

TRENDS IN THE DEFENCE OFFSETS MARKET

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I. Introduction

The economic and political importance of international defence offsets is increasing and is likely to increase even more in the future. Offsets are currently influenced by the changes in the global defence market, namely the declining US and European defence budgets and the growing military expenditure of fast developing countries. Moreover, their monetary value is rising and experts estimate that accumulated global offset obligations will total \$500 billion by 2017, 60% of which will be held by U.S. industry. Offsets are drawing the attention of national governments and defence companies due to their economic and strategic importance. In this perspective, a greater and up to date understanding of offsets trends is necessary to evaluate their future evolutions and their deep implications on international arms trade.

II. Defence offsets: overview and main characteristics

This section will present an overview of the offset instrument by describing its main characteristics.

There is no an universal consensus about what the term offset indicates, but rather some prevailing definitions utilized by experts and academics. These include the following:¹

an offset is a contract imposing performance conditions on the seller of a good or service so that the purchasing government can recoup, or offset, some of its investment. In some way, reciprocity beyond that associated with normal exchange of goods and services is involved.

an offset occurs when the supplier places work to an agreed value with firms in the buying country, over and above what it would have bought in the absence of the offset. Offset are usually designed to achieve relocation of economic activity from the country of the equipment supplier to the purchasing nation.

However, Peter Hall and Stefan Markowski provide a more inclusive conceptualization:

offsets are simply goods and services which form elements of complex voluntary transactions negotiated between governments as purchasers and foreign suppliers...they are those goods and services on which a government chooses to place the label “offsets”.

In general, as a result of a defence deal the foreign supplier has to conduct a number of additional investments, local projects into the domestic industrial base so that the recipient country can offset the cost of defence procurement, up to 100% of the contract value - and even more.

There are two main **categories of offsets**: direct and indirect ones. The US Bureau of Industry and Security (BIS) defines direct offsets as *an offset transaction directly related to the article(s) or service(s) exported or to be exported pursuant to the military export sales agreement.*² These are usually in the form of co-production, subcontracting, training, production, licensed production, technology transfer or financing activities.

¹ Jurgen Brauer and J. Paul Dunne, *Arms Trade and Economic Development: Theory, policy, and cases in arms trade offsets*, Routledge 2004.

² The US Department of Commerce, Bureau of Industry and Security (BIS), *Offsets in Defense - Trade Seventeenth Study*, February 2013.

The same Bureau describes the indirect offsets *an offset transaction unrelated to the article(s) or service(s) exported or to be exported pursuant to the military export sales agreement*. The kinds of offsets include purchases, investment, training, financing activities, marketing/exporting assistance and, again, the technology transfer. Indirect offsets could be divided in two subcategories, defence-related indirect offsets and non defence-related indirect offset.³

A further characteristic regards the distinction between **offset agreement** and **offset transaction**. The former indicates a contract defining the offset package related to a specific defence import contract. The latter is an activity for which the offset supplier claims credit for in fulfilment of the offset agreement.

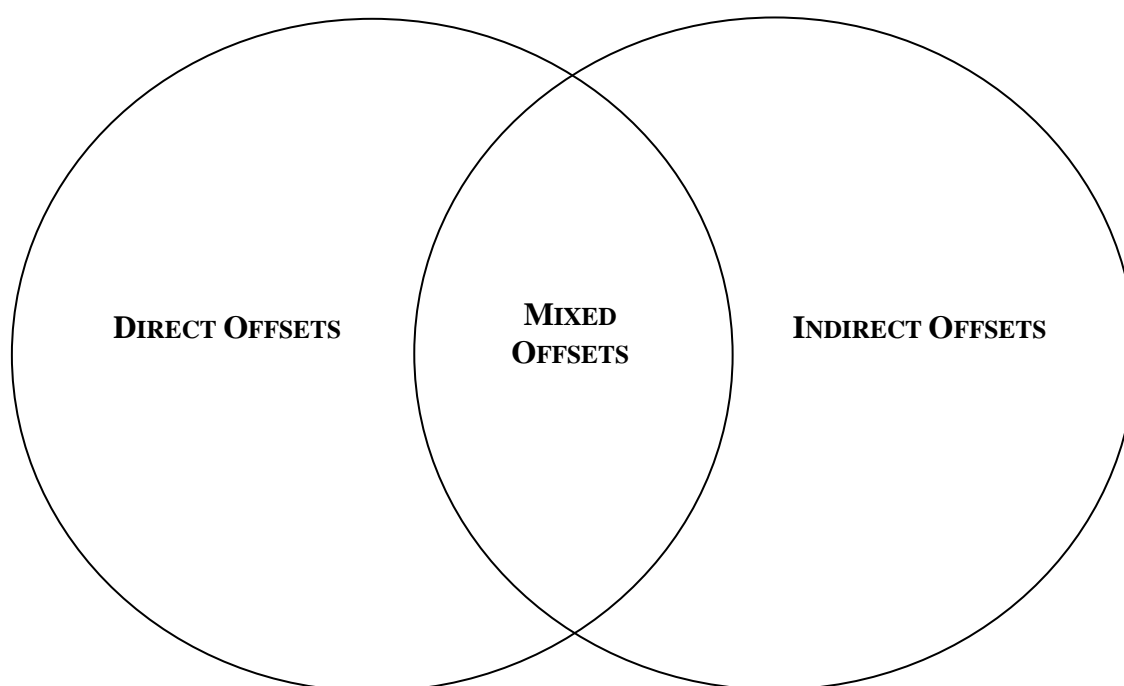
Different countries consider offset in different ways. For example, offsets are often established as **condition for participation to the bid**: if the company fails to present an offset package, typically meeting certain requirements, that the bid is disqualified. Another widely used approach is to have offset as one of the **award criteria**, that means offset is one of the parameters along with cost and performance to evaluate the qualified bids.

To discern the **credit value** and the **actual value** of offsets is often crucial in examining offset policies and then the related offset projects carried out by defence companies. Indeed, the credit value is the actual value multiplied by a factor – so-called “**multiplier**”⁴ – that designates which categories of offset are deemed as particularly valuable for the receiving country.⁵

³ FOI and SCS, *Study on the effects of offsets on the Development of a European Defence Industry and Market*, July 2007.

⁴ The BIS defines the multiplier in the following way: “A foreign government interested in a specific technology may offer a multiplier of “six” for offset transactions providing access to that technology. A U.S. defense company with a 120 percent offset obligation from a \$1 million sale of defense systems ordinarily would be required to provide technology transfer through an offset equalling \$1.2 million. With a multiplier of six, however, the U.S. company could offer only \$200,000 (actual value) in technology transfer and earn \$1.2 million in credit value, fulfilling its entire offset obligation under the agreement.”

⁵ Alessandro R. Ungaro, *Le compensazioni industriali nel mercato della difesa e il caso indiano*, Quaderni IAI, luglio 2012.



Source: IAI elaboration based on BIS report

III. Defence offsets trends: an analysis

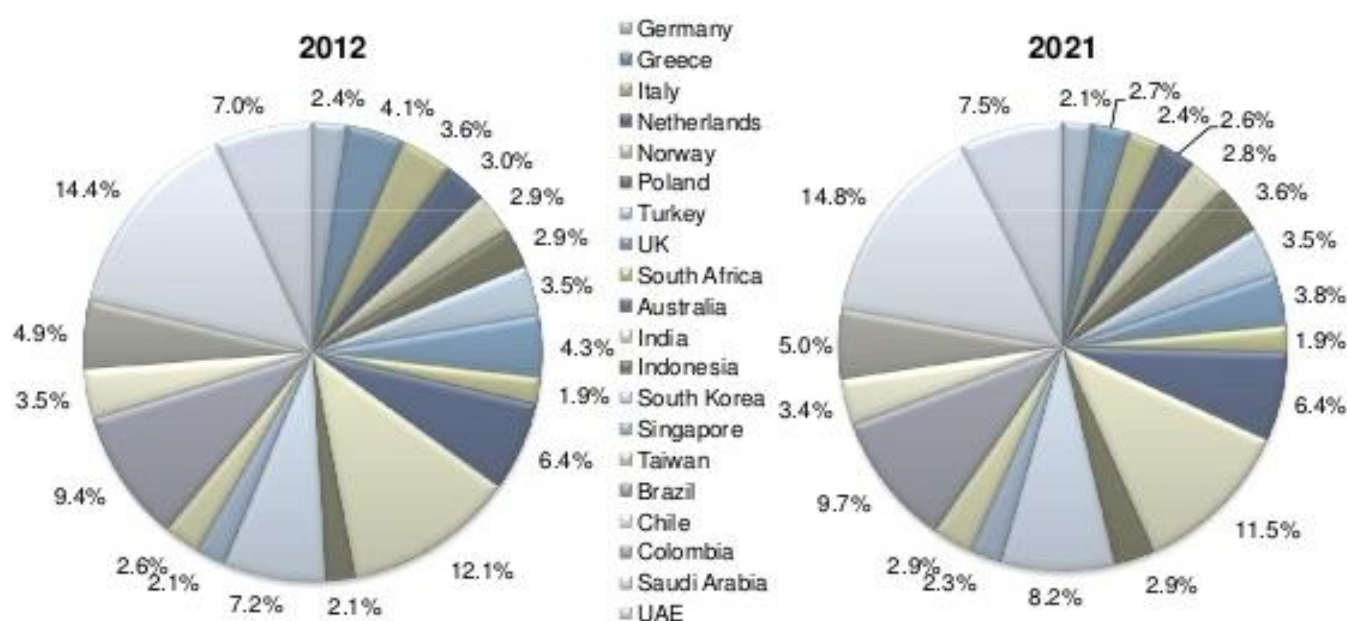
This section will assess trends and forecasts concerning international defence offsets, also by considering some examples of procurement programmes which have required the fulfilment of offset obligations by defence companies. This analysis will consider, for example, which categories of offset are generally requested and the role played by the related technology transfer. The focus will mainly be on offsets demanded by non-EU countries to European defence companies, since they are an instrument both to enter a specific lucrative market and to develop local industrial capabilities.

According to recent studies published by two consulting firms, the value of defence offset market is increasing. For example, Frost & Sullivan forecasts that the cumulative value of military offsets obligations demanded by 20 countries⁶ will reach approximately \$424.57 billion between 2012 and 2021. Among these markets, APAC⁷ countries such as Indonesia, South Korea and Taiwan show the highest grow, while the Saudi Arabia's market is expected to create the biggest cumulative value of military offset obligations, totalling \$62.63 billion by 2021.

⁶ The countries examined are: Australia, Brazil, Chile, Colombia, Germany, Greece, India, Indonesia, Italy, Netherlands, Norway, Poland, Taiwan, Turkey, Saudi Arabia, Singapore, South Africa, South Korea, UAE and United Kingdom. The survey does not include the United States as the country imports little defence equipments.

⁷ The acronym APAC indicates the Asia-Pacific region.

Figure 1 – Military Offset Market: % Revenue Forecast by Country 2012-2021



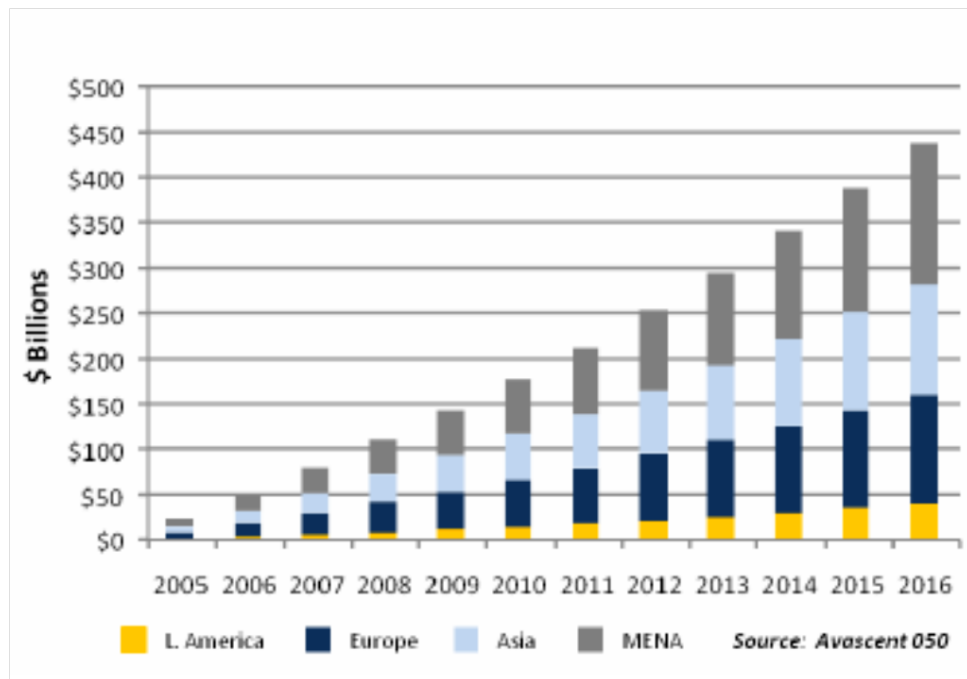
Source: Frost & Sullivan analysis

The management consultant Avascent estimates that global offset obligations will hit about \$500 billion between 2005 and 2016, in line with Frost & Sullivan estimate on the growing magnitude and value of defence offsets. However, the detailed figures presented by Avascent are slightly different from Frost & Sullivan ones. For example, contrary to F&S, the Washington-based consulting firm believes that the MENA⁸ region – in particular UAE and Saudi Arabia – presents the highest grow with an estimated \$156 billion worth of cumulative offset obligations accumulated by defence companies between 2005 and 2016.⁹

⁸ The acronym MENA refers to Middle East and North Africa region.

⁹ Avascent, *The Half Trillion Dollar Challenge*, February 2012.

Figure 2 – Global Offset Obligations (Cumulative Obligations, 2005-2016)



Source: Avascent, *The Half Trillion Dollar Challenge*, February 2012

All together, these analysis prove that international offset environment is changing. From an European point of view, a first major trend is related to the discrepancy between European defence market's offset regulation and non-EU countries offset policies/dispositions. While EU has made efforts in order to diminish and eliminate the utilization of offsets among Member States' procurement processes¹⁰, the non-EU market witnesses a growth of offsets requested, a lack of international standard, and a strategic use of offsets by governments willing to pursue industrial policy such as the development of local defence technological and industrial base.

An EU-wide reflection on the sustainability of offset obligations in the long term perspective, as well as on offset impact on the competitiveness of the European Defence Technological and Industrial Base (EDTIB), is worthy to undertake. Indeed, as demonstrated above, offset market is characterized by an accumulated amount of offsets obligations that could threaten the sustainability of defence companies' commitments in foreign countries. In this perspective, European firms have to take seriously into account and manage two major risks, the reputational risk and, above all, the financial risk in case of un-fulfilment of offset obligations. For this reason, the Baroness Liz

¹⁰ The Directive 2009/81 states that "offset requirements are restrictive measures which go against the basic principles of the Treaty, because they discriminate against economic operators, goods and services from other Member States and impede the free movement of goods and services. Since they violate basic rules and principles of primary EU law, the Directive cannot allow, tolerate or regulate them". Directorate General Internal Markets and Services, Directive 2009/81/EC on the award of contracts in the fields of defence and security, *Guidance Note Offsets*, November 2010.

Symons, former UK defence procurement Minister, has warned about the level of escalating costs and, with it, huge risks of liability on the balance sheet.¹¹

Offsets are not an easy issue to handle. The complexity is further emphasized by the fact that offsets are evolving in more sophisticated instruments – not only a merely technical or business issue – reflecting the political/strategic/industrial policy of the country. Indeed, it is noteworthy to underline that offset requirements are moving from indirect offset towards direct ones – directly related to the article(s) or service(s) exported or to be exported pursuant to the military export sales deal – such as co-development, co-production and the Transfer of Technology (ToT). Many non-EU countries such as Brazil, India, Turkey and South Korea require more and more technology transfer as they aspire to compete internationally and become Tier 1 suppliers or, at least, accessing to the global supply chain. Therefore, the ToT is becoming a key aspect – much more than in the past – as well as a challenging area that European defence suppliers have to deal with, by delivering value without exporting the core technology they master. This situation is further compromised by the fact that Europe as a whole is subject to fragmentation of defence, industrial, export policies and control of exports of military technology and equipment, without a proper impact's assessment of offsets' impact on DTIB technological edge and competitiveness.

The days of off-the-shelf sales seems to be over. Because of cuts to European defence budgets, including public expenditure in Research and Development (R&D) and Research and Technology (R&T) activities, companies' keyword is export towards non-EU markets and competition in international markets is red-hot. In addition, the European defence market alone is not able to guarantee sustainable conditions for defence industry so as to increase the European "dependence" on foreign lucrative markets. At the same time, since APAC countries and MENA region's States have healthy balance sheets, trade surplus and financial resources, they are willing to create their DTIB in order to protect their economic and political interests. In this context, ToT and long-term effects of offsets investments for local economy – such as the establishment of joint venture, co-production and licensed production – are the most critical offset variables able to influence the selection of an offset package rather than another one. These countries are increasingly looking for medium to long-term partnership to cement relationship beyond the main purchase¹² and some of them are reducing the offset threshold while requiring obligations that exceed 50% of the contract value. This is also due to the recognition that past offsets' outcomes that were expected in the implementation process have been largely unrealized. Usually, defence companies have developed

¹¹ DefenseNews, *As Firms Target Exports, Offsets Create Headaches*, May 2013.

¹² DefenseNews, *Refine Requirements*, October 2012.

bid proposal with a limited intention to fulfil offset obligations by budgeting for the penalties, assuming that paying away an obligation was a better solution.¹³ In order to react to this situation, several countries now allow suppliers to pay only a part of the obligation.

In other words, from a recipient country perspective, offsets are seen as a driver or stimulus of industrial development and capabilities of indigenous defence sector. For example, India has revised its offset policy with several reform in order to tackle the various weaknesses of its approach to offset. The Indian government has recently established the Defense Offsets Management Wing (DOMW) within the Ministry of Defence to monitor more effectively the implementation of offsets packages. Moreover, New Delhi has recently decided to allow technology transfer as a legitimate way to discharge offset obligations, and has extended the period of completing offset obligations up to two years beyond the completion of the main procurement contract.¹⁴ Along these lines, in 2012 Brazil has issues a new regulation – law n. 12.598 – aimed at creating a particular system for public procurement relating to strategic defence products. The objective is to stimulate and promote the establishment of companies able to locally develop and produce defence articles for Brazilian Armed Forces. As a result, Brazil intends to be a partner with foreign defence company and not only a client, by establishing that part of research, development and manufacturing work-share will be done in Brazil.

However, such efforts and step forwards made by non-EU countries with regards to offset policies is only one side of the coin. The level of ambitions of these countries often is not consistent with the local reality – for example in the MENA region and APAC countries. Indeed, despite a strong political will and considerable financial resources, creating a competitive and solid defence industrial base requires competences that few countries have – but many are willing to acquire. An efficient and effectiveness absorption of offsets investments is still a challenge: only through carrying out R&D and R&T programmes, defence offsets will have long-term impacts on local defence's competitiveness. To this end, the receiving country should consider offset as *one* of the industrial tools able to potentially stimulate and develop an indigenous defence industry, necessary linked to broader investment plans in research, know-how and technology.

¹³ DefenseNews, *Are Offsets Becoming Unaffordable?*, October 2012

¹⁴ Center for Strategic and International Studies, *Defence Offsets in India*, August 2012.

IV. Conclusion

The defence offset market is drawing the attention of national governments and defence companies due to its economic, financial and strategic importance. As outlined by this paper, the value of global offset obligations is estimated to increase in the future thanks to ambitious defence procurement programmes of countries such as Brazil, India, Indonesia, Saudi Arabia, Taiwan and United Arab Emirates. This increasing accumulation of offset obligations at international level goes hand in hand with an evolution of the offset instrument. The analysis shows that recipient countries seem to move from indirect offsets towards direct ones in which the technology transfer and long-term partnership act as *a sine qua non* condition in order to finalize a defence deal. Many countries have revised their own offset policy also by strengthening control and penalties mechanisms and by creating ad-hoc commissions to monitor the implementation of offset programmes.

It seems evident that defence offset market presents strong dynamics that could negatively affect *in primis* European defence companies' competitiveness and, above all, the European defence technological edge as a whole. Offsets *per sé* are not the main issue but they might rather cause negative effects because of the shrinking of European defence budgets which put under pressures defence companies constrained to rely more and more on foreign markets – and thus to accept ambitious offset requirements by recipient countries focused on technology transfer.

Considering shift of the bargaining power towards non-EU countries, a key question is whether there is in Europe the awareness of offsets' implications for the competitiveness and technological edge of European defence companies. Not having a shared reflection and assessment among policy-makers at national and European level of offsets' impact on European defence and technological industrial base (EDTIB) leaves to defence companies an high degree of flexibility and room of manouvre in terms of market and offsets strategies. However, such scenario conceals some relevant risks. In fact, defence companies do not always carry out an assessment of the long term impact of offsets deals on the competitiveness and technological edge of the whole EDTIB, since they are pressed to ensure short term profitability in order to survive in an increasing competitive international defence market. In other words, in this particular circumstances, the main goal of a single company is to sell its products and penetrate non-EU growing markets. In this context, an increased awareness and a clear and long-standing political commitment at European level could help the defence technological industrial base to deal with current offsets' reality.

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