

Mejino-López, Juan; Wolff, Guntram B.

Research Report

Europe's dependence on US foreign military sales and what to do about it

Bruegel Policy Brief, No. 27/2025

Provided in Cooperation with:

Bruegel, Brussels

Suggested Citation: Mejino-López, Juan; Wolff, Guntram B. (2025) : Europe's dependence on US foreign military sales and what to do about it, Bruegel Policy Brief, No. 27/2025, Bruegel, Brussels

This Version is available at:

<https://hdl.handle.net/10419/334009>

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.

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.

Europe's dependence on US foreign military sales and what to do about it

Juan Mejino-López and Guntram B. Wolff

Executive summary

WORRIES ABOUT EUROPE'S dependence on the United States military industrial base have increased with the worsening security situation in Europe and the deterioration of the transatlantic relationship. With a new dataset covering all notifications under the US Foreign Military Sales programme since 2008, we show that Europe has substantially increased its purchases from the US defence industrial base during the last four years, deepening its dependence on US military equipment in the short to medium term.

THE DEPENDENCE IS particularly significant for high-tech equipment, including air defence, missiles and fighter jets, and for additional equipment and services included in purchases, such as advanced software and sustainment and modernisation required in future years.

THIS STRATEGIC RELIANCE on the US, even when the risks associated are low, provide the US with significant bargaining leverage over Europe that can potentially be used in different policy areas, such as trade. Moreover, the US military industrial base faces its own constraints and current and future US administrations might prioritise deliveries to Asia.

IN RESPONSE, EUROPEAN policymakers must assess the extent of dependence on the US and develop a strategy on how to minimise the risks. At a time of rising defence budgets, it is crucial that European production of key weapon systems grows faster than demand, so that dependence on the US defence industrial base is gradually reduced. Policymakers should review critical technological dependencies, even for procurement directed at national producers, and should plan to upgrade Europe's technological base without increasing external dependence. Learning from and cooperating with Ukraine to boost Ukrainian production is one important step. Establishing a timeline to determine the pace at which certain dependencies should be minimised is equally necessary. Europe also needs to reduce its reliance on structural strategic systems provided by the US, such as command, control and communications systems.

GIVEN THE DIVERGING strategic cultures across Europe, building consensus is of paramount importance. European companies need to grow to the scale that is only achievable in a larger market. Failing to implement a strategy risks Europe losing its freedom and autonomy.

Recommended citation

Mejino-López, J. and G. Wolff (2025) 'Europe's dependence on US foreign military sales and what to do about it' *Policy Brief* 27/2025, Bruegel

Juan Mejino-López (juan.mejino-lopez@bruegel.org) is a Research Analyst at Bruegel

Guntram B. Wolff (guntram.wolff@bruegel.org) is a Senior Fellow at Bruegel

We thank Alex Burilkov, Jonathan Caverley, Rebecca Christie, Ignacio Garcia, Stephen Gardner, Hans Geeroms, Ethan Kapstein, Pawel Karbownik, Jacob Kirkegaard, Alexander Roth, Reinhilde Veugelers, Nicolas Véron and Georg Zachmann for their input. Research assistance by Javier Octavio Ospital Greslebin and Daniyal Vemuri is gratefully acknowledged.



Europe faces a deteriorating threat scenario at a moment of a huge disruption in the transatlantic relationship

1 Introduction

Vladimir Putin's Russia continues to be a formidable threat to Europe. The number of active-duty troops in Russia is set to increase to 1.5 million, and military production has reached record highs (Burilkov *et al*, 2025). If the current trajectory continues, Russia will have the world's second largest standing army after China, which continues to massively increase its own military capability.

Europe faces this deteriorating threat scenario at a moment of huge disruption in the transatlantic relationship. Transatlantic relations have gone through different stages, but Sapir *et al* (2025), for example, argue that the current disruption goes beyond the ups and downs in the relationship in the past. There are even fears that the United States may become an autocracy without free elections¹.

The state of transatlantic relations has implications for the transatlantic trade in defence products. Calls for more European independence in this context are not new but have not so far led to major policy changes². The idea of 'too much' European independence has even been rejected. In 1998, then US secretary of state, Madeleine Albright, argued that "decoupling" would weaken the alliance, "duplication" would spread resources too thinly and "discrimination" against non-EU producers would be undesirable³.

Albright made these points when US growth and fiscal strength were superior to today. Now, there is a serious question of whether the US has the fiscal capacity to sustain a long-term global military presence at approximately current levels. Now, the question, even on purely economic terms, is whether NATO's current force posture can survive the inevitable US fiscal consolidation while European rearmament takes place.

Beyond economic arguments, many European politicians worry about excessive dependence on the US. There is concern that defence dependence translates into unfavourable trade relations⁴. There are also worries that the security guarantees for Europe that the US provides via NATO may be at risk, irrespective of whether US demands on trade are met.

Europe's security dependence on the US is multi-faceted. Many European countries depend on the US to take a political lead on global affairs. They also depend on the US nuclear umbrella, the presence of US troops in Europe, the sharing of US intelligence with European allies, US support for Ukraine, specific US technologies, the sharing of patents and finally US weapons. In this Policy Brief, we focus on EU reliance on US weapon supplies.

In financial terms, the US is the world's largest exporter of weapons. Its large domestic market for defence products, combined with sales to numerous countries, has provided US companies with substantial scale to develop leading modern weapon systems. A huge US annual research budget of roughly \$150 billion has further added to the advantage. Sophisti-

1 Garry Kasparov, 'The race to save America's democracy', *The Atlantic*, 28 September 2025, <https://www.theatlantic.com/politics/archive/2025/09/putin-trump-elections-autocrat/684298/>.

2 See Arancha González Laya, Camille Grand, Katarzyna Pisarska, Nathalie Tocci and Guntram Wolff, 'Trump proofing Europe: how the continent can prepare for American abandonment', *Foreign Affairs*, 2 February 2024, <https://www.foreignaffairs.com/united-states/trump-proofing-europe#>, and Arancha González Laya, Camille Grand, Katarzyna Pisarska, Nathalie Tocci and Guntram Wolff, 'Can American abandonment help Europe? - the continent has a chance to address its own weaknesses', *Foreign Affairs*, 6 January 2025, <https://www.foreignaffairs.com/united-states/can-american-abandonment-help-europe>.

3 M.K. Albright, 'The Right Balance Will Secure NATO's Future', *Financial Times*, 7 December 1998, <https://www.jstor.org/stable/resrep06989.8>.

4 For example, the European Commission's director general for trade, Sabine Weyand, has argued that the unfavourable trade deal concluded between the US and the EU was a direct result of Europe's security dependence, a view later echoed by President of the European Council, Antonio Costa. See Sarah Wheaton, 'Trade truth and consequences', *Politico*, 29 August 2025, <https://www.politico.eu/newsletter/brussels-playbook/trade-truth-and-consequences/>, and Seb Starcevic, 'Costa breaks ranks on EU-US trade deal, fires warning shot at Trump', *Politico*, 1 September 2025, <https://www.politico.eu/article/antonio-costa-eu-us-trade-deal-warning-shots-donald-trump/>.

For weapons, Europe is thus becoming more, not less, dependent on the US

cated weapon systems from the US are in high demand in Europe, Asia and the Middle East, but in recent years, Europe has become an increasingly important customer.

The US organises the main transfers abroad of military equipment primarily through its Foreign Military Sales (FMS) programme⁵. Between 2017 and 2021, the FMS portfolio for the US's European allies averaged \$11 billion, but in 2024, it reached \$68 billion (Cavoli, 2025)⁶. This growth in demand is unsurprising: after Russia's invasion of Ukraine, European countries increased their defence spending substantially from only 1.3 percent of GDP in 2016 to now above 2 percent. As defence budgets have increased, spending on military equipment has increased particularly strongly, more than doubling to about 0.7 percent of GDP now. Faced with an initially relatively small domestic military production base, it is natural for EU countries to direct more demand to the US defence industrial base – at least until European domestic production can be scaled up. Beyond the increase in overall demand, there is also a modernisation need, for example the replacement of old fighter jets with new models. Europe is thus becoming more, not less, dependent on the US. But what form is this increased dependency taking, and to what extent should it be a concern?

US foreign military sales are subject to intricate foreign-policy considerations in the US⁷. For example, President Donald Trump has suggested that only new fighter jets with downgraded capabilities should be sold to allies⁸. US Under Secretary of War for Policy, Elbridge Colby, has repeatedly argued that US weapons should be prioritised for use by US forces and allies in Asia⁹. However, the US has been inconsistent, as can be seen from the contrasting arguments made by the US ambassador to NATO, who has called repeatedly for continued European purchases from the US¹⁰.

In response to some of these political and strategic uncertainties, the US's allies in both Europe and Asia have been thinking about cancelling orders of prominent US weapon programmes, such as the F-35¹¹. In reaction to uncertainty about US foreign military sales policy, Denmark even decided to buy a €7.8 billion air defence system from European suppliers instead of US suppliers¹².

Against this backdrop, this Policy Brief assesses how dependent Europe is on US foreign military sales and identifies to what extent this dependency is a source of concern. It provides numbers on US foreign military sales to Europe and the types of technology for which Europe depends on the US. It then formulates policy recommendations.

5 See Defense Security Cooperation Agency, 'Foreign Military Sales FAQ', <https://www.dsca.mil/Resources/Foreign-Military-Sales-FAQ>.

6 Figures relate to fiscal years, which in the US run from 1 October to 30 September. Thus, the figure for 2024 relates to 1 October 2023 to 30 September 2024.

7 US weapon exports also compete with European exports, a topic we do not cover further here. See for example Stuart Dee, 'Lessons for Industrial Resilience: The UK's Typhoon Export Conundrum', *Commentary*, 2 February 2024, RAND, <https://www.rand.org/pubs/commentary/2024/02/lessons-for-industrial-resilience-the-uks-typhoon-export.html>.

8 George Allison, 'U.S. to reduce capabilities of new jet purchased by allies', *UK Defence Journal*, 23 March 2025, <https://ukdefencejournal.org.uk/u-s-to-reduce-capabilities-of-new-jet-purchased-by-allies/>.

9 Piotr Smolar, 'Elbridge Colby, ex-secrétaire adjoint à la défense américain : « Nous ne voulons pas être le gendarme du monde »', *Le Monde*, 18 July 2024, https://www.lemonde.fr/international/article/2024/07/18/elbridge-colby-ex-secretaire-adjoint-a-la-defense-americain-nous-ne-voulons-pas-etre-le-gendarme-du-monde_6252098_3210.html, and Vivian Salama, 'The U.S. Is Quietly Pausing Some Arms Sales to Europe', *The Atlantic*, 19 September 2025, <https://www.theatlantic.com/national-security/archive/2025/09/arms-sale-europe-trump-colby-ukraine/684274/>.

10 Stuart Lau, 'US envoy to NATO questions EU's 'buy local' strategy on weapons', *Politico*, 22 October 2024, <https://www.politico.eu/article/us-envoy-to-nato-questions-eus-buy-local-strategy-on-weapons/>.

11 Joe Gould, Jacopo Barigazzi and Chris Lunday, 'Allies, in jab at Trump, threaten not to buy F-35s', *Politico*, 13 August 2025, <https://www.politico.com/news/2025/08/13/trump-tariffs-allies-f-35-00508201>.

12 *Reuters*, 'Denmark to buy \$9 billion air defence systems as tensions with Russia grow', 12 September 2025, <https://www.reuters.com/business/aerospace-defense/denmark-buy-9-billion-air-defence-systems-tensions-with-russia-grow-2025-09-12/>.

2 Should Europe worry about weapon imports?

Europe and many parts of the world have long relied on imported weapons (Mejino-López and Wolff, 2025), with the US often the main partner. An important part of that bargain was the implicit security guarantee granted by the US¹³. Assessing how vulnerable Europe is now in the context of that dependency requires evaluation of multiple aspects of the relationship.

The first aspect is overall volumes. Large imports from the US would indicate that Europe's domestic defence industry is too small, possibly losing out in terms of jobs and innovation capacity, and perhaps even implying an inability to build weapons at scale when needed. A debate on this volume aspect has emerged since the publication by the European Commission in March 2024 of the European Defence Industrial Strategy (EDIS; European Commission/HRVP, 2024) and the suggestion in Draghi (2024) that almost 80 percent of Europe's military procurement was directed towards foreign suppliers. The debate has been, however, fraught with misunderstandings and incorrectly interpreted data. Mejino-López and Wolff (2024a) and Burilkov *et al* (2025) clarified the numbers and showed that, in terms of imports, Europe's dependence on foreign suppliers is much less. European governments, with major exceptions such as Poland, typically buy from domestic producers.

Studying dependence solely through the lens of imports misses important aspects; imports measured in billions of euros are not a good measure of actual dependence on the US military industrial base. For example, this indicator does not capture the many weapons bought from US producers' European production sites, sometimes made in cooperation with local companies. Burilkov *et al* (2025) showed, based on Wolff *et al* (2025), that national and foreign partnerships represent a substantial percentage of military procurement, often around 30 percent. Simple import statistics thus fail to capture the extent of dependence on US companies with respect to purchased volumes.

A second aspect concerns technological dependence. Import statistics do not capture the critical importance of specific technology. This may be just a small intermediary product, component or software not appearing as significant in import statistics, but critical for the functioning of entire weapons systems, for example through command-and-control systems. European countries have the capacity to produce much military equipment, but still rely heavily on the US for software, the provision of strategic enablers and specific major equipment (Burilkov *et al*, 2025).

Third, worries in Europe about dependence on US weapons systems extend well beyond weapons deliveries. Senior politicians from Portugal, Switzerland and Denmark have talked publicly about the possibility of 'kill switches', or automatic means of disabling equipment¹⁴. Deals¹⁵ between the United Kingdom and Nordic countries on production of warships might have come about in part because of these security concerns. US defence companies have denied the existence of such kill switches for their weapons, but President Trump has stated that lower-capacity versions of some weapons should be sold to allies because they may not

13 In Europe, this came in the form of NATO guarantees given with the implicit understanding of weapons purchases.

14 For example, Portugal's former defence minister said in March 2025, "*The world has changed ... and this ally of ours ... could bring limitations to use, maintenance, components, and everything that has to do with ensuring that aircraft will be operational and used in all types of scenarios*". Helena Pereira, Susana Madureira and Nuno Ferreira, 'Nuno Melo admite compra de caças europeus a par de F-35. "O mundo já mudou"', *Público*, 13 March 2025, <https://www.publico.pt/2025/03/13/politica/entrevista/nuno-melo-afasta-compra-f35-eua-causa-trump-mundo-ja-mudou-2125727>.

15 David Sheppard, Sylvia Pfeifer and Richard Milne, 'UK in advanced talks to build warships for Denmark and Sweden', *Financial Times*, 2 September 2025, <https://www.ft.com/content/c84e2df3-2cc0-453c-9f11-b1db1ba99b28>.

remain allies (see section 1, footnote 8).

The need to update weapon software regularly represents a risk. F-35 fighter jets rely on the ODIN software, for example, while several European navies rely on the American Aegis Combat System. Should the software components of these integrated systems for some reason not be updated, the effectiveness of modern warships would be diminished. Another example in which software dependence may have had direct military implications, is a reported decision by Microsoft to discontinue certain services for Israel's military over surveillance of Palestinian civilians¹⁶. Reliance on cloud services is a further possible source of vulnerability.

Box 1: The F-35 programme

The programme to develop the US fifth-generation fighter aircraft is an example of cooperation between the US and foreign governments. It also demonstrates the security risks. The UK, Italy, the Netherlands, Denmark and Norway have participated in research and development related to the F-35. The European contributors¹⁷ also participate in the supply chain. These countries can acquire F-35s under a different legal basis to the FMS (see CRS, 2022, for more details). The main contractors associated with the programme are Lockheed Martin, Northrop Grumman (both US) and BAE Systems (UK).

While most F-35 manufacturing is done by US contractors located in the US, the extensive net of suppliers numbers almost 2000, varying in size and from different countries¹⁸. Italy and Japan have facilities for final assembly of F-35s, with the Italian facility producing aircraft for the Italian and Dutch markets.

Though US dominance in terms of producing and owning the key assets needed for F35 production represents a security risk for the European allies, their involvement in the supply chains provides some reassurance by providing some (albeit limited) leverage over the US. For instance, the suspension of Turkey from the programme in 2019 forced US industry to find new providers for more than a thousand parts (GAO, 2020). Failure of European providers in the supply chain for whatever reason would also create disruption; BAE Systems (UK), for example, provides key software components¹⁹, while Alenia Aermacchi, a Leonardo subsidiary (Italy), produces a significant share of the aircraft wings. Realistically, however, the escalation dominance would be with the US.

FMS notifications for F-35s often involve high volumes of related equipment, included either in the same sale and/or at a later point. This is the case for AIM-120C-8 Advanced Medium Range Air-to-Air Missiles (AMRAAM), produced by RTX (US), with sales to Germany and Poland alone amounting to more than 800 missiles. The maintenance of the aircraft also involves the participation of US contractors. The UK, for example, contracted maintenance services for €185 million in 2023 for a fleet of 37 aircraft (Wolff *et al*, 2025a). In August 2025, an FMS notification for Poland shows F-35 sustainment services worth \$1.85 billion.

16 Rafe Rosner-Uddin, 'Microsoft cuts off some services to the Israeli military', *Financial Times*, 25 September 2025, <https://www.ft.com/content/32062a65-e458-4c04-b464-9af5a37cd16a>.

17 Australia and Canada are the non-European participants. Turkey participated in the development of the programme but was excluded in 2020 because of security concerns.

18 See Lockheed Martin, 'Every F-35 Brings Value to the UK Economy', undated, <https://www.f35.com/f35/global-enterprise/united-kingdom.html>, and Australian Government press release of 30 October 2023, 'Australia begins providing F-35 wheels and brakes repair work', <https://www.defence.gov.au/news-events/releases/2023-10-30/australia-begins-providing-f-35-wheels-brakes-repair-work>.

19 See BAE Systems news of 3 April 2023, 'Manufacturing advanced Block 4 F-35 electronic warfare systems to defeat evolving threats', <https://www.baesystems.com/en-us/article/manufacturing-advanced-block-4-f-35-electronic-warfare-systems-to-defeat-evolving-threats>.

Fourth, maintaining an integrated transatlantic defence industrial base, as for example advocated by Caverly and Kapstein (2025), implies accepting supply-chain dependence that will likely be asymmetric. The F-35 programme is a prime example of an integrated transatlantic supply chain with substantial asymmetries. While several important parts of the F-35 are produced in Europe, ultimate control over production and sales remains with the US.

There have been instances of the US preventing a partner country from buying F-35s (Turkey; Box 1) and the US eventually replacing that partner's contribution to the F-35 supply chain by turning to alternative suppliers. European suppliers control some key parts of production. For example, joint strike missiles are produced exclusively by the Norwegian company Kongsberg. But European partners are unlikely to be able to equally credibly threaten to disrupt the F-35 supply chain (Box 1). Supply chains involve mutual dependencies, but in politically difficult times, the US would probably be able to replace European components, such as joint strike missiles, rapidly, while European nations cannot quickly replace F-35s²⁰. The purchase of numerous F-35 fighter jets by multiple European governments has locked-in European air forces to US technology that would be difficult, or at least expensive, to exit from. Many governments increasingly see this as a vulnerability²¹.

Finally, continuous reliance on the US defence industrial base means it is difficult to reach sufficient scale in the European defence market for expensive high-tech products. While the French Rafale and Swedish Gripen fighter jets may be European, the Gripen at least relies on crucial components (the engine) supplied by the US²². If European countries want to create very expensive top-notch products that are independent of the US industrial base, European market scale must be combined with standardised exporting policies.

3 Analysing European reliance on US FMS

US military equipment exports are governed by national security and foreign policy laws and regulations, including the Foreign Assistance Act and the Arms Export Control Act. These provide the legal framework for the export channels used by the US government, mainly the Foreign Military Sales. FMS is the central instrument for the sale of US weapons abroad. It is quantitatively and in terms of strategic relevance much more important than the Direct Commercial Sales and the Foreign Military Financing instruments (appendix 1).

The FMS consists of government-to-government agreements, with the US administration playing an intermediary role between the foreign government and US contractors. Under the FMS, the foreign government depends on the US administration to negotiate the conditions of the contracts with the defence companies. The FMS is typically the instrument used for exports of the most advanced military equipment, including fighter aircraft, autonomous equipment and advanced missile systems²³.

20 Some scholars have compared the F-35 programme to China's Belt and Road Initiative; see Jonathan D. Caverly, Ethan B. Kapstein, and Srdjan Vucetic, 'F-35 Sales Are America's Belt and Road', *Foreign Policy*, 12 July 2019, <https://foreignpolicy.com/2019/07/12/f-35-sales-are-americas-belt-and-road/>.

21 See for example, *TurDef*, 'Danish Defence Committee Chairman Regrets F-35 Purchase', 21 March 2025, <https://turdef.com/article/danish-defence-committee-chairman-regrets-f-35-purchase>. See also footnote 14.

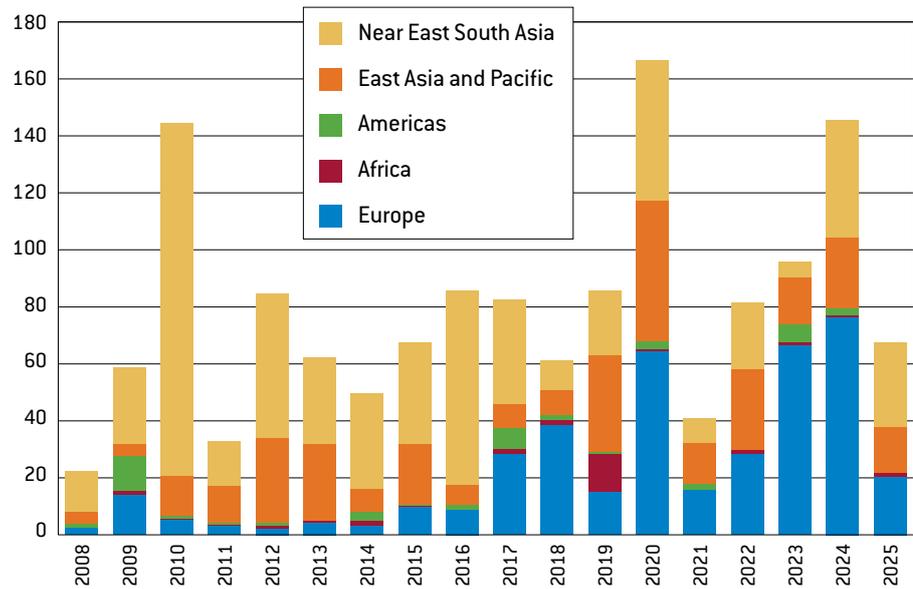
22 See Saab, 'The Engine That has Gripen's Back', 14 May 2020, <https://www.saab.com/markets/india/gripen-for-india/technology/the-engine-that-has-gripens-back>.

23 See the Department of Defense Security Assistance Management Manual (<https://samm.dsca.mil/>) for specific information on geographical restrictions and equipment recommended for transfer via the FMS.

Mejino-López and Wolff (2025) compiled, for the first time, a database of all 1179 FMS notifications²⁴ published by the US Department of Defense between 2008 to 2025. Until 2017, only a small part of the FMS notifications related to Europe, reflecting the very limited European spending on defence equipment (Wolff *et al*, 2024). Since 2017, however, Europe has accounted for a larger share of FMS notifications, often being the continent with the largest share (Figure 1)²⁵.

FMS notifications involving European countries first showed a sharp increase in 2020 because of major acquisitions of F-35s and F-18s by Finland and Switzerland. In 2024, the number of notifications increased further to a record high for European customers, reaching \$76 billion, four times the European average since 2008. If current numbers persist, Europe is set to account for a very substantial part of advanced US military equipment exports.

Figure 1: FMS notifications by destination region, \$ billions, 2024 prices



Source: Bruegel based on Mejino-López and Wolff [2025].

As European defence budgets and equipment purchases have increased, European countries have directed their massive increase in demand to both domestic and foreign producers. For European NATO countries as a whole, FMS notifications from 2022 to 2024 represented 50.7 percent of their spending on military equipment. This compares to 27.83 percent from 2019 to 2021. Figure 2 plots how FMS has become more important in Europe's overall equipment spending.

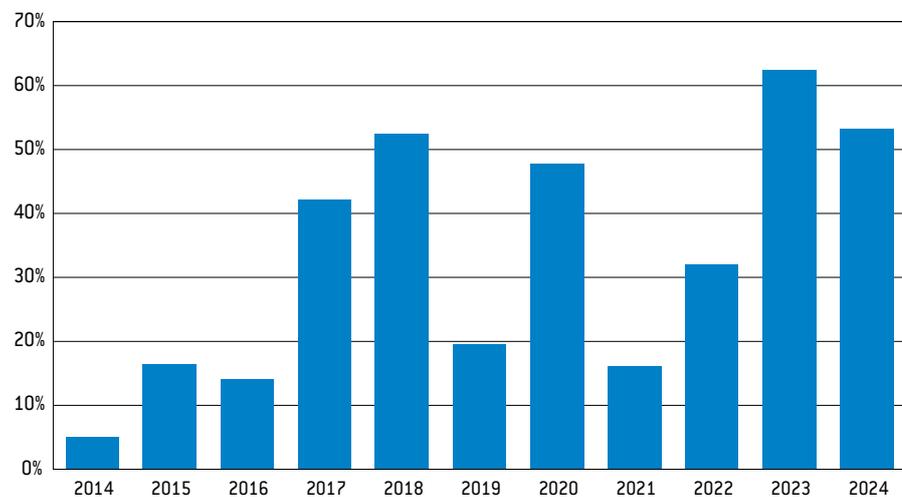
24 There is official reporting from the US administration on both FMS and the DCS sales. The latter is sketchier and while statistics by country and year can be obtained, it is not possible to disaggregate these by year as they relate to multi-year frameworks and do not match the numbers provided by the Department of State in yearly summary reports. See for instance US Department of State factsheet of 24 January 2025, 'Fiscal Year 2024 U.S. Arms Transfers and Defense Trade', <https://www.state.gov/fiscal-year-2024-u-s-arms-transfers-and-defense-trade>.

25 We use the geographical categorisation used by the Department of Defense (<https://samm.dsca.mil/table/table-c4t2all>), with the exception of Canada which we classify as 'Americas'.

However, FMS notifications do not mean immediate sales²⁶. Delivery and disbursement of funds can come years later. Burilkov *et al* (2024) provided selected evidence of delivery delays. Delays can result from high demand relative to US production capacity, as is the case for expensive Patriot air defence systems. Political considerations can lead to reprioritisation of which countries receive deliveries first or go to the back of the queue. Patriot deliveries to Switzerland, for example, have been delayed in order to prioritise deliveries to Germany, which has delivered the systems to Ukraine²⁷.

Moreover, FMS notifications do not automatically translate into US exports, as some of the products and services under FMS are produced and provided in Europe. Burilkov *et al* (2025) showed that from the perspective of procurement, a substantial share of spending is directed to joint venture companies that have production sites in Europe. Therefore, actual exports that appear in trade statistics are substantially smaller and the importance of weapons sales for the US's bilateral trade balances should not be exaggerated.

Figure 2: FMS notifications for NATO Europe as a share of NATO Europe equipment spending



Source: Bruegel based on NATO and Mejino-López and Wolff (2025).

Within Europe, there is substantial variation in purchases via the US FMS programme. Poland's FMS notifications account for a large part of overall US FMS notifications to Europe (Figure 3). From 2022 to 2024, Polish purchases amounted to over \$55 billion, or 30 percent of European demand. Polish purchases have driven the sharp rise in European notifications since 2020, with its FMS notifications representing 106.83 percent of its overall defence procurement according to Wolff *et al* (2025). FMS notifications in a given year do not match precise procurement spending in national budget data as notifications precede the actual deal, let alone delivery. Nevertheless, these numbers indicate just how striking the Polish armament strategy is²⁸. Finland, Turkey and Switzerland, and to some extent Germany and Greece, are the other main countries to have negotiated military purchases from the US. For Germany, FMS notifications represented only 19.63 percent of its overall defence procure-

26 See Mejino-Lopez and Wolff (2025) for details and explanation of the FMS notification process.

27 Aurélie Pugno, 'Trump's Patriot missile deal for Ukraine sparks European fears over air defence gaps', *Euractiv*, 4 August 2025, <https://www.euractiv.com/news/trumps-patriot-missile-deal-for-ukraine-sparks-european-fears-over-air-defence-gaps/>.

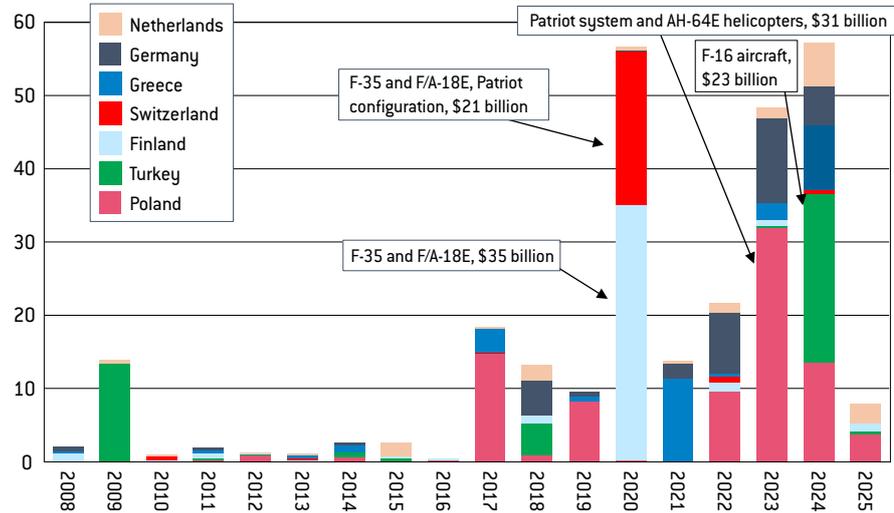
28 One can speculate on the reasons for the Polish numbers. First, Poland has felt the threat of Russia and the need to rearm rapidly most strongly. Second, domestic production capacity has been limited. Third, during some of the period, Poland's right-wing government looked explicitly to the US and wanted to counter deeper European integration.

ment from 2022 to 2024, according to the numbers in Wolff *et al* (2025).

Figure 3 also provides an insight into the type of equipment purchased under the FMS. Major F-35 purchases preceded the war in Ukraine and reflect the ongoing modernisation of European air forces.

Table 1 shows all FMS notifications involving European countries worth \$5 billion or more since 2020. Such large notifications primarily relate to aircraft and air-defence systems and missiles.

Figure 3: Value of FMS notifications for Europe, \$ billions, constant 2024 prices



Source: Bruegel based on Mejino-López and Wolff (2025).

The high level of detail of the data also allows us to see associated services or other equipment included in deals. For example, a major sale notification for Turkey includes 40 new F-16 aircraft and the modernisation of 79 F-16s. The notification also covers radar systems, cryptographic devices, electronic warfare systems and medium range air-to-air missiles. Notifications of sales to Finland included, besides F-35s, tactical missiles, bombs and intelligence devices. Similarly, the notification for a sale to Poland included both 644 Patriot missiles and 48 Patriot launch stations.

Table 1: FMS notifications to European countries exceeding \$5 billion since 2020

Country	Main equipment	\$ bns
Turkey	F-16 Aircraft	23
Poland	Integrated Air and Missile Defence Battle Command System (IAMD, IBCS)	15
Finland	F/A-18E/F Super Hornet and EA-18G Growler aircraft	15
Finland	F-35 Joint Strike fighter aircraft	13
Poland	AH-64E Apache helicopters	12
Greece	F-35 Joint Strike fighter aircraft	9
Germany	CH-47F Chinook helicopters	9
Germany	F-35 Aircraft	8
Switzerland	F/A-18E/F Super Hornet aircraft	7
Poland	F-16 Viper midlife upgrade	7
Romania	F-35A Lightning II Joint Strike fighter aircraft	7
Greece	Multi-Mission Surface Combatant (MMSC) ships	7
Switzerland	F-35 Joint Strike fighter aircraft	7
Poland	M1A2 SEPv3 main battle tanks	6
Czechia	F-35 Aircraft	6
Germany	Patriot Advanced Capability-3 Missile Segment Enhancement Missiles	5

Source: Bruegel based on Mejino-López and Wolff (2025).

4 Addressing Europe's dependence on FMS

Analysis of our new FMS database shows that several European countries have substantially increased purchases from the US military industrial base. This is, in part, a matter of availability of certain technologies: the US produces some weapons systems that are unrivalled by European producers, such as the fifth-generation fighter jet (F-35), long-range rocket artillery (Multiple Launch Rocket System, MLRS) and some long-range missiles. In part, however, increased purchasing from the US is a deliberate geopolitical decision based on the assumption and hope that purchases will ensure continued US commitment to European security²⁹.

However, the evidence provided in this Policy Brief demonstrates that while Europe currently benefits from US imports, there are material dependencies that lead to substantial economic and geopolitical dependencies. The mere existence of a high security risk to Europe, even if of low probability, fundamentally impacts the balance in the transatlantic relationship. In a context of new political uncertainty, this should invite serious reflection. In addition, US production capacity constraints³⁰ and the increasing risks in the Asian theatre (Colby, 2021) may further jeopardise the continuation of weapon deliveries from the US.

In our assessment, European policymakers therefore need to assess their dependence on US supplies of weapon systems critical for Europe's self-defence, and to develop a strategy on

29 There is also the hope that large-scale purchases of US weapons could help ensure a more balanced bilateral trade relationship, possibly leading to a more favourable trade relationship. See for example Roula Khalaf, Patrick Jenkins and Olaf Storbeck, 'Buy American to avoid Trump trade war, says Christine Lagarde', *Financial Times*, 28 November 2024, <https://www.ft.com/content/24d5d526-b970-4e53-a262-9a678319ce23>.

30 See for example Burilkov *et al* (2025) and GAO (2024).

European policymakers need to develop a strategy on how to reduce dependence on US supplies of weapon systems critical for Europe's self-defence.

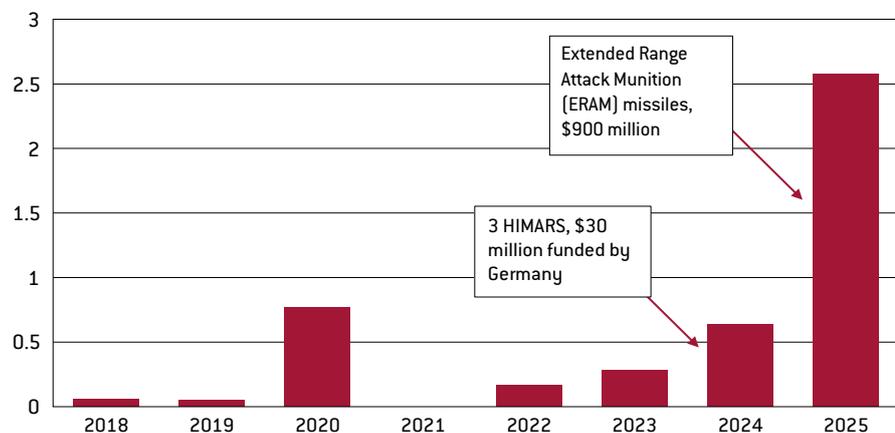
how to reduce it. Such a strategy will need to weigh up difficult trade-offs.

The first is Europe’s ability to master cutting-edge technologies. European countries do not produce certain weapons systems, relying instead on the US industrial base. Given that the US defence R&D budget of \$150 billion in 2024 far exceeds Europe’s budget of around €11 billion in 2023, it will be difficult to close the technology gap for all weapons systems.

A credible strategy to reduce arms imports from the US must deal with this problem. While this is a question for military planners, the rapid change in the way wars are fought, as seen in Ukraine, represents an opportunity for Europe to partner with producers in Ukraine and with leading companies in Western Europe, and to focus scarce resources increasingly on drone and missile warfare. Further areas of focus should be advanced communication and integrated combat systems, and artificial-intelligence and satellite-based intelligence. New partnerships with emerging US high-tech companies should be deprioritised.

The second important issue is that Europe’s security continues to depend on US supplies to Ukraine. The US has provided weapons to Ukraine outside of the FMS using the Presidential Drawdown Authority, under which the US president can draw directly on Department of Defense stocks and deliver them to Ukraine³¹. The US was the biggest military and financial donor to Ukraine until 2024, but Europe has now taken the lead. Under the second Trump administration, the US relationship with Ukraine has become more transactional, and the military equipment transferred now seems to be switching from special instruments (such as the Presidential Drawdown Authority and the Ukraine Security Assistance Initiative) to the standard exporting vehicles used for other allies. The almost fivefold increase in FMS notifications involving Ukraine between 2024 and 2025³² seems to corroborate this point, indicating that now either Ukraine or its European allies must fully finance any military support from the US. Meanwhile, actual US defence supplies delivered to Ukraine – air defence, for example – appear to be declining³³. Dealing with possible disruption of US supplies to Ukraine thus remains a top European priority. Further strengthening the Ukrainian industrial base should be an essential part of the response (Kirkegaard, 2025).

Figure 4: FMS notifications for Ukraine since 2018, \$ billions, 2024 prices



Source: Bruegel based on Mejino-López and Wolff (2025). Note: the chart shows that under President Trump, FMS notifications to Ukraine have gone up. This does not mean that actual deliveries have gone up but rather suggests that previous schemes to transfer weapons to Ukraine, such as US Presidential Drawdown Authority, are being replaced by the commercial FMS.

31 See US Department of State factsheet of 20 January 2025, ‘Use of Presidential Drawdown Authority for Military Assistance for Ukraine’, <https://www.state.gov/bureau-of-political-military-affairs/use-of-presidential-drawdown-authority-for-military-assistance-for-ukraine>.

32 2025 includes FMS notifications for Ukraine up to mid-September.

33 Christopher Miller, ‘Ukraine battles air defence shortage as Pentagon slows shipments’, *Financial Times*, 9 September 2025, <https://www.ft.com/content/26df4030-9613-498d-9ce8-44691aee4346>.

The third important issue is the timeline. European countries have substantially increased weapons purchases from the US since 2020. There was arguably no alternative, given the lack of domestic production capacities for systems that European companies produce and for systems for which no European equivalent technology exists³⁴. Relying on US producers was also seen as necessary because European policymakers wanted to ensure that their militaries could build up their capabilities to be ready to confront Russia in 2030 – mentioned by NATO and defence ministers as when Russia would be prepared to attack a European NATO country³⁵.

However, strong reliance on US production for rapid rearmament creates lock-in effects that will favour US producers over the long term, making the creation of domestic alternatives more difficult. European policymakers should thus plan a longer rearmament timeline for selected weapons to allow domestic producers to develop and produce such systems. This might not actually delay actual rearmament, given the increasing delays in some US weapons deliveries (Burilkov *et al*, 2024).

5 Recommendations

European policymakers worry about the security of their countries because of Russia's aggressive posture. Europe is benefiting from US weapons and the US security guarantees through NATO. However, dependence on US weapon deliveries and embedded technology is a growing concern. Even though extreme scenarios, in which intelligence sharing would be discontinued or weapon systems not updated, therefore becoming much less effective, might be unlikely, the mere existence of that possibility provides the US with leverage across multiple policy areas. We therefore argue that a strategy needs to be developed and implemented on how to reduce the most problematic dependencies.

Reducing dependence on the US FMS at a moment of high intensity warfare on the European continent requires a substantial increase in the output of the European defence industrial base. To boost domestic production, European companies need a clear view of how future demand will develop. The debt-funded defence spending increase in Germany (Zettelmeyer, 2025) will drive overall demand for European defence products. In some parts of Europe, however, the fiscal outlook is much less certain and therefore it may be difficult to raise defence spending substantially, despite declarations to the contrary in the NATO context.

Policymakers should thus design and implement a strategy to determine how spending increases across Europe will be financed sustainably, and how the distribution of spending will shift gradually to European suppliers and European equipment overall. Given that defence budgets are still set to grow, spending more on European producers does not necessarily lead to reduced imports from the US. Policymakers need to understand and argue that this is a unique possibility to strengthen the European defence industrial base without undermining purchases from the US, thus containing the possible political fallout for the transatlantic relationship.

Second, by increasing spending on US military technology, Europe has reinforced US dominance in some technologies, providing it with additional demand and profits. This has created a situation in which, despite bigger European spending, the US's technological lead may be growing.

To boost domestic technological alternatives, European start-ups and unicorns, working

34 For some weapons systems, European countries may decide that dependence on the US is acceptable, or that home-grown alternatives would be too expensive or not strategically desirable.

35 Frank Gardner and Tessa Wong, 'Russia may attack Nato in next four years, German defence chief warns', *BBC*, 1 June 2025, <https://www.bbc.com/news/articles/c62v63gl8rvo>.

By increasing spending on US military technology, Europe has reinforced US dominance in some technologies

at the cutting edge of new technologies such as drones, automated weapon systems and advanced missile systems, need a clear prospect of incoming demand. Several new companies have already emerged³⁶. Improving their growth prospects is not primarily a question of ensuring sizeable and growing defence budgets. Rather, it is a question of procurement authorities modernising rapidly and understanding the evolving military technological needs. In Wolff *et al* (2025), we did not detect major shifts in spending towards new technologies that have been deployed successfully in Ukraine. From a policy perspective, procurement authorities should be prepared to finance prototype development, provide testing facilities, offer direct connections between startups and military units, and provide purchase guarantees when new systems are successfully tested to alleviate the funding constraints faced by relatively new companies. Some degree of European preference, especially for high-tech products, is needed to ensure new tech demand boosts European producers.

More controversially, European militaries, procurement agencies and their political masters need urgently to review critical technological dependencies, even for procurement directed at national producers. For software, for example (section 2), policymakers should review whether dependence on AEGIS or ODIN systems is really still appropriate in the new transatlantic context, especially when ordering new major equipment from domestic producers, such as German F127 frigates³⁷. In short, supply chains need to be reviewed and future-proofed for an age of geopolitical turbulence.

Moreover, independent European production is also essential because even the US does not yet have some new state-of-the-art technologies such as controllable hypersonic weapons, on which Russia and China seem to be ahead³⁸. Europe must regain technological leadership and that requires targeted investment and purchases from domestic industrial leaders and start-ups. A defence industrial strategy focusing on scale, research and some degree of European preference is an essential element for upgrading and expanding European production (Mejino-López and Wolff, 2024b).

Third, European policymakers must tackle the fragmentation of their domestic defence markets to achieve the scale necessary to produce expensive advanced systems. For example, sharing the burden across several European countries would greatly reduce costs per country of developing strategic enablers that are currently not owned or controlled by Europeans, such as advanced command, control and communication systems. It is time to move beyond case-specific solutions towards a more structured intergovernmental agreement (Wolff *et al*, 2025b). Alternative models exist, however. To credibly advance defence cooperation across a larger market, multiple issues around standards, procurement processes, export policies and state aid policies need to be agreed. For example, if a new weapon system is developed backed with state aid from several countries, a clear agreement needs to be in place *ex ante* on how restrictive export controls on that weapon would be applied, otherwise cooperation will be put into question.

Implementing these recommendations will not be easy as strategic cultures across Europe remain fragmented. We have, however, shown a substantial increase in deliveries to Europe of US weapons in the last four years. This grants leverage to US decision makers. A level-headed debate on what strategies are feasible to bolster European strategic autonomy is thus needed urgently. Policymakers should also take into account the upside of spending on European defence tech. Defence spending can stimulate long-term economic growth through its effect on R&D (Antolin-Diaz and Surico, 2025), but that impact is diminished when the spending is directed to imports rather than domestic products. The case for defence R&D is thus not only

36 *Defence Nexus*, 'Europe mints two new defence tech unicorns', 7 May 2025, <https://www.defencenexus.com/europe-mints-two-new-defence-tech-unicorns/>.

37 *Naval News*, 'German Navy: More F127 frigates and an upcoming decision on the F126', 28 September 2025, <https://www.navalnews.com/naval-news/2025/09/german-navy-more-f127-frigates-and-an-upcoming-decision-on-the-f126/>.

38 Sam Skove, 'China and Russia Are Winning the Hypersonic Missile Race', *Foreign Policy*, 11 September 2025, <https://foreignpolicy.com/2025/09/11/hypersonic-missiles-china-russia-us-military-weapons/>.

driven by security considerations (Steinberg and Wolff, 2023) but also by growth effects.

Ultimately, European policymakers must understand that they need to go beyond discussions of individual policy questions, such as whether to buy US or domestic air defence. Deeper structural issues need to be dealt with. Agreements need to be forged on command-and-control structures³⁹ and on deeper defence planning and procurement integration (Wolff *et al*, 2025b). Failing to make progress means accepting that Europe cannot remain a free and autonomous continent.

References

- Antolin-Diaz, J. and P. Surico (2025) 'The Long-Run Effects of Government Spending', *American Economic Review* 115 (7): 2376–2413, available at <https://www.aeaweb.org/articles?id=10.1257/aer.20231278>
- Burilkov, A., J. Mejino-López and G. Wolff (2024) 'The US defence industrial base can no longer reliably supply Europe', *Analysis*, 18 December, Bruegel, available at <https://www.bruegel.org/analysis/us-defence-industrial-base-can-no-longer-reliably-supply-europe>
- Burilkov, A., K. Bushnell, T. Morgan, J. Mejino-López and G. Wolff (2025) *Fit for war by 2030? European rearmament efforts vis-à-vis Russia*, Kiel Report, Kiel Institute for the World Economy (IfW Kiel), available at <https://www.kielinstitut.de/de/publikationen/fit-for-war-by-2030-european-rearmament-efforts-vis-a-vis-russia-18194/>
- Caverly, J., E. Kapstein, L. Péria-Peigné and E. Tenenbaum (2025) 'A Transatlantic Defense Industrial Base? Two Contrasting Views', *Focus Stratégique* 124, The French Institute of International Relations (IFRI), available at <https://www.ifri.org/en/studies/transatlantic-defense-industrial-base-two-contrasting-views>
- Cavoli, C.G. (2025) 'Statement Of General Christopher G. Cavoli, United States Army United States European Command', statement to the US Senate Armed Services Committee, 3 April, available at https://www.armed-services.senate.gov/imo/media/doc/general_cavoli_opening_statements.pdf
- Colby, E.A. (2021) *The strategy of denial: American defense in an age of great power conflict*, Yale University Press, available at <https://yalebooks.yale.edu/book/9780300268027/the-strategy-of-denial/>
- CRS (2022) *F-35 Joint Strike Fighter (JSF) Program*, CRS Report, Congressional Research Service, available at <https://www.congress.gov/crs-product/RL30563>
- Draghi, M. (2024) *The Future of European Competitiveness*, available at https://commission.europa.eu/topics/strengthening-european-competitiveness/eu-competitiveness-lookingahead_en
- DSCA (2019) *Historical Sales Book, Fiscal Years 1950 – 2024*, US Department of Defense Security Cooperation Agency, available at https://media.defense.gov/2025/Jul/01/2003746467/-1/-1/1/FY_2024_HISTORICAL_SALES_BOOK_COMPLETE.PDF
- European Commission/HRVP (2024) 'A new European Defence Industrial Strategy: Achieving EU readiness through a responsive and resilient European Defence Industry', JOIN(2024) 10 final, available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52024JC0010>
- GAO (2024) *F-35 Joint Strike Fighter: Actions Needed to Address Manufacturing and Modernization Risks*, US Government Accountability Office, available at <https://www.gao.gov/products/gao-20-339>
- Kirkegaard, J. F. (2025) 'Ukraine: European democracy's affordable arsenal', *Policy Brief* 10/2025, Bruegel, available at <https://www.bruegel.org/policy-brief/ukraine-european-democracys-affordable-arsenal>
- Mejino-López, J. and G. Wolff (2024a) 'What role do imports play in European defence', *Analysis*, 4 July, Bruegel, available at https://www.bruegel.org/sites/default/files/2024-11/what-role-do-imports-play-in-european-defence%3F-10131_1.pdf

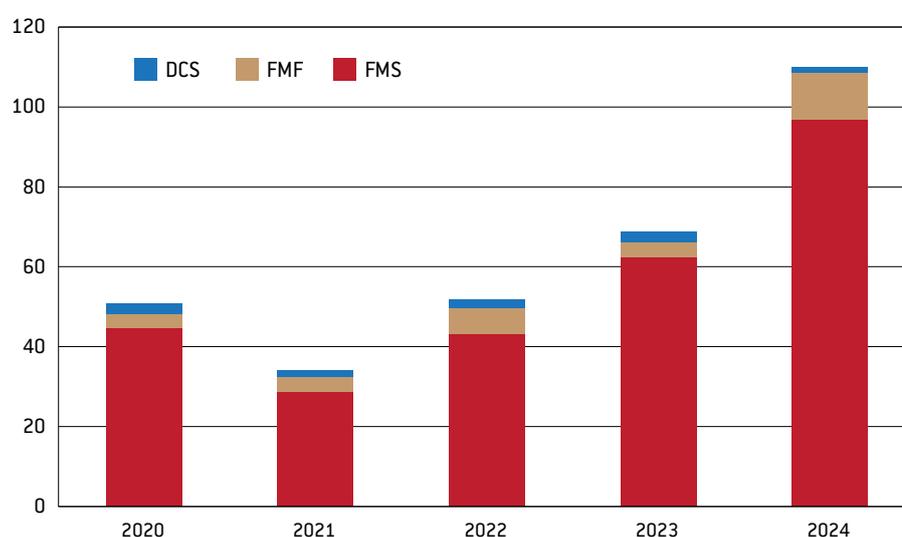
39 See Christophe Gomart and Hélder Sousa Silva, 'Europe Must Take Command', EPP Group news, 11 September 2025, <https://www.eppgroup.eu/newsroom/europe-must-take-command>.

- Mejino-López, J. and G. Wolff (2024b) 'A European defence industrial strategy in a hostile world', *Policy Brief* 29/2024, Bruegel, available at <https://www.bruegel.org/policy-brief/european-defence-industrial-strategy-hostile-world>
- Mejino-López, J. and G. Wolff (2025) 'Understanding US Foreign Military Sales since 2008; analysis of a new database', *Working Paper*, Bruegel, forthcoming
- Sapir, A., J.F. Kirkegaard and J. Zettelmeyer (2025) *Geopolitical shifts and their economic impacts on Europe: Short-term risks, medium-term scenarios and policy choices*, Report 1/2025, Bruegel, available at https://www.bruegel.org/sites/default/files/2025-09/Report%2001%202025_1.pdf
- Steinberg, F. and G. Wolff (2023) 'Dealing with Europe's Economic (In-)security', *Global Policy* 15(1): 183-192, available at <https://doi.org/10.1111/1758-5899.13303>
- Wolff, G., A. Burilkov, K. Bushnell and I. Kharitonov (2024) *Fit for war in decades: Europe's and Germany's slow rearmament vis-à-vis Russia*, Kiel Report, Kiel Institute for the World Economy (IfW Kiel), available at <https://ideas.repec.org/p/zbw/ifwkrp/306225.html>
- Wolff, G., Burilkov, A., K. Bushnell, I. Kharitonov, J. Mejino-López and T. Morgan (2025a) 'Kiel Military Procurement Tracker', dataset, Kiel Institute for the World Economy, available at <https://www.ifw-kiel.de/publications/kiel-military-procurement-tracker-33232/>
- Wolff, G., Steinbach, A. and Zettelmeyer, J. (2025b) 'The governance and funding of European rearmament', *Policy Brief* 15/2025, Bruegel, available at <https://www.bruegel.org/policy-brief/governance-and-funding-european-rearmament>
- Zettelmeyer, J. (2025) 'Can Germany afford to take most defence spending out of its debt brake?' *Analysis*, 11 March, Bruegel, available at <https://www.bruegel.org/analysis/can-germany-afford-take-most-defence-spending-out-its-debt-brake>

Appendix 1: Comparison of main US weapon transfer instruments

The FMS accounts for most US weapons transfers abroad, both in financial volume and strategic importance of the equipment⁴⁰. The FMS has increased in overall size during the last four years. Other significant instruments, mainly Direct Commercial Sales (DCS) and Foreign Military Financing (FMF), exist but often account for less-strategic equipment and relate to lower financial values. Figure A1 compares the value of transferred defence articles via the FMS and FMF as reported by the Department of State, with the values of shipped equipment via the DCS per year as reported in annual US Section 655 reports, which detail arms exports from the US⁴¹. Details and further caveats are explained in Mejino-López and Wolff (2025).

Figure A1: Total value of transferred defence articles by exporting instrument, \$ billions



Source: Bruegel based on Department of State and US Section 655 report. Note: while the US Department of Defense sometimes refers to this data as “transferred value”, it is likely that they actually refer to ‘implemented’ value, that is the authorised value of FMS agreements for which the foreign government has signed the contract and paid the initial deposit; see DSCA (2019).

40 See for instance the ‘FMS Only List’, which includes the specific military equipment that should only be sold via the FMS instrument, Section C4.3.5.2 of the Security Assistance Management Manual of the US Department of Defense, available at <https://samm.dscamilitary.com/chapter/chapter-4>.

41 See US Department of State, ‘Section 655 Annual Military Assistance’, <https://www.state.gov/section-655-annual-military-assistance>.

REPUBLISHING AND REFERENCING POLICY

© Bruegel 2025. Bruegel publications can be freely republished and quoted according to the Creative Commons licence CC BY-ND 4.0. Please provide a full reference, clearly stating the relevant author(s) and including a prominent hyperlink to the original publication on Bruegel’s website. You may do so in any reasonable manner, but not in any way that suggests the author(s) or Bruegel endorse you or your use. Any reproduction must be unaltered and in the original language. For any alteration (for example, translation), please contact us at press@bruegel.org. Publication of altered content (for example, translated content) is allowed only with Bruegel’s explicit written approval. Bruegel takes no institutional standpoint. All views expressed are the researchers’ own.
