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Frank Coleman
Kevin Dehoff
Reed Doucette
John Dowdy
O Sung Kwon
Cody Newman
Maggie Stringfellow

Defense offsets: From 'contractual burden' to competitive weapon

Western defense companies now need to look outside their core markets for growth. In the aftermath of the global economic crisis and over a decade of engagement in southwest Asia, many Western countries have scaled back their defense budgets, favoring instead more targeted spending and austerity plans. In Europe, ministries of defense are downsizing their military operations and procurement programs, and in the United States, the effects of the Budget Control Act of 2011 and sequestration will restrict defense spending through 2021 absent congressional action. By contrast, many countries representing addressable markets in Asia, the Middle East, and South America are investing in defense-modernization programs and over the past few years have increased their defense spending at compound annual growth rates of between 5 and 10 percent.

The value of international deals for Western contractors can be significant. Recent competitions to supply fighter aircraft to the nations of Brazil, India, Japan, and South Korea have represented a combined $33 billion sales opportunity—equivalent to one or two decades of full-rate production for the entire fighter industry.[1] India's competition for more than 120 multi-role combat aircraft was the largest contract opportunity of its kind since the early 1990s, valued at around $12 billion (Exhibit 1).

However, a comparison of export revenues among top-tier US defense contractors shows that most, on average, still earn less than a third of their revenues from foreign customers (Exhibit 2). Success in international markets requires robust strategies for growth and global sourcing, as well as affordable products. But as most defense contractors know, there is more to proffering a winning bid than just touting technology performance and cost positions; the stakes of international deals are too high not to consider other impacts as well.

Exhibit 1 Emerging and non-Western markets hold significant value for defense contractors looking to grow.

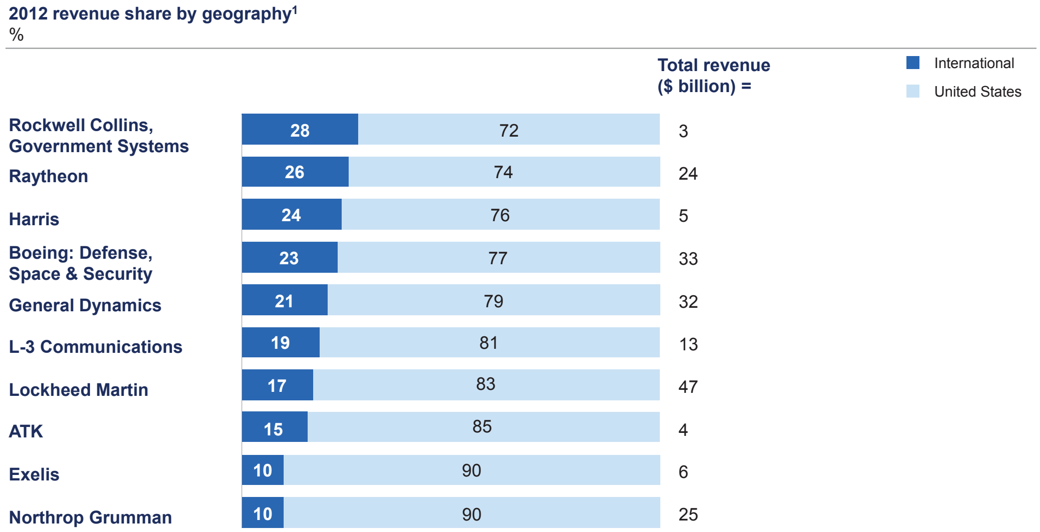
▪ Vendor selected

Country	Fighter competition	Approximate value[1] $ billion	Number of aircraft[1]	Final bidders (aircraft)
India	MMRCA[2]	12	126	▪ Dassault (RAFALE) Eurofighter GmbH (Eurofighter)
Japan	F-X	8	42	▪ Lockheed Martin (F-35) Boeing (F/A-18) Eurofighter GmbH (Eurofighter)
Korea	F-X	7	40	▪ Lockheed Martin (F-35) Boeing (F-15SE) Eurofighter GmbH (Eurofighter)
Brazil	F-X II	6	36	▪ Saab (Gripen NG) Boeing (F/A-18) Dassault (RAFALE)

1 Subject to change.
2 Medium multi-role combat aircraft.
Source: *Defense Industry Daily*; *DefenseNews*; *Aviation Week*; Teal Group; press search

1 Based on an approximately $2 billion average annual value of production for the fighter industry from 2002 to 2012, as reported by the Teal Group.

Exhibit 2 US contractors have headroom to grow internationally.



1 Foreign military sales may be reported as either US or international sales depending on company preference. Percentages are expressed as international revenue over segment total.

Source: Annual filings; Credit Suisse estimates; Drexel Hamilton; earnings calls

Primary among these are "offsets"—industrial compensation arrangements required by foreign governments as a condition of the purchase of goods and services from nondomestic suppliers. Some contractors have adopted the legacy view of offsets as "pay to play" instruments and sources of increased risk. No doubt there are costs and regulatory and ethical considerations that come along with the use of these contracted arrangements, but as we will describe in the following pages, offsets can also enable long-standing sales relationships in foreign markets.

How offsets can drive international growth

Offsets are contracted obligations that are typically regulated by ministries of defense or government partners, and they can take one of two forms. *Direct offsets* are agreements that are directly related to the defense products being sold. For instance, as part of its bid, Kongsberg Defence Systems agreed to subcontract work locally and transfer certain forms of technology to the Polish Navy to support the sale of its Naval Strike Missile Coastal Defense System. *Indirect offsets* are agreements that are not related to the defense products being sold. For instance, Sukhoi, one of Russia's major aircraft manufacturers, transferred various space technologies to the Malaysian National Space Agency to fulfill obligations related to the sale of 18 Su-30MKM aircraft. Offset obligations are fulfilled through the proposal and award of "credits," an accounting metric specific to these programs. In turn, those credits may be earned using a "multiplier," or an investment incentive that reflects the customer's desire to direct funding or services toward particular sectors or economic initiatives.

Although they are not usually reported in annual filings, offset contracts are increasingly becoming a C-suite agenda item. Over the past 20 years, US defense contractors have typically entered into an average of 30 to 60 offset agreements each year, representing between \$3 billion and \$7 billion in obligations per year. Lockheed Martin, the world's largest defense contractor, reported \$9.3 billion worth of outstanding offset agreements as of year-end 2012, and a recent analysis by the *Financial Times* and *IHS Jane's* estimated that ten other companies have accumulated obligations in excess of \$1 billion each.[2]

2 Guy Anderson and Ben Moores, *The Growing Offset Burden: What A&D businesses need to know*, IHS Aerospace, Defense & Security, October 2013, ihs.com.

Offsets are a critical enabler for success in international markets for several reasons. First, customers take them very seriously; governments count on the local investments that offsets generate to justify the capital expenditures required for their defense upgrades and to correct imbalances in foreign trade. In fact, governments sometimes give offset packages equal or greater weight than procurement costs when evaluating competing bids. In Korea’s assessment of bidders for its F-X III fighter program, for example, proposed offsets and technology-transfer arrangements accounted for 17 percent of the total evaluation “score” while acquisition costs accounted for 15 percent. The government also considered a number of other factors, including mission capability of the aircraft (35 percent), technology compatibility (18 percent), and operational costs (15 percent).[3]

Second, offsets can help Western companies tap into markets that would otherwise be difficult to access. Relationships with local partners are part of the table stakes in major military-procurement competitions, so it is common for contractors to propose offset agreements aimed at developing industrial relationships through joint production or development. Israeli manufacturers have built a top global position in the export of unmanned aerial vehicles in part by cultivating robust local relationships, including joint ventures in Brazil and other emerging defense markets.

A number of Western defense contractors have already realized success in international markets, in part through sound offset strategies. For example, Lockheed Martin’s 2003 win in Poland’s Peace Sky fighter competition was enabled by a competitive offset package. Its unprecedented offset offer was valued at more than $9 billion and included 55 defense-sector programs and 49 programs benefiting the Polish economy overall. Trade journals and the military press cited Lockheed’s offset package as a major reason why its F-16 was selected over competing aircraft, and that deal set the bar for others that followed.[4]

Meanwhile, Boeing in 1985 established the Boeing Industrial Technology Group to fulfill offset obligations related to the sale of its Peace Shield land-based air defense system to Saudi Arabia. Through this entity, Boeing has participated in education and training programs in the region and has partnered with Saudi Arabia’s General Investment Authority as well as numerous other economic-development bodies in the Kingdom.[5] Over time, Boeing has deepened its business relationships in the region, selling F-15 fighters and AH-64 Apache helicopters, along with relevant upgrades and sustainment packages, to the Saudi Ministry of Defense.

The risks offsets pose

As these examples suggest, proposing the right offset package can yield tremendous gains. We have seen that successfully negotiated offset agreements can create win-win situations, generating economic impact or technological advantages for the purchasing country and profits for the contractor. If the process is not managed properly, however, offsets can also pose significant competitive, legal, and reputational risks.

Contractors that have acted improperly in fulfilling their offset obligations, or that have proposed programs that failed to produce the intended impacts, have been subject to any number of penalties—among them, congressional inquiries, reputational damage associated with broken contracts, inclusion on “black lists” of companies restricted from bidding on public procurements in specific countries, and investigations under the US Foreign Corrupt Practices Act and the UK Bribery Act.

Over the past few years, several nations have introduced reforms in their offset policies that are raising the bar for contractors’ industrial participation and prompting customers to judge bids and enforce offsets with refined criteria for success. India, for instance, recently created the Defence Offset Monitoring Wing to provide stronger oversight of and standardized performance reporting on offset programs. Among the new provisions are additional multipliers to provide contractors with an incentive to include investments in micro, small, and medium enterprises as part of their offset proposals. Meanwhile, the United Arab Emirates’ Offset Program Bureau (recently renamed the Tawazun Economic Council) in 2010 announced several reforms, including a detailed set of multipliers to target investments at priority investment areas, as well as penalties for underperforming programs—for example, payment of damages for partially fulfilled or unfulfilled offset obligations.

Another risk over the long term is increased competition from companies that have gained key capabilities through offsets.

3 Jung Sung-Ki, “Boeing Close to Winning S. Korean Fighter Deal,” *DefenseNews*, September 2, 2013, defensenews.com.
4 Aurel Cobianu and Konrad Madej, *Analysis and Forecasting of Operating and Support costs for F-16 C/D*, Naval Postgraduate School, June 2006; Barre R. Seguin, *Why did Poland Choose the F-16?*, George C. Marshall European Center for Security Studies, June 2007, marshallcenter.org.
5 *Boeing in the Kingdom of Saudi Arabia: 65 Years of Partnership,* Boeing, March 2014, boeing.com.

Italy's Alenia Aermacchi and Brazil's Embraer, for example, were both benefactors of offset contracts in their infancy. Through these arrangements, the companies gained technical and advanced manufacturing experience and are now strong players the fixed-wing aircraft market, competing with global leaders.

These sorts of regulatory challenges and competitive pressures reinforce the need for a sound offset strategy.

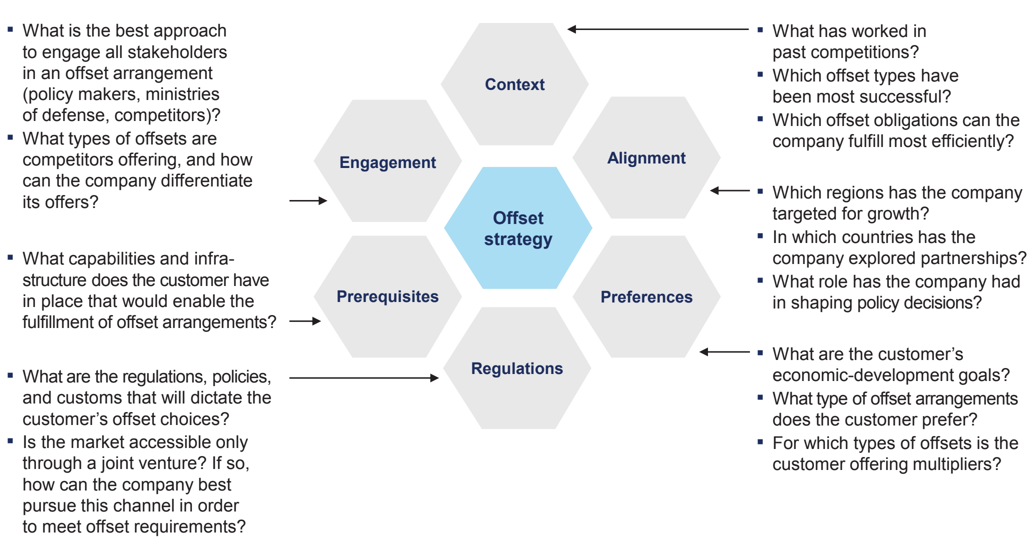
How to develop a robust offset strategy

Our experience advising defense companies on a range of global sourcing, operations, and strategy issues suggests that to build successful offset strategies, leaders need to focus on the following core characteristics of these arrangements (Exhibit 3).

1. Context. A successful offset strategy is based on an objective evaluation of methodologies that have proved successful in the past—both for the company and for its competitors. Indeed, some of the most successful international customer relationships are based on offset programs that have been built and iterated over years and decades. Lockheed Martin, for example, recognizes that its current successful collaboration with Korea Aerospace Industries on the T-50 trainer aircraft is based on the generous technology-transfer arrangements it forged through its association with the F-16 Peace Bridge program in the 1980s. A thorough case review can help reveal any gaps between the types of offset arrangements a company uses and the kinds of offset agreements that have been readily accepted in certain parts of the world. The companies that have developed a strong infrastructure and process for monitoring their offset programs will have an advantage in this regard. But there is still value in the review process for companies that have limited offset experience; over time, they will build up a historical record of the offset programs that have allowed them to mitigate risk, win bids, and fulfill obligations efficiently.

2. Alignment. Any proposed offsets should be consistent with the company's overall international strategy. Contractors should avoid offset programs that may disrupt operations or limit opportunities in other parts of the company, despite any near-term benefits of winning a deal. Leaders must consider their offset proposals against a number of other variables, including the company's existing growth initiatives, its global sourcing practices, and its manufacturing footprint. Offset-proposal teams are often organized as a support function for business development, but to keep lines of communication open and to ensure that the company's offset strategy is consistent with overall strategy, team members must maintain constant interaction with individuals in other functional areas, such as manufacturing, purchasing, and finance.

Exhibit 3 To build sound offset strategies, companies need to focus on six core areas.



3. Preferences. Most international customers have a vision for their domestic industries, which can include building self-sufficiency in defense production, securing their supply of military products, or encouraging general economic growth and employment. Poland, for example, prioritizes general economic growth and seeks offset packages that provide the highest possible economic impact. Korea prioritizes the development of its own defense industry and seeks out deals that include the transfer of technologies that would enable the local defense base. But in other parts of the world, government leaders' vision for economic growth may not be as well articulated. In these cases, offset teams must perform due diligence to understand government priorities. This might require conducting a series of stakeholder interviews or a literature search on the development initiatives and offset arrangements that have proved successful in particular regions of the world.

4. Regulations. The types of contracts that are subject to offset obligations, the minimum percentage of offset requirements, and offset credit multipliers all vary by country. Leaders need to consider all these factors when trying to optimize a particular offset deal for a given country. India, for example, offers multipliers of up to 3x for technology with unrestricted domestic production and export—valuable and necessary information for Western contractors that are looking to gain a competitive edge. Leaders need detailed knowledge of local acquisition regulations in order to mitigate reputational and legal risks (claims of bribery and kickbacks, for instance). In some countries, the rulebook is not as straightforward as it may appear. Some regulations and procedures may be informal, and politics often plays a part. It is crucial for contractors to build and maintain transparent relationships with the members of international ministries and other governing bodies.

5. Prerequisites. Contractors must consider the buying country's ability to absorb different types of offsets. This means conducting a thorough review of, among other things, the potential customer's infrastructure, manufacturing base, labor force, and R&D capabilities. For example, a defense company's offset proposal to Brazil could include provisions for local subcontracting and joint production, given Embraer's global scale and established capabilities in fixed-wing aircraft manufacturing. The company's offset proposals to Singapore, however, might benefit from technology transfer given Singapore's science and technology competencies and labor force.

6. Engagement. It is critical for defense companies operating in international markets to understand who the most important stakeholders are and how to engage with them—for some customers in the Middle East, a select few people serve as the primary decision makers in defense acquisition, while in South Korea, approval from several government bodies is required for any major military procurement. Similarly, defense companies need to have a strong sense of the competitive landscape and how they can best differentiate themselves from rivals. Important questions for leaders to ask include, "What types of offset packages have our competitors offered?" and "What sorts of relationships do we already have in the area that we can leverage?" Companies may be able to take advantage of contacts that their colleagues in other business units (other than the one responsible for the original contract) might have in the region. Lockheed Martin included a military-communications satellite in its offset proposal for Korea's F-X fighter program—drawing on resources from other parts of the company to more closely target its offer to the customer's needs.

As globalization in the defense industry continues, offsets will become an increasingly important strategic tool. Some contractors have adopted the view that offsets are a burden—a "tax" that has to be paid in order to play. From our perspective, offsets are a key enabler for international growth. Those players that follow a holistic, structured approach to defining their offset strategies will find them less a burden than a competitive weapon.

Frank Coleman is a consultant in McKinsey's Stamford office, **Kevin Dehoff** is a principal in the New York office, **Reed Doucette** is a consultant in the San Francisco office, **John Dowdy** is a director in the London office, **O Sung Kwon** is an associate principal in the Southern California office, **Cody Newman** is an analyst in the North American Knowledge Center, and **Maggie Stringfellow** is a consultant in the Seattle office.

Contact for distribution: O Sung Kwon
Phone: 1 (424) 249-1075
E-mail: O_Sung_Kwon@mckinsey.com

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