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Defence industries in small European states: Key contemporary challenges and opportunities

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Illimar Ploom*

*Chair of Strategy and Innovation, Estonian Military Academy,
Riia 12, Tartu 51013, Estonia*
illimar.ploom@mil.ee

ORCID 0000-0003-2950-7553

* Corresponding author

Tarmo Kalvet

*Department of Business Administration, Tallinn University of
Technology, Akadeemia tee 3, Tallinn 12618,
Estonia*

tarmo.kalvet@taltech.ee

ORCID 0000-0002-4895-4466

Marek Tiits

*Department of Business Administration, Tallinn University of
Technology, Akadeemia tee 3, Tallinn 12618,
Estonia*

marek.tiits@taltech.ee

ORCID 0000-0002-2484-5003

Abstract. This study addresses the challenges and opportunities that small European states face when weighing their defence industrial policy options. The article builds on a technology-based small state industry governance model by adding a defence industry-specific layer. This model is used to analyse how defence industries of small states could contribute to the European Union common defence industrial policy, and how the latter could likewise be beneficial to small member states. The paper discusses defence industrial policy challenges and opportunities both from the wider European Union and small state perspective. Global and regional geopolitical trends are explored among other specific topics, as are aspects of regional and domestic governance like the market structure, procurement, and R&D. The article concludes that small European states could both win and lose with the establishment of a common defence market, depending on the market design. Ideally, it should be combined with the simultaneous creation of an EU defence industrial policy that enables smaller, and especially less developed, member states to maintain and advance

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their own industries, preferably participating within the value chains of defence industries of the larger countries.

Keywords: defence industry governance, small states, EU defence industrial policy, geopolitics, strategic autonomy

JEL Classification: F52, F55, H56

1. INTRODUCTION

Studies and analyses of European defence industry tend to focus on major arms producing companies and their markets (e.g., Meijer, 2010; Hartley, 2010). This means that small states have largely escaped closer scrutiny. In the first extensive edition on defence industry (Hartley and Belin 2020), only a few smaller states were covered. Against this background, the aim of the current article is to reflect on the defence industry governance options and main challenges for small European states in the contemporary security environment. In addition to technological and economic considerations, the focus will be on geopolitical trends, the domestic market, as well as the new modes of warfare.

As to geopolitics, there has been a crucial shift of attention of the U.S. away from Europe and its neighbourhood to China and the Pacific region (Nagasaka & Miyasaka, 2020). This trend has continued through at least three last presidencies in the U.S. (Ganesh 2019). Although re-emergence of “great power” competition is most acutely perceived from Russia (Sverdrup-Thygeson, 2017), and the U.S. has taken Russia seriously as a response to Russian aggression against Ukraine in 2022 (see, e.g., Chivvis, 2022), the overall trend has not changed (Perthes, 2020, pp. 5-6). This gradual but persistent shift has touched many a facet of the hitherto relatively stable transatlantic security edifice. Its general impact is to make European countries more self-dependent in matters of security and defence (Thiele, 2013).

There are two interlinked aspects which show a need for Europe to become more autonomous with regard to defence. These could be called external and internal factors.

The foremost external component is the already long expressed need from the U.S. side for its European NATO partners to assume a more extended and active role toward its own defence (Techau, 2015). This concerns the financial aspect, achieving the stable 2% defence costs level of one’s GDP (Dowdy 2017). Another topic pronounced by the U.S. is the need for European countries to address their regional security problems on their own, and not relying as heavily upon the support by the U.S. (Knoll 2020). But this outside pressure to Europe is also an outcome of new hybrid threats. Such as the recent wars of the Middle-East and the rise of the terrorist threat from the ISIS and related fundamentalist groups (Rauch 2015). A yet further pressure has come from the wave of immigration that followed from regional wars (Swain 2019), but also the sweeping political changes known as the Arab Spring (Abdelsalam, 2015). A separate but all the more immediate factor is the rise of Russia’s aggressive stance, through Georgia, Syria, and with a large-scale conventional war in Ukraine in 2022, ideologically marked by its moving away from a European to a Eurasian power (Karaganov, 2018).

In this context, the need to develop common European defence capabilities that should be ready to face the myriad of challenges, has become ever more obvious. A great part of such a cooperation touches European defence industries.

While there have emerged new initiatives and modes of cooperation and governance such as e.g. the Permanent Structured Cooperation (PESCO) and the European Defence Fund (EDF), as well as the establishment of the Directorate-General for Defence Industry and Space (DG DEFIS), the member states still mostly fall back on their own defence industrial base. What is more, efficient cooperation sees

many an obstacle on its way. Bigger member states may wish to promote the interests of their own industries as the easiest way to found a common market. For their sake speaks free market and its mechanisms. Smaller member states, in their turn, may feel as forced into a role of a mere client, and therefore a need to keep their own industries for which some protectionism works as a reliable method. Therefore, establishing a common defence industrial base in the EU needs to overcome of the mentioned problems.

In this context, this exploratory article intends to pursue two research questions. First, which role of defence industries of small EU states would be of greatest use for the emerging common European Union's defence market? And second, what design of a common market would, next to larger states, best serve small European states?

2. LITERATURE REVIEW AND ANALYTICAL FRAMEWORK

Defence industry is a moving target for a consistent analysis due not merely to its inner complexity but also because of its hybrid form. According to Alyson Bailes, products can be dual- or multi-use, ownership can be private or national (Surry 2006, 4). Hence, instead and in parallel with "defence industry" the heterogenous group of companies is called "defence-related industry", "defence and security-related industry" or "defence-related companies" (Berrebi & Klor, 2010). Thus, a clear line of demarcation between defence and non-defence products and services is hard to draw, and it is made even more complex with the emerging hybrid threats whereby, e.g., computer programmes or information narratives, or energy supplies can be weaponised (see e.g. Giannopoulos et al. 2021).

2.1. Literature review: development economics and technological upgrading

As an economic phenomenon, one can analyse defence industry by applying to it concepts from the economics discipline. In this regard, in order to increase living standards, nations should increase the knowledge intensity of products (Reinert, 2007).

In the globalised world, the smallness of a country adds complexities (Armstrong and Read, 2003; Edquist & Hommen, 2008; Kattel et al., 2010). Namely, small states commonly do not have the financial capabilities or the human resources needed to invest into cutting-edge science, research, and development. Small states (particularly the less-developed ones) have small home markets that limit economies of scale and geographical agglomerations. In addition, small home markets and dependence on exports threaten small states with over specialisation, lock in and low diversification of the economic structure. Small states might also have limited administrative capacities (Kattel et al., 2010).

Along with the increasing fragmentation and delocalisation of industry value chains, the "small country squeeze" identified by Levinsen and Kristensen (1983) should be mentioned. By that, large old industrial countries prevail in fields related to complex technologies and products and large developing countries dominate in simple products and technologies. Thus, small states are squeezed from both sides, and with time it has become even more intensive. It is impossible for small economies, and often also for medium-sized ones, to cover the whole spectrum of cutting-edge science and technology that is needed to nurture new basic technologies. The concentration of resources required to develop new high-tech industries is increasingly risky as is the inability to compete in scale-intensive mass production with the larger emerging economies that have abundant "cheap" labour (see Walsh, 1988).

Smallness entails fairly limited diversification of innovative and productive capabilities. This may lead, as exemplified by the dominance of Nokia in the Finnish economy, to a strong domination by individual industries to a country's economic development (e.g. Ali-Yrkkö, 2010).

Well-informed priority setting, both at the level of individual businesses and public policy has become even more important for successful development. In comparison to larger advanced economies, the dominance of imported technologies and the importance of export markets, however, make the priority-setting and strategic policy-planning process very different in small countries.

Historically, major new (especially science-based and scale-intensive) industries (such as defence industry) have emerged in, or even in competition between, the larger major economies that were able to secure the necessary resources. Their countries also served as sizeable lead markets for the emerging new industries. Even as recently as a few decades ago, all the main elements of any industrial value chain tended to be concentrated in a fairly close geographical area. The globalisation and advancement of ICT have made international communications and logistics, the management of remote business units and the relocation (off-shoring) of individual elements of the value chains, massively easier. With greater specialisation and an increase in the manufactured, intermediate-goods trade (Cattaneo et al., 2010), successful catching up has become increasingly dependent on imported technologies and related production capabilities as well as on the dynamics of the broader global industry and market. It is no longer sufficient to discuss specific industries or clusters only within regional/national borders. Instead, industry's value chains (clusters) should be analysed in broader cross-border settings or, depending on the characteristics of the particular industry, even as global value chains (Tiits et al., 2006).

With defence industry, with developed larger states often the linear model of innovation was exploited where defence industry was, and sometimes remains, itself a main financier of R&D, and the spill-overs to civil industries occurred afterwards. With small states this is rather different because of the limitation of domestic market. Another relevant aspect of defence industry is related to security of supply and strategic autonomy that have considerable impact on the design of supply and value chains.

2.2. The analytical framework: small state defence industry governance model

The question remains, how to select those areas with a breakthrough scientific and economic potential? We have earlier developed a governance model for small catching-up economies that should opt for an “intelligent piggybacking” approach to governance, acknowledging that smallness of a country can be a source of multiple constraints on innovation and economic development. Such an approach to strategy development focuses on mapping global technological development trajectories and finding the possibilities for restructuring and upgrading existing technological and production capabilities. With such an approach, the key focus shifts from just science and technology to the upgrading of existing technological and production capabilities. (Tiits & Kalvet, 2013)

Relying on the intelligent piggybacking framework, and an earlier developed tool, we adopted it to the defence industry needs. As a contributor to the security of a nation, defence industry is influenced by a wider set of factors, most prominently political.

States are the main, if not the only legitimate, buyers for defence equipment. This lifts security interests to as important a position as economic ones. One can even see a primary role for security interests. This role of states is also visible in the design of national defence industrial policies which, in the context of general trends of globalization and the dominance of liberalization of markets, instead of the free market gives priority to national interests and concerns. But it has also a positive feedback mechanism working both ways, domestic demand gives local producers assurance, local producers assure in turn the security of supply.

At the same time, while designing their defence industrial policies, small states need to take into consideration major global and regional security concerns. But we can also see how in terms of the socio-

economic challenges the military sector has witnessed a thorough widening of the sector by the emergence of hybrid threats, against which the main policies are set again by the state.

Thus, this article includes into the model next to economics-related factors also the political factors (Figure 1). Next to global technological development trajectories, and existing technological and production capabilities, we have added two components, geopolitics and domestic markets. Also trends in modern warfare were included.

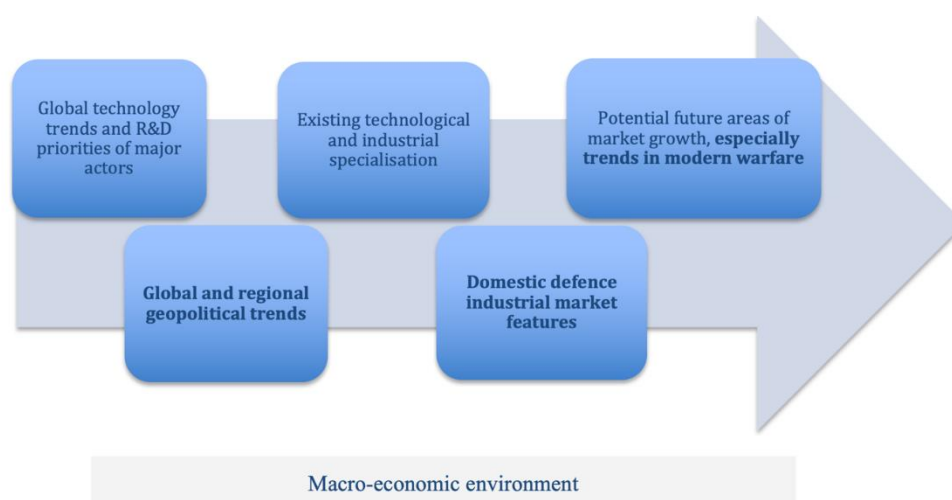


Figure 1. An analytical framework for priority-setting in the defence industry policy in small states (defence-governance related additions are **in bold**)

Source: Authors, based on Tiits & Kalvet, 2013.

The original intelligent piggybacking framework consists of the following aspects:

- Global technology trends. They are, for the most part, set in the larger advanced economies and characterise major future technological possibilities.
- Existing technological capabilities and industrial specialisation. These define the starting point(s) of any future development scenarios or roadmaps.
- Major domestic and international socio-economic challenges. They indicate likely changes in future market demand as well as decision points for the willingness of domestic actors to rethink their future production and innovation activities. (Ibid.)

Also, major changes in the macroeconomic environment, e.g., changes in the conditions of access to capital or in the exchange rate, can be hugely powerful elements.

With the extra layer concerning defence industry governance, the following aspects should be considered:

- Global and regional geopolitical trends. Geopolitics influences broader security and defence policy environment, and within their structures, defence industrial policy landscape.
- Domestic and regional defence industrial markets. Domestic and regional demand and capability development priorities of national and friendly defence forces are especially relevant for the defence industries of smaller states. States as main buyers.
- Trends in warfare. The possible future areas of demand are influenced by trends in modern warfare, the latter being influenced also by technological advances like emerging disruptive technologies (EDT).

This extra layer of the model has been moulded by way of generalizing upon the studies of small state defence industry governance practice. We have been interested in mapping the main non-technological factors that influence small state defence industrial policy. This extra layer will also be the main focus of the next chapter.

3. METHODOLOGY

This paper relies on the study of governance of defence industry in Estonia with which the authors have detailed the focus of the categories of the outlined defence industry governance model. Methodologically, we participated in 2020 and 2021 in several workshops with the major stakeholders of Estonian defence industry, i.e. industry representatives from the Estonian Defence Industry Association (EDIA), the state (MoD) and universities (TalTech and Estonian Military Academy). We have also conducted a survey during the first wave of COVID in May 2020 among EDIA members on the impact of the crisis, and a study commissioned by MoD to consult the renewal of Estonian defence industry innovation policy. Drawing on these workshops and studies we have specified the three broad categories that form the extra layer of the above proposed governance model for priority setting for small states in defence industry.

4. TRENDS IMPACTING SMALL EUROPEAN STATE DEFENCE INDUSTRY GOVERNANCE

This chapter addresses geopolitics, warfare trends and domestic market demand as new elements of the amended small state defence industry governance model. Some salient global and regional trends are considered to understand the importance of those aspects for small European states' defence and industrial policy, especially where they mingle.

4.1. Geopolitics: the impact of the U.S. shift to the EU–U.S. relationship

This subchapter assumes the U.S.'s gradual shift away from Europe to the Pacific as described above and asks about the consequences of that shift to the transatlantic partnership. As will be argued, the vicissitudes of the EU–U.S. partnership are simultaneously impacted by, as well as influential to, EU security and defence industry governance.

This outer geopolitical pressure is mirrored within the EU by the need to pool the scattered resources and capabilities together, signified most clearly by the ever wider but still not unproblematic recognition of the need for the EU to achieve strategic autonomy (ESA) (Biscop 2013, EU Global Strategy). Since the failure of the initiative to create a European Defence Community in 1954 till the recent decade, the EU member states have not had much will to delegate aspects of their national defence policies to a Union level. This mood has recently changed, especially with the Lisbon Treaty and with the creation of several instruments like EDA, EDF, PESCO, and DG for Defence Industry and Space. The question is what will happen to transatlantic relations if the EU will strive towards strategic autonomy. Conditionally, and in simplified terms, three scenarios could be imagined where what varies is the degree of autonomy.

Picking and adopting three scenarios from the original five that Andersson et al (2016) outlined about the future of European defence, the fullest version would bring straightforward strategic autonomy with European Army. That is best illustrated by the example of Libya operation in 2011 when European nations needed to rely on the U.S. strategic enablers in order to conduct a military operation (Biscop 2013). Should the EU achieve its own strategic autonomy, not only would the member states be able to act independently from the U.S. help but they will be able to act in all domains (Ibid., Andersson et al.

2016). This version is based on a supranational European defence design. The second version comprises three original middle scenarios. It varies by the function (peace operations or defence capabilities) and degree of integration (outside NATO by voluntary clusters, fully integrated within the EU, or even into NATO), but most importantly it still considers NATO as a grand security and defence framework but the role of European partners will rise remarkably (Andersson et al., 2016). This solution remains cooperative, but the exact balance between traditional intergovernmental versus new supranational form will vary. Here is mirrored the inner variety of ESA, as long as ESA could mean different geographical and functional characteristics (Franke & Varma, 2019). The last version sees a gradual demise of NATO but the inability of European countries to build a strong common response. In this case defence questions will be solved individually, by ad hoc or bilateral agreements (Andersson et al. 2016). Each of those possible scenarios has its implications on the financial and industrial arrangements in the questions of defence. While the inner layer of those aspects will be addressed in the next subchapter, here it is vital to acknowledge the implications of those developments to transatlantic relations. In order to simplify the discussion, as well as show the importance of defence industries, we reduce the character of this relationship to the financial arrangements regarding the purchases of military technology between the partners.

The second version will presumably be closest to the existing balance between the U.S. and Europe, being nevertheless an advanced adaptation of it. With this version, in response to the protection offered by the U.S. the European countries continue to buy a bulk of the needed defence technologies from the U.S. (Woody, 2018). Here, what matters is not the exact balance of EU defence equipment purchases from its own and the U.S. companies, but their mutually reinforcing relationship. The first version will most probably see a parallel effort to develop and finance European own defence industries and concomitantly leaves the U.S. defence sector without some, possibly significant, proportion of its income that has so far been coming from their European partners (Ibid). This has a potential, though not a necessary one, to offset current transatlantic balance. The last version will see further cleavages between countries in building national industries for the provision of their separate defence needs. Smaller countries may as well become mere clients of the defence products of the country providing security guarantees.

4.2. The existing defence industrial capabilities and their regional governance

This subchapter focuses on governance trends within the European Union that influence small member state defence industries. Current geopolitical trends emphasize regional integration aspect, the inner governance developments within the EU point to the same direction. There are vital topics within NATO that mould member state defence industrial policies like NATO 2030 agenda that includes the decision by the Allies to launch civil-military Defence Innovation Accelerator for the North Atlantic (DIANA) (NATO 2021a), the Brussels summit decisions (NATO 2021b) and NATO Science & Technology Trends 2020-2040 (see Reding and Eaton 2020). Nevertheless, due to specific focus, separate consideration of NATO policies is left out from this article.

The hitherto largely separate development of defence industries in EU member states, as well as among non-EU states, has issued in European defence industrial capacity having spread unevenly. In its biggest proportions it is located in the six Letter of Intent (LoI) countries – France, Germany, Italy, Spain, Sweden and the UK – and in some smaller countries such as Norway, Finland, Switzerland and Poland (Balis & Heidenkamp 2014). While the LoI states have signed intergovernmental agreements to facilitate restructuring and operation of defence industries within Europe, the defence industry policy area was formally brought onto the EU level in 2003 with the decision to create EDA (Britz 2010). Thus, the EU is currently still a heterogeneous mix of member states with very different approaches to national defence,

which is also reflected in their relationship with EDA (Calcara 2017). There are thus 27 different national markets and defence industrial bases, and the same number of different national defence, technology, market, procurement and export policies in the EU (Mölling 2013).

In recent years, though, the EU has taken steps towards common defence governance. Along this road, the EUGS in 2016, the EDF and PESCO in 2017, and DG DEFIS in 2021 were established. However, the extent of those changes is not clear and straightforward. First, the term strategic autonomy itself remains essentially ambiguous, the meaning of it is yet to be ascertained. E.g., does it mean rather defence-oriented approach and capabilities or expeditionary focus and forces? Also, geopolitical trends and interests of actors may be contradictory. There has been a noticeable pressure from the U.S. towards the EU to take more responsibility in matters of security and defence in its region. At the same time the U.S. is not too favourable with the prospective of the EU developing its own defence industry. This is reflected also in the still ongoing discussion on the degree of openness of the ESA. Yet, if there exists an aspect about the ESA that has a relatively comprehensible meaning, it concerns military arms and the related technology.

This contradiction needs a brief exposition. During the cold war European integration was built upon transatlantic defence cooperation within NATO under U.S. leadership. The latter meant that significant U.S. troops and arms systems were stationed in Europe to help defend the region (Kaplan 2014). As the U.S. has been an important arms producer, the relationship between it and the European allies has been reinforced by defence trade relations. European states have namely been dependent on the U.S. defence industry (Bergman et al. 2021), buying a bulk of their defence equipment from the U.S. In this context, a reduced defence trade volume could damage U.S.'s economic interests and security cooperation between the U.S. and the EU.

Thus, from the perspective of sustainability of transatlantic security relationship, the defence rationale for the EU defence industrial policy can be contested. Historically, also the French position towards CSDP has been ambivalent (Treacher 2007). Although this is far from being a one-way road, and much depends on the way the policy is designed and implemented (see e.g. Biscop 2013), recent polemic around PESCO developments has demonstrated that the U.S. is verily concerned about possible negative implications (Bergman et al. 2021).

Next to the outside influence, European countries have witnessed a myriad of internal developments that likewise push them towards more independent stance in defence matters and capabilities. An underlying historical factor is the drastic decline of defence expenditures in the years following the Fall of the Wall (Dowdy 2017, p. 2). The popularity of austerity measures at the time of the financial crisis has given a further blow to the actual capabilities of individual European countries (Korteweg 2015). The rather bizarre, if not outright paradoxical, result of the ever lessened actual defence capabilities of the European countries means that at times when immediate threats have arisen, the only realistic perspective to be able to adequately respond in time is to combine the capabilities of different countries (Biscop 2013; see also Brooks 2005, and Bitzinger 2009). But this needs a truly supranational effort and respective institutional mechanisms to achieve it (Ibid). On the positive side of this solution would be a much lessened pressure to national budgets due to the efficiency of combined capabilities and forces. It is still unknown if this potential will actually realize.

In this context of different pressures, the economic rationale for a common defence industrial policy can surface. That rationale, i.e. creating a single market for goods, services, capital and workers is the original purpose of the European Union. The European Commission has been working to create single European defence market since the early 2000s (Britz 2010; Besch 2019). Economic arguments for a single EU defence market are strong and have been listed both by the EU institutions (European Defence Agency, 2007; European Defence Agency, 2015) and academic studies (Guay and Callum 2002; Hartley

2010). Hitherto, however, efficiency arguments do not seem to bear enough weight for the EU member states. Also, the vision of a Transatlantic (EU-USA) defence market (Guay and Callum 2002) has not materialized (Besch 2019).

4.3. Trends in modern warfare and the market features

In order to understand the possibilities that defence industry of a small European state has, some warfare trends have to be briefly considered. We have selected the example of the non-kinetic civilian side of hybrid activities that take place in the gray-zone (Carment and Belo 2018). And what we inquire into is their proclivity to create new markets for small state defence industries. The latter are *inter alia* impacted by technology-driven trends (Cohen et al. 2020) which are left out of consideration for the scarcity of space. This is also the case with a plethora of developments in conventional and asymmetric warfare (Morgan and Cohen 2020). In a complete analysis, all these trends need to be addressed.

As to the trends among civilian hybrid activities, we distinguish between their two major facets: first, as specific non-kinetic events or sequences of such events where geopolitical and other realities play themselves out; second, as general trends that point to the way warfare develops and thus to the new areas where defence industry may find new markets. The possible weaponization and securitization of technology in the case of China will be considered as both an example of a new hybrid form with a geopolitical content, but also as indicating a likely new arising demand for European producers.

During recent decades, threats such as cyber attacks, weaponization of technology, of energy and migration, disinformation campaigns, but also vulnerability of societies from e.g. financial instability and climate change have arisen (Giannopoulos et al. 2021). Some of them are instrumentalized by specific actors, some remain background conditions. Cyber attacks have probably been among the most visible events. For example, the supposed attacks by China against U.S. companies in 2010 (Taylor 2013), or against Australian Security Intelligence Organisation in 2013 (Eunjung Cha and Nakashima 2010). Or the suspected Russia-backed attempts to affect the democratic processes in the West (e.g. Brexit and the U.S. elections in 2016), but also against critical infrastructure like electricity grids, as it supposedly was in Ukraine in 2015 (see Erbach and O'Shea 2019). Partly preceding it, and partly in parallel, migration has brought its own security problems, culminating in some cases in the weaponization of it. Also, as an unguided background event not itself part of gray zone activities, yet all the more importantly the global financial crisis of 2007-2008 can be seen to have left a long term effect on societal stability in the West and beyond (Paul 2020), harming seriously the attractiveness of the Western democratic model and making possible malvolent information campaigns. Influencing hitherto perhaps most acutely migration, climate change can likewise be considered a threat, even if not directly controllable by any concrete actor. Yet, climate policy decisions in the EU together with a possible manipulation with its gas supplies by Russia have recently caused energy price levels to skyrocket, thereby destabilizing more vulnerable European societies.

To bring an example of the new threats intermingling in the case of European societies, the latter have been impacted by terrorism, migration, and starting earlier, by the long lasting effects of the global financial crisis of 2007-2008. In itself, the crisis can be seen to have brought a long-term trend of increasing inequalities within countries, thereby causing societal unease (United Nations 2020). Yet, the complexity of those threats starts opening up when their chains are revealed, an example being the financial crisis which has, in turn, had a role in paving the way for the movements of the Arab Spring and its consequences in the MENA region, among which one can see terrorism and migration, reaching also Europe (Ploom et al. 2019).

As an example of possible new markets for European industries, both defence and traditional, the case of the possible weaponization and the countering securitization of some key technologies and investments like that of the 5G that China offers (see e.g. Mariani and Pertolini 2019, Stanzel 2019) will be considered.

Whereas for a long time the Chinese economy had been closely integrated with the global production chains, the growing ability of it to develop key technologies has sowed doubts among Western nations about the possible strategic security issues when relying in their everyday functioning on the technologies that could be controlled by the Chinese government (Chatzky 2019). There has arisen a debate about "technological spheres of influence" (Schulze and Voelsen 2020). Thus it is possible to witness a competition for dominance and a possibly ensuing technological divide (Sanger 2020).

On the other hand, the perception of the nature and extent of that threat is rather different across the Atlantic, as well as in Europe. The most profound difference is that between the U.S. and its European partners where the latter are less concerned about the threat than the former (e.g. Hilpert 2020, Menon 2020). Illustrative here is also the position of Scandinavian or more widely Nordic countries in this question. They have been pursuing a friendly politics towards China, which is not surprising as they have received technology investments from China into their tech companies (Conley et al. 2020).

But, in the technology sector, there exists also division within the West, the example being micro-chip production. The EU has namely refused U.S. based producer Nvidia to obtain European chip producer ARM as this might lead to full control of the U.S. over the supply of certain type of microchips. It is seen as a question of strategic autonomy. (Larger 2020)

Altogether, one can witness an emerging divide between European states and the U.S. in the perception of the possible weaponization of technology by China, and among themselves – about retaining control over certain basic products. At the same time, as will be argued by this example, hybrid threats show an opening in the defence market of new opportunities.

5. DISCUSSING DEFENCE INDUSTRY GOVERNANCE IN SMALL EUROPEAN STATES: LIMITATIONS AND OPPORTUNITIES

This chapter discusses on the one hand the limitations that the defence industrial policy of a small European state faces within the conditions set by geopolitics, and on the other hand the potential opportunities that could arise for small states with the more supranational design of the EU common defence policy, as well as with the need to develop responses to new hybrid threats. Within that framework, basic features of EU common defence industrial policy design will be dealt with.

5.1. The impact of geopolitics and regional governance on small state defence industry

As was argued, geopolitics pressurizes the EU to develop more independent defence and defence industrial capabilities. Yet, how to do that in a way that is not in a direct conflict with the interests of the U.S.?

To reiterate, transatlantic relations have been built on a reciprocity whereby for receiving defence from the U.S. European states buy U.S.'s defence technology. This means that whereas establishing common supranational defence capabilities remains relatively neutral as to its impact to the transatlantic relations, the development of autonomous defence industry within the EU can be problematic from the U.S.'s viewpoint.

The regionalization trend within the EU defence policy adds an extra layer of complexities. In matters of foreign, security, and defence policies member states of the EU have stayed cautious about supranationalism and relied on the intergovernmental format rather. Yet, geopolitical and inner trends

have made the EU nevertheless move gradually closer to the supranational design of its security and defence policy, marked most clearly by the goal to achieve European strategic autonomy (EUGS 2016).

Defence industry plays a vital role in both the transatlantic arrangements as well as in the attractiveness of the supranational format of the CSDP. For the present article the question is how to design such EU defence industrial policy that considers the interests of the U.S. and that simultaneously benefits small states and the EU as a whole. With defence products, except dual-use technologies, especially the smaller member states have been reluctant to establish free market. The interests of bigger member states may well coincide with the establishing of free market in defence inasmuch as the well established companies would logically prevail (Reinert 2007).

Thus, a small European state needs to navigate between its own, EU's and U.S.'s interests. The first question is about blocks within the larger Western block, or indeed avoiding the arising of such blocks altogether (see Biscop 2013). A complicating dimension is time, where with e.g. the Baltic states today's presence of NATO weighs up any possible future promise of the European level common defence arrangements. What seems considerably clear is that the defence industrial policy choices of a small European state should be made with a perspective of staying within the technological networks of their allies. This situation can be seen as a challenge and an opportunity, especially from the economic point of view. Security policy wise it is not too difficult to imagine a policy which in return to the supplied security offers its purchase power for the technologies that the allies produce. Economy wise it would mean becoming a mere client. This could bereft the domestic defence industry from some of its own opportunities.

A more efficient way would be to attempt to enter into the value chains of one's allies. Next to the economic benefit – arising from the companies' and country's rise on the technological ladder and the bigger rents from the larger value added – there would accrue also security benefit as an economic advancement would strengthen the resilience of a particular society. This would apply both to the European-American relations and to the small and big member-state relations within the EU. As the focus of this article is on the intra-EU defence economic relations, the question is on finding defence industry areas and their governance logic which would benefit both small and large member states, the EU as a whole, and consider the U.S.'s interests.

5.2. Warfare trends: the impact of hybrid threats on small state defence industry

Of the two warfare trends we distinguished, the first facet has a proclivity to mark out novel areas of security and defence interests. By widening security concerns beyond the conventional, the new kinds of threats have a direct implication to the defence industry. As such, they are considered as harbingers of the possible future demand for defence industry. They create a need for new technologies, equipment and services, issuing not seldom in the digital idiom like e.g. with the technologies for surveillance, detection etc that are needed to deal with terrorism (see e.g. U.S. Department of Homeland Security 2019, 15).

However, not less important, among the opportunities that the emerging new category of threats bring, are the consequences of actual events occurring within the hybrid idiom. Here the example of weaponization and securitization of technologies is relevant, as are the effects of the COVID crisis that emphasize the security of supply. Here arises a specific need to (gradually) replace the goods and services hitherto produced by now less trustworthy countries. Thus, also small European states can see new areas of innovation in the arising needs brought by hybrid warfare and the concomitant comprehensive approach to the defence issues (Veebel and Ploom 2018).

With these questions also a geopolitical dimension is apparent. Securitization of technology (e.g. 5G) and the COVID crisis have both taught that economic aspects cannot go against main political values

(Enderwick and Buckley 2020). Hence, defence industry should not give unnecessary support to, nor become dependent on, unfriendly regimes. The COVID crisis conveyed it especially clearly, when global production and supply chains broke down, the shortage of medical masks and other goods revealed Europe's dependency on particularly Chinese products (Lowe 2020). And while it would be impractical, if not impossible, to start re-shoring production – thus one can talk about "open strategic autonomy" (De Vet et al. 2021), the lesson was clear: European states are too dependent on China and need to re-examine their security of supplies policy (Vanhanen 2020). Thus, in terms of security of supply, the widest possible change may be the need to replace certain nomenclature of critical technologies, component parts and devices by the Western alternatives. This may offer Western, and also European small states, defence and other industries a share of new markets.

Hence, hybrid threats point to the needs as well as the emerging markets. For small member states, the readiness to respond to hybrid threats is often part of their overall defence philosophy in the form of total defence or comprehensive defence (Veebel and Ploom 2018). But hybrid threats also outline possibly useful areas of development for the European, especially small state, defence industry. Being new markets, they should be largely unproblematic for the established interests of the U.S.. Also, they should be useful for the EU as they respond to acute needs of defence amidst of arising unconventional threats. These new technologies for countering hybrid threats, often include a significant proportion of ICT components and thus, due to their accessible cost profile, should not be out of reach of smaller member states.

5.3. Governance choices for small state defence industries

To illustrate the way the proposed small state defence industrial governance model enables to select a field for preferred development of a small European state defence industry, this article has picked the example of cyber capabilities as especially related to the protection of critical infrastructure (see Johnson 2015). Next to the above outlined reasons (geopolitical, and pertaining to the warfare trends) this choice has also been made by the awareness of Russia's activities towards Ukraine as of winter 2022 (Bowen, 2022).

Hitherto, the EU reality has seen governance choices conducted mostly in the idioms of either free market or protectionism. The way how those choices materialize are by way of national defence procurement practices. Defence equipment imports and exports are related to national defence equipment procurement practices. Especially in defence markets the governments have a pivotal role.

[D]efence markets are dominated by national governments so that governments are the market. Government can use its buying power to determine the ownership, size, structure and performance of national defence industries. Government procurement policy determines the openness of its national defence market (entry and exit) where national 'protectionism' is often justified on grounds of security of supply and wider economic benefits (e.g. jobs; technology; spin-offs; exports). (Hartley 2013, 4).

Procurement practices can be protectionist or free-market-oriented. Free-market-oriented procurements aim to keep the procurement cost low. Competition is expected to lead to better quality and lower cost. Protectionist practices give advantages to national industry. This helps maintain production capacity and know-how in state and is also an important fiscal (tax revenue stays in state) and social policy (jobs are retained in state) measure.

Buying off-the-shelf (OTS) and other free-market-oriented practices are used in cases where there is something to be gained from competition in (inter)national market. Small states prefer buying off-the-self due to limited defence budget, need for reliable products, or previous bad experiences with national product development (De France et al. 2016). Joint defence procurement and regional cooperation has

been advocated for small states (Veebel 2018). Despite failures in joint procurement projects within Nordic states, the field is developing (Iso-Markku et al. 2018).

In the field of defence, protectionist practices are rather common, also in small states. State-owned companies, such as exist e.g. in Israel, Switzerland, Norway, the Netherlands (Hartley and Belin 2020), produce equipment and quantities according to national needs. The second method is buying from national defence industrial partners, as the Swiss government buys from RUAG (Ibid.). Third, offsets can be required in case of foreign purchases. Offsets can be direct or indirect (in the form of industrial cooperation). In Switzerland, offsets are favoured as they provide work for the Swiss defence industry (Ibid.). Although Netherlands MOD prefers off-the-shelf procurement, their Ministry of Economic Affairs propagates the continuation of offset practice (De France et al. 2016).

The advantages of the free European market is to win in terms of lower prices but also in quality (Calcara 2018). In such a context, a common EU defence industry market would clearly be preferable. However, the question is how not harm small state industries. Or even better, how could the common market use the potential of small states to the benefit the EU as a whole. This article proposes that a solution exists whereby defence industries and capabilities are developed together in joint value chains. A wholesome EU system is an ideal which the arrangements of PESCO remind (Blockmans, 2018).

In bilateral deals, participation of smaller states in global value chains is probably best exemplified by the example of the Finnish purchase of F-35 strikers from the U.S. As an off-set, Finland will acquire the right to provide costly maintenance, but more importantly its defence industry will have an access to the global market of military aircraft. (Frisk 2021)

According to this article, a common market of jointly designed and governed value chains would benefit the EU as a whole, as well as small member states. As small states are not able to produce all defence goods they need, exports and imports form an important aspect of their defence industrial policies. Defence exports and imports have also foreign policy dimension as they offer an opportunity to advance long-term relationships between governments (Heidenkamp et al., 2011). On the other hand, national markets of small states are too small for companies to survive (Lundmark, 2020). Even with dual-use products, they are in constant search for larger markets that could allow the compensation of their initial investment. Therefore, joint defence research and development could also reduce costs and duplication. As small states do not have enough resources (both financial and human) they typically specialize and find their specific R&D niche(s) on which the advanced defence industry could rely, supported by other R&D stakeholders. A common CSDP that systematically links such niches of small states to the value chains of larger states is bound to be successful.

6. CONCLUSION

Assuming the perspective of a small state, this article has discussed what factors and conditions should be taken into account if one wishes to understand small European state defence industry in its main features. How could small states be useful members in the regional EU defence industrial value chains? What should the design principles of the EU common market be in order to benefit also small states?

The article has amended the "intelligent piggybacking" governance model for small catching-up economies with major geopolitical, governance, and warfare trends. To summarize the possible impact of those trends on small state defence industries, the largest appears to be a higher degree of regionalization, even if temporary, of defence markets and industries themselves. The vital consideration in designing the EU common defence market are the U.S.'s economic interests. In turn, the EU common market will

affect small states defence industries more than bigger ones since the common defence market design may create lucrative opportunities but also amplify the weaknesses especially for small EU states.

Altogether, from the perspective of small member states, they could both win and lose with the establishment of a common defence market. It depends on the market design and the way smaller states are included to the mutually beneficial value chains of the defence industries of larger countries. With a neoliberal design, common defence market means that the small but still de facto existing import barriers and domestic subsidies would disappear. In such circumstances, as buyers, small states are bound to gain when products from larger producers may become accessible with lower price. As sellers, however, regarding their domestic producers, while the benefit is the access to the EU common market, with the disappearance of the secure and stable domestic demand they may become victims of out-competition. The more efficient and better established big producers from larger countries could offer same or better quality with lower price.

This means that the establishment of the common defence market should be conducted with the simultaneous creation of EU defence industrial policy that enables smaller, and especially less developed, member states to maintain and develop their own industries, preferably participating within the value chains of defence industries of the larger countries.

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