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Defence Means Defence
The Western Defence Industry After the Ukrainian War
Challenges and Opportunities

Raffaele Esposito

Honorary Chair of NATO Industrial Advisory Group

ABSTRACT

The war in Ukraine has created a dramatically changed scenario for Western governments, institutions and for their defence industries. The strongly assertive behaviour of China adds complexity to this scenario. From the point of view of industry there are now challenges and opportunities but, as the title suggests, there is also a much clearer understanding and legitimacy of the word “Defence”.

The scope of this paper is to list and discuss the most significant challenges and opportunities in the new scenario, with some indication of which strategies and actions the industry could put in place in order to deal successfully with challenges and take advantages of opportunities. A strong cooperation of industry with governments, institutions, academia, think tanks, etc... seems to be the prerequisite for any other strategy or activity.

We note a significant difference within the Transatlantic Alliance between the US and Europe, with the US enjoying the upper-hand on the basis of its overall competitive position.

All industrial strategies and actions discussed in the paper will have to be carried out in an environment of great uncertainty so that situation awareness, flexibility and resilience should be the frame in which industries develop and execute their strategic plans.

There is no doubt that the Ukrainian War has had and will continue to have a significant wide impact on the Western Defense Industry (WDI), but it is quite likely that a first important consequence will be just semantic. The title we have chosen, paraphrasing Theresa May on Brexit, means that it will be difficult from now on to dispute or misunderstand the true mission of the WDI and to question the legitimacy of using the word defence, both for governments and industries.

Before we discuss the impact, two points need to be mentioned: first, the actual threat is not only the obvious one from Russia but, with an eye to the future, the systemic competitor is also China, as acknowledged in the NATO 2022 Madrid Summit Declaration. As usual, the behaviour of China is called “assertive”, but the meaning of the adjective stretches between “confident and forceful” to “tending to be aggressive”. It is evident that the recent behaviour of China is rolling toward the latter meaning. The second point is that while our analysis will focus on the West, there are several Far-East countries and their industries, mainly Japan, South Korea, Australia and New Zealand, that despite specific differences, are related to the West with various forms of cooperation and will feel different echoes of the impact. To be fair, another group of important countries and their industries, such as India, the Emirates, Saudi Arabia, etc...are also players in the present global theatre, but none of these groups are the subject of this paper.

It is clear that the impact of the new threat scenario on the WDI is a very complex multiparametric situation; the complete analysis would require a long and deep effort perhaps worthy of a book and certainly beyond the scope of this short paper. What we want to do here is to compile a list of the most important issues involved and some discussion of their relevance, simplifying their classification and dividing them into just two categories: challenges and opportunities. The impacts of the threat are obviously felt first by governments and arrive to the DI filtered and interpreted. It is therefore appropriate to start with a brief mention of the West's reaction to the Russian aggression: USA, NATO, the European Union and European nations. This will be the necessary frame in which to conduct our analysis.

The USA have decisively coordinated the US-NATO-EU response, especially for sanctions and military and economic help to Ukraine. Its increase of the defence budget has been exemplary and nearly all nations have followed suit. The House has just passed (July 2022) a 2023 Defense budget of 840 billion dollars, increasing by 37 billion Biden's request. Notably, the budget includes 171,6 billion for R & D, a 9 % increase and 20 % of the total budget, a clear signal of the continuing and increased attention to the role of technology. NATO, "after condemning Russia's war of aggression in the strongest possible terms" has moved troops to the Baltic regions and Eastern Europe's flank. The NATO Secretary General has reminded the NATO audience that over half of the Alliance's nations have complied with the 2% of GDP commitment and some have already surpassed that amount. As mentioned above, NATO also reinforced existing battlegroups on the Eastern side (Romania, Hungary, Bulgaria and Slovakia) and the Northern Baltic states. An important NATO summit decision related to R&D and innovation has been the creation of DIANA (Defense Innovation Accelerator) and an innovation fund of one billion dollars, a clear message that NATO wants to play a leading role in the global race for technological superiority. The new 2022 Strategic Concept has also been approved, reaffirming the commitment of the USA to the EU through the Transatlantic Alliance. And, last but not least, Finland and Sweden have been formally invited to join NATO.

In the EU, aside from the existing tools of PESCO (Permanent Structural Capability), CARD (Coordinated Annual Review of Defense), MPCC (Military Planning and Conduct Capability), the European Defence Fund (circa 8 billion euros) has seen an acceleration in the assignment of research funding: contracts of first 1,2 billion euros batch were awarded in July this year. In parallel to the NATO Strategic Concept, the EU has approved its Strategic Compass, whose main focus is to improve the EU level of military activities and the modalities of their planning and execution, and also to enhance the resilience of states and societies. At national level, almost all European nations have increased their defence budget. Major examples are Germany with 100 billion euros additional fund (allowing a 2% hike during the Scholz government) and Poland, which is planning for 2023 to increase its budget from 2,3% to 3% of the GDP (on condition of creating a special fund, whose resources have still to be found). In

total, the European nations can now count on a budget that will surpass 200 billion euros in 2023 (i.e., more than the double compared to the actual estimated Russian war budget). Obvious caveats are that the increases come after two years of decreases due to the COVID-19 pandemic and also that the values indicated will have to take into account the actual and future level of increasing inflation.

In order to put defence budgets in perspective, and to show the need for the West to continue the policy of the necessary defence investments, it is useful to look at the “other side”. According to SIPRI 2022, China, the world’s second big spender for the military, allocated an estimated 293 billion dollars to its military in 2021, an increase of 4,7% compared to 2020 (China has increased its military budget for 27 consecutive years). Russia increased its military spending by 2,9% to 65,9 billion dollars when it was building up its forces at the Ukrainian border. Estimates have indicated increased spending for the war, a total of 26,4 million dollars from January to April (Reuters, 18 May, 2022). It is worth noting that according to a paper published in October 2021 by Peter Robertson of CEPR (Centre for Economic Policy Research), by taking into account the Purchasing Power Parity the US military budget in 2019 was smaller than the next three big spenders combined, China, Russia and India (the India military budget was circa 75 billion dollars in 2019). Actually, the turbulence is truly worldwide even if at different intensities: according to SIPRI 2022, in 2021 the world military expenses have exceeded 2 trillion dollars for the first time with an increase of 6,1% with respect to the previous year.

As mentioned at the beginning of this paper, we will limit our analysis of opportunities and challenges to what we believe to be the most relevant. Naturally, opportunities will need appropriate actions to make them realizable, whereas challenges that imply risks will need mitigation plans. On the opportunity side, we will focus on just three:

- 1) the increase of the defence budgets, with a more than proportional share devoted to R&D and innovation,
- 2) an improved government attitude to having a military industrial policy and to cooperate with industry in ways that go beyond the customer-supply relation,
- 3) the improved legitimacy of the WDI.

The challenges mainly consist of what is needed to take advantage of opportunities. In addition, we note the need to defeat hackers and espionage, monitor security and protect the IPRs (Intellectual Property Rights). The WDI will also be impacted by climate change, well-known energy issues and possibly future pandemics. In our opinion, at the same time challenges will also reside in the difficulties to respond adequately to the variety of demands arising from the new scenario.

The increased global defence budget, and specifically that of the Western side, is certainly the most obvious opportunity for the WDI. There is, however, quite a difference between the USA and Europe, with the former clearly in the lead. A typical recent example is the big German order of 35 F35 and 60 CH-47-E for a total of over 13 billion dollars, shortly after the Scholz announcement of 100 billion euros additional funds for defence (German arms industry fear for its slice of defence spending windfall, Financial Times, 29 June 2022, p.7). US defence industries and investors are in fact quite confident and US DI stocks have recently beat the market in the expectation of increased orders, some of which with little competition.

A good discussion of the predicament of the European Defense Industry, especially with reference to its counterpart in the USA, can be found in a recent Financial Times article (Europe's war dividend, 19 July, 2022, p.15). It contains, among many other issues, a review of the very imperfect rationalization of EU defence products. The issue of industrial structure rationalization is also mentioned, with the remark that while aerospace has undergone a reasonable rationalization (of structure, not yet of products, see the parallel development of Future Air Combat and Tempest), the land and naval sector have not, in spite of some laudable but unsuccessful efforts. The scarce number of common projects and, in general, the low level of cooperation among EU governments and industries is also mentioned as a source of limited competitiveness.

Defense Industries, especially in the EU, will find many challenges and obstacles in order to respond to the immediate and near-future market needs and increased orders: the products catalogue and product planning should be revisited. In the July 2022 above-quoted FT article, Bastian Giegerich, of the IISS (International Institute for Strategic Studies) mentions that the industry in the short and near future faces three parallel challenges: Replenish, Replace and Rebuild, implying "Replenish stockpiles rundown after two decades, replace obsolete Cold War era equipment that is being flushed out by the war in Ukraine, and rebuild and innovate for new capabilities". A related challenge will be in the manufacturing with new sudden requests of possibly large volume and diversified content. A high level of quality should obviously be maintained. Here, security of supply will be a difficult issue due to the many current perturbations of the supply chain. In any event, the industrial organization will need more attention and investment going into strategy, R&D and innovation, and cooperation with the national, international and transatlantic level, as well as increased links with academia, think tanks, etc... From this point of view, the ability to attract a vibrant and competent staff, particularly in the STEM areas (Science, Technology, Engineering and Mathematics), will be essential. It would seem hardly necessary to point out that industry should deal with all changes and challenges without sacrificing sound economic and financial performance, and a satisfactory relationship with the stakeholders.

As for the second opportunity, in many of the issues mentioned, a necessary response will be the cooperation with governments and institutions. This need, interpreted as a more mature form of cooperation, has been recognized by both parties but more work is needed to fill the toolbox. Perhaps NATO was the first institution to recognize this concept of cooperation with industry at the pre-competitive or non-competitive level: NIAG (NATO Industrial Advisory Group) was created with this very mission in mind in 1968, and other NATO bodies such as STO (Science and Technology Organization) include a robust industrial participation. There are also other groups such as the STC (Science and Technology Committee) of the NATO Parliamentary Assembly, etc....

In Europe, similar functions are the responsibility of the EEAS (European External Action Service) and EDA (European Defense Agency) with appropriate funding. In both in the Madrid Summit Declaration and the new Strategic Concept, NATO has recognized the importance of industry as a partner; in the EU Strategic Compass, Europe has taken the same position. At the national level, there is awareness of the need for an Industry Defense Policy: in Italy, for example, the Minister of Defense Lorenzo Guerini has recently issued a new “Directive for Industrial Defense Policy”, intended for both his ministry and industry. This document underlines that industry plays a pivotal role both in the European defence integration and in the geopolitical role in support of governmental agreements, and in the strengthening of Italy’s role in the international arena. It is naturally now the task of industry to take advantage of this more favourable government and institutional approach in several ways; one is to be more aware of the new operational requests from the battlefield and conflict areas such as the widespread presence of urban warfare, hybrid conflicts, cyberwarfare, etc... A striking example of the impact of government interaction with the defence industry is in Turkey where the 20-year-long support and promotion of the Turkish government has made the Turkish defence industry grow by a factor of ten, and the government guidance helped in achieving worldwide success of some of its products.

The last opportunity, and to some extent a challenge, is the one that we mention in the title; that is, the increased legitimacy of the defence industry, despite the fact that it was generated by Russian aggression of Ukraine and the dangerous new assertiveness of China. These two striking changes of scenario should have modified the image of the defence industry in the eyes of the public, the media and the financial community – especially in the EU. The change of image, of course, will not be all-encompassing, and there will be, unfortunately, sectors that will continue to call the defence industry by the old expression, “the arms business”. It is now the challenge for the defence industry to take advantage of the present need for defence to better explain its mission through an enhanced use of PR, better engagement with the categories pointed out earlier (public media, financial community, etc...). Government help would be useful in this endeavour and should be solicited. Again, it must be noted that this seems to be a more European than American problem. In the US there is strong support for the military even if American

attitudes are more mixed when it comes to defence spending. (Defense Industry in the Context of US Public Opinion. Gallup, March 11, 2022).

Before closing, we should also reflect on and re-examine WDI's present structure. This issue was briefly mentioned (regarding Europe) in the FT article Europe war dividend mentioned earlier. In the USA, after the famous "last supper" of Undersecretary of Defense William Perry in 1992 and the radical restructuring of the defence industries around the Big Five (Boeing, Lockheed, General Dynamics, Northrop Grumman and Raytheon) there have been several further rationalizations, even if on a smaller scale: the acquisition of Sikorski by Lockheed, Orbital ATK by Northrop Grumman, CSRA IT by General Dynamics, etc... The last significant M&A has been the merger of Raytheon with UTC, and therefore Rockwell Collins, resulting in Raytheon Technologies. On the whole however, the situation has been - and continues to be - relatively stable and one might only expect further important acquisitions abroad. The basic configuration of the European industry has also remained relatively stable in spite of a flurry of small to medium acquisitions by BAe and Thales, with the possible exception of the Dassault Systèmes acquisition of Medidata. As mentioned before in this paper, European rationalization could be improved and some basic changes might be in order.

We note that in the course of this paper we have often observed that while opportunities and challenges are similar within the WDI, the position of the USA and Europe show drastic differences in the potential of dealing with them, with the US enjoying a much better chance. Thus, whereas the strength of the transatlantic link has been duly reaffirmed both in the NATO Summit and Strategic Concept, and in the EU Strategic Compass, competition within the alliance will certainly persist and probably increase between the US and European industries. How to reconcile the sincere stated intention to cooperate in the presence of obvious competition between the two parties will no doubt be a significant challenge in the future.

And finally, what remains to be seen is whether the present stormy uncertain and dangerous scenario will be remembered as a momentous discontinuity or just a ripple, albeit a very large one, after which some stability will be restored in the evolution of the WDI. This extremely high level of uncertainty strongly suggests that every strategy and action described in this paper will have to be accompanied by an almost obsessive attention to events and by a similar attention to the pursuit of industrial flexibility and resilience.

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