

Burilkov, Alexandr; Wolff, Guntram B.

Research Report

Defending Europe without the US: First estimates of what is needed

Kiel Policy Brief, No. 183

Provided in Cooperation with:

Kiel Institute for the World Economy – Leibniz Center for Research on Global Economic Challenges

Suggested Citation: Burilkov, Alexandr; Wolff, Guntram B. (2025) : Defending Europe without the US: First estimates of what is needed, Kiel Policy Brief, No. 183, Kiel Institute for the World Economy (IfW Kiel), Kiel

This Version is available at:

<https://hdl.handle.net/10419/312398>

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.

KIEL POLICY BRIEF

Alexandr Burilkov, Guntram Wolff

Defending Europe Without the US: First Estimates of What is Needed



No. 183 | February 2025

Overview

- We provide initial estimates of the additional weapons and troops Europe will need to defend itself, assuming an effective US withdrawal from Europe.
- Russia's military production has ramped up: In 2024, Russia produced and refurbished an estimated 1,550 tanks, 5,700 armoured vehicles and 450 artillery pieces of all types.
- If the US withdraws from supporting Ukraine, the EU would have to spend only another 0.12 percent of its GDP to replace the US military contributions – a feasible amount.
- A US-Russian deal on Ukraine, resulting in a continued Russian military build-up would require an increase in European capacities equivalent to the fighting capacity of 300,000 US troops, with a focus on mechanised and armoured forces to replace US army heavy units.
- European defence spending will have to increase substantially from the current level of about 2 percent of GDP. An initial assessment suggests an increase by about €250 billion annually (or around 3.5 percent of GDP) is warranted in the short term.

Keywords: USA, Europe, Germany, Ukraine, Defense, Security policy

- Wir liefern erste Schätzungen über die zusätzlichen Waffen und Truppen, die Europa zur Selbstverteidigung benötigen würde, falls sich die USA aus Europa zurückziehen.
- Die russische Militärproduktion wurde hochgefahren: Es wurden schätzungsweise 1.550 Panzer, 5.700 gepanzerte Fahrzeuge und 450 Artilleriegeschütze produziert oder instand gesetzt.
- Falls die USA ihre militärische Unterstützung für die Ukraine einstellen, müsste die EU lediglich zusätzliche 0,12 Prozent ihres BIP aufwenden, um die Lücke auszugleichen – ein machbarer Betrag.
- Ein amerikanisch-russisches Abkommen über die Ukraine, das zu einer weiteren Aufrüstung Russlands führen würde, würde eine Aufstockung der europäischen Kapazitäten um die Kampfstärke von 300.000 US-Soldaten erfordern.
- Die europäischen Verteidigungsausgaben müssten erheblich über das derzeitige Niveau von etwa 2 Prozent des BIP hinaus steigen. Erste Schätzungen legen nahe, dass kurzfristig eine Erhöhung um etwa 250 Milliarden Euro jährlich (oder etwa 3,5 Prozent des BIP) erforderlich ist.

Schlüsselwörter: USA, Europa, Deutschland Ukraine, Verteidigung, Sicherheitspolitik

Guntram Wolff

Professor of Economics, Solvay Brussels
School of Université libre de Bruxelles
Kiel Institute Senior Fellow
Senior Fellow, Bruegel

**Aleksandr Burilkov**

Assistant Director for Research at the
GLOBSEC GeoTech Center
Lecturer in International Relations at Le-
uphana University of Lüneburg



The responsibility for the contents of this publication rests with the authors, not the Institute. Any comments should be sent directly to the corresponding author.

Defending Europe Without the US: First Estimates of What is Needed

Alexandr Burilkov, Guntram Wolff

1 Introduction

Europe could need 300,000 more troops and a defence spending hike of at least €250 billion in the short term to deter Russian aggression. *“Some in Europe may be frustrated with Brussels. But let’s be clear – if not Brussels, then Moscow. It’s your decision. That’s geopolitics. That’s history.”* Volodymyr Zelenskyy, 15 February 2025 ¹. Europe needs to be able to defend itself against Russia, with or without the United States. Here, we provide initial estimates of the additional weapons and troops Europe will need to defend itself, assuming effective US withdrawal from Europe. We focus on land warfare because invasion by Russia will remain for the foreseeable future the main security challenge to Europe².

Europe needs to be able to defend itself against Russia, with or without the United States. Here, we provide initial estimates of the additional weapons and troops Europe will need to defend itself, assuming effective US withdrawal from Europe. We focus on land warfare because invasion by Russia will remain for the foreseeable future the main security challenge to Europe.

2 Quantifying the Russian threat

For the Russian military, the war in Ukraine has been costly. However, because of the Kremlin’s broad mobilisation of society and industry, Russia’s military is now considerably larger, more experienced and better equipped than the force that invaded Ukraine in 2022. The Russian army and general staff now possess invaluable battlefield experience unmatched by any other military – apart from Ukraine.

The Russian presence in Ukraine at the end of 2024 stood at roughly 700,000 troops, far more than the 2022 invasion force. Russian defence production has been rapidly ramped up (G.B. Wolff et al.: 2024). In 2024 alone, Russia produced and refurbished an estimated 1,550 tanks, 5,700 armoured vehicles and 450 artillery pieces of all types. It also deployed 1,800 long-range Lancet

¹‘I Really Believe That Time Has Come: The Armed Forces of Europe Must Be Created – Speech by the President at the Munich Security Conference’, <https://www.president.gov.ua/en/news/viryu-sho-cej-chas-nastav-neobhidno-stvoriti-zbrojni-sili-ye-96089>.

²We do not here discuss nuclear deterrence or hybrid warfare.

loitering munitions. Compared to 2022, this represents a 220 percent increase in tank production, 150 percent in armoured vehicles and artillery, and 435 percent in long-range loitering munitions³. Most of this is modernised Soviet equipment, but Russian production will continue, albeit at a reduced tempo, once Soviet stockpiles are exhausted. This reduction will be felt less if it occurs after hostilities in Ukraine have ended. Furthermore, Russia has made substantial advances in drones, after previously relying on Iran.

A Russian attack on a European Union country is thus conceivable. Assessments by NATO, Germany, Poland, Denmark and the Baltic states put Russia as ready to attack within three to 10 years⁴. It could be sooner, with the quadrennial Zapad military exercises taking place in Belarus in summer 2025⁵. These will demonstrate Russia's ability to manage military exercises at scale even during a war.

3 Europe's needs

Europe's first priority is to continue support Ukraine – Ukraine's experienced military is currently the most effective deterrent against a Russian attack on the EU. If Ukraine decides that a US-Russian deal to end the war is unacceptable – because Putin's peace guarantees are not credible, for example – Europe is capable to provide additional weapons to Ukraine to ensure its fighting capacities remain as they are currently. Ukraine and the EU rely on some critical US strategic enablers, including intelligence and satellite communications. These are difficult to replace in the short term but there are substitutes if necessary.

From a macroeconomic perspective, the numbers are small enough for Europe to replace the US fully. Since February 2022, US military support of Ukraine has amounted to €64 billion, while Europe including the United Kingdom sent €62 billion. In 2024, US military support amounted to €20 billion out of a total of €42 billion. To replace the US, the EU would thus have to spend only another 0.12 percent of its GDP – a feasible amount. A more important question is whether Europe could do this without access to the US military-industrial base.

A significantly more challenging scenario for Europe would be an unlikely peace deal accepted by

³David Hambling, 'Russia Steps Up Deployment Of Lancet Kamikaze Drones, But How Effective Are They?' Forbes, 25 June 2024, <https://www.forbes.com/sites/davidhambling/2024/06/25/russia-steps-up-deployment-of-lancet-kamikaze-drones-but-how-effective-are-they/>.

⁴See for example Ketrin Jocheková, 'Russia could start a major war in Europe within 5 years, Danish intelligence warns', Politico, 11 February 2025, <https://www.politico.eu/article/russia-war-threat-europe-within-5-years-danish-intelligence-ddis-warns/>.

⁵Karolina Modzelewska, 'Minsk and Moscow gear up for massive Zapad-2025 drills', MSN, 15 January 2025, <https://www.msn.com/en-ie/money/technology/minsk-and-moscow-gear-up-for-massive-zapad-2025-drills/ar-AA1xf5FX>.

Ukraine. In such a scenario, Russia is likely to continue its military build-up, creating a formidable military challenge to all of the EU in a very short period, given current Russian production. The EU and allies including the UK and Norway would need to accelerate their military build-ups immediately and massively.

The question of what capacities would be needed to secure a peace deal in Ukraine is at some level secondary. While there are estimates that Ukraine would need around 150,000 European troops to effectively deter Russia⁶, these troops would need to be ready to be deployed rapidly to wherever Russia might decide to attack the EU.

The current assumption of NATO military planners (RAND: 2024) is that in case of a Russian attack on a European NATO country, 100,000 US troops stationed in Europe would be rapidly augmented by up to 200,000 additional US troops, concentrated in US armoured units best suited for the East European battlefield.

A realistic estimate may therefore be that an increase in European capacities equivalent to the fighting capacity of 300,000 US troops is needed, with a focus on mechanised and armoured forces to replace US army heavy units. This translates to roughly 50 new European brigades.

4 Military coordination

The combat power of 300,000 US troops is substantially greater than the equivalent number of European troops distributed over 29 national armies. US troops would come in large, cohesive, corps-sized units with a unified command and control tighter even than NATO joint command. Furthermore, US troops are backed by the full might of American strategic enablers, including strategic aviation and space assets, which European militaries lack.

Europe, including the UK, currently has 1.47 million active-duty military personnel (SIPRI: 2024) but effectiveness is hampered by the lack of a unified command. NATO works under the assumption that the Supreme Allied Commander Europe is a top US general – but that can only function if the US takes a leadership role and provides strategic enablers.

Therefore, Europe faces a choice: either increase troop numbers significantly by more than 300,000 to make up for the fragmented nature of national militaries, or find ways to rapidly enhance military coordination. Failure to coordinate means much higher costs and individual efforts will likely be insufficient to deter the Russian military. Yet collective insurance means moral hazard and coordination problems need to be credibly solved.

⁶Steven Erlanger, 'Can European 'Boots on the Ground' Help Protect Ukraine's Security?' The New York Times, 11 February 2025, <https://www.nytimes.com/2025/02/11/world/europe/ukraine-russia-trump.html>.

5 Equipment and production

Rapidly generating such increases requires an extraordinary effort, though experience shows market economies can do it. For instance, under Chancellor Schmidt (1974-1982), West Germany rapidly modernised the Bundeswehr in response to the threat of modernised Soviet mechanised forces.

Taking the US Army III Corps as a reference point, credible European deterrence – for instance, to prevent a rapid Russian breakthrough in the Baltics – would require a minimum of 1,400 tanks, 2,000 infantry fighting vehicles and 700 artillery pieces (155mm howitzers and multiple rocket launchers). This is more combat power than currently exists in the French, German, Italian and British land forces combined. Providing these forces with sufficient munitions will be essential, beyond the barebones stockpiles currently available. For instance, one million 155mm shells would be the minimum for a large enough stockpile for 90 days of high-intensity combat.

Europe would also need to generate aviation and transport capacities, and missile, drone warfare and communication and intelligence capacities. This includes scaling-up drone production to match Russia – to a level of about 2,000 long-range loitering munitions per year. Meanwhile, 300,000 new personnel would have to be recruited and trained.

To reach these targets, production across Europe would need to surge. Military equipment spending is currently about 0.7 percent of GDP (G.B. Wolff et al.: 2024); it would need to increase substantially. According to our calculations, the recent surge in military spending in Poland saw the government dedicate 70 percent of the additional funds to equipment purchases. Similarly, Germany's Sondervermögen debt fund went exclusively to equipment purchases. A greater share of defence spending increases will have to be invested in personnel recruitment and training.

European-scale procurement will be crucial to achieve military production at lower costs. Costs could be cut substantially if procurement were bundled and more competition introduced. Contracts with military suppliers should be shifted from cost-plus approaches to contracts that provide incentives to bring down costs (J. Streb and S. Streb: 1998). Furthermore, very large orders under a single European standard to reach targets such as 1,400 tanks, 2,000 infantry fighting vehicles, or 700 artillery pieces, would significantly reduce costs compared to smaller-scale procurement (Mejino-Lopez and G.B. Wolff: 2024).

Similar savings are achievable for drones. German firm Helsing's announcement of a production order for 6,000 long-range drones for Ukraine is a good example⁷. Such systems would give the EU quantitative and qualitative parity with Russia's drone programmes. The aerial aspect of war –

⁷The Defense Post, 'German Firm to Make 6,000 More AI-Enabled Drones for Ukraine', 13 February 2025, <https://thedefensepost.com/2025/02/13/german-firm-drones-ukraine/>.

especially drones and missiles – highlights the vital importance of the European Sky Shield Initiative (Steinbach and G. Wolff: 2024). The aim should be to enable competition between European companies for large contracts and to avoid government intervention in the firms themselves. Spare industrial capacity, for example in car industry, suggest that additional demand could be met rapidly.

6 The fiscal aspect

European defence spending will have to increase substantially from the current level of about 2 percent of GDP. An initial assessment suggests an increase by about €250 billion annually (or around 3.5 percent of GDP) is warranted in the short term, though this computation is not straightforward. Larger orders should mean that production processes become more efficient, bringing down unit prices. However, a rapid demand increase will certainly drive-up prices in the short-term. Overall, however, unit prices should fall as order volumes increase. For example, since February 2022, Germany has ordered 105 Leopard II tanks for its own use at a unit price of €28 million. This could add up to a fiscal cost of €40 billion if Europe were to order 1,400 tanks at that price but in fact unit prices should fall substantially.

From a macroeconomic perspective, a debt-funded increase in defence spending should boost European economic activity at a time when external demand may be undermined by the upcoming trade war (Ilzetzki: 2025; Ramey: 2011), though yields and inflation may rise. Ilzetzki (2025) argued that defence spending can also positively contribute to long-term growth via innovation, but a precise quantification of such effects is still needed.

Especially for countries on the eastern flank most exposed to Russia, and those with substantial gaps even in the basic components of deterrence, a substantial increase might be realistic politically. A €250 billion increase could be split equally between EU and national funding, facilitating both substantial joint procurement and substantial national military expenditure. To address moral-hazard problems, countries not spending more on national defence would get less from the common pot. Such spending hikes should be funded through debt in the short run for both political and economic reasons. Yet funding will need to increase permanently. One solution would be to raise €125 billion annually for the next five years at EU level, while EU countries would gradually commit to increasing their non-debt funded share of spending during that period.

German leadership and commitment will be critical. Germany would have to, on its own, raise at least half of the €125 billion to increase German national defence spending from €80 billion to €140 billion, or approximately 3.5 percent of GDP, to be topped up with joint EU funding. Currently,

German military capabilities fall severely short of the capabilities needed and committed to allies. Germany's 2022 pledge to provide NATO with two divisions – typically around 40,000 troops – by 2025 and 2027 faces major setbacks⁸. This will need to change as Germany's contribution, given its size, would certainly have to be close to an additional 100,000 troops.

⁸Sabine Siebold, "'50% battle-ready': Germany misses military targets despite Scholz's overhaul", Reuters, 13 February 2025, <https://www.reuters.com/world/europe/50-battle-ready-germany-misses-military-targets-despite-scholz-overhaul-2025-02-13/>.

References

- Ilzetzki, E. (2025). *Guns and Growth: The Economic Consequences of Defense Buildups*. Kiel Report 2. Kiel Institute.
- Mejino-Lopez, J. and G.B. Wolff (2024). *A European defence industrial strategy in a hostile world*. Tech. rep. 29/2024. Bruegel.
- Ramey, V.A. (2011). Identifying government spending shocks: It's all in the timing. *The Quarterly Journal of Economics* 126.1, pp. 1–50.
- RAND (2024). *Commission on the National Defence Strategy*. Available at https://www.rand.org/content/dam/rand/pubs/misc/MSA3057-4/RAND_MSA3057-4.pdf.
- SIPRI, Stockholm International Peace Research Institute (2024). *Yearbook 2024*. Available at <https://www.sipri.org/yearbook/2024>.
- Steinbach, A. and G. Wolff (2024). *Financing European air defence through European Union debt*. Tech. rep. 21/2024. Bruegel.
- Streb, J. and S. Streb (1998). Optimale Beschaffungsverträge bei asymmetrischer Informationsverteilung: Zur Erklärung des nationalsozialistischen Rüstungswunders während des Zweiten Weltkriegs. *Zeitschrift für Wirtschafts- und Sozialwissenschaften* 118, pp. 275–294.
- Wolff, G.B. et al. (2024). *Fit for war in decades: Europe's and Germany's slow rearmament vis-a-vis Russia*. Kiel Report 1. Kiel Institute.

IMPRESSUM

Publisher:

Kiel Institute for the World Economy
Kiellinie 66, 24105 Kiel, Germany
Phone: +49 (431) 8814-1
Fax: +49 (431) 8814-500
Email: info@ifw-kiel.de

Berlin Office:

Kiel Institute for the World Economy
Chausseestraße 111, 10115 Berlin
Phone: +30 30830637-5
Email: berlin@ifw-kiel.de

The Kiel Institute for the World Economy —
Leibniz Center for Research on Global Economic
Challenges is an independent foundation under
the public law of the German federal state of
Schleswig-Holstein.

Board of Directors:

Prof. Dr. Moritz Schularick, President, Execu-
tive Scientific Director
Birgit Austen, Executive Administrative Director
Prof. Dr. Christoph Trebesch, Vice President

Value Added Tax Id.-Number:

DE 251899169

Photo:

Cover: © Adobe Stock / roibu

Responsible Supervisory Authority:

Ministry of General Education and Vocational
Training, Science, Research and Culture of the
German federal state of Schleswig-Holstein
Jensendamm 5, 24103 Kiel



© 2025 Kiel Institute for the World Economy.

All rights reserved.