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Markets in Defense of Europe: Providing Public Goods in European Defense

Defense has often been defined as the purest of public goods (Samuelson and Temin 1976). Usually considered a core state power, governments provide non-excludable defense goods for a specified territory (Tilly 1985). However, 21st-century nation-states are not exclusive goods providers: they rely on public as well as non-public entities to provide defense goods. Long gone are the days of government arsenals and war mobilization based on taxation and extraction from domestic populations. This also applies to public defense goods in the European Union (EU) and European states. European states have different organizational structures of their defense industrial ecosystems, but they depend upon defense contractors - either domestic, foreign, or a mix of both - to supply the equipment of choice. A modern state's role as a public goods provider therefore goes beyond the more traditional idea of taxation to generate defense goods, via resource extraction and manufacturing, and to deploy armed forces; instead, its role in generating defense public goods also encompasses the organization and structuring of private defense markets. A recent example of this is the US Second Offset Strategy, where US officials have attempted to harness the commercial economy's innovation capacity in order to generate better defense equipment as a public good.

The EU, as a supranational institution *sui generis*, does not have armed forces nor does it procure defense equipment for itself or its member states. However, it is a public goods provider as a market regulator. Historically, state-building has often been motivated by providing security as well as markets for specified territories and populations (Kelemen and McNamara 2022). The primary EU public good for member states is the single market. Given its market orientation, and its function as a public goods provider, the EU is well-positioned to provide a

vider, the EU is well-positioned to provide a functioning defense market. Since the February 2022 Russian invasion of Ukraine, the question of a functioning European defense market that more efficiently provides states with the goods and services necessary for survival has taken center stage. The EU is not a classic state in that it is not yet a defense public goods *buyer*, but an emergent defense public goods *provider*, particularly as a result of its market and regulatory powers.

In this essay, we examine the economic logic of EU defense public goods. We outline the various "costs of non-Europe in defense"

KEY MESSAGES

- The EU is not yet a defense public goods *buyer*, but it is generally a public goods *provider* in the form of the single market, which includes security goods
- Public defense goods provision includes a functioning defense market, but the European market for defense equipment remains insufficiently integrated
- EU regulation can reduce defense market uncertainty and incentivize R&D spending, ensuring future company competitiveness
- The EU should expand its regulatory authority in defense and indirectly provide Europe with a defense market as a public good
- Eventually, the EU should work toward consolidating demand and supply, which would further reduce inefficiencies and meet the challenge of secular rises in costs for defense

and challenges facing European defense cooperation. We then turn toward policy recommendations for increasing EU defense goods provision to prevent further market distortion and toward European strategic autonomy. We recommend the EU increase its regulatory authority over defense markets to reduce market uncertainty and incentivize corporate innovation. We also anticipate the need for industrial policy to fill in strategic needs and correct for market failures. As industrial policy will inevitably produce domestic (and European) winners and losers, EU strategy should account for and anticipate such externalities.



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THE COSTS OF NON-EUROPE IN DEFENSE PUBLIC GOODS

European states have historically excluded formal defense market cooperation from EU single market authority, carving out national exceptions for defense markets from EU competition. There have always been countervailing concerns, however, that national sovereignty creates market distortions that limit optimal defense goods. These concerns were present in the negotiations leading up to the 1952 European Defence Community, the 1986 Single European Act, and the 1992 Maastricht Treaty. An unpublished 1992 report for the European Commission, titled "The Cost of Non-Europe in Defence," argued that member-state market sovereignty would distort defense markets, resulting in replication, redundancies, and suboptimality (Hartley and Cox 1992).

Defense industrial consolidation is therefore a long-standing theme in Europe. The post-Cold War consensus has prescribed market restructuring in the face of decreasing or stagnating defense budgets and secular increases in unit costs. Through various market-oriented measures, the EU Commission had tried to defuse the market-distorting effects of Article 346 of the Treaty on the Functioning of the European Union (TFEU), which allows governments to circumvent European competition for public tenders on national security matters. The idea was to increase competition and the process of natural selection would ideally create supply-side consolidation in the form of European defense champions. National governments have, however, been reluctant to effectively implement measures such as the 2009 Defence Directive, and numerous examples point to the persistent market-distorting effects of Article 346.

As a result, Europe finds itself entangled in an oversupply of weapons systems. The costs of weapons overcapacity have often been increasingly offset by exports outside of Europe, in tension with other policy objectives such as global human rights promotion. The combined EU has a sufficient volume of weapons production; however, they are just not the right weapons to meet the strategic demand from EU member states and NATO. The inability to effectively address the post-2022 surge in national demand demonstrates that the issue at hand is not an overabundance of production capacity, but rather an excess of suppliers grappling with limited production capacity and artisanal manufacturing instead of industrial production.

The solution to this status quo overproduction of duplicated, redundant weapons systems across Europe has been circulating since at least 1992: the EU is the ideal political and market entity to incentivize multinational weapons platforms. A consolidated European demand side would streamline defense equipment toward fewer but more optimal weapons systems. It would also create winners and – more importantly – losers among defense industrial interests. This

relative-gains dilemma (Simón 2017) arises because Europe's defense industries find themselves in competition with one another as well as with non-European suppliers. Defense industrial capacity is unevenly distributed across the EU and Europe, particularly if one includes the UK and Norway. EU countries with Europe's largest defense companies face the dilemma of retaining their defense industrial capacity while offering industrial participation to attract more customers. EU countries with smaller defense industries, on the other hand, fear subordination in an internally seamless and externally protectionist European defense market. By keeping the market open to non-European suppliers, smaller defense industrial players retain the chance to carve out niches as specialized producers in collaboration with global partners (Calcara and Simón 2021).

Movement toward a European common market in defense will have to reckon with these relative and absolute competition winner and loser dynamics with policies designed to anticipate these externalities. States will be intolerant of the extinction risk their defense industries face as losers from EU market consolidation. First, states pursue inefficient autarky strategies in their defense markets to ensure future security of supply in the case of interstate warfare or international supply chain disruption. Second, states without functioning defense industries are less likely to be able to sustain political support for defense spending requirements within alliances such as NATO, due to a lack of domestic benefits and interests if they incur the pure costs of only importing weapons from abroad (Guiberteau et al. 2024). For security and political reasons, member states have to maintain their domestic defense industrial bases, even as the EU moves toward the provision of European defense public goods.

The European Commission is not new to this game, however. It has worked around EU treaty barriers to partially govern European public security and dual use goods for decades, using their market powers in adjacent sectors such as internal security and dual-use defense equipment. The inception of the European Defence Agency (EDA) in 2004 established a dedicated institution capable of articulating collective capability requirements and catalyzing collaborative efforts in the development and procurement of next-generation defense equipment exemplified by projects like the Eurodrone. Building on this foundation, the EDA has assumed a central role since 2017 in orchestrating initiatives such as the Coordinated Annual Review on Defence (CARD) and the European Capability Development Plan (CDP). These strategic frameworks serve as platforms for member states to evaluate opportunities for both military and industrial cooperation, effectively functioning as institutional or market mechanisms that mitigate transaction costs. By exercising oversight over third-party engagement in EU defense initiatives, the Commission has bolstered its authority in delineating the contours of the European defense market.

POLICY RECOMMENDATIONS

Public Goods Provision in the Form of Regulation

As discussed above, the EU is currently a significant regulator of security and dual-use markets, which has shaped defense markets around the margins. Moving forward, it should leverage its regulatory prowess to foster a conducive regulatory environment for the European Defence Technological and Industrial Base (EDTIB) to flourish. This should partially mitigate some of the supply bottlenecks we have witnessed since February 2022.

Russia's war in Ukraine underscores the importance of mass production for wars with great power involvement. It has also revealed how unprepared Western defense industries were in supplying basic equipment such as ammunition in large quantities over a longer time span. Besides hesitant financial commitments for long-term production, ineffective standardization has impeded the production and procurement in large quantities of such products. For example, NATO's "standard" 155mm artillery shell features 14 national deviations, thus impeding bulk purchases. Ammunition and other relatively simple products can and should be considered defense commodities that compete on price rather than product specification (Caverley 2023). The status quo insistence on national deviations prevents desperately needed commodification of simple defense products. Effective standardization would not only ensure interchangeability and interoperability, but could also transform ammunition into a true defense commodity, enabling bulk purchases and efficiency gains.

The EU Commission published the first European Defence Industrial Strategy (EDIS) in March 2024. EDIS proposes the Structure for European Armament Programme (SEAP) as an instrument to foster joint procurement and maintenance. SEAP features financial incentives such as VAT exemption for jointly procured and operated defense equipment. It could be harnessed to promote standardization to incentivize only standardized military equipment as exempt from VAT. Market-distorting deviations that protect individual companies at the expense of a public good would be subject to financial penalties. Just as the EU enforces a common standard for charging mobile devices, it should enforce standards for simple defense products, creating a functioning defense commodities market.

Efficiency gains for simple defense products would free up resources for national and EU R&D investments and thus safeguard the industry's long-term viability or competitiveness. Existing EU regulation has encouraged European defense companies to increase self-funded R&D investments. As a "modern regulatory state," the EU can provide defense as a

public good without having direct political authority in this field (Schilde 2023). The EU has a track record of setting regulatory standards that generate consumer benefits and secure markets for producers at the same time.

An optimized regulatory environment includes industry access to capital. EDIS underscored the importance of aligning EU regulations on sustainable finance with the goal of fostering private investment in the defense sector. Criticism directed at the European Investment Bank's (EIB) stringent lending policies highlights the pressing need for reform (Butler 2024). This acknowledgment reflects the challenges faced by companies in accessing vital investment capital. Addressing these issues requires concerted regulatory efforts aimed at facilitating a more conducive environment for investment.

Public Goods Provision in the Form of R&D Support

Industry R&D and private capital are not enough to generate optimal European defense goods. A more robust industrial policy in the form of public R&D investments is also necessary because the enduring challenge of defense inflation (i.e., real unit cost increases of 5-10 percent per annum) persists for high-end defense equipment such as the next generation of fighter aircraft systems. The market for such equipment, often termed "tournament good" because of its highly specified character in contrast to defense commodities, works differently and requires more active state intervention to correct for market failures. If let alone, the markets for tournament goods trend toward high levels of concentration or monopolies, as illustrated by the increasing number of European countries that have chosen to procure the F-35 fighter aircraft instead of European alternatives. Life cycles are also longer than those of commercial goods, with more possibilities of market failure without government intervention and investment and less risk tolerance on the part of private actors to delay profit.

Launched by the Juncker Commission in 2016, the European Defence Action Plan paved the way for the European Defence Fund (EDF) as an R&D funding tool financed by the EU budget. The next Multiannual Financial Framework (MFF) for the 2028-2034 period should feature an increase in the EDF's financial volume. This necessitates debt-financed expenditures - a highly controversial topic within the EU. But the economic recovery package established during the pandemic (Next Gen EU) proves that breaking from established fiscal rules and conventions is possible in times of severe crisis, and allows for European public goods investments that reinforce rather than undermine national investments. A EUR 100 billion defense fund backed by Eurobonds, as proposed by Estonian prime minister Kaja Kallas, might gain traction after the European Parliament elections and the outcome of the US elections in November 2024.

Public Goods Provision in the Form of Consolidation Support

Long-term instruments such as the EDF have the potential to set European equipment standards, especially if they are coupled with instruments to generate joint military capabilities such as the Permanent Structured Cooperation (PeSCo). On the other hand, the EDF prescribes geographical dispersion, which may run counter to the long-term goal of consolidating supply. At some point when it comes to actual product development, the EU and its member states will need to make decisions on European champions.

The EU needs to consolidate its public goods provision and also be a public goods buyer in order to control prices. The uncoordinated manner in which Europe has been re-arming only exacerbates pre-2022 problems. Larger defense budgets gloss over these structural problems only temporarily. Without demand consolidation, defense inflation will return with a vengeance due to market distortion. The situation is analogous to the consolidation of the US defense market: prior to key reforms like the Packard Commission and the Goldwater-Nichols Act, inefficiencies and cost issues plagued the acquisition policies of individual US services. After procurement reforms consolidated demand, the US government became a more effective provider of public goods in the defense sector.

Unfortunately, European procurement patterns since February 2022 point toward further fragmentation of the European defense industrial field. The vast majority of procurement contracts have been awarded to non-European suppliers (Maulny 2023). In addition, many of these contracts feature license production agreements through which the procuring countries seek to bolster their domestic defense industry. They aim to climb the metaphorical ladder of production and transform their industries into suppliers. For governments as well as industry, licenses to produce non-European defense equipment may seem like a more attractive tool than European cooperation.

Data on international arms transfers as well as on European defense companies reveals existing export dependence on non-European demand for Europe's defense industrial heavyweights (Wezeman et al. 2024). If Europeans trade less defense equipment among themselves and increase domestic production capacity, they will become even more export dependent once domestic demand dwindles. Resource-rich countries such as the Gulf states have become "buyers of last resort" for European arms manufacturers. If non-European demand is necessary to support European defense industrial capacity, Europe remains far from providing security and defense as a public good.

Outlook

Economic exigencies underscore the imperative for an expanded EU footprint in European defense affairs. While member states may attempt to mitigate the costs of non-Europe in defense through temporary boosts in spending, the persistent specter of defense inflation looms large, posing an obstacle to the sustainable provision of defense as a public good at the national level. A more substantial EU involvement in this domain hinges upon the willingness of member states to relinquish defense market protectionism. By further positioning the EU as a public goods provider of defense markets, policymakers can overcome the "costs of non-Europe" in defense that currently limit European strategic autonomy and produce unnecessary price and inefficiency pressures facing European member states.

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