amphibian aircraft in the world, the AG-600 Kunlong, which is developed and produced entirely by the Chinese corporation AVIC, and is also intended for export.[26]

One of the most advanced Chinese military products intended for export is the Gyrfalcon J-31 stealth fighter jet. This aircraft, also known as the FC-31, was developed as a response to the fifth generation of American fighter jets, which have stealth capabilities. The aircraft that the Shenyang Aircraft Corporation is developing has limited stealth capability, and its development is expected to be completed in 2019.[27] According to reports, its price was to be $70 million, and it was claimed that many potential customers expressed interest in it, even though it has not entered the production stage.[28]

Chinese exports in the field of UAVs focus on two main families of models: the Cai Hong (CH) and the Wing Loong, which is also known as the Pterodactyl.

One of China's most advanced UAVs is the CH-5. According to a senior official involved in the development of this vehicle, it is able to remain at an altitude of 10 km for some 60 hours and carry a payload of some 1,000 kg. It is said to be more advanced than the United States flagship UAV model, the MQ-9, and a few countries have expressed interest in acquiring the UAV, which has been approved for export. Unlike Western countries,

the military corporation CASC, which produces the UAV, announced that it is also prepared to sell the vehicle's technologies to foreign countries.[29] According to a Chinese government document disclosed in February 2018, over the last few years China has exported over 30 UAVs of the previous model, the CH-4, to various countries, including Iraq, Saudi Arabia, Jordan, and Egypt.[30]

Another UAV that was first revealed in November 2016 is the Wing Loong 2, which conducted its maiden flight in February 2017. This is an upgraded version of the previous model, the Wing Loong 1, which has been sold in large quantities to countries such as Egypt, Saudi Arabia, Nigeria, Uzbekistan, Kazakhstan, and Indonesia. The length of the UAV is 11 meters, its wingspan is 20.5 meters, and its height is 4.1 meters. It is equipped with a large dedicated payload weighing 400 kg, and is able to carry armaments such as air-to-surface missiles, precision guided missiles, bombs, and air-to-air missiles.[31] In February 2017, it was revealed that CAIG – a subsidiary of the Chinese military corporation AVIC – will provide a customer in the Middle East with 300 units of this model. Despite various reports that identified Saudi Arabia as the customer, in January 2018 three UAVs of this model were observed at a United Arab Emirates military base.[32] In April 2018, it was reported that a Houthi leader was assassinated by UAE using an armed Chinese UAV of this model, as part of the ongoing war against the Houthi rebels in Yemen.[33] According to SIPRI, in 2018 15 UAVs were transferred to Saudi Arabia and 15 to the Emirates.

In addition, many Chinese companies are active in the field of UAVs and drones for the use in the civilian sector. These vehicles, which are considered popular in the global civilian UAV market, are accessible to all and inexpensive compared to military aircraft (only a few hundred or thousand dollars). These companies include DJI and Skywalker Technologies, which produce and market the Phantom family of drones and civilian UAVs such as the X-8, respectively. They have also been observed to be in use by terrorist organizations such as the Islamic State for the purposes of surveillance, intelligence gathering, and even attack.[34]

Sea

China is improving its ability to produce submarines, missile boats, destroyers, naval aviation, and additional naval capabilities by upgrading and expanding its shipyards. The two ship production companies in China – China State

Shipbuilding Corporation and China Shipbuilding Industry Corporation – collaborate on ship design and information on construction methods in order to increase efficiency in the field of naval production. China continues to depend on foreign suppliers to acquire drive units, but it is becoming more and more independent in ship production.[35] In June 2017, a senior official in the Chinese navy claimed that China is the world leader in development of integrated electric propulsion systems (IEPS).[36] China has set a target of developing silent submarines, advanced electronics systems for use by naval vessels, and naval warfare systems based on artificial intelligence.[37]

According to the US Department of Defense, China is the world's largest ship producer, and it arms its battleships with advanced air defense and underwater defense systems as well as attack capabilities.[38] In 2017, China launched its first ever domestically-produced aircraft carrier, after it acquired and renovated a Soviet model aircraft carrier from the Ukraine following the fall of the Soviet Union. China has reportedly signed a major deal with Thailand for the sale of three submarines, which demonstrates China's willingness to export strategic watercraft to countries with which it has an interest in strengthening relations.[39] In addition, at the Defense & Security 2017 exhibition held in November 2017, China announced a variety of new submarine models. According to the Chinese company CSOC, Middle East countries that have expressed an interest in these vessels include Saudi Arabia, UAE, and Egypt.[40]

Land

According to the US Department of Defense, China's production capacity continues to advance in almost every field of ground forces systems, including up-to-date tanks, armored vehicles, and artillery, though sometimes at the cost of quality.[41] In addition, China is developing a variety of advanced armored vehicles for export.[42] Furthermore, in August 2017, China first revealed the domestically produced GL-5 active protection system for armored vehicles, which in trials succeeded in intercepting anti-tank munitions. This system, which is also intended for export, operates in a similar manner to the Israeli Iron Fist system produced by IMI Systems.[43]

Future Trends in Middle East Acquisitions of Chinese Military Products

The penetration of Chinese military products into Middle East militaries in the coming years will be affected by factors originating in China itself and the Middle East, relations between superpowers and the region, and dominant trends in the global military export market.

Catalysts

Expanding political and economic interests: China has an increasing interest in the Middle East, from energy supply to terrorism distanced from its borders to additional economic interests. The Middle East is a central energy source for China, whose main oil suppliers are Saudi Arabia and Iran.[44] Moreover, countries in the region, in particular Iran and the Gulf states, are located at a junction of land and sea routes between East Asia and Europe and Africa. In the coming years, China will invest billions in developing infrastructure connected to its Belt and Road Initiative, including railroads, ports, roads, pipelines for energy products, electrical and communications networks, and more.[45] The deepened Chinese interests in the Middle East, despite its basic instability, will gradually compel China to develop the ability to protect its interests (supply lines, infrastructure, investments, assets, projects, and workers) and carefully increase its involvement in the region, as can be learned from its activity in Africa.

China's deep need for energy and minerals from Africa and its extensive and long term investment in infrastructure on the continent have led in recent years to increasing Chinese involvement in the continent's affairs and conflicts. Thus, China took upon itself the role of mediator in the civil war in South Sudan, from the outbreak of war in 2013 and in the following years.[46] At the same time, most of the economic and military aid granted by China to crisis regions in Africa has been through multilateral frameworks. In this manner, China has created regional frameworks for resolving conflicts and for increasing regional cooperation, such as the Initiative on China-Africa Cooperative Partnership for Peace and Security (ICACPPS), which was established in 2012 and has granted economic aid to similar local initiatives, and the African Capacity for Immediate Response to Crises, which was established in 2013. China has also sent its forces on four UN peacekeeping missions throughout Africa.[47] It seems that China has directly supported military buildup efforts by African regimes facing political and

military challenges only marginally and to a limited extent, and as far as is known without supplying weapons and munitions on a large scale or of advanced quality.[48]

The conflicts in the Middle East following the regional upheaval and the deep rivalry between Iran and the Shia axis versus the various Sunni camps have increased the demand for military imports to the region. Since 2011, almost every country in the region has found itself involved in one sense or another in exerting military force over time, whether within its territory or beyond its borders. Iran is involved in wars in Iraq, Syria, Yemen, and Afghanistan; in 2015 Saudi Arabia began a campaign against the Shiite Houthis in Yemen; Egypt is waging a campaign against the Islamic State on two fronts, in the Sinai Peninsula in the East and in Libya in the West; and UAE is involved in Saudi Arabia's combat in Yemen and Egypt's combat in Sinai and Libya.

At the same time, the map of global superpower involvement in the Middle East is changing. The United States, in a trend that began during the Obama administration and continues under Trump's leadership, seeks to reduce its involvement and direct investment in local conflicts. In contrast, Russia has deepened its political and military involvement in the region through its intervention in the crisis in Syria, and is expected to remain and deepen its power base in the area, expanding its political and military relations with countries in the region. This means that countries in the Middle East that have active military campaigns against terrorism and insurrection are now in greater need of political and military support, including the steady and reliable supply of weapons, and the superpowers see this demand as potential for increasing their influence and their revenue. Weapons and the establishment of nuclear reactors are major export areas for superpower trade with countries in the region.

This situation could enhance China's standing in two possible ways. The first, and more likely and relevant for most countries in the Middle East, is that the volume of military exports from China to the Middle East will continue to grow in accordance with the volume of its trade and investments in the region, and in certain particular fields could compete with exports from the United States, Russia, and the Western countries, but without threatening their dominance. The second way, which to some extent is a competing explanation but also complements the first scenario, is that the option of military trade with China (and even more so, with Russia) could

serve as a bargaining chip for the region's countries with respect to the United States as the world's leading weapons exporter, in order to pressure it to approve the sale of weapons that may be subject to restrictions. It is more likely that countries such as Saudi Arabia, the United Arab Emirates, and Egypt will go down this path, as they are closely bound to the United States, and their military aid and military trade with the US are sometimes subject to fluctuation due to various policy considerations.

Relatively few restrictions on exports: Western countries often place diplomatic and political limitations on the sale of advanced weapon systems that are sought by some countries in the Middle East, out of human rights and strategic considerations (alliances, international sanctions). For example, in the United States there are still restrictions on the sale of attack UAVs even to some of its allies in the Middle East, mainly due to compliance with the Missile Technology Control Regime (MTCR). Only recently was there a discussion in Congress on the possibility of Jordan and the United Arab Emirates acquiring attack UAVs from the United States, in light of concerns that they would acquire similar capabilities from China.[49] China for its part has declared that it adheres to the principle of the sovereignty of countries and their governments, opposes external intervention in internal issues such as human and civil rights, and maintains simultaneous relations with many parties in the Middle East. For example, China maintains extensive political relations, which include significant military components, with both Iran and Saudi Arabia, though the latter are bitter rivals. Furthermore, China is willing to sell attack UAVs to Saudi Arabia, engaged in a campaign against the Houthis in Yemen, despite the fact that the Saudi attacks involve extensive noncombatant casualties. While this fact arouses considerable indignation in the West and civilian and diplomatic pressure on Western governments to block the sale of weapons to Saudi Arabia, China's hands are not tied by such considerations.[50]

At the same time, it seems that China – like all countries – places certain limitations on the sale of technological weapon systems out of defense and economic considerations. According to China's Ministry of State Security, there are three declared principles of military exports: assistance in strengthening the legitimate self-defense capabilities of the customer; non-intervention in the internal affairs of the customer; and guarantees that the weapons do not threaten regional and global peace and security.[51] In addition, eager to maintain its military-technological advantages, China refrains from exporting

certain weapon systems. For example, it has never declared the J-20 stealth jet intended for export, and it is likely that there are classified military products whose existence China has never confirmed, in order to maintain strategic advantages over its rivals. However, it tends to carry out technological collaborations with its allies. For example, in July 2017, China established a center for military technology collaboration in Pakistan, for the purpose of joint development of military products. In November 2017, it was reported that the Chinese corporation NORINCO will expand its collaboration with the Myanmar army.[52] This is part of a trend of establishing additional such centers for strengthening domestic industries in Southern Asia – a region that China sees as being of the utmost military-strategic importance, in view of its long time rivalry with India.[53]

Attractiveness over competitors: as with other products, Chinese military products are considerably cheaper than those of their competitors in the West. For example, the price of a single unit of the American UAV MQ-9 Reaper is around $15 million.[54] In contrast, the price of the Chinese UAV CH-4, with similar capabilities to the American model, is only around $4 million. An American Predator-model UAV costs around $4 million; the Chinese Wing Loong 1 costs around $1 million.[55] In both cases, the Chinese price tag is four times less expensive than the American one. Even though the technical performance of the American military products is still greater than that of their Chinese counterparts, the price advantage can play a very important role for customers in the Middle East. In addition to the price tag, China has shown that it is flexible in the form of payment that it requires for military products. For example, China exported armored vehicles to Thailand in return for dried food, and exported FD-2000 air defense systems to Turkmenistan and Uzbekistan in return for natural gas.[56]

Impediments

The nature of the demand: the Middle East is a "conquered market," but one that has a growing appetite. In a "conquered market," the armies are relatively homogenous, such that the various branches of the military and the different systems they operate are compatible with one another; the military doctrines are based on the combat systems and their capabilities; and the logistical support system is also dependent on the source countries for spare parts, advisors, training, and so on. In addition, as is natural with military buildup processes, they bind the supplier and the customer with deep, long

term economic and military commitments. Thus, military trade relations are often the generators and expressions of political and strategic relations between the trading countries. In this way, over the past few decades, the world's leading weapons exporters, including the United States, Russia, the UK, France, and Germany have controlled the Middle East military products market. For example, from 2014 to 2018, some 52 percent of US weapons exports were to the Middle East – a 134 percent increase over the previous five years. Russia's weapons exports declined by 17 percent during 2014-2018 in comparison to the previous five-year period.[57]

At the same time, the demand for military products in the Middle East has only increased since the outbreak of the regional upheaval in 2011 and the emergence of active conflicts in many locations in the area. In the five years from 2014, demand for weapons in the Middle East increased by 87 percent over the previous five years. Demand from Saudi Arabia alone – the largest weapons importer during those years – increased by 192 percent. Aside from Saudi Arabia, demand for military products in Qatar increased by 225 percent, in Iraq by 139 percent, in Oman by 212 percent, in the United Arab Emirates it decreased by 6 percent, and in Egypt there was a significant increase of 205 percent. However, even under these circumstances, the leading exporters in the regional weapons market maintained their tight grip. The United States has continued to be the principal exporter to Saudi Arabia, with over 68 percent of total imports. The United States and France lead in Egypt with a similar percentage.[58] Thus, when competing in the Middle Eastern market, China faces strong and well-established competitors, and long term competition combined with significant civilian economic leverage will be required.

The nature of the supply: Chinese technology, production capacity, and performance are adequate but not yet competitive. According to the US Department of Defense, the quality of Chinese military products is still inferior to that of corresponding American and Russian products. However, the development trends of Chinese military industries alongside the massive investment in research and development may lead to narrowing and even closing the gap in the future. In addition, Chinese products have only been tested in operational considerations to a limited degree, and their effectiveness has only received initial proof on the battlefield. Seemingly this would impede the penetration of Chinese military products into the Middle East market, which enjoys advanced Western and Russian products

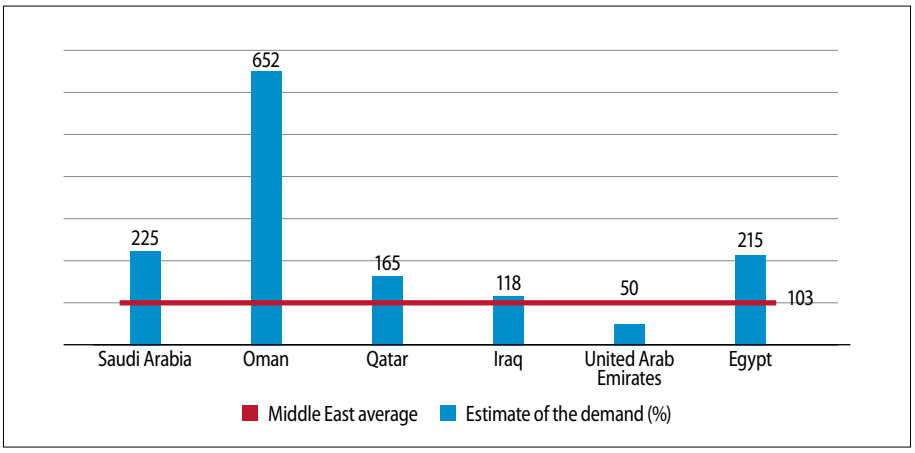

Figure 4: Increase in the Demand for Weapons in the Middle East, 2014-2018

Source: SIPRI 2018

that have been tested on the battlefield in Iraq, Afghanistan, Ukraine, and Syria. However, this could also be an opportunity for China, if it is able to take advantage of the many active conflicts in the region in order to assess the operational capability of military products and market them, as Russia, for example, has done since the beginning of its open military involvement in Syria in 2015. This line of thinking in China is expressed in the words of Song Zhongping, a former senior figure in the Chinese army, who said that due to the lack of operational activity of the Chinese army, China is selling military products to countries in order for those armies to test their operational capabilities.[59]

Conclusion

China's accelerated development in general and that of its military in particular bring accelerated development of its military industries, and increasing penetration into the global military export market. However, in assessing the potential penetration of Chinese military products into the Middle East, there are opportunities for China, along with significant challenges and barriers. The major impediments include gaps in the quality of Chinese weapons and operational reputation on the battlefield versus the products of competitors, which also enjoy the standing of preferred weapons suppliers as part of broader strategic relations. The factors accelerating the penetration of Chinese weapons into the Middle East are based on increasing demand due to the spread of war in the region, the increasing supply of Chinese industries,

comparative advantages in cost, the specific fields where competitors impose trade restrictions on themselves (such as surface-to-surface missiles and UAVs), and China's ability to integrate military exports as part of broader and more comprehensive trade and economic relations. Thus, while the Middle East weapons market is expected to continue to be dominated by the major suppliers from the Western countries and Russia, the penetration of China into specific areas is expected to expand gradually, along with the expansion of its interests and economic activity in the region.

The expansion of Chinese military exports to the Middle East will gradually pose an increasing challenge to Israel and the IDF. First, China supplies weapons to Iran, which in turn transfers them or their Iranian derivatives to proxies that fight against Israel – Hezbollah, Hamas, Palestinian Islamic Jihad, and the Shiite militias active on its behalf in the region. Second, the majority of Chinese military products that will enter the region are mainly used in the Chinese army and less common worldwide, and thus there is a challenge in recognizing their technical capabilities and technological performance, and in developing a response to them. Third, unlike the United States framework for weapons supply to the region, China does not have legislation committed to maintain Israel's qualitative military edge, and the two countries do not have an established channel of communication on this critical issue. Fourth, increased Chinese exports in fields where Israel has a comparative advantage, such as unmanned aerial vehicles, increase the competition with potential Israeli exports in general and to the pragmatic Sunni countries in particular.

Despite the limited amounts and types of Chinese military exports to the Middle East at present, the trends in China's military production and trade indicate the potential for change here too, and require that Israel follow these trends more closely. The Israeli government must seek to establish channels of communication with the Chinese government on the issue of military exports to the Middle East, and through them express its concerns on the issue and try to reduce risks. At the same time, the Israeli government and security establishment must include this topic in the strategic dialogue with the United States, and reach shared understandings regarding the development of trends, their potential impact on the interests of the two countries, and the coordination of their policies on the issue.

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