

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Wolff, Guntram B.; Steinbach, Armin; Zettelmeyer, Jeromin

Article

The Governance and Funding of European Rearmament

Intereconomics

Suggested Citation: Wolff, Guntram B.; Steinbach, Armin; Zettelmeyer, Jeromin (2025): The Governance and Funding of European Rearmament, Intereconomics, ISSN 1613-964X, Sciendo, Warsaw, Vol. 60, Iss. 4, pp. 210-214, https://doi.org/10.2478/ie-2025-0041

This Version is available at: https://hdl.handle.net/10419/325276

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



https://creativecommons.org/licenses/by/4.0/

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Intereconomics, 2025, 60(4), 210-214 JEL: H56, L52, F55

Guntram B. Wolff, Armin Steinbach and Jeromin Zettelmeyer

The Governance and Funding of European Rearmament

Gaps in European military equipment are substantial compared to Russia's military build-up. The European defence market is fragmented and weakened by home bias in procurement, low order numbers and technological gaps. With the US now retreating from its role as Europe's guardian, greater European cooperation will be essential to close technological gaps and reduce rearmament costs. Procurement will need to be pooled to reduce market fragmentation and avoid that additional demand for defence goods will mainly drive up prices. Better-integrated defence markets would both increase competition and facilitate entry of new defence technology firms. The combination of integrated markets and scaled-up procurement could halve unit costs. This article discusses how this could be achieved either by scaling instruments in the current institutional framework or by creating a new intergovernmental institution, the European Defence Mechanism.

Europe faces a grave security threat, created by Russia's imperialism in Ukraine and exacerbated by changes in US policy on Ukraine and European defence under the current Trump Administration. Europe's leaders understand this and have started to react. In 2024, 20 European NATO members spent more than 2% of GDP on defence – a median rise of about 0.6% of GDP in just two years. This paper assesses recent initiatives and discusses how additional efforts can be made to improve the governance and financing of European rearmament. We focus on solutions that are both fiscally feasible and do not assume a leap in European defence integration along the lines of the European Defence Community (EDC), an agreement signed but not ratified in the 1950s (see also Fabbrini et al., 2025).

© The Author(s) 2025. Open Access: This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (https://creativecommons.org/licenses/by/4.0/).

Open Access funding provided by ZBW – Leibniz Information Centre for Economics.

Guntram B. Wolff, Solvay Brussels School of Université Libre de Bruxelles; and Bruegel, Brussels, Belgium.

Armin Steinbach, HEC Paris, France; and Bruegel, Brussels, Belgium.

Jeromin Zettelmeyer, Bruegel, Brussels, Belgium.

This article presents Europe's basic rearmament challenge: to undertake large-scale, accelerated rearmament in the face of an overstretched and nationally fragmented European defence industry. Meeting this challenge requires pooling defence procurement and creating a single market for defence as well as initiating "strategic enablers" that would benefit many countries. The article summarises recent EU-level efforts to increase defence capacity and offers suggestions about two possible ways forward.

Europe's rearmament conundrum

Europe's military capabilities are fragmented along national lines. Europe's defence relies on NATO and US leadership within NATO. Apart from boots on the ground, the US has provided Europe with "strategic enablers", without which national European armies would be far less effective. These include joint command and control capabilities, satellite-based intelligence and communication, development of expensive new weapon systems such as fifth- or sixth-generation fighter jets, integrated weapon systems needed by multiple countries such as strategic air defence, strategic lift (large-scale air transport and maritime logistics), missiles and nuclear deterrence.

To reduce its dependence on the US, Europe must close a large gap. As a priority, this means acquiring strategic enablers that could potentially be put under European operational control. An example would be a satellite-based intelligence and communication network, which would be difficult and expensive for European countries

to build individually. In addition, Europe must better equip its troops and acquire major military equipment stocks – from main battle tanks, artillery and ammunition to drones and aircraft (Burilkov & Wolff, 2025; Barrie et al., 2019).¹ According to a political goal set by the European Council on readiness for a major confrontation, this must happen within the next five years (see, e.g. European Commission & High Representative of the Union for Foreign Affairs and Security Policy, 2025).

Europe's conundrum is that these ambitious rearmament goals must be reached with limited fiscal space and in the face of a fragmented defence industry, which is already overstretched because of its limited capacity and the provision of military support to Ukraine. While Europe remains a global player in defence markets, it is far smaller than the US. In 2023, the revenues of the 27 European defence companies (20 of which are in the EU) within the world's top 100 amounted to \$130 billion, i.e. half that of their US counterparts. The top three US companies alone generated as much revenue as all European defence firms combined (Stockholm International Peace Research Institute, 2024).

While Europe has the industrial potential to scale up the production of modern battle tanks, artillery, air defence, armoured vehicles, drones and electronic warfare systems, its market in most of these products is characterised by low production numbers, high fragmentation along national lines, limited competition and a strong home bias in procurement. Even large countries often order products such as tanks or even drones in only small quantities. For example, since 2022, Germany has ordered only 123 Leopard 2 tanks to be delivered by 2030 (Wolff et al., 2024b). European countries operate 12 different main battle tanks, while the US has one.²

Germany buys almost half of its equipment from domestic producers and around an additional 30% from domestic joint ventures (Wolff et al., 2024a; Mejino-Lopez & Wolff, 2025). Centrone and Fernandes (2024) even found that big countries including Germany and France are procuring more than 80% of defence equipment from national sources, even though that number includes domestic production by foreign companies.

Market fragmentation gives national suppliers substantial market power. Carril and Duggan (2020) showed that in

the US, when market concentration increased, procurement became less competitive. Europe's defence industry is less consolidated than that of the US, with a high degree of product differentiation across countries. National champions tend to dominate national markets and exercise market power. For example, the top two French defence companies account for 69% of the sector's domestic sales; in Germany, that number is 70%. Competition could decline further if the US reduces weapons exports as it prioritises other threat arenas (Burilkov et al., 2024). Increasing demand in an environment of limited competition means that companies can charge higher prices and increase rents.

There are joint projects for different military equipment, for example, multinational group MBDA for missile manufacturing, the Eurofighter fourth-generation aircraft and Franco-German KNDS for tank production. But the scale is limited, with the top trans-European companies accounting for less than 20% of the total European revenues of the main global competitors. Several major joint ventures exist, for example, to develop the next generation of fighter jets, such as Tempest (UK, Japan, Italy) and FCAS (France, Germany, Spain).

A further problem of the European defence industrial base is that some modern arms technologies are unavailable. These include fifth-generation fighter jets, certain air-defence systems, rocket artillery systems similar to the US HIMARS and heavy transport helicopters. Europe also relies on US software, and satellite-based communication and intelligence. And while Europe has seen a significant entry of firms in new technologies, including high-tech drones, Al-based intelligence and advanced autonomous robotic systems, it remains far from the level of investment and technological disruption that characterises the US defence market. Between mid-2021 and 2024, the total venture capital volume for defence start-ups in the US was 2.4 times that of Europe (McKinsey, 2025).

With an increasing number of governments considering whether to cancel or review purchases from the US,³ the question is whether the European defence industrial base could provide the required arms at a cost that the European taxpayer can afford and at the technological level required for modern peer conflict. The scale of current production is not encouraging, particularly when it comes to expensive strategic enablers. For example, in 2023,

Barrie et al. (2019) estimated that Europe would have to invest between US \$288 billion and US \$357 billion to fill the capability gaps in a specific scenario. This would be a scenario in which Europe would need to reassure the Baltics and Poland after a Russian incursion into Lithuania. By now, prices have increased while Russia has greater capabilities, suggesting that the number could be larger.

² See https://eda.europa.eu/what-we-do/eda-in-short.

³ For example, Portugal is considering purchasing European aircraft alongside US F-35s, while Canada has decided to review its purchase (see Pereira et al., 2025). The chairman of the Danish Parliament's defence committee, Rasmus Jarlov (2025), argues that buying American weapons is a security risk.

there were 19 Eurofighter deliveries and 13 Rafale deliveries, both fighter jets of the fourth generation, while there were 98 deliveries worldwide of US F-35s (a fifth-generation fighter). Moreover, long development cycles indicate that Europe might take decades to develop some of the top technology products. This suggests that the reliance on US manufacturers may be difficult to overcome.

Yet, development cycles can accelerate substantially in moments of dramatic increases in defence spending and re-prioritisation of defence, while production costs should fall substantially (Mejino-Lopez & Wolff, 2025). Weapon production during the Second World War increased by a factor of five to ten within a few years, while unit production costs fell dramatically, even after production numbers declined, showing the importance of learning and experience (Harrison, 1990; Streb & Streb, 1998; Herman, 2012; Lafond et al., 2022). Management literature suggests that unit cost can fall by 10%-20% as quantities double (see, e.g. Henderson, 1968). Given the low quantities currently ordered in Europe, the combination of rearmament, specialisation and market integration could lead to a demand increase for specific items by a factor of ten, implying a fall in unit costs and prices by 50%-90%, unless margins rise as a result of lack of competition.

Europe thus has a chance to rearm and reduce its dependence on the US within the requisite timeframe, but only if it can undertake major reform of both the demand and the supply side of the defence market in Europe. This would require: firstly, the pooling of procurement to the greatest extent possible for greater scale and demand-side market power; and secondly, a common European defence market – including the UK as a major industrial defence player – for much greater competition, among established national defence companies and via entry of new suppliers.

Delivering on both elements faces formidable obstacles. The Treaty on the Functioning of the European Union (TFEU, Article 346) does not envisage a common defence industrial market, and Europe has tried to address procurement fragmentation in the past on multiple occasions, with limited success. There are several joint-purchasing agencies and arrangements including the NATO support and procurement organisation; Permanent Structured Cooperation (PESCO), a treaty-based framework for the 26 participating EU countries (Malta is the exception) to jointly plan, develop and invest in collaborative capability development; and the European Defence Agency (EDA), established in 2004 to support the procurement efforts of

EU member countries. These procurement initiatives have not always worked effectively, possibly because the urgency of action was missing. The cost of this coordination failure is much higher today.

EU-level efforts to improve European defence capabilities

Since Russia's invasion of Ukraine, significant EU-level efforts have been made to improve European defence capabilities. EU-level defence industrial policy goes back to 2017, when the first Trump Administration prompted calls for greater EU strategic autonomy from the US. The 2021-2027 EU budget contains a European Defence Fund for defence-related research and development and crossborder collaboration of defence small and medium-sized enterprises (SMEs) within the EU (Table 1). After Russia's invasion of Ukraine, the EU stepped up the promotion of its defence industrial capability. The 2003 Act in Support of Ammunition Production (Regulation (EU) 2023/1525) seeks to expand capacity specifically for ammunition production. A European Defence Industry Programme (EDIP) would expand this to all defence industries once adopted.5 Finally, in March 2025, the European Investment Bank (EIB) changed its eligibility rules (which previously only allowed dual-use investment in defence) so it can now finance projects primarily focused on defence (EIB, 2025).

The total volumes committed in these programmes to strengthening the EU defence supply add up to about €4 billion per year (Table 1). Importantly, this refers only to public lending and subsidies, including for R&D – not to government procurement, which can act as a demand-side industrial policy. Companies facing sustained demand for their products should in principle be able to obtain funding from banks and the capital market. However, the European Commission's Directorate General for Defence Industry and Space (DG DEFIS, 2024) quantified an equity financing gap of some €1 billion to €2 billion and a debt financing gap of some €2 billion in the EU, based on a survey of defence firms in 2021, and large investors tend to shy away from defence companies due to stigma (Merler, 2025).

The EU has also stepped up its attempts to promote the coordination of defence procurement across the European Economic Area (EEA). The 2023 European Defence Industry Reinforcement through Common Procurement Act (EDIRPA, Regulation (EU) 2023/2418) offered €300 million in subsidies for joint procurement projects involving at least three EEA members. EDIP (European Commission, 2024) promises

⁴ Based on the 2023 annual reports of Dassault, Lockheed Martin and Airbus.

⁵ See https://defence-industry-space.ec.europa.eu/edip-proposal-regulation en.

Table 1

Overview of EU defence funding mechanisms

Instrument	Purpose	Focus	Passed on	Time frame	Amount in billion euros	Annual in billion euros
European Peace Facility	Funding of EU military aid to partner countries and EU military missions abroad (off-budget instrument)	Crisis operations	March 2021	2021-2027	17.0	2.4
European Defence Fund	Fund industrial policy and R&D on defence sector, particularly benefitting SMEs	Supply side	April 2021	2021-2027	8.0	1.1
Connecting Europe Facility	Funding of cross-border infrastructure, including dual use	Infrastructure	July 2021	2021-2027	1.7	0.3
Act in Support of Ammunition Production	Fund industrial policy supporting ammunition production	Supply side	July 2023	2024	0.5	0.5
European Defence Industry Reinforce- ment through Common Procure- ment Act	Create a financial incentive for procurement coordination	Demand side	October 2023	2024-2025	0.3	0.3
European Defence Industry Programme	Fund industrial policy supporting the European Defence Technology Industrial Base and incentivise common procurement under a new legal framework, the Structure for European Armament Programme	Supply and demand (but funding is for supply side only)	Not yet passed (pro- posed on 5 March 2024)	2025-2027	1.5	0.5
European Investment Bank	Funding of defence sector SMEs and startups, infrastructure funding	Supply side and infrastructure		2025	2.0	2.0
Total					31.0	6.9
Of which, supply side measures					12.0	3.9

Source: Bruegel.

to create a new legal framework for common procurement (the Structure for European Armament Programme, SEAP). Finally, in March 2025, the European Commission proposed the Security Action for Europe (SAFE) instrument, adopted in May 2025, which mobilises up to €150 billion in loans to member states to finance procurement projects.

Given the long and difficult history of attempts to incentivise common procurement, instruments offering modest subsidies (directly, such as EDIRPA, or by moderately reducing borrowing costs, such as SAFE) cannot be expected to be transformational. That said, in November 2024, the Commission said that the €300 million in funds allocated to EDIRPA had leveraged joint procurement of more than €11 billion – on its face, an extraordinary success (European Commission, 2024).

In its March 2025 ReArm Europe announcement, the European Commission has attempted to loosen national fiscal constraints holding back military spending in two main ways. The SAFE instrument allows member states to borrow up to €150 billion to finance defence procurement from the EU (Council of the EU, 2025). Moreover, ReArm Europe proposes loosening the EU fiscal rules specifically for defence spending (Pench, 2025).

Conclusions and two ways forward

Much progress has been made in boosting European defence production, but significant gaps remain that could be addressed in two different ways.

On the *supply side*, gaps in access to capital for defence firms are likely addressed, particularly after the widening of EIB eligibility criteria, or can be addressed relatively easily. Other than finance, national and European regulations – from local concerns to AI to environmental rules – may make it difficult to increase defence production capacities and need to be revised carefully. On the *demand side*, procurement coordination will remain crucial, as the modest incentives offered by SAFE are unlikely to make a difference beyond projects for which the bureaucratic or political costs of common procurement are already very low. Offering the national escape clause for defence could have a substantial impact in countries such as Germany but might reenforce defence procurement nationalism. Finally, Europe does not have a vision on how to coordinate building and acquiring strategic enablers.

We see two avenues – one "incremental" and another "transformational" – to address the shortcomings of the status quo (for more details, see Zettelmeyer et al., 2025).

The incremental solution would expand the roles of existing institutions in capability planning, procurement and funding, building on recently intensified coordination efforts. This solution would also see an expanded role for the EDA, a "coalition-driven" PESCO (the framework for jointly planning, developing and investing in collaborative capability development) and the extension of financing instruments that build on precedents such as the EU's 2020-22 Support to mitigate Unemployment Risks in an Emergency (SURE).

However, the incremental approach might fall short in three main ways. First, the EDA might not effectively curtail discrimination for national security purposes. Higher defence spending financed mainly through higher national borrowing could strengthen procurement nationalism further, as governments seek to maximise the economic benefits of higher defence spending within their national borders. Second, the fiscal benefits of a SURE-plus mechanism would be limited to a relatively minor reduction in borrowing costs. This could be a significant obstacle to the creation of strategic enablers with high upfront costs. Third, while non-EU countries could benefit from some EU instruments, it is hard to imagine that they could participate as equal partners.

A solution to these problems would be a new intergovernmental institution, the European Defence Mechanism (EDM). It would serve as an exclusive procurement agency in specified areas; as planner, funder and potentially owner of strategic enablers; and as a legal commitment to observe defence single market rules within the jurisdictions of its members. Unlike in the EDA, failure of members to live up to their obligations could trigger sanctions, including suspension of the membership.

Europe needs to rearm rapidly and acquire its own strategic enablers. The EDM could be the enduring output of a moment of political will that overcomes national division, bureaucratic inertia and special interests. We may be witnessing such a moment in Europe today.

References

- Barrie, D., Barry, B., Béraud-Sudreau, L., Boyd, H., Childs, N. & Giegerich, B. (2019). Defending Europe: scenario-based capability requirements for NATO's European members. International Institute for Strategic Studies.
- Burilkov, A., Mejino-Lopez, J., & Wolff, G. (2024, December 18). The US defence industrial base can no longer reliably supply Europe. Bruegel.
- Burilkov, A., & Wolff, G. (2025, February 21). Defending Europe without the US first estimates of what is needed. Bruegel.
- Carril, R., & Duggan, M. (2020). The impact of industry consolidation on government procurement: Evidence from Department of Defense contracting. *Journal of Public Economics*, *184*, 104141.

- Centrone, M., & Fernandes, M. (2024). Improving the quality of European defence spending. European Parliamentary Research Service.
- Council of the EU. (2025). SAFE: Council adopts €150 billion boost for joint procurement on European security and defence. Consilium.
- Directorate-General for Defence Industry and Space. (2024). Access to equity financing for European defence SMEs. European Commission.
- European Commission. (2024, November 14). EU boosts defence readiness with first-ever financial support for common defence procurement [Press release].
- European Commission, & High Representative of the Union for Foreign Affairs and Security Policy. (2025). *Joint White Paper for European Defence Readiness 2030*. (JOIN(2025) 120 final).
- European Investment Bank. (2025, March 21). EIB steps up financing for European security and defence and critical raw materials [Press release].
- Fabbrini, F., Goulard, S., Caunes, K., de Vries, C., Genini, D., James, H., Kaminski, A., Keller, E., Kirst, N., Mayer, F., Mourlon-Druol, E., & Wolff, G. (2025). Getting serious about defence integration: The European Defence Community precedent (ALCIDE Policy Brief). Dublin European Law Institute.
- Harrison, M. (1990). A volume index of the total munitions output of the United Kingdom, 1939–1944. The Economic History Review, 43(4), 657–666.
- Henderson, B. (1968, January 1). The Experience Curve. BCG Global.
- Herman, A. (2012). Freedom's forge: How American business produced victory in World War II. Random House.
- Jarlov, R. [@RasmusJarlov]. (2025, March 27). I dont know if there is a kill switch in the F35's or not. [Post]. X.
- Lafond, F., Greenwald, D., & Farmer, J. D. (2022). Can stimulating demand drive costs down? World War II as a natural experiment. *The Journal of Economic History*, 82(3), 727–764.
- McKinsey. (2025, February 12). European defense tech start-ups: In it for the long run?
- Mejino-Lopez, J., & Wolff, G. B. (2025). Boosting the European defence industry in a hostile world. *Intereconomics*, 60(1), 34–39.
- Merler, S. (2025, March 17). Sustainability rules are not a block on EU defence financing, but reputational fears are. Bruegel.
- Pench, L. (2025). Dilemmas for the EU in deficit-financing of defence expenditure and maintenance of fiscal discipline (Working Paper 03/2025).

 Brundel
- Pereira, H., Madureira Martins, S., & Ferreira Santos, N. (2025, March 13). Nuno Melo admite compra de caças europeus a par de F-35. "O mundo já mudou". *Público*.
- Steinbach, A., & Wolff, G. (2024). Financing European air defence through European Union debt (Policy Brief 21/2024). Bruegel.
- Stockholm International Peace Research Institute. (2024). SIPRI Arms Industry Database.
- Streb, J., & Streb, S. (1998). Optimale Beschaffungsverträge bei asymmetrischer Informationsverteilung: Zur Erklärung des nationalsozialistischen Rüstungswunders während des Zweiten Weltkriegs. Zeitschrift für Wirtschafts- und Sozialwissenschaften, 118, 275–294.
- Wolff, G. B., Burilkov, A., Bushnell, K., & Kharitonov, I. (2024a). Fit for war in decades: Europe's and Germany's slow rearmament vis-à-vis Russia (Kiel Report 1). Kiel Institute for the World Economy.
- Wolff, G. B., Kharitonov, I., & Bushnell, K. (2024b). Kiel Military Procurement Tracker. Kiel Institute for the World Economy.
- Zettelmeyer, J., Steinbach, A., & Wolff, G. (2025). The proposed European defence mechanism: Questions and answers. Bruegel.