AL MASAH CAPITAL LIMITED

الماسة كابيتال ليمتد

MENA Military: The Hidden Industry

- What’s the size of MENA military expenditure?
- Which MENA country spends the most on military?
- What does MENA military expenditure consist of?
- Who are the major weapon suppliers?
- Is the supplier’s space witnessing increased deal activity?
- What are offset programs and how do they benefit?
- What is the usual procurement process by militaries?
- What are the key drivers of military expenditure in MENA?

EXECUTIVE SUMMARY

Governments across the globe spend trillions of dollars every year on aircraft, missiles, armored vehicles, tanks, artillery and military supplies. According to Stockholm International Peace Research Institute (SIPRI), world military expenditure stood at USD1.63 trillion in 2010, a 94% increase since 2001. The US tops global military spending rankings, accounting for 42.8% of world military expenditure in 2010, followed by China (7.3%), the UK (3.7%), France (3.6%) and Russia (3.6%).

Military expenditure in the MENA region crossed USD91 billion in 2010 with Saudi Arabia accounting for half that amount (USD45.2 billion), followed by the UAE (USD16.1 billion or 18%), Algeria (USD5.7 billion or 6.3%) and Kuwait (USD4.6 billion or 5%). We expect MENA military expenditure to reach USD118.2 billion by 2015, or 4.75% of 2015e GDP (annual North American expenditure amounted to 3.8% of GDP on average between 2001 and 2010).

Rising concerns over energy infrastructure assets, military modernization programs, regional rivalry, mounting oil wealth driven by high oil prices, and aspirations for stronger regional and international presence are the primary drivers behind this type of spending.

The MENA region has been spending a significantly higher percentage of its GDP on its military than the rest of the world. Military expenditure in the MENA averaged 5.5% of GDP between 2001 and 2010, compared to the world average of only 2.5%. Oil-exporting countries such as Oman, Saudi Arabia, Kuwait and the UAE are the prime spenders.

The MENA region has been buying large quantities of aircraft, missiles and armored vehicles. Over 2005–10, these three categories accounted for 83% of all conventional weapon purchases, with aircrafts being the most sought-after. On average, aircrafts accounted for more than 50% of all weapon imports by the region in four of the past six years, followed by missiles and armored vehicles. The UAE, Algeria and Saudi Arabia rank the highest in terms aircraft and missile purchases, while armored vehicle purchases are dominated by Egypt and Algeria.

During 2005–10, the UAE was among the most active buyers of arms in the international market. The country accounted for 35% of all purchases of major conventional weapons in the MENA region, followed by Algeria (21%), Egypt (16%) and Saudi Arabia (13%). Together, the countries accounted for 85% of all arms imports in MENA during 2005–10.

The US, Russia and France have been the major weapon suppliers to the MENA region. Over 2005-10, the US supplied 44% of all conventional weapons bought by the region. The share of Russia, France and the UK stood at 25%, 14% and 6%, respectively. The US's dominance is mainly a result of its strong ties with the two largest buyers – Saudi Arabia and the UAE. Russia is a favored defense partner of Algeria; France enjoys good ties with the UAE, while Saudi Arabia prefers the UK.

The US is a dominant player in the defense services sector. Seven of the ten largest arms-producing and defense service companies across the world are based out of the US. Although the MENA region significantly lags the US, it is making efforts to develop a local supplier base using defense offsets, which are now a norm in most military deals. Defense offsets help develop a local defense industrial base, enable the acquisition of high-quality modern technology, boost private sector participation, and increase employment. Exhibits 17 & 18 on pages 15 & 16 provide lists of international and regional companies involved in the military field.

The global defense services sector is witnessing increasing M&A activity. According to Pricewater-houseCoopers, a total of 341 deals worth USD43.7 billion were announced in the global Aerospace and Defense (A&D) sector in 2011. This is a new high on both a volume and value basis. The major deals announced during the year include United Technologies' acquisition of Goodrich Corporation for USD16.2 billion and Engine Holding GmbH's takeover of Tognum AG for USD4.7 billion. The A&D sector also witnessed private equity interest. Among the largest PE deals of 2011 was PE firm Providence Equity Partners' acquisition of SRA International for USD1.79 billion in cash. The MENA region however, lacks similar interest as defense contractors here are not just smaller in size, but are also yet to develop capabilities that make for a compelling investment case.

For 2012, we expect world military expenditure to remain flat due to cuts in defense spending by large traditional buyers. The US has announced cuts of nearly USD487 billion in its Department of Defense (DoD) budget and reduction of an equivalent amount under sequestration; this could result in an almost trillion-dollar reduction in US defense spending over a ten-year period starting fiscal year 2012. In Europe, too, defense budgets remain under pressure due to increasing financial constraints (a result of the ongoing economic crisis in the Eurozone).

On the other hand, rising military expenditure in India, China, Saudi Arabia and the UAE offers some respite to defense contractors; however, this is unlikely to fill the gap created by spending cuts in the US and Europe.

To sum up, the defense industry's future is clearly shifting to Asia and the Middle East. As these regions continue to spend heavily on developing military capabilities, domestic defense suppliers/ companies are likely to receive a boost.

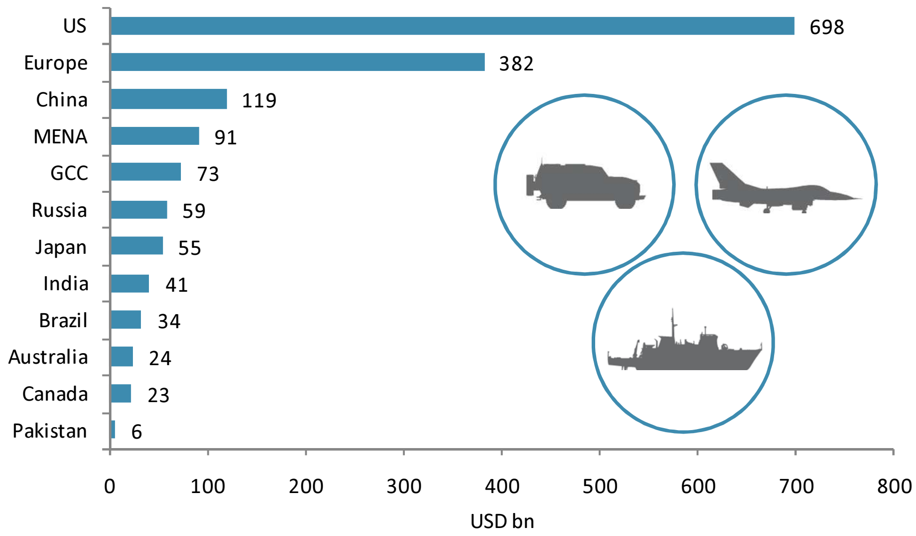
MILITARY EXPENDITURE MEANS BIG BUSINESS

The World military expenditure was estimated to be USD1.63 trillion in 2010

Every year, trillions of dollars are spent worldwide in the form of military expenditure. Conflicts, disputes, rivalries, internal security threats and the aspiration to hold a stronger regional and international presence are the key factors driving this expenditure. Additionally, recurring operational, training and maintenance expenses make up a considerable portion of total military expenditure.

According to Stockholm International Peace Research Institute (SIPRI), world military expenditure was estimated to be USD1.63 trillion in 2010.

Exhibit 1: Military expenditure across various countries/regions in 2010



Source: SIPRI, The World Bank, Al Masah Capital Research

Military expenditure has been on the rise across the globe

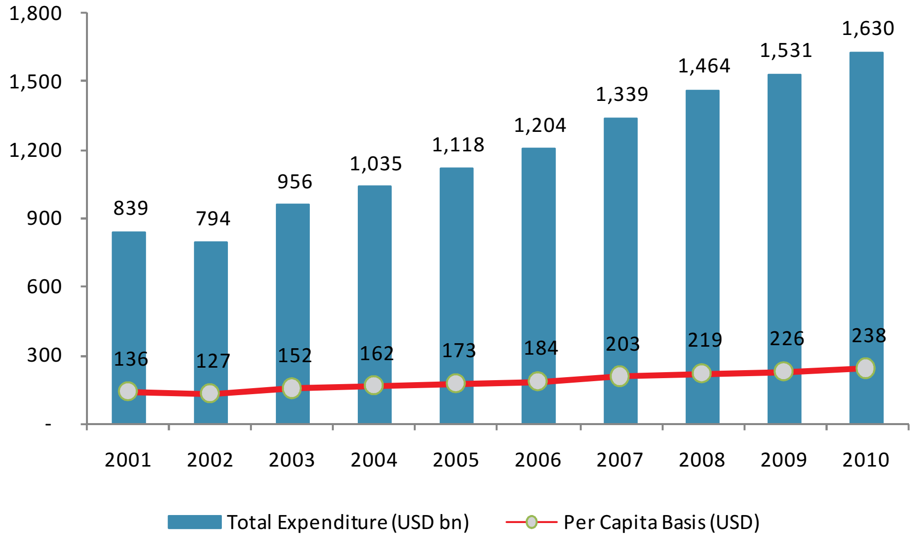
World military expenditure is growing at a strong rate of 7.7% CAGR between 2001 and 2010

In March 2012, India announced a defense budget of USD40 billion for 2012–13, up 17.0% over last year. During the same month, China hiked its defense budget by 11.2% year-on-year to USD106 billion for 2012. A report by the International Institute for Strategic Studies claims that the double-digit hike in budgetary allocations for defense by India and China could push Asia's military spending over Europe for the first time ever.

World military expenditure is growing at a robust rate of 7.7% CAGR between 2001 and 2010, rising to USD1.63 trillion in 2010 from USD0.84 trillion in 2001. Apart from India and China, countries such as the US, Brazil, Russia and South Africa significantly increased military spending between 2001 and 2010. In per capita terms, global spending stood at USD238 per person in 2010 compared to USD136 per person in 2001.

Exhibit 2: World military expenditure over 2001–10

Global expenditure on military has nearly doubled over the last decade



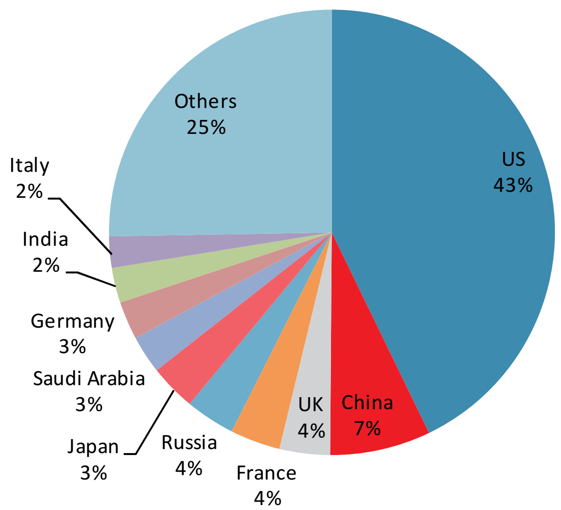
Source: SIPRI, The World Bank, Al Masah Capital Research

The US tops global military spending

With a defense spending of USD698 billion, the US accounted for the largest share (42.8%) of world military expenditure in 2010, followed by China (7.3%), the UK (3.7%), France (3.6%), and Russia (3.6%). Saudi Arabia, with a share of 2.8% in 2010, was the only country from the MENA region to feature amongst the top ten nations in the world for military spending.

Exhibit 3: Country-wise military expenditure in 2010 – percentage share

The US spends the largest amount on military



Country	USD bn
US	698.0
China	119.0
UK	59.6
France	59.3
Russia	58.7
Japan	54.5
Saudi Arabia	45.2
Germany	45.2
India	41.3
Italy	37.0
Others	412.2

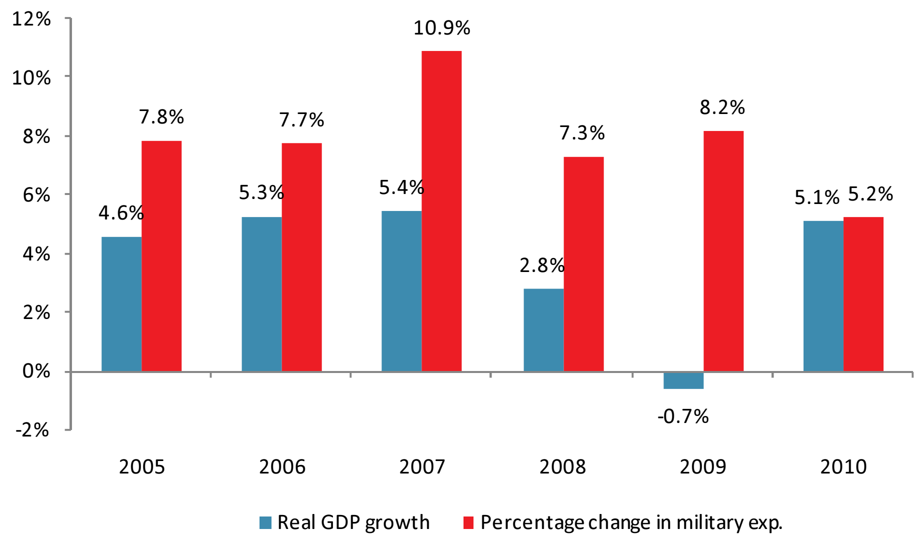
Source: SIPRI

Military spending quite consistent despite the economic slowdown

Military expenditure remains largely immune to recessionary trends in the global economy. During 2005–10, world military expenditure increased at a CAGR of 7.8% (adjusted for inflation) to USD1.63 trillion from USD1.08 trillion.

Military spending is counter-cyclical; not exposed to the commercial business cycle

Exhibit 4: World GDP growth versus change in military expenditure



Source: SIPRI, IMF

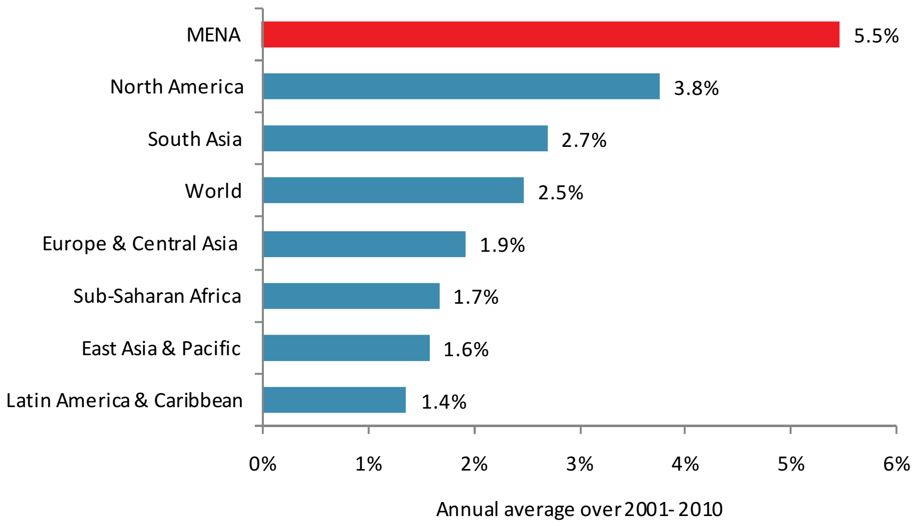
Despite the global financial crisis and the subsequent economic recession, world military expenditure did not decline during 2009. On the contrary, it increased 8.2% (adjusted for inflation). According to SIPRI, this was the steepest rise in military spending since the start of the Iraq War in 2003.

MENA: A REGION WITH HIGH MILITARY EXPENDITURE

MENA is characterized as a region with high military expenditure relative to GDP. According to the World Bank, military expenditure in MENA, as a percentage of GDP, averaged 5.5% during the last decade compared to the world average of 2.5%. Military expenditure in MENA is higher than any other region in the world, including North America, South Asia, Europe and Central Asia, Sub-Saharan Africa, East Asia and Pacific, and Latin America & Caribbean.

MENA military expenditure stands at 5.5% of GDP; double the world average of 2.5%

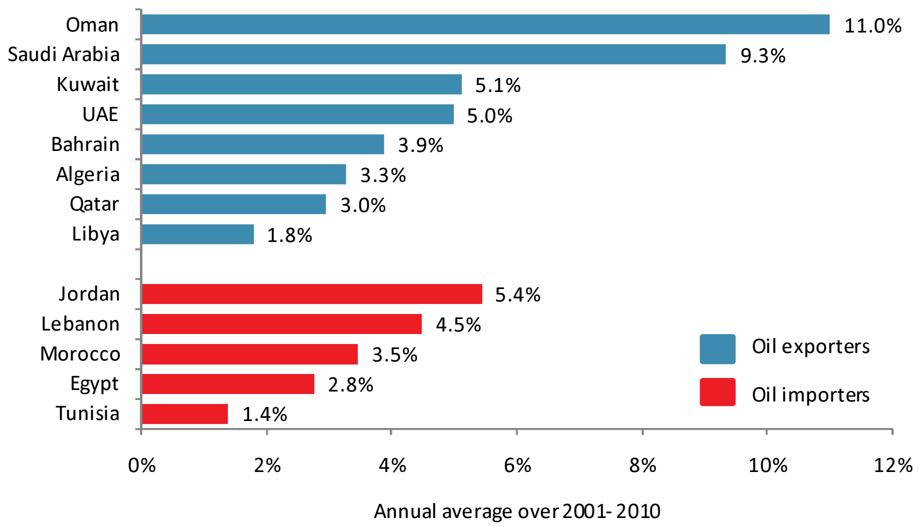
Exhibit 5: Average annual military expenditure as a percentage of GDP



Source: The World Bank

Oil-exporting countries are the main drivers of high military expenditure in MENA

Exhibit 3: Average annual military expenditure as a percentage of GDP in MENA



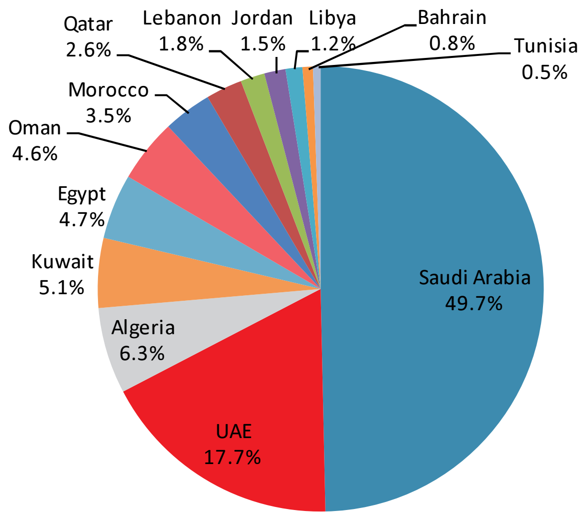
Source: The World Bank

MENA military expenditure was USD91.1 billion in 2010

In absolute terms, MENA's military expenditure stood at USD91.1 billion in 2010. According to SIPRI, Saudi Arabia led with total defense spending of USD45.2 billion, followed by the UAE (USD16.1 billion), Algeria (USD5.7 billion) and Kuwait (USD4.6 billion).

Saudi Arabia and the UAE are the two biggest spenders in MENA

Exhibit 7: Country-wise military expenditure in 2010 (USD billion)



Country	USD bn
Saudi Arabia	45.2
UAE	16.1
Algeria	5.7
Kuwait	4.6
Egypt	4.3
Oman	4.2
Morocco	3.2
Qatar	2.4
Lebanon	1.6
Jordan	1.4
Libya	1.1
Bahrain	0.7
Tunisia	0.5

Source: SIPRI

In fact, the SIPRI list of top ten importers of major conventional weapons across the world in 2011 featured three countries from MENA – Morocco (rank 4), the UAE (rank 5), and Saudi Arabia (rank 8).

Exhibit 8: Largest arms importers across the world, by rank

Country	2011	2010	2009	2008	2007
India	1	1	1	1	1
Australia	2	3	11	21	14
Pakistan	3	2	5	6	15
Morocco	4	54	62	53	63
UAE	5	14	14	8	6
South Korea	6	4	9	2	2
China	7	10	7	3	3
Saudi Arabia	8	5	10	24	35
Turkey	9	18	12	14	16
Vietnam	10	34	55	32	100

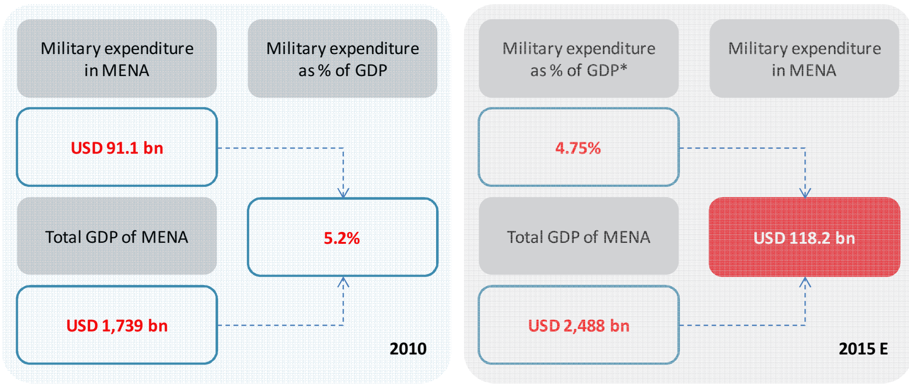
Source: SIPRI

We estimate MENA annual military expenditure to reach USD118 billion by 2015

We estimate annual military expenditure in MENA to reach USD118.2 billion by 2015 from USD91.1 billion in 2010. The figure was arrived at after considering GDP projections for the region and its historical average military expenditure (as a % of GDP).

We estimate MENA military expenditure to reach USD118.2 billion by 2015

Exhibit 9: MENA annual military expenditure to reach USD118 billion in 2015



Source: SIPRI, IMF, Al Masah Capital Research
Note: GDP projections are by the IMF and exclude Libya; Al Masah estimate of 5% for 2015 MENA military spending as % of MENA GDP

As stated above, military expenditure in MENA stood at USD91.1 billion in 2010. Considering a GDP of USD1,739 billion during the year, the military expenditure accounted for 5.2% of the region's GDP in 2010. Military expenditure in MENA, as a percentage of GDP, averaged 5.5% over 2001–10.

The MENA region has been spending a higher percentage of its GDP on military purposes than the rest of the world. However, assuming a faster convergence to the global average we expect this percentage to reduce to 4.75% by 2015. By multiplying this with the IMF GDP forecast for 2015, we arrived at a military expenditure of USD118.2 billion for the MENA region.

WHAT DOES MENA MILITARY EXPENDITURE CONSIST OF?

Military expenditure comprises both current and capital expenditure

Military expenditure usually comprises current and capital expenditure. Most countries allocate a large part of the defense budget to current expenditure, which includes salaries, training and healthcare of military personnel; food supplies; energy and fuel; and operations and maintenance activities. Allocations for purchase of aircraft, warships, construction works, and other defense equipment fall under capital expenditure.

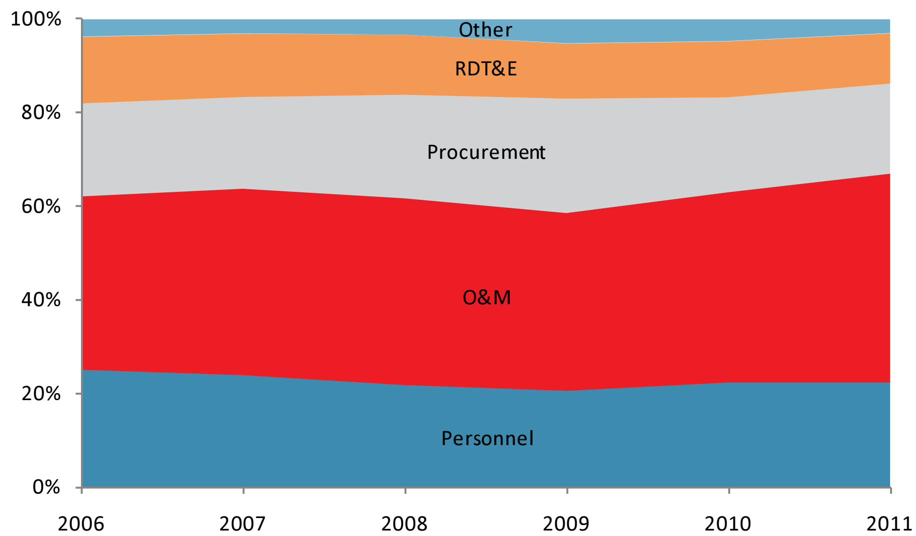
Most countries allocate a large part of their defense budget toward current expenditure

The Obama administration proposed a defense budget of USD712.1 billion (FY 2011) for the US. The budget consisted of personnel expenses (pay and allowances), operations and maintenance activities (O&M), research, development, test and evaluation (RDT&E), procurements, and other expenses.

The US defense budgets over 2006–11 indicate that O&M activities have typically accounted for the largest share (40%) of military expenditure, followed by personnel expenses (23%), procurements (21%) and RDT&E activities (12%).

The US allocates 40% of defense budget to O&M activities followed by personnel (23%), procurements (21%) and RDT&E activities (12%)

Exhibit 10: US military budget allocations over 2006–11



Source: Center for Strategic and Budgetary Assessments

Note: Personnel takes care of all expenses relating to active and reserve forces; O&M is meant for base operations support, maintenance of facilities and software, training and travel; Procurement allocations are meant for purchase of aircraft, missiles, ammunition, and other weapons; and RDT&E allocations are meant to support expenses on research, development, test and evaluation of weapons systems, equipment, material, software.

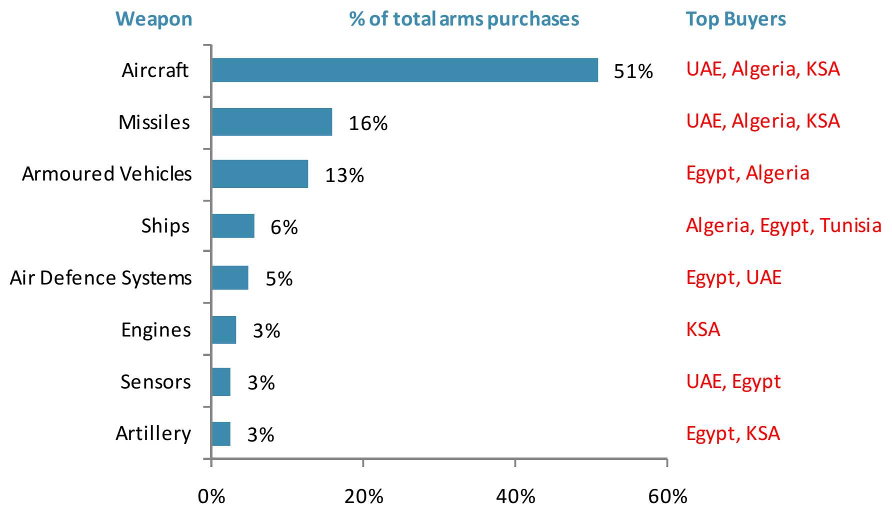
Although such level of detailing is not available for the MENA region, it can be assumed to be similar to the US. A recent report titled Military spending and arms procurement in the Gulf states by SIPRI states that details of military spending for this part of the world are highly opaque. In many cases, not all military expenditure appears in official figures, while in certain countries (notably Oman, Qatar and Saudi Arabia), military spending is not reported separately from the broader expenditure on security (including internal security).

MENA buys large quantities of aircraft and missiles

MENA has been buying large quantities of aircraft, missiles and armored vehicles

Data provided by SIPRI on arms transfer indicates that the MENA region has been buying large quantities of aircraft, missiles and armored vehicles. Over 2005–10, the three categories accounted for 83% of all conventional weapon purchases in MENA. Conventional weapons include aircraft, air defense systems, anti-submarine warfare weapons, armored vehicles, artillery, engines, missiles, sensors, satellites and ships. Refer to appendix for details on aircraft & missile purchases by country.

Exhibit 11: Major arms purchases by MENA over 2005–10



Source: SIPRI Arms Transfers Database
Note: The above results are based on Trend Indicator Values expressed in USD million at constant (1990) prices

Over 2005–10, the UAE was the most active buyer of arms within MENA

Over 2005-10, the UAE was the most active buyer of arms in the international market. During the period, the country accounted for 35% of all purchases of major conventional weapons in the MENA region. The value of arms imported by the UAE (particularly aircraft, missiles, sensors and artillery) has increased significantly. During 2005–10, the country took delivery of 62 Mirage 2000-9 combat aircraft, 80 F-16E combat aircraft, 18 AH-64D combat helicopters, 10 S-70A Blackhawk utility helicopters, 40 S-100 Al-Saber UAV, and 224 AIM-120C-7 Advanced Medium Range Air-to-Air Missiles (AMRAAM), among others.

The UAE, Algeria, Egypt and Saudi Arabia accounted for 85% of all arms purchases by MENA during 2005–10

The UAE is followed by Algeria (21% of all MENA arms imports), Egypt (16%) and Saudi Arabia (13%). Together, the four countries accounted for 85% of all conventional arms purchases by the MENA region during 2005–10. Some of the major purchases by these countries are: 28 Su-30MK/ Flanker FGA aircraft (by Algeria); 250 M113 armored personnel carriers, 125 M-1A1 Abrams tanks and three Ambassador III Class Fast Attack Craft (Egypt); and 200 RBS-56 Bill-2 anti tank missiles, 900 Joint Direct Attack Munitions (JDAM) kits and 72 Eurofighter Typhoon aircraft (Saudi Arabia). The interest to acquire missiles is visible in smaller countries too. In 2010, Qatar too was seen placing an order with France for 70 Exocet MM40-Block 3 Anti-ship missiles to equip its naval fleet.

No visible change in the arms-purchasing trend

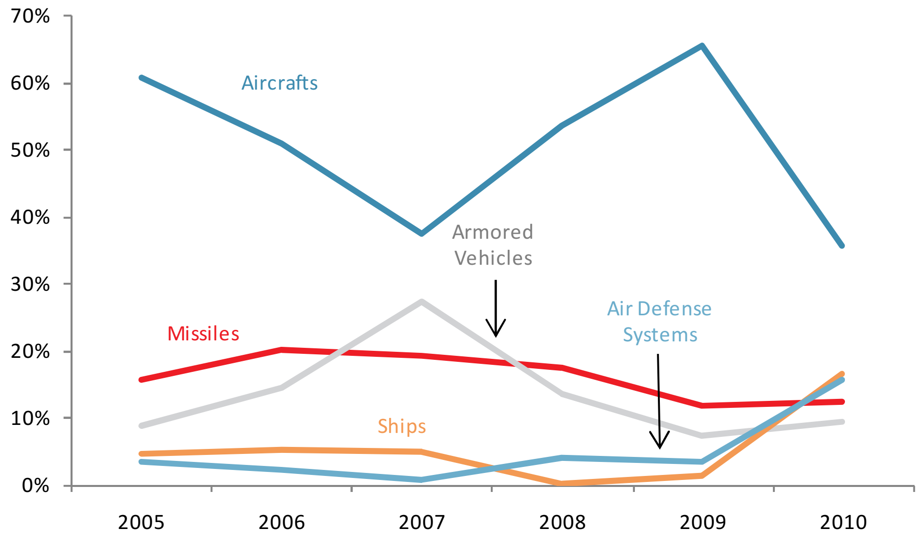
Aircraft have been the most sought after arms products by MENA

Aircraft have been the most sought-after arms product by the MENA region. On average, aircraft accounted for more than 50% of all weapon imports by the region in four of the last six years, followed by missiles and armored vehicles.

The UAE, Algeria and Saudi Arabia are big buyers of missiles, while armored vehicles are in high demand in Egypt and Algeria. According to SIPRI, the UAE, Algeria and Saudi Arabia bought missiles worth USD1461 million, USD779 million and USD379 million, during 2005-10. Demand for armored vehicles peaked during 2007, but has tapered since. The other two categories, ships and air defense systems, were in good demand in 2010.

Exhibit 12: Types of arms purchases by MENA over 2005–10 (percentage share)

Aircraft, missiles and armored vehicles are the major weapons bought by MENA



Source: SIPRI Arms Transfers Database
Note: The above results are based on Trend Indicator Values expressed in USD million at constant (1990) prices

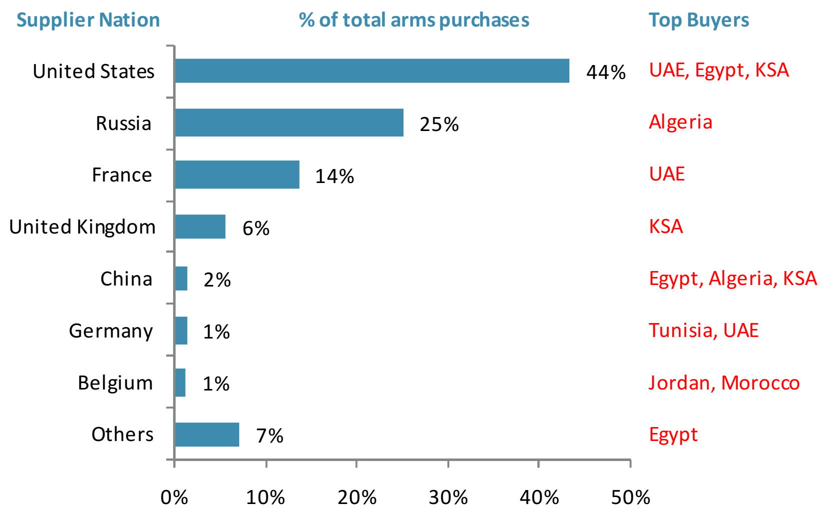
The US, Russia and France are the major weapon suppliers to MENA

Over 2005–10, the US supplied 44% of all the conventional weapons bought by MENA. The share of Russia, France and the UK stood at 25%, 14% and 6%, respectively. These countries together supplied 88% of all conventional weapons to MENA.

US' dominance is mainly a result of its strong ties with the two large buyers in MENA – Saudi Arabia and the UAE. Russia is a favored defense partner of Algeria; France enjoys good ties with the UAE, while Saudi Arabia prefers the UK.

Exhibit 13: Major weapon supplying countries to MENA over 2005–10

Over 2005–10, the US supplied 44% of all the conventional weapons bought by MENA



Source: SIPRI Arms Transfers Database

Note: The above results are based on Trend Indicator Values expressed in USD million at constant (1990) prices

The US and Europe are the major defense suppliers across the globe

The list of weapon suppliers to MENA is not very different from that of the world. According to SIPRI Yearbook, the US and Russia were the two largest exporters of conventional weapons (across the world) during 2006–10. Germany, France and the UK were the other major suppliers. The dominance of the US and Western European countries (Finland, France, Germany, Italy, Norway, Spain, Sweden, Switzerland and the UK) in the international defense market can be gauged from the list of top 100 arms-producing and military services companies compiled by SIPRI every year. In 2009, the SIPRI Top 100 list featured 45 companies from the US and 33 from Western Europe. Together, these 78 companies from the US and Western Europe are reported to have generated USD368 billion in total arms sales.

In 2009, the SIPRI Top 100 list featured 45 companies from the US and 33 from Western Europe

Exhibit 14: Top 100 arms-producing and military services companies, 2009

Country/Region	No. of Companies	Arms Sales (USD bn)
US	45	247.2
Western Europe	33	120.3
Russia	6	9.2
Japan	4	6.5
Israel	3	6.3
India	3	4.5
South Korea	2	1.9
Kuwait	1	2.5
Singapore	1	1.5
Canada	1	0.7
Turkey	1	0.6
	100	**401.2**

Source: SIPRI

Russia and the UK are gaining preference for arms supplies

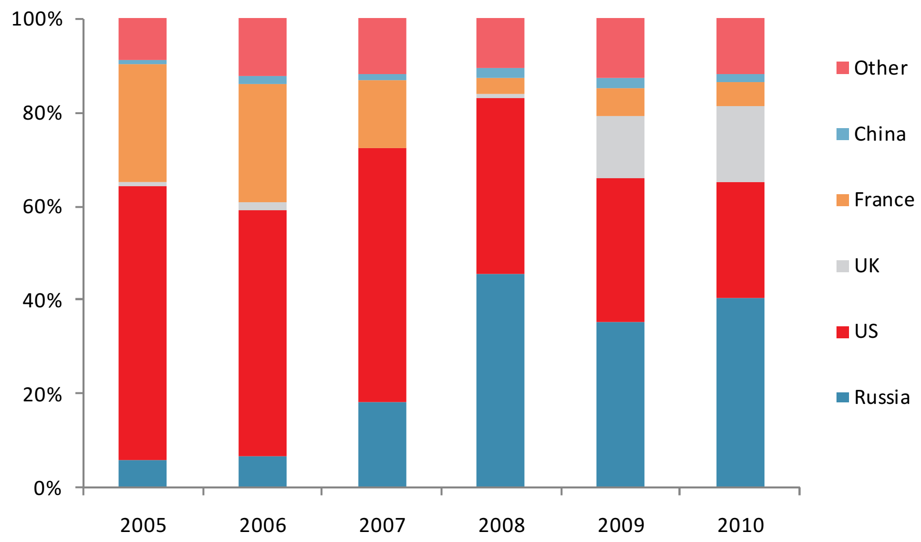
Russia is emerging as the leading supplier of arms to the MENA region due to its strong ties with Algeria

Russia is emerging as the leading supplier of arms to the MENA region. According to data from SIPRI, the country supplied 41% of arms imported by the MENA region in 2010. The share of the global leader, the US, was 25% in 2010 compared to 59% in 2005. The UK too has been gaining share in the overall pie of arms suppliers to the MENA region.

Russia has benefited from its strong ties with Algeria, which purchased large quantities of arms in 2008 and 2009. Some of the major arms sales of Russia are 36 Su-30MK/Flanker FGA aircraft, 10 Yak-130 trainer/combat aircraft and two Project-636E/Kilo submarines. Almaz-Antei, United Aircraft Corp., Sukhoi (United Aircraft Corp.), Irkut Corp. (United Aircraft Corp.), TRV Corp., Vertolety Rossii (OPK Oboronoprom) and Uralvagonzavod are the leading arms-producing and military services companies in Russia.

The UK is also gaining share in the overall pie of arms suppliers to the region

Exhibit 15: Suppliers of arms to MENA over 2005–10 (percentage share)



Source: SIPRI Arms Transfers Database

Note: The above results are based on Trend Indicator Values expressed in USD million at constant (1990) prices

The UK gained from its recent supply wins to Saudi Arabia. Some of its major arms sales are 72 Eurofighter Typhoon FGA aircraft and 350 Storm Shadow/SCALP air-surface missiles. BAE Systems, Rolls-Royce, Babcock International Group, Cobham,Serco, QinetiQ, GKN, Chemring Group, Ultra Electronics and Meggitt are the leading arms-producing and military services companies in the UK.

WESTERN COMPANIES DOMINATE ARMS SUPPLIES TO MENA

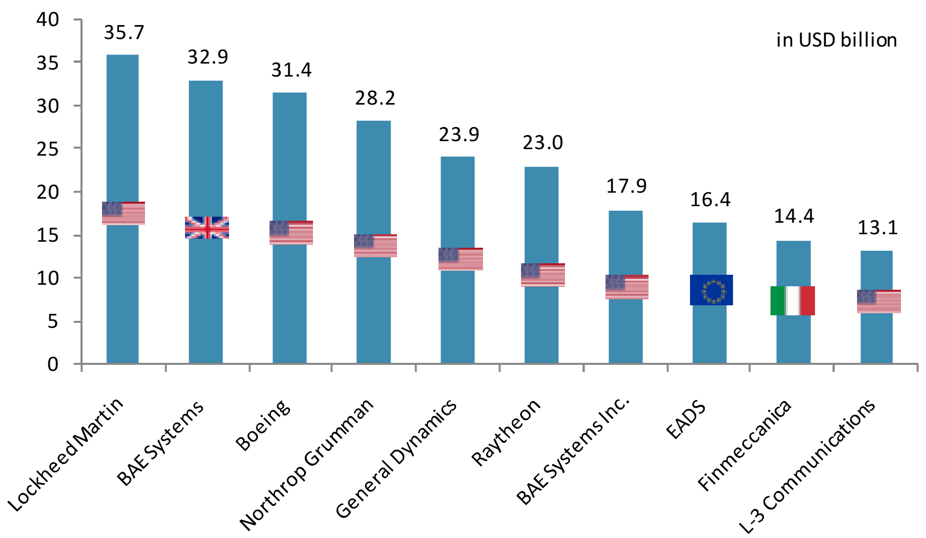
Lockheed Martin and BAE Systems are the biggest suppliers of arms and services to the militaries globally

Lockheed Martin (US) and BAE Systems (UK) are the biggest suppliers of arms and services to the militaries globally. In 2010, Lockheed Martin and BAE Systems clocked arms sales of USD35.7 billion and USD32.9 billion, respectively.

Seven of the ten major arms-producing and military service companies across the world are from the US

The US is a dominant player in the defense industry. Seven of the ten major arms-producing and military service companies across the world are from the US. The other three companies on the list are BAE Systems (UK), EADS (EU) and Finmeccanica (Italy).

Exhibit 16: Largest arms-producing and military services companies, 2010



Source: SIPRI

Exhibit 17: Details of major military equipment/service suppliers to the World

Company	Country	Type of supplies
Lockheed Martin	United States	Aircraft, Electronics, Missiles, Space
BAE Systems	United Kingdom	Aircraft, Artillery, Electronics, Missiles, Military vehicles, Small arms/ammunition, Ships
Boeing	United States	Aircraft, Electronics, Missiles, Space
Northrop Grumman	United States	Aircraft, Electronics, Missiles, Ships, Space
General Dynamics	United States	Artillery, Electronics, Military vehicles, Small arms/ammunition, Ships
Raytheon	United States	Electronics, Missiles
BAE Systems Inc.	United States	Artillery, Electronics, Military vehicles, Small arms/ammunition
EADS	European Union	Aircraft, Electronics, Missiles, Space
Finmeccanica	Italy	Aircraft, Artillery, Electronics, Missiles, Military vehicles, Small arms/ammunition
L-3 Communications	United States	Electronics, Services

Source: SIPRI

MENA has only a few companies providing equipment and services to the defense sector

MENA too has quite a few local companies providing equipment and services to the defense sector. However, just a small number of these are large in size and comparable to big global companies. In 2009, Kuwait-based Agility entered the league of top 100 arms-producing and military services companies across the world.

At the International Defense Conference and Exhibition (IDEX 2011), local companies that won large defense contracts included C4 Advanced Solutions (AED889.7 million), Abu Dhabi Ship Building Company (AED880.5 million) and Al Yah Satellite Communications Company (AED551 million).

Exhibit 18: Details of military equipment/service suppliers in the MENA region

Company	Country	Type of supplies
Abu Dhabi Aircraft Technologies	UAE	Provides aircraft maintenance, repair and overhaul (MRO) services
Abu Dhabi Ship Building Co	UAE	Specializes in the construction, repair and refit of naval, military and commercial vessels
Al Yah Satellite Communications Co	UAE	Provides secure satellite communications to government and commercial sectors
Advanced Integrated Systems	UAE	Provides fully-integrated turnkey solutions for homeland security
Burkan Munitions Systems	UAE	Engaged in manufacturing and testing of ordnance such as infantry, artillery and bombs
Caracal	UAE	Owns a highly advanced pistol manufacturing facility
C4 Advanced Solutions	UAE	A technology systems integrator in the MENA region
Tawazun	UAE	A strategic investment firm with a specific focus on the defense sector
Agility	Kuwait	Provides integrated logistics solutions with operations in over 100 countries
Abdallah Al Faris & Co for Heavy Ind.	Saudi Arabia	Developer and builder of armored fighting vehicles
Advanced Electronics Co	Saudi Arabia	Engaged in manufacturing of sophisticated military and commercial electronics
Al-Salam Aircraft Co	Saudi Arabia	Provides aircraft maintenance, repair and overhaul (MRO) services
Abu Zaabal Co for Engineering Ind.	Egypt	Explosives powder, industrial explosives, dynamite
Arab International Optronics Co	Egypt	Engaged in advanced optical, electro optical and electronic systems
GeoMAP Consultants	Egypt	Provider of remote sensing and GIS services and systems

Source: Al Masah Capital Research

Abu Dhabi Aircraft Technologies, Abu Dhabi Ship Building Company, Al Yah Satellite Communications Company, Advanced Integrated Systems, Burkan Munitions Systems, Caracal, C4 Advanced Solutions, Tawazun, Agility, Abdallah Al Faris & Company for Heavy Industries, Advanced Electronics Company, Al-Salam Aircraft Company, Abu Zaabal Company for Engineering Ind. Arab International Optronics Company, and GeoMAP Consultants are some of the other MENA-based companies in the defense equipment and services business.

DEFENSE OFFSETS AND ITS BENEFITS TO MENA

Defense offsets are now a norm in most deals

On January 31, 2012, the shares of French aircraft manufacturer Dassault Aviation jumped 18.4% (the most in 22 years) on reports that India had selected the company's Rafale fighter jets to equip its air force. With price negotiations still on, Dassault could walk away with India's biggest-ever contract for supplying 126 combat aircraft in a deal estimated to be worth USD10.4 billion.

India's benefit from this deal is not limited to an enhanced air force. The contract win for the medium multi-role combat jets comes with a 50% offset clause for the French firm, wherein it would be required to reinvest a part of the sales proceeds in India.

Defense Offsets

Offset policy for defense contracts are present in more than 130 countries worldwide

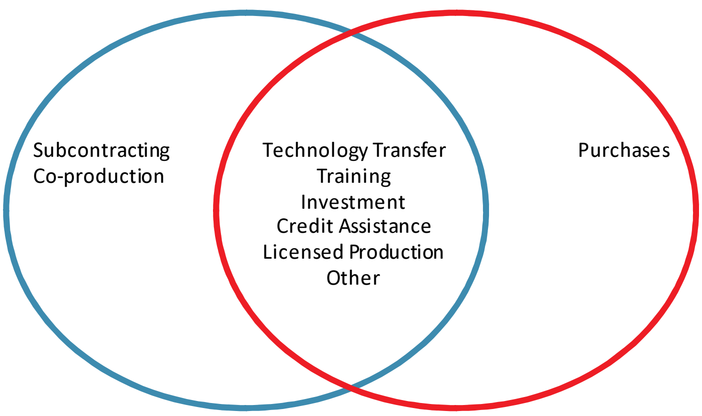
Offsets in defense trade encompass a range of industrial compensation arrangements required by foreign governments as a condition of the purchase of defense articles and services from non-domestic suppliers[1]. In simple words, defense offsets are reciprocal arrangements that obligate the seller to reinvest part of his sales proceeds back in the purchasing country. Offsets, which are now a norm in most defense deals, are present in more than 130 countries worldwide.

Types of defense offsets

Offsets are generally of two types – direct and indirect. Direct offsets require the vendor to purchase goods or make investments (from the purchasing country), which are directly related to the defense sector. Indirect offsets obligate the vendor to purchase goods or make investments in non-defense sectors. Offset transactions are categorized into co-production, technology transfer, sub-contracting, credit assistance, training, licensed production, investment, purchases and others.

Exhibit 19: Categories of Offset Transactions

There are generally of two types of offsets – direct and indirect



Source: Bureau of Industry and Security (US)

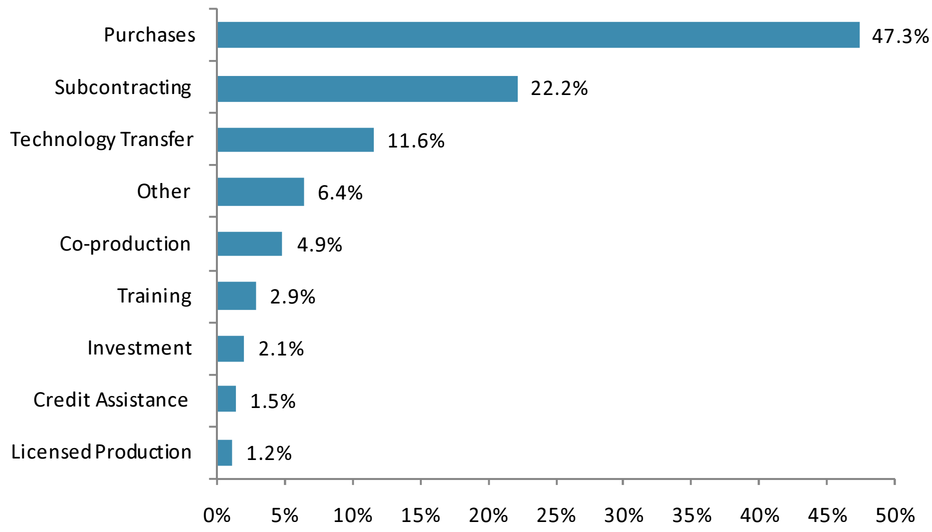
[1] *Bureau of Industry and Security*

Developed nations demand a higher percentage of direct offsets, while the developing ones seek more of indirect offsets

Approaches to defense offsets vary from country to country. Developed nations generally demand a higher percentage of direct offsets, while developing economies prefer indirect offsets. Analysis of data relating to offset transactions by the US over 1993–2010 suggests that purchases, subcontracting and technology transfer are the three most popular categories of defense offsets. Together, the three categories formed a little more than 80% of all defense offset transactions concluded by US companies during the period.

Exhibit 20: Offset transactions in the US by category over 1993–2010

Purchases, subcontracting and technology transfer are the three most popular categories of defense offsets



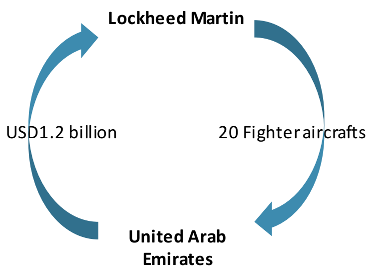
Source: Bureau of Industry and Security (US)

Understanding defense offsets through an example

A typical offset transaction involving Lockheed Martin and the UAE

To explain the working of a typical offset transaction, let us assume that Lockheed Martin has won a USD1.0 billion contract to supply 20 fighter aircraft to the UAE. Based on the UAE Offset Program, this defense procurement contract would require an offset obligation of an amount equivalent to USD600 million (60% of the contract value) from Lockheed Martin to be fulfilled over a period of seven years.

Exhibit 21: A typical offset transaction



Offset Project	Actual Value	Multiplier	Credit Value
Investment	USD90 million	1.0 X	USD90 million
Export assistance	USD60 million	1.5 X	USD90 million
JV with a local co. for aircraft maintenance	USD30 million	4.0 X	USD120 million
JV with a local co. to develop airport	USD60 million	5.0 X	USD300 million

Source: White & Case, Al Masah Capital Research

Lockheed Martin is free to make its choice of the type of offset (direct or indirect or a mix of both) it wishes to employ in order to achieve this. In fact, it could also make use of another feature called "Offset Multipliers" to fulfill its offset obligation with a lower outgo. Offset Multipliers (offered by several countries to encourage investments in specific sectors/projects) enable a reduction in the value of the initial offset obligation by a ratio equivalent to the total multiplier value assigned to the specific sector/project.

Offset percentages in MENA are at levels lower than those observed in other parts of the world

Several factors make MENA an attractive market for defense companies. Very few countries in the region have an offset policy for defense contracts. Moreover, countries that have outlined such frameworks have placed the offset percentages at levels lower than other parts of the world. According to gulfdefense.com, European defense sales typically require offsets of 100%. The offset policies of some MENA countries include:

Kuwait (35% offset), Saudi Arabia (35% offset), the UAE (60% offset)

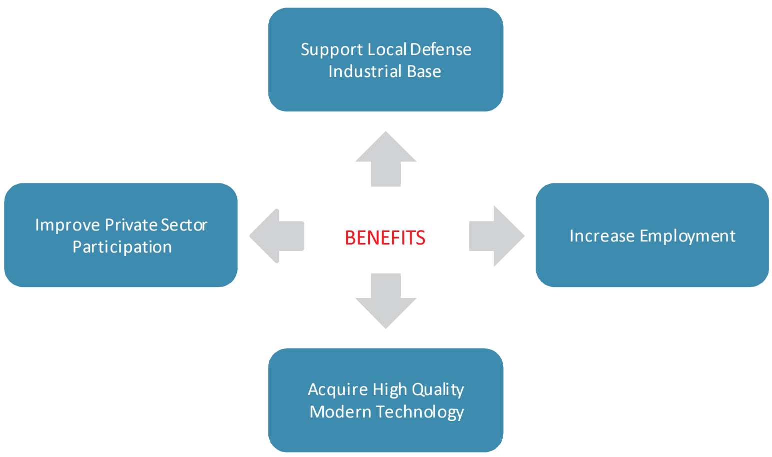
- In Kuwait, the value of an offset obligation is estimated at 35% of the net monetary value of the supply contract in case the value of the defense contracts is USD10 million or more.
- Saudi Arabia requires a minimum offset of 35% of the monetary value of military contracts. However, the Kingdom has not stated any threshold for contract value above which the offset obligation kicks in.
- The UAE, which has the most comprehensive offset policy among MENA countries, requires a minimum offset of 60% of the supply contract in case the value of defense contracts is USD10 million or more.

Benefits of defense offsets

Defense offsets are a means to generate economic benefits for the purchasing country. Support to local defense industrial base, increase in employment, acquisition of high quality modern technology, and improvement in private sector participation are some of the key benefits of defense offsets.

Offsets present many economic benefits for the purchasing country

Exhibit 21: A typical offset transaction



Source: Raytheon, Al Masah Capital Research

Offsets help develop a local defense industrial base

Support to local defense industrial base: Design and manufacture of defense equipment is a highly challenging job. Just a handful of countries, with sound technical base and regular investments in research and development, can supply ultra-modern defense equipment to the world. However, the price charged for such equipment/service is extremely high. Not wanting to remain dependent and make high payments in the future, buyer countries are increasingly seeking offsets that enable the formation of a local defense industrial base with capital as well as technical support from the supplier country.

Offsets help increase employment opportunities

Increase in employment: Investments by foreign suppliers in the defense or non-defense sector help create jobs for locals. It also enables development of skill sets in the local genre, which is beneficial for improving the overall employment situation of the economy.

Offsets enable buyer countries to gain access to new technology

Acquisition of high quality modern technology: Onset of defense offsets has helped buyer countries to gain access to a small part of new technology through joint ventures and licensing arrangements.

Improvement in private sector participation: A flourishing private sector is central to the long-term balance of any economy. Defense offsets help achieve this objective by engaging local entrepreneurs with foreign suppliers.

The success of the UAE Offset Program makes a perfect case on how defense offsets have benefited a country. In 2010, the joint efforts of international contractors and members of the local private sector in the UAE are believed to have created over 40 commercially viable and profitable businesses, attracting foreign investment in excess of AED8 billion.

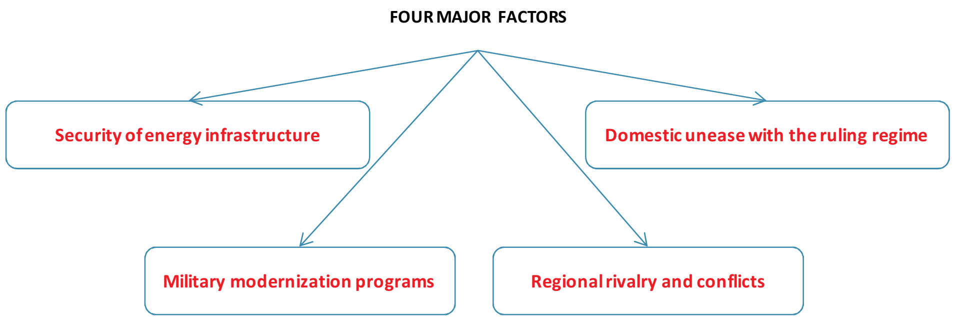
The Al Yamamah Project too is noteworthy in this regard. This deal between Saudi Arabia and the UK for the supply of Tornado, Hawk and PC-9 aircraft and specialized naval vessels resulted in the establishment of a sugar refinery and a major pharmaceutical plant at Jeddah.

KEY DRIVERS OF MILITARY EXPENDITURE IN MENA

Military expenditure and arms imports in MENA have increased due to rising security concerns about energy infrastructure, military modernization programs, regional rivalry, mounting oil wealth, and growing insecurity caused by various armed conflicts and regional tensions, among others.

There are four major factors driving military expenditure in MENA

Exhibit 23: Factors responsible for high military expenditure in MENA



Source: Al Masah Capital Research

Security of energy infrastructure

The oil-producing countries spend to safeguard their energy Infrastructure

The MENA region holds large quantities of oil. According to BP Statistical Review 2011, the region has more than 40% of the world oil reserves. The price of oil, which is in high demand, has been on an uptrend lately. This is resulting in major economic gains for oil-producing countries in MENA. However, it is also drawing attention of enemy countries and terrorists who can target to destroy critical infrastructure such as oil fields, power plants, harbors and energy production facilities, causing human and monetary losses.

An unsuccessful Al-Qaida bombing attack on the Abqaiq oil processing facility in 2006 escalated Saudi Arabia's security concerns. Accordingly, robust investment in security forces would enhance the military strength of oil-rich MENA countries as well as help prevent similar attacks by enemy countries and terrorists.

Military modernization programs

MENA countries are using their oil wealth to replace obsolete military equipments and to modernize their militaries

Oil-rich MENA countries, capitalizing on the petrodollar windfall, are purchasing sizeable advanced weapons to modernize the military. According to Gulf News, many MENA countries are in the process of acquiring C2 and C4 artillery and warfare systems, naval combatants, and current and next generation fighter aircraft; soldier modernization and overall equipment upgrades. Every few years, countries across the world conduct a thorough inspection of military equipment for obsoleteness. The checks are carried out to determine whether military equipment at perusal are in a good condition for combats (if any), and the availability of technologically advanced, better/upgraded weapons. The Saudi army, for instance, currently seeks to replace its obsolete AMX-30s tanks acquired from France way back in 1975.

Regional rivalry and conflicts

Iran's widening political and military influence provokes fears among the MENA countries, particularly the GCC

Earlier this year, Iran threatened to close the Strait of Hormuz (entry point to the Gulf) after the European Union agreed on an oil embargo against the country as part of sanctions over its nuclear program. This action could have resulted in huge monetary losses for neighboring countries such as Saudi Arabia, Iraq, Kuwait, the UAE and Qatar, which use the Strait of Hormuz to ship oil. According to the Energy Information Administration, the Strait of Hormuz had a daily oil flow of almost 17 million barrels, or 20% of the oil traded worldwide, in 2011. Iran is not seen in positive light by most neighbors due to its disputed nuclear power program (which is allegedly pursued to create nuclear weapons) and its support for Shia militant groups. The country's widening political and military influence is raising concerns and provoking fears. Consequently, these countries are now spending a large part of oil income to acquire various aircraft, missiles, armored vehicles and ships as a safety measure.

Historical precedent suggests that MENA (especially the Gulf region) is prone to wars, which substantially increase military spending. The Gulf region has witnessed three major wars since 1980: Iran-Iraq war of 1980–88, Iraq-US war of 1990–91, and Iraq-US war of 2003.

Domestic unease with ruling regime

Fragility of the MENA region to events like the Arab Spring

The MENA region was recently affected by the Arab Spring – an outcome of high inflation, large income disparity, corruption, increased unemployment, and years of authoritarian regime. Although Tunisia, Egypt, Libya and Bahrain were most affected by the civil unrest, large-scale public demonstrations were also witnessed in other parts of MENA including Algeria, Jordan, Kuwait, Morocco and Oman.

Exhibit 24: Chronology of armaments, disarmament, and international security in MENA

Date	Country	Details
January 14, 2011	Tunisia	Following weeks of violent anti-government protests, President Zine El Abidine Ben Ali left the country.
January 25, 2011	Egypt	People took to the streets in Cairo and other large cities, demanding the resignation of President Hosni Mubarak.
February 11, 2011	Egypt	Egyptian President Hosni Mubarak was forced to leave power.
February 16–22, 2011	Libya	Libya witnessed demonstrations against the regime of Muammer Gaddafi. Hundreds were killed and injured when government forces responded in Tripoli and Benghazi.
March 8, 2011	Libya	Violent fighting between protesters and forces loyal to Muammer Gaddafi in the town of Zawiyah left dozens of people dead and many wounded.
March 14, 2011	Bahrain	Following weeks of anti-government protest in Manama, the government requested GCC assistance to quell the unrest.
April 24, 2011	Libya	Two NATO missiles hit Muammer Gaddafi's compound, Bab al-Azizia, in Tripoli, Libya.
October 20, 2011	Libya	The Libyan National Transitional Council (NTC) announced the capture and subsequent killing of former Libyan leader Muammer Gaddafi.
October 23, 2011	Libya	Leaders of the NTC declared an end to the uprising in the country.

Source: SIPRI Fact Sheet, January 2012

Given the vulnerability of the MENA region to events like the Arab Spring, militaries in certain MENA countries are likely to invest more in developing internal security measures to help control such incidents.

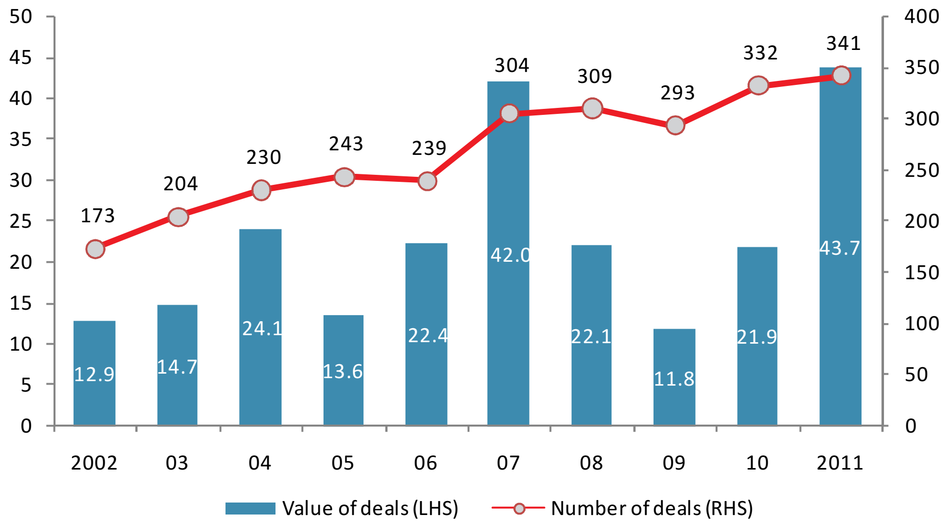
DEAL ACTIVITY IN THE SECTOR

The Aerospace and Defense (A&D) sector is witnessing increased M&A activity

The Aerospace and Defense (A&D) sector is witnessing increased M&A activity. According to PricewaterhouseCoopers, a total of 341 deals worth USD43.7 billion were announced in the global A&D sector in 2011. This is a new high on both volume and value basis. Previously, the largest number of deals was announced in 2010 (332 deals), and the highest value was achieved in 2007 (USD42.0 billion).

Deal activity was at a new high in 2011

Exhibit 25: Global deal activity in Aerospace and Defense sector



Source: Mission Control Fourth Quarter 2011 (PWC)

The A&D sector also witnessed private equity interest

The major deals announced during the year include United Technologies' acquisition of Goodrich Corporation for USD16.2 billion and Engine Holding GmbH's takeover of Tognum AG for USD4.7 billion. Note that acquisitions of USD10 billion and above are extremely rare; the last deal in the A&D sector of a similar size was executed way back in 1996 when McDonnell Douglas merged with Boeing Co. The A&D sector also witnessed private equity interest. Among the largest PE deals of 2011 was PE firm Providence Equity Partners' acquisition of SRA International for USD1.79 billion in cash. The top five private equity deals in the A&D sector in 2011 are:

The purchase of SRA International by Providence Equity Partners for USD1.79 billion was the biggest deal

Exhibit 26: Top five private equity deals in Aerospace and Defense sector, 2011

Company Name	Private Equity Firm	Value (USD bn)
SRA International	Providence Equity Partners	1.79
Sensor-Nite	Bain Capital	0.32
Pattonair International	Exponent Private Equity	0.24
Global Defense Technology & Systems	Ares Management	0.22
Anixter International Inc-Aerospace Hardware Division	Greenbriar Equity Group	0.19

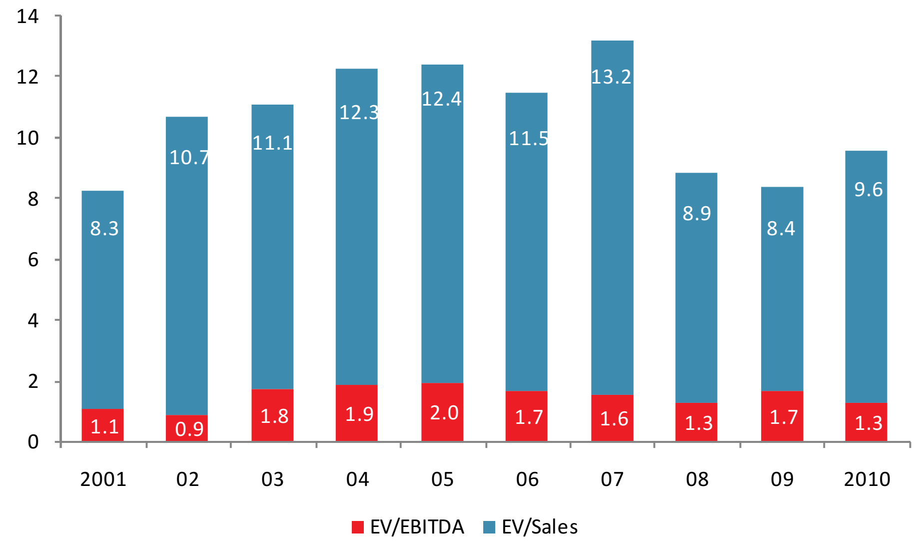
Source: Mission Control Fourth Quarter 2011 (PWC)

Transaction multiples (as measured by EV/EBITDA and EV/sales) have declined across the A&D sector. Average EBITDA acquisition multiple was 9.6x in 2010 compared to the high of 13.2 in 2007, while average sales multiple stood at 1.3x in 2010 compared to 1.6x in 2007. Both EBITDA and sales multiples averaged 10.6x and 1.5x, respectively, over 2001–10.

According to PricewaterhouseCoopers, average sales multiple for deals worth USD50 million and above trended lower to 1.2x in 2011.

Transaction multiples (as measured by EV/EBITDA and EV/Sales) have declined across the A&D sector

Exhibit 27: Transaction multiples for M&As in Aerospace and Defense sector



Source: Corporate Finance Spring 2011 (KPMG)

Valuations in the A&D sector have contracted further. Data on twelve large A&D companies indicates that EV/EBITDA in the sector currently averages 6.6x and EV/sales stands at 0.7x.

Exhibit 28: Select publicly traded Aerospace and Defense companies

Company	Market Cap.	EV	TTM			LTM Margins		EV/TTM	
			Sales	Gross Profit	EBITDA	Gross Profit	EBITDA	Sales	EBITDA
United Technologies Corp	74,697	80,295	58,190	16,037	9,446	27.6%	16.2%	1.4	8.5
Boeing Co	55,124	56,316	68,735	12,868	7,226	18.7%	10.5%	0.8	7.8
Lockheed Martin Corp	29,024	31,899	46,499	3,840	4,903	8.3%	10.5%	0.7	6.5
General Dynamics Corp	25,980	27,261	32,677	5,856	4,418	17.9%	13.5%	0.8	6.2
EADS NV	24,874	20,442	49,128	6,843	3,305	13.9%	6.7%	0.4	6.2
Raytheon Co	17,660	18,424	24,857	5,160	3,304	20.8%	13.3%	0.7	5.6
Northrop Grumman Corp	15,403	16,349	26,412	5,626	3,775	21.3%	14.3%	0.6	4.3
BAE Systems PLC	9,885	11,003	17,770	-	1,934	-	10.9%	0.6	5.7
L-3 Communications Holdings Inc	6,883	10,333	15,169	1,641	1,810	10.8%	11.9%	0.7	5.7
Thales SA	5,650	5,239	13,028	2,961	1,141	22.7%	8.8%	0.4	4.6
SAIC Inc	4,507	4,767	10,819	981	756	9.1%	7.0%	0.4	6.3
Finmeccanica SpA	2,036	7,641	18,650	5,359	664	28.7%	3.6%	0.4	11.5
Average						**16.6%**	**10.6%**	**0.7**	**6.6**

Source: Thomson Reuters; M-Cap and EV are as of March 22, 2012; all financials are in US dollar, Trailing Twelve Months (TTM)

OUTLOOK

World military expenditure is expected to remain flat in 2012

World military expenditure is expected to remain flat in 2012. This is ascribed to two divergent trends: tightening of purse strings by traditional buyers such as the US and Europe; and rising military expenditure in India, China, Saudi Arabia and the UAE.

Traditional buyers like the US and Europe are cutting down on their defense spending

The US has outlined a military expenditure of USD650.1 billion for 2012, about 5.7% lower than the previous year. Suppliers of defense equipment could face pressure due to announced cuts of nearly USD487 billion in the Department of Defense (DoD) budget and reduction of an equivalent amount under sequestration. Along with DoD cuts, sequestration could result in an almost trillion-dollar reduction in defense spending over a ten-year period starting fiscal year 2012.

In Europe, too, defense budgets remain under pressure. Increasing financial constraints due to the ongoing economic crisis in the Eurozone could impede growth in world military expenditure. Certain Eurozone countries have already slashed military spending as part of austerity plans due to high debt levels and budget deficit.

However, other parts of the world like India, China, Saudi Arabia, and the UAE are spending a lot more on defense

Nations that have traditionally been the largest buyers of arms are cutting military expenditure; however, India, China, Saudi Arabia, the UAE and few other countries are taking the opposite stance. A recent report by International Institute for Strategic Studies said that increased security concerns are likely to drive military spending in Asia to an extent that it could overtake expenditure in Europe for the first time ever, this year. Even SIPRI ranks India, China, Pakistan, South Korea, Morocco, Saudi Arabia, Turkey and the UAE among the ten largest importers of major conventional weapons in 2011.

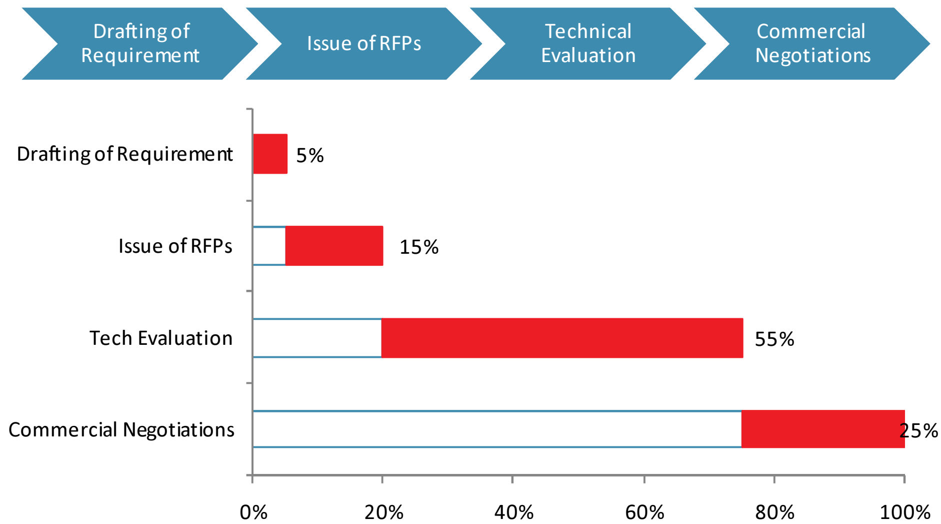
On the other hand, the expected decline in military expenditure in the US and Europe would create such a large gap that higher spending in Asia and the Middle East may not offset the loss.

APPENDICES

Appendix 1: Defense Procurement process

Defense acquisition is a complex decision-making process. Every country has a different procedure of procuring defense equipment or services. Typically, the process encompasses four stages: drafting of requirement (stage 1), issue of RFPs (stage 2), technical evaluation (stage 3) and commercial negotiations (stage 4).

Exhibit 29: Approximate timeline for defense procurement process



Source: Al Masah Capital Research; Note: RFP means Request for Proposal

Drafting of requirement refers to laying down of the defense requirement in a comprehensive and structured manner. It should include details of the product/service required, quantity/duration of the service, and other important parameters essential in the product/service.

Request for Proposal (RFP) is a standard document given to defense suppliers. An RFP usually contains details of the product/service required, quantity/duration of the service, time frame for delivery, terms of payment, offset obligations, description of technical parameters, and criteria for evaluation and acceptance.

Technical evaluation refers to assessment of the technical bids received in response to the RFPs sent to defense suppliers. In this stage, technical characteristics of the equipment/service offered by defense suppliers are evaluated against the original requirement to examine the extent of variations or differences, if any. In the case of equipment, this stage can also include field evaluations (trials).

Commercial negotiation is the final stage of the defense procurement process. It starts with the opening of commercial bids received from those defense suppliers who have been shortlisted through technical evaluation. Usually, the supplier quoting the lowest price is chosen and the price is negotiated before signing the contract.

Appendix 2: Aircraft purchases by MENA

Exhibit 30: Aircraft purchases by MENA, 2005-10

Country	2005	2006	2007	2008	2009	2010	Total
UAE	1,724	1,442	525	632	337	183	4,843
Algeria	130	52	-	770	770	63	1,785
Saudi Arabia	11	7	110	50	504	706	1,388
Egypt	201	154	35	35	61	161	647
Oman	149	189	-	66	90	14	508
Jordan	9	20	141	127	161	2	460
Qatar	-	-	-	-	285	26	311
Kuwait	7	-	248	-	-	-	255
Bahrain	27	63	9	-	-	58	157
Lebanon	1	-	3	-	1	26	31
Morocco	-	-	-	-	-	28	28
Libya	-	2	2	-	6	6	16
Tunisia	-	-	-	3	-	7	10

Source: SIPRI Arms Transfers Database
Note: Based on Trend Indicator Values expressed in USD million at constant (1990) prices

Appendix 3: Missile purchases by MENA

Exhibit 30: Missile purchases by MENA, 2005-10

Country	2005	2006	2007	2008	2009	2010	Total
UAE	440	470	382	64	48	57	1,461
Algeria	-	22	45	354	229	130	780
Saudi Arabia	106	110	33	33	25	72	379
Egypt	24	63	34	52	18	60	251
Jordan	-	-	15	18	60	80	173
Oman	2	78	4	-	2	-	86
Kuwait	-	-	16	5	16	35	72
Libya	-	13	13	16	3	14	59
Morocco	8	8	8	8	-	-	32
Bahrain	-	-	2	2	-	-	4
Tunisia	-	2	-	-	-	-	2
Lebanon	-	-	-	-	1	-	1
Qatar	-	-	-	-	-	-	-

Source: SIPRI Arms Transfers Database
Note: Based on Trend Indicator Values expressed in USD million at constant (1990) prices

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