

The Path to European Sovereignty: Defense

A joint study by DekaBank and EY, Frankfurt and Berlin,
November 2025



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Forewords

Dear Readers,

Both the German government's decision to increase defense spending and NATO's new 5 percent target are triggering another boost for the European defense industry and sending a clear signal to Moscow.

In Germany alone, GDP could rise by a total of 0.9 percent, while around 360,000 jobs could be secured or created annually. These are significant figures in an overall slower economic environment. Beyond the defense sector, manufacturing, the metal industry, technology and IT companies, as well as services will benefit from these growth impulses. Many companies, including those from the automotive sector, are also expanding into the defense industry.

In the financial sector, the new formula is "Security = Sustainability." Banks are increasingly providing financing, private equity and private debt funds see attractive investment opportunities in the defense sector, M&A deals are surging, and asset managers expect robust valuations even in the medium term.

In short: Public investments in defense not only protect against external threats but also represent excellent industrial policy.

Jan Friedrich Kallmorgen

Partner Strategy and Transactions, EY- Parthenon GmbH

Dear Readers,

The mindset is changing – not fast enough, but it is changing, finally! Europe is slowly realizing that deterrence is essential to avoid war.

For this reason, and because of the economic impact of the resulting investments – both public and private – this analysis is as interesting as it is necessary.

It clearly highlights the opportunities and challenges that have become more apparent since the NATO Summit this summer. It also shows that defense investments, including their direct and indirect effects, are far more growth-oriented than traditional economic theory in the "peaceful" past ever wanted to admit.

Taking these investments forward decisively and forcefully is therefore highly sensible – not only from a defense perspective but also from an economic one, for governments, companies, banks, and private investors.

With this study, we aim to provide transparency into the concrete interdependencies at play, offering the mentioned stakeholders a solid foundation for their investment decisions.

Dr. Matthias Danne

Deputy Chairman of the Board of Management of DekaBank



Executive Summary

NATO views Russia as a continuing threat

NATO confirms Russia as a long-term threat to Euro-Atlantic security and responds by strengthening defense investments.

This follow-up study provides an overview of concrete investment needs, examines expected impacts on the European economy, current developments in the defense sector, and addresses necessary framework conditions.

€220 billion annual demand for investments in equipment

During the NATO Summit 2025, NATO-Europe agreed to increase direct defense spending to 3.5% of GDP annually by 2035, equivalent to ~€770 billion. For equipment and ammunition alone, this requires annual investments of ~€220 billion (amounting to ~€2.2 trillion over a decade), also to compensate for US capabilities. A focus will be placed on expanding modern air defense technologies with ~€500 billion.

Europe alone cannot fulfill procurement requirements

Germany, the UK, and France together account for ~46% of investments and, along with Poland, cover ~47% of orders. At the same time, one-third of defense equipment is procured from the USA. Despite the desire for stronger European sourcing, Europe remains dependent on the USA. Since 2017, the order backlog of European defense companies has nearly tripled, with demand increasing by 183%.

Overcoming structural hurdles in expanding production

The ability to mobilize and repurpose existing industrial production reserves is limited due to structural hurdles. These include lengthy procurement processes, lack of scalability and fragmentation, supply chain and material shortages. Long-term order planning, joint procurement and R&D, harmonization of standards, platform concepts, as well as targeted funding programs can help reduce these hurdles.

Significant boost for the European economy

In NATO-Europe, annual investments would generate a gross value added (GVA) of ~€150 billion (0.7% of GDP), of which ~€ 40 billion would be directly generated in the defense industry. About 2 million jobs would thus be created or secured each year. For Germany, this would amount to €39 billion in GVA annually (0.9% of GDP) and about 360,000 jobs. With a stronger focus on European products, these effects should be even greater.

Increasing expenditures provide opportunities for suppliers

About half of the economic effects are generated through the European supplier industry. The economic analysis highlights key areas of the supply chain beyond the defense sector in manufacturing, metal processing, technology & IT, as well as professional services. This creates opportunities for companies seeking to reposition themselves and expand into the defense industry.

Targeted M&A and tech acquisitions

In the first half of 2025, M&A volume in the European defense sector rose to USD 2.3 billion, an increase of 35% compared to the previous year. European companies are pursuing targeted acquisitions of AI, sensor, and system integration experts to evolve their hardware offerings into fully integrated, driven solutions.

High visibility and strong growth in the defense sector

The persistently positive revenue and margin trends are expected to normalize the valuation of the defense sector by 2030 and keep investments attractive due to the high growth profile and visibility. Price fluctuations and correction phases should not come as a surprise and should be viewed as market entry opportunities. Strong growth will continue to make the sector attractive in the long term.

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2 The Future of Europe's Defense Environment

3 Current Developments in Europe's Defense Economy

4 Economic Impacts

5 Financial and Business Impacts

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1

Introduction

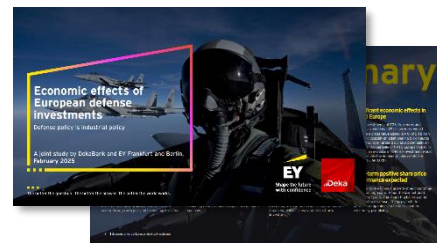


	m		
a-a	3.0	55.0	75.0
b-b	4.0	75.0	85.0
c-c	6.0	87.0	89.0

New political goals in defense, and what industry requires to efficiently and effectively contribute

Content of this study

- This study updates and expands on our February 2025 report “Economic Effects of European Defense Investments”.
- Following the NATO Summit in June 2025 and the adoption of the 5% GDP target, defense investment commitments were made that even exceeded the estimations of our earlier study. As a result, demand potential is set to increase significantly.
- The report provides a comprehensive overview of the investments required to strengthen Europe’s defense capabilities and examines their impact on the European economy and the defense industry.
- To meet future needs, Europe will require a defense industrial base supported by a supplier network that relies less on made-to-order manufacturing and more on scalable, serial production.
- The study also analyzes existing barriers and explores how they can be reduced or eliminated.



Methodological approach

- Joint study by EY and DekaBank.
- Target groups are decision-makers in politics and business.
- Findings and estimates are based on published sources, standard market databases, and EY and DekaBank analyses.
- Uses EY’s global macroeconomic model to assess direct, indirect, and consumption-driven (induced) effects of spending.
- Compared to the initial study, the methodology for deriving defense investment estimates has been optimized thanks to improved data availability.
- The current EY assessment of European defense investments includes equipment expenditures based on:
 - Demand forecasts from NDPP-2025 targets and the IISS report Defending Europe Without the United States: Costs and Consequences (2025) and
 - Historical prices from the past decade drawn from tenders and existing NATO-Europe procurement structures.



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The Future of Europe's Defense Environment



European defense policy has set the groundwork, but the persistent threat environment demands more far-reaching steps.

A new era in European defense policy since 2022

Since Russia's illegal military invasion of Ukraine in violation of international law, the question of defense capabilities has become a top priority on the European security policy agenda. Germany, together with its allies and partners, has responded to this aggression. NATO and the EU stand united.

Key aspects:

- Europe is focused on increasing deterrence through reinforced troop presence its eastern flank, improving rapid reaction forces, and modernizing defense capabilities under the Readiness 2030 framework.¹
- The EU is making substantial investments in artificial intelligence and cybersecurity through the European Defense Fund (EDF). NATO is boosting innovation through Alliance Transformation and programs for immediate testing of market-ready technologies under operational conditions.^{2,3}
- The EU is advancing defense industry coordination and implementing joint procurement programs to increase strategic autonomy, outlined in the EU Strategic Compass 2022.⁴
- NATO and the EU are prioritizing protection against hybrid threats and cyberattacks, while reinforcing the resilience of critical infrastructure to safeguard European security.^{5,6}

Russia's war economy

The Russian defense industry is undergoing intensive expansion to support ongoing military operations. Despite significant economic strain and Western sanctions, production and financing of the war economy are being strongly prioritized. The defense industry is centrally controlled and focusing resources on sustaining the war effort even amid workforce shortages and economic pressure.⁵

Financing

- Russia's defense spending is expected to reach about 13.5 trillion rubles (~USD 145 billion) in 2025, a 25% increase year-on-year, marking its highest level since the Cold War, with spending likely to stay elevated until 2027.⁷
- Up to two-thirds (67%) of the liquid reserves in Russia's National Wealth Fund have already been allocated to war financing.⁸
 - A planned increase in value-added tax from 20% to 22% is intended to bolster revenues for war-related expenditures.⁹

Production

- Artillery shell production is expected to reach 1.5 to 2 million units annually to compensate for significant front-line losses.¹⁰ Annual production capacity for main battle tanks (T-90, T-14) and modernizations is estimated at about 300-500 units. In addition, older models are being reactivated and repaired.¹¹
- President Putin called for stronger integration of civilian technologies into the military sector to make production processes more efficient and catch up technologically.¹²

Source: 1) European Commission (2025a); 2) European Commission (2025b); 3) Sostak (2024); 4) Council of the European Union (2022); 5) NATO (2022); 6) European Commission (2025c); 7) Cooper (2025); 8) IPG Journal (2025); 9) Korsunskaya and Bryanski (2025); 10) Euronews (2025); 11) ISW (2025); 12) ZOIS (2024)

New Political Defense Goals and the Industry's Needs to Contribute Efficiently and Effectively

Strategic positioning and NATO threat assessment

- Since Russia's large-scale invasion of Ukraine in February 2022, NATO has classified Russia as the most significant and immediate threat to the security of the Alliance and to peace and stability in the Transatlantic theater.¹
- According to NATO, Russia pursues a policy aimed at destabilizing the European security order, including through military aggression, nuclear threats, hybrid operations such as cyberattacks and disinformation, as well as the buildup of conventional forces near NATO borders.
- The Vilnius Summit Declaration of 2023 highlights this:
 - *„Russia has increased its multi-domain military build-up ... including near NATO borders ... Russia's actions demonstrate a posture of strategic intimidation ...“²*
- The Alliance views this threat as structurally long-term, leading to a permanent adjustment of defense and deterrence capabilities. As emphasized in the NATO Secretary General's Annual Report 2024:
 - *„In 2024, NATO focused on significantly strengthening its deterrence and defense posture across the land, air, maritime, cyberspace and space domains, and against any potential adversary, including at short or no notice.“³*

NATO reaction, defense measures, and outlook

- At the NATO Summit 2025 in The Hague, member states reaffirmed Russia as a “long-term threat” to Euro-Atlantic security. The summit declaration states:
 - *„In the face of profound security threats and challenges, in particular the long-term threat posed by Russia to Euro-Atlantic security and the persistent threat of terrorism, Allies commit to invest 5% of GDP annually on core defense requirements as well as defense-and security-related spending by 2035 to ensure our individual and collective obligations.“⁴*
- In addition to increasing defense spending, NATO has reinforced the Enhanced Forward Presence (eFP) in Eastern Europe, restructured the NATO Response Force into the Allied Reaction Force, and expanded airspace and naval operations.^{5,6}
- NATO aims to enhance its deterrence posture toward Russia while bolstering resilience against hybrid threats. Despite these measures, NATO continues to stress its openness to dialogue.
- Continuous adaptation of deterrence and defense measures remains a core pillar of NATO's strategy to protect member states' territorial integrity and uphold the rules-based international order.³

Source: 1) NATO (2022); 2) NATO (2023); 3) NATO (2024a); 4) NATO (2025a); 5) NATO (2024b); 6) NATO (2024c).

NATO plans the next development step – more investment, more capacity, more security

Defense spending of NATO members

NATO Member	Defense Expenditures (2024, € bn.)	Share of Equipment (2024)	Defense Expenditures as % of GDP (2024)	Target: Defense Expenditures at 3.5 % of GDP (€ bn., 2024 Prices)
Albania	0.4	27%	1.7%	0.9
Belgium	7.9	15%	1.3%	21.5
Bulgaria	2.0	32%	2.0%	3.6
Croatia	1.6	26%	1.9%	3.0
Czech Republic	6.6	38%	2.1%	11.2
Denmark	8.9	31%	2.3%	13.7
Estonia	1.3	23%	3.4%	1.4
Finland	6.7	41%	2.4%	9.7
France	59.6	28%	2.0%	102.6
Germany	86.6	21%	2.0%	151.3
Greece	6.5	26%	2.7%	8.3
Hungary	4.4	48%	2.1%	7.2
Italy	32.7	22%	1.5%	76.4
Latvia	1.3	25%	3.4%	1.4
Lithuania	2.4	30%	3.1%	2.7
Luxembourg	0.7	51%	1.2%	2.1
Montenegro	0.1	30%	1.7%	0.3
Netherlands	20.2	23%	2.0%	39.6
North Macedonia	0.3	30%	1.9%	0.5
Norway	10.0	27%	2.3%	15.3
Poland	31.8	43%	3.8%	32.3
Portugal	4.5	19%	1.6%	9.9
Romania	7.7	32%	2.2%	12.4
Slovakia	2.6	35%	2.0%	4.6
Slovenia	0.9	25%	1.4%	2.3
Spain	22.7	31%	1.4%	55.6
Sweden	12.9	35%	2.3%	19.6
Turkiye	26.1	33%	2.1%	42.9
United Kingdom	77.8	33%	2.3%	116.7
Sum	447.3	28%	2.9%	769.0

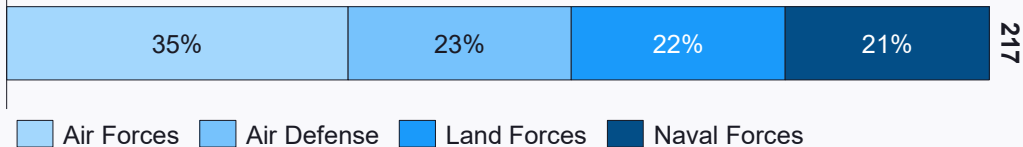
Investment needs for defense and security until 2035

- The June 24-25, 2025, NATO Summit delivered several major outcomes. NATO member states committed to increase defense expenditure to 5% of GDP by 2035, dedicating 3.5% to core defense and 1.5% to security-related investments, such as military-ready infrastructure, cybersecurity, and safeguarding energy pipelines.
- To achieve the 3.5% GDP goal by 2035, European NATO countries need to increase defense spending by around 72%, reaching about €320 billion annually. Germany alone would account for approximately €75 billion. An additional €330 billion annually would be required across Europe for security-related investments.
- In 2024, NATO members spent an average of 28 % of their defense budgets on equipment, with individual values ranging from about 15 % to 50 %. Future investments in equipment aim to close capacity gaps. These gaps average 30 % for equipment and as much as 400 % for air defense, as highlighted by the NATO Defense Planning Process (NDPP) 2025 and recent statements by the Secretary General.
- This study estimates and evaluates these investments by equipment type, using demand forecasts derived from the NDPP targets for 2025 and an IISS report, and examines their broader economic relevance.

Source: 1) EY-Parthenon calculations; 2) NATO 2025

The 3.5% target requires annual investments of nearly €220bn in equipment and ammunition, of which approximately 60% for air forces and air defenses

Investment requirements by category (in € billion, 2024 prices)



	NDPP 2025	US-Replacement	Total
Land Forces	19%	2%	22%
Armored Fighting Vehicle	15%	2%	17%
Armored Support Vehicle	1%	0%	1%
Artillery	4%	0%	4%
Air and Space Forces	30%	5%	35%
Combat-capable Aircraft	11%	2%	13%
Combat-capable Helicopter	1%	1%	2%
Non-combat-capable Aircraft	10%	1%	10%
Non-combat-capable Helicopter	7%	1%	8%
Satellite	1%	0%	1%
Uncrewed Systems	1%	0%	1%
Naval Forces	18%	2%	21%
Naval Surface Vessels	10%	2%	11%
Submarines	9%	1%	9%
Air Defense and ATSGM¹	21%	2%	23%
TOTAL	89%	11%	100%

High costs for air defenses and air superiority

- To meet equipment targets and replace major US military platforms. European NATO members are projected to invest around €2.2 trillion over the next decade.
- Armored vehicles, combat aircraft, air defense systems, and ammunition will account for the largest portion of expenditures.
- Total expenditures across air, land, and naval domains are roughly aligned, but unit costs vary substantially.
- NATO plans a full-scale modernization and expansion of its main battle tank capabilities, with investments potentially totaling €170 billion reflecting both quantity targets and the expense of cutting-edge tank systems.
- Spending on air and missile defense within NATO is projected to surge significantly over the coming years, potentially reaching €500 billion for next-generation systems.

Source: 1) EY-Parthenon calculations

Notes: 1) ATSGM: Advanced Tactical and Strategic Guided Munitions

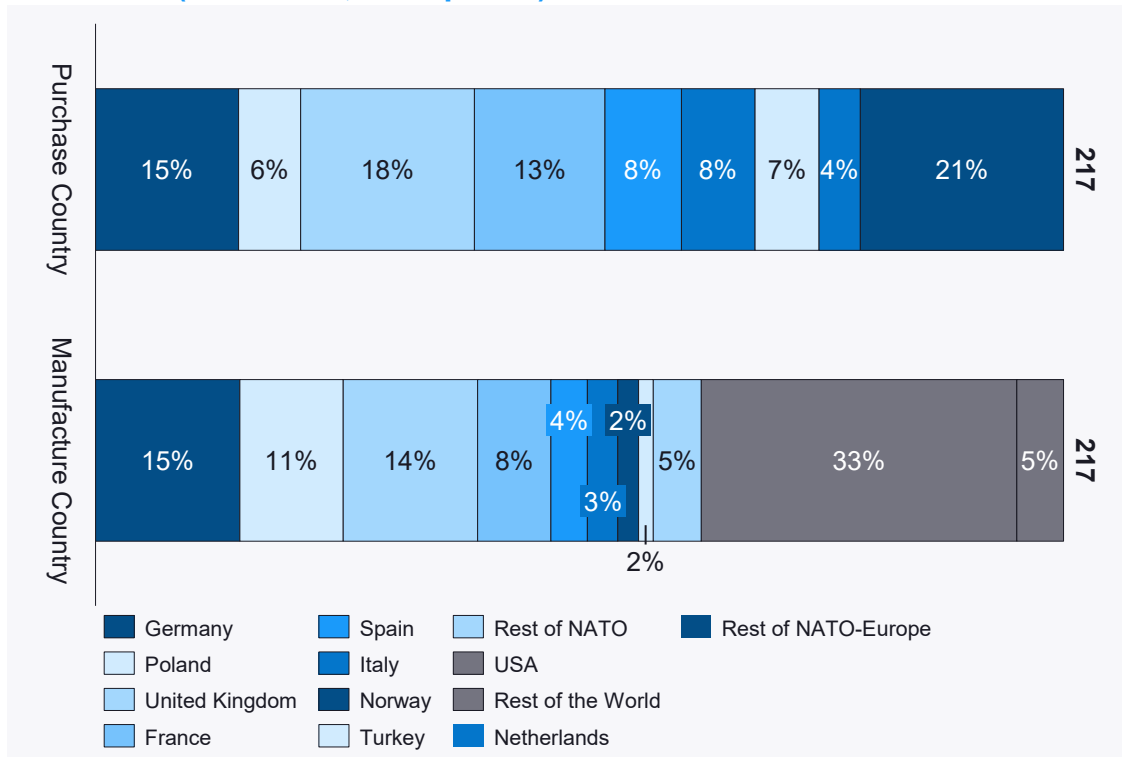
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Current Developments in Europe's Defense Economy



European NATO will be able to meet its own demands in large part, but dependence on the US will remain

Investment requirements by country compared to spending of countries (in € billion, 2024 prices)



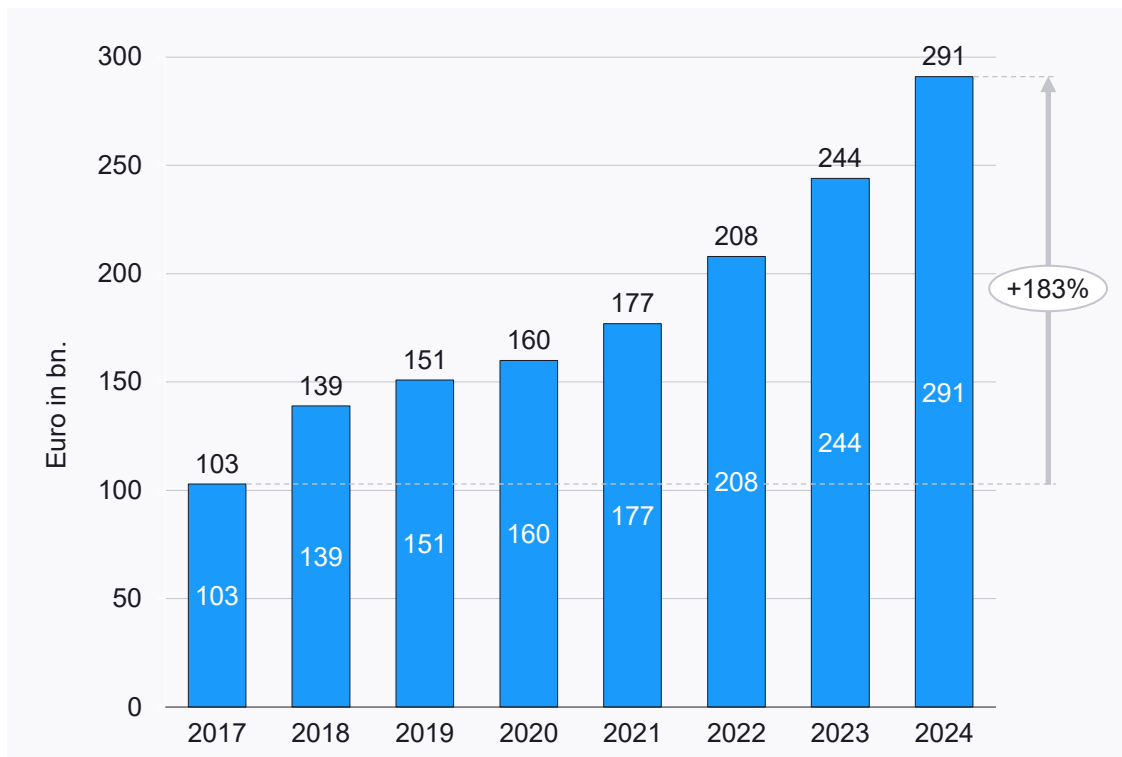
Core NATO countries with strong demand for defense goods

- By 2035, NATO-Europe is projected to spend around €217 billion annually on equipment, assuming defense budgets at 3.5% of GDP and an average equipment share of 30%.
- Germany, the United Kingdom, and France together account for roughly 46% of total spending – about €100 billion per year.
- Furthermore, Germany, France, the United Kingdom, and Poland collectively handle around 47% of defense equipment orders, equivalent to approximately €102 billion annually.
- Despite political measures to strengthen European procurement, around one-third of equipment will still be procured from the USA, highlighting ongoing reliance on American systems for key platforms.
- Legacy procurement structures and current systems in service underpin this dependency, limiting a faster transition to European procurement.

Source: 1) EY-Parthenon calculations

Capacity expansion and industrial scaling drive the transformation from manufacturing to serial production in Europe's defense industry

Development of order backlog of European defense companies¹



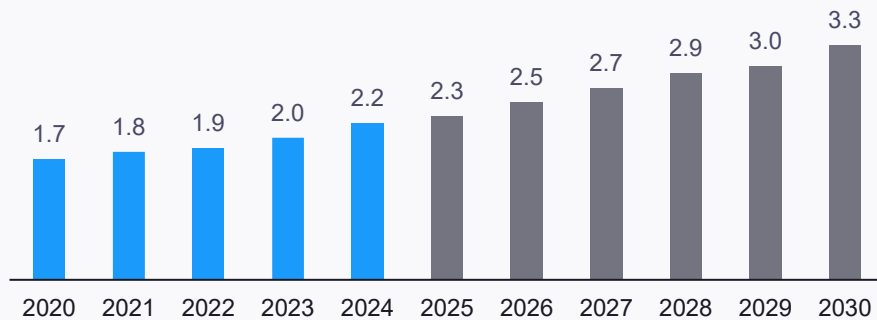
Capacity expansion and joint procurement

- Since 2017, the order backlog of European defense companies has nearly tripled from €103 to €291 billion – reflecting a 183% surge in demand. The record setting order numbers secure steady revenues going forward and highlight the demand surge since the beginning of Russia's invasion of Ukraine.¹
- The industry is prepared to expand its capacities, however, investment decisions hinge on predictable planning and aligned requirements. Investments are already ongoing (e.g., for ammunition and missile production), yet raw material dependencies, skilled labor shortages, and a fragmented market remain major hurdles.²
- Political momentum for greater cooperation and European autonomy is growing yet diverging national interests hinder the implementation of a unified strategy – despite initiatives such as Readiness 2030, EDIRPA, and NATO's Defense Production Action Plan.^{3,4,5}
- Joint procurement projects, like the Next Generation Medium Helicopter (NGMH), Next Generation Rotorcraft Capability (NGRC), or the Future Combat Air System (FCAS) aim to create economies of scale and reduce costs.⁶
- At the same time, overlapping programs at the NATO- and EU-level complicate coordination and spark strategic conflicts. Additionally, major projects frequently falter due to divergent national priorities, structural differences in decision-making and procurement mechanisms, as well as high-tech demands, undermining confidence in large-scale project delivery.

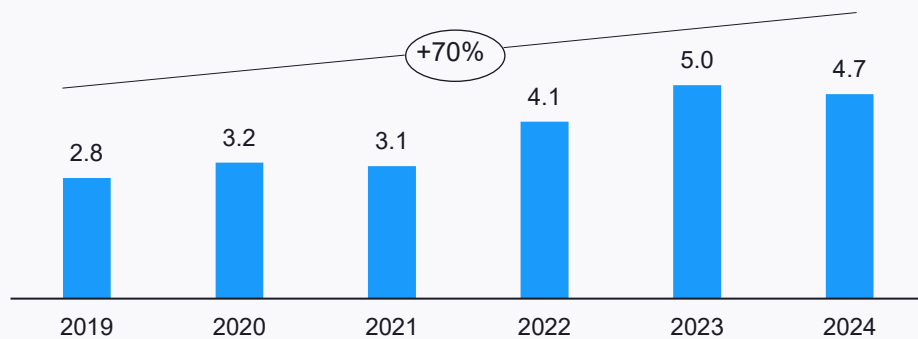
Source: 1) FitchRatings (2025); 2) Brett (2025); 3) European Commission (2025a); 4) Clapp (2025); 5) NATO (2025b); 6) PESCO (2023)

Globally rising defense budgets have almost doubled the order backlog of European companies

Global defense expenditure (in € billion)¹



Order backlog of European companies relative to annual revenue²



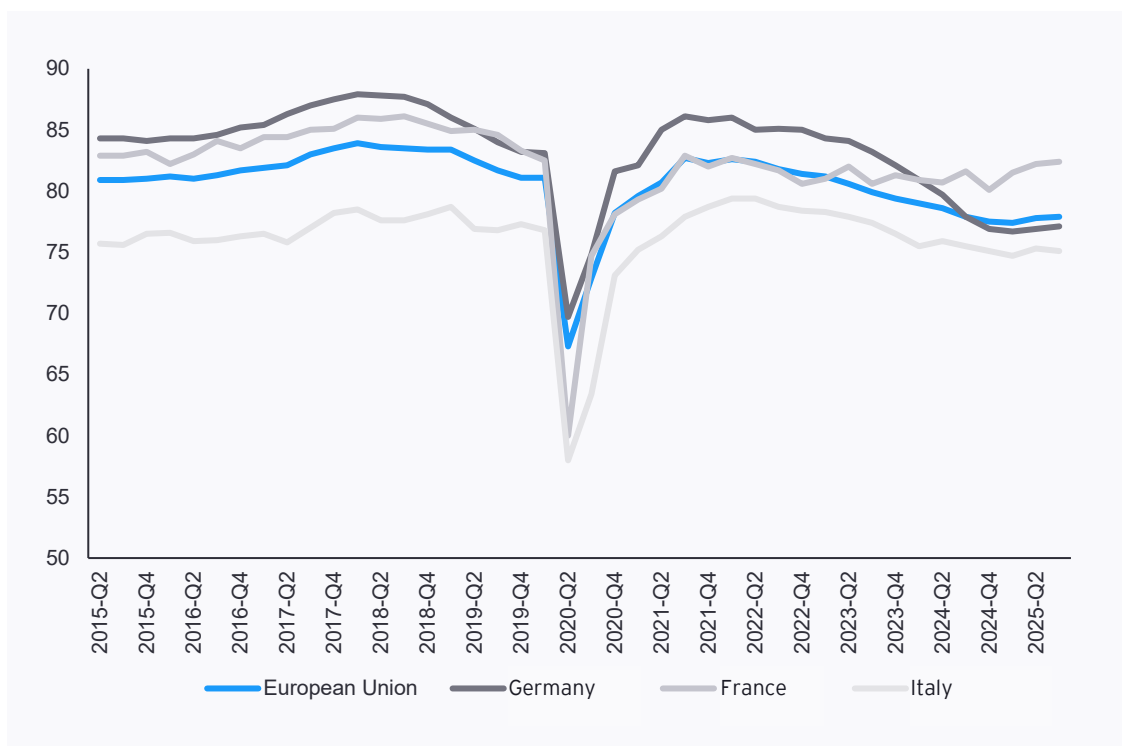
The increase in order backlogs of European defense companies requires an expansion of production capabilities

- The defense sector is largely unaffected by economic development cycles. A decisive factor for companies' outlook is the determination of global defense budgets at the political level.
- Since February 2022, defense companies worldwide have experienced significant growth driven by a surge in projects and incoming orders, a trend further reinforced by NATO's decision to raise its spending target to 3.5% of GDP.
- Large defense firms dominate the industry, supported by a medium-sized base of suppliers. Rising demand is driving significant expansion of capital-intensive production facilities.
- European defense manufacturers have experienced significant increases in order backlogs since 2022, underscoring the sector's growth trajectory.
- Given the significant demand surge for defense equipment, financing of numerous projects has become increasingly challenging.
- Despite rapid growth in defense budgets offering a clear expansion path, companies must factor in a rising need for external capital for interim financing.

Source: 1) SIPRI Military Expenditure Database, 2) numerous company websites, DekaBank

Expansion of defense production is possible with existing industrial reserves, but structural hurdles remain

Utilization of production capacity in EU manufacturing (in %, 2015–2025)¹



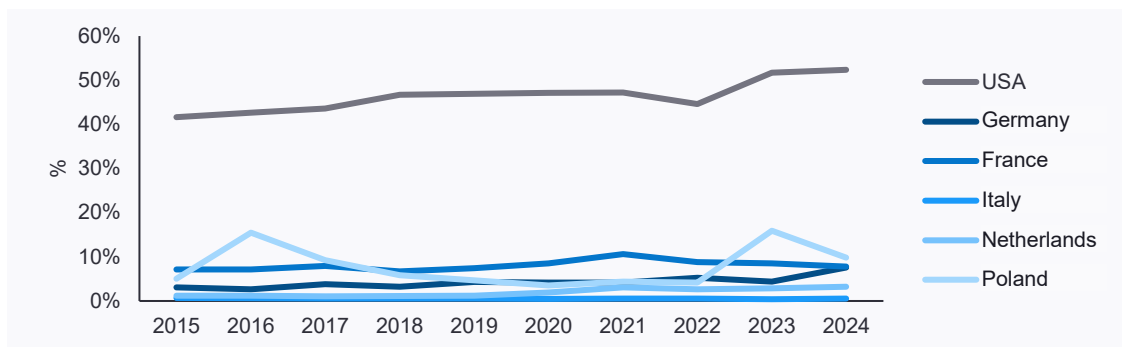
Mobilization and conversion capability

- Manufacturing capacity utilization (measured as the share of deployed capacity relative to the estimated total capacity potential) across the EU and its three largest economies is currently below 85 percent, indicating a notably low level.
- Germany has considerable industrial reserves as manufacturing capacity utilization is far below its long-term average, driven by falling output in key sectors (e.g., machinery, chemicals, and automotive).^{2,3} Similar patterns in other regions suggest technical scope to repurpose or expand capacity.
- If the defense industry can leverage unused capacity from other industries, it would significantly boost total economic performance.
- However, the ability to mobilize and convert capacity is constrained not only by utilization rates but also by structural obstacles such as long procurement cycles, insufficient industrial scaling, fragmentation, and shortages of critical materials.⁴
- Small and medium-sized enterprises (SMEs) are disproportionately affected, given their limited financial and human resources and reliance on key customers exacerbate vulnerability.
- Policy measures such as long-term procurement planning, harmonization of standards, and targeted funding programs are essential to mobilize SME capacity for defense manufacturing.

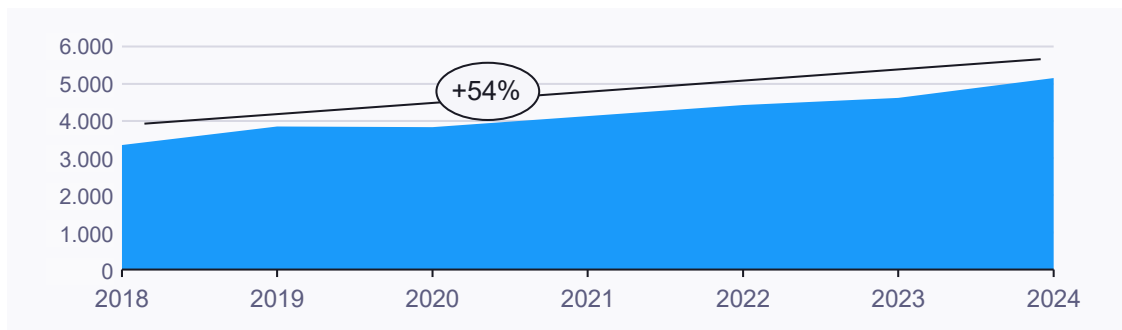
Source: 1) Eurostat (2025); 2) IfW (2024a); 3) IfW (2024b); 4) EPRS (2024)

Joint R&D would support platform concepts and thus make procurement and maintenance more efficient and cost-effective

R&D in defense – share of government R&D spending (in %)¹



R&D in defense – expenditures by European companies (€ million)²



R&D and dual-use in the defense industry of the future

- European governments have historically devoted a much smaller share of their R&D budgets to defense than the United States. Poland and Germany have slightly increased these shares since 2022.³ Defense companies in Europe have raised their expenditures in recent years – by 54% since 2018 (nominally).
- US companies benefit primarily from higher research intensity and a tightly connected ecosystem of government, private industry, start-ups, and venture capital – frameworks Europe must still establish to replicate such success.
- Fragmented national budgets and overlapping programs in Europe hinder economies of scale, while lack of coordination and limited private-sector involvement slow innovation.⁴
- NATO-Europe's range of systems – 16 types of main battle variants, 18 fighter aircraft types, and nearly 30 frigates or destroyers – adding complexity, driving up operating costs, duplicating maintenance, and straining logistics. Such fragmentation limits interoperability and consumes resources that could otherwise drive innovation and modernization.⁵
- Leveraging dual-use technologies such as AI, space systems and semiconductors can help shorten development cycles and significantly reduce costs. At the same time, integrating such technologies requires close collaboration between industry, research, and government bodies.⁶
- Export restrictions, data protection regulations and lengthy certification processes further complicate rapid integration into military procurement processes.⁷

Source: 1) OECD (2025); 2) DekaBank; 3) EDA (2024); 4) Roland Berger (2025); 5) IISS (Military Balance+ 2025); 6) VDI/VDE (2025); 7) Gamito et al. (2025)

Notes: 1) R&D expenditures excluding private sector R&D spending

Europe's defense ecosystem relies on targeted acquisitions, cooperation, and technological sovereignty as keys to European resilience

Defense ecosystem

- Europe is undergoing a period of significant consolidation and strategic technology acquisitions in the defense and security sector. Drivers include increased defense budgets, EU funding instruments (EDF / Permanent Structured Cooperation (PESCO)), NATO initiatives to strengthen production, and a focus on key technologies (AI, autonomous systems, space, cyber).
- In the first half of 2025, M&A volume in the European defense sector reached USD 2.3 billion, an increase of 35% compared to the previous year.
- This dynamic strengthens industrial resilience and enables partial substitution of certain US capabilities (e.g., ammunition, intelligence, surveillance and reconnaissance, C2 software) but does not replace all transatlantic strategic capacities in the long term (e.g., nuclear deterrence, satellite data, strategic airlift and air refueling capacity).

What trends can be observed?

- Targeted M&A and tech acquisitions**
Companies across Europe are targeting acquisitions in AI, sensor technologies, and integration expertise to shift from hardware to data-driven systems.
- Cross-border consortia & "industrial champions"**
Airbus, Thales, and Leonardo are exploring closer cooperation in satellite manufacturing; new production facilities (e.g., in Italy) strengthen Europe's dual-use space capabilities and reduce US dependencies.
- Institutionally supported cooperation**
EU funds (EDF), PESCO projects, and NATO surge plans drive joint research, procurement, and production networks.
- Resilience & nearshoring**
Ammunition, electronics, and shipbuilding are being brought back into European supply chains or secured through government contracts and funding initiatives.

Examples

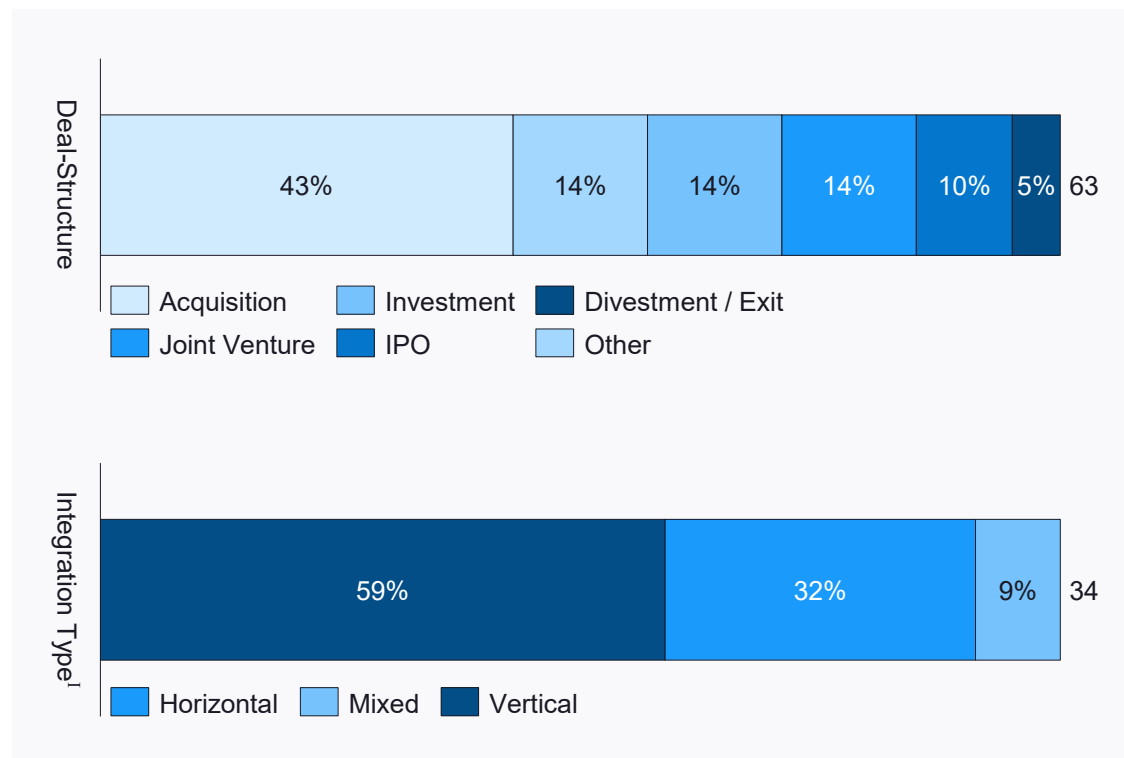
- Rheinmetall:** Rheinmetall is pursuing aggressive internationalization through acquisitions of US companies and marine-sector acquisitions, while securing direct orders from Germany and other NATO members – illustrating how a European firm expands both capacity and market reach at the same time.
- HENSOLDT:** The acquisition of ESG, a leader in system integration and electronic warfare, reinforces Europe's technological foundation in sensor technology and C4I, reducing reliance on imported integration solutions.
- Thales / Leonardo / Airbus (Space):** Intensive talks on division of labor and potential cooperation/joint ventures in satellite manufacturing; parallel investments in large production facilities (e.g., in Italy) signal a European consolidation push in the space segment.
- Indra und EM&E:** Exploring a merger aimed at integrating radar technology know-how with advanced weapons system capabilities.
- EDF projects for ammunition production ("ASAP" – Act in Support of Ammunition Production):** EU funding to boost European ammunition production capacity with €500 million for 31 ongoing projects.

Source: 1) A&O Sherman (2025); 2) Bahceli, Y. (2025); 3) Federal Cartel Office (2025); 4) DefenseNews (2025); 5) Foy, H., Khalaf, R., & Hall, B. (2024); 6) Hensoldt (2025a); 7) Hensoldt (2025b); 8) Levingston, I., & Minder, R. (2025); 9) Reuters (2025a); 10) Reuters (2025b); 11) Reuters (2025c); 12) Reuters (2025d); 13) Wolff, G. B., Steinbach, A., & Zettelmeyer, J. (2025)

Notes: I) C4I: Command, Control, Communications, Computers, and Intelligence

Persistent fragmentation hampers the creation of an integrated European defense architecture despite political initiatives

Number and structure of European M&A activities in 2025



Vertical integration as a means of securing critical upstream inputs

- Defense market transaction analysis shows a clear trajectory toward consolidation. Acquisitions account for 43%, the largest share, indicating a strategic desire for full integration of key technologies and capabilities. High demand exists for skills in aerospace, cybersecurity, and additive manufacturing.
- IPOs (10%) and divestitures (5%) illustrates the sector's high activity level, with companies adjusting portfolios to match strategic priorities and expansion opportunities.
- With 59%, vertical integration prevails as the dominant approach to safeguard upstream inputs and build robust supply chains. At the same time, horizontal integration (32%) remains a key lever for expanding market presence and driving technological consolidation.
- Joint ventures and minority stakes, accounting for 14%, are becoming increasingly significant, especially for international collaboration. Joint ventures between defense corporations enable licensed production and industrial participation by national companies, allowing them to integrate key technologies while leveraging established platforms. These not only strengthen interoperability within NATO and EU structures but also reduce fragmentation in the European defense market.

Source: 1) EY-Parthenon analysis: selected M&A transactions in 2025, ongoing and completed

Notes: 1) Only relevant for acquisitions and joint ventures

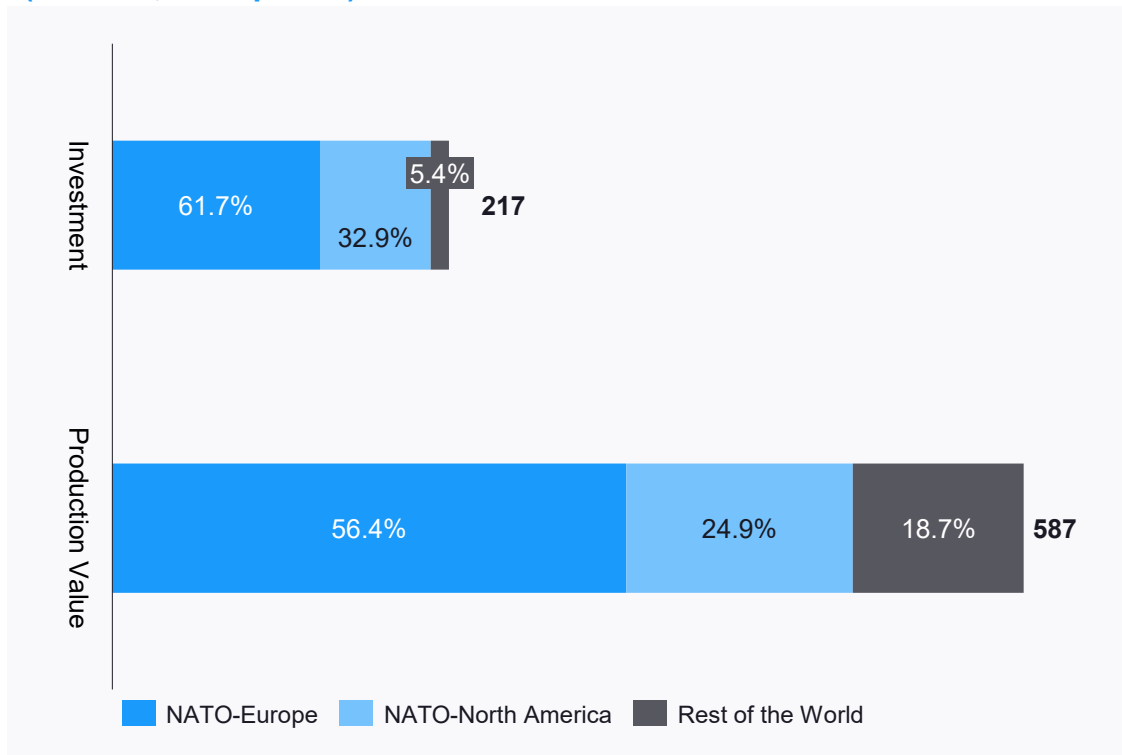
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Economic Impacts



NATO's commitment to increase investment in defense equipment is driving production growth

Regional distribution of producers and global production value (€ billion, 2024 prices)



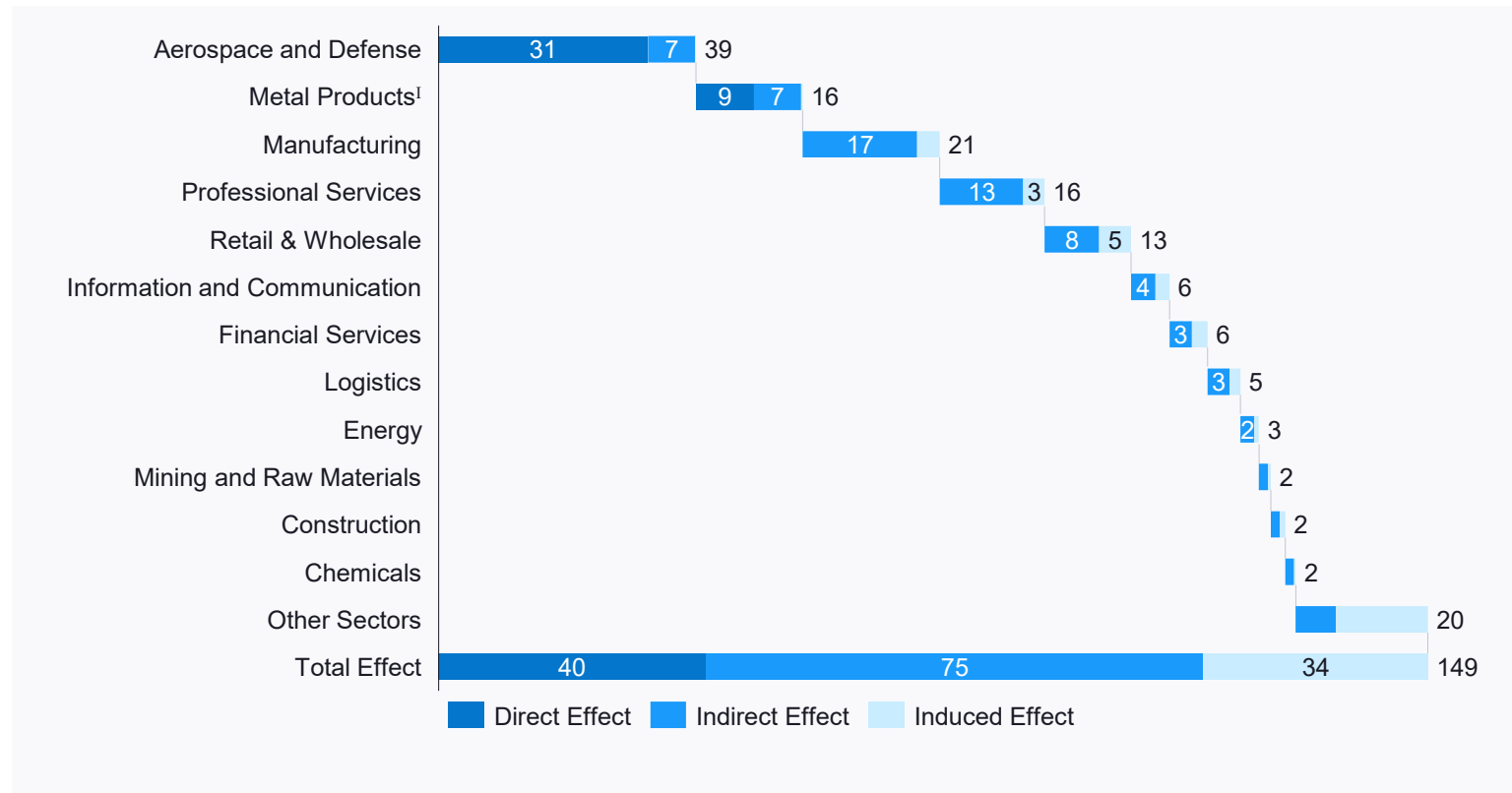
Strong demand in Europe and North America

- Increased investments in European security are triggering far-reaching industrial dynamics that extend beyond national borders. The resulting demand for defense goods leads to significant demand for goods and services along various supply chains.
- With an annual investment volume of €217 billion, global production worth around €587 billion is generated. Meaning: every euro invested generates an additional economic impulse of about €2.70.
- Approximately 62% of defense equipment demand stems from (NATO-) Europe. Of this, roughly 56.4% of the associated industrial and service-related value creation also takes place in NATO-Europe. Germany, the United Kingdom, France, and Poland benefit significantly, where investments by European alliance states generate especially high demand.

Source: 1) EY-Parthenon calculations

Higher defense investments not only contribute to European security but also generate significant value added

Gross value added by sector in Europe (in € billion, 2024 prices)



Significant value creation in Europe

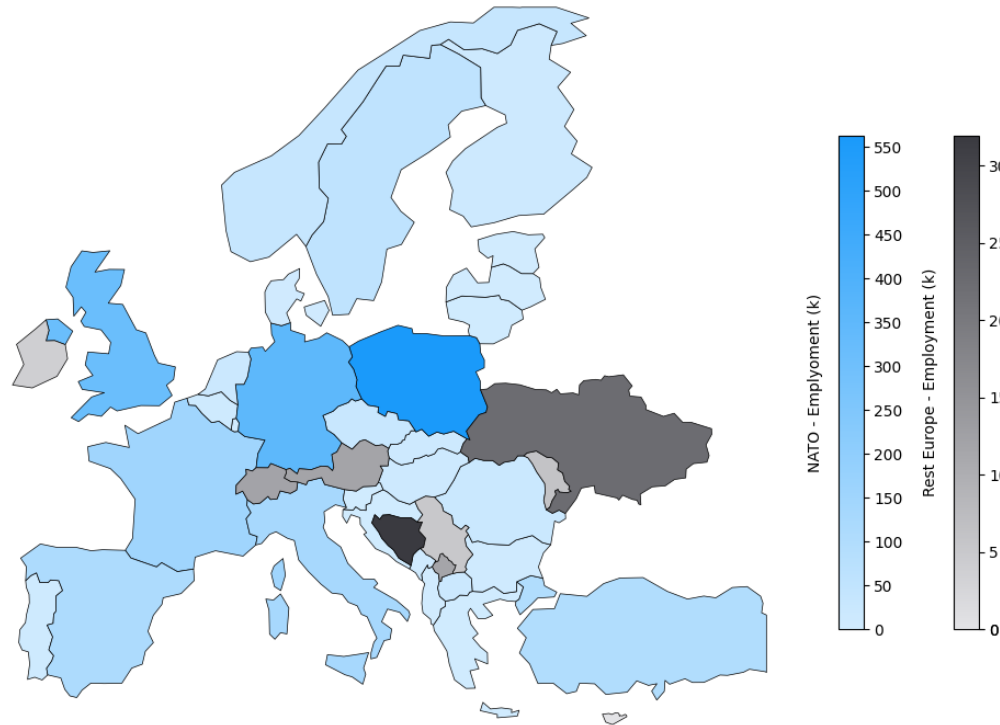
- Companies in the defense industry benefit directly from rising defense budgets of alliance nations through increased order volumes.
- Higher defense investments not only contribute to European security but also generate significant value added. Gross value added in NATO-Europe amounts to around €149 billion annually, of which approximately €75 billion is generated along the supply chain.
- The European supplier industry is generating almost twice as much value as direct production, which accounts for €40 billion. This development offers new opportunities for companies seeking to reposition themselves and expand into the defense industry amid stagnant markets.
- In addition to the direct and indirect effects arising from demand for equipment and ammunition, the investments also lead to consumption-induced value creation of €34 billion per year in Europe.

Source: 1) EY-Parthenon calculations

Notes: 1) Including the production of weapons and ammunition

NATO investments create up to 1.9 million jobs annually among its European member states – about half along the supply chain

Employment effects in NATO-Europe (in thousand)



Employment effects in Europe

- We observe significant employment effects in Europe, driven by European investments in aerospace and defense.
- Poland, Germany, the United Kingdom, and France see the largest absolute employment effects in Europe – accounting for almost 70% of all employment effects in Europe.
- Within NATO-Europe, investments in aerospace and defense create and secure around 1.9 million jobs annually, including nearly 600,000 direct jobs within European defense companies.
- Along supply chains, an additional 971,000 indirect jobs are generated across NATO-Europe.
- Direct and indirect employment accounts for approximately 78% of the total effect in NATO-Europe.
- Globally, European defense investments create or secure almost 5 million jobs each year, with about one-third attributable to direct and indirect employment. In the United States alone, the absolute employment effect exceeds 600,000 jobs annually.

Source: 1) EY-Parthenon calculations

Notes: 1) All employment effects include full-time and part-time positions.

European defense investments generate significant economic effects in Europe – €149 billion in annual value creation

Economic Effects in NATO-Europe

NATO-Europe	Direct Effect	Indirect Effect	Induced Effect	Total Effect	„Multiplier“:
					(indirect + induced) direct effect
Gross value added (€ billion)	40	75	34	149	2.7
Gross wages (€ billion)	25	41	15	81	2.3
Employment (thousand jobs)	581	971	439	1.991	2.4

Overview of the Economic Effects

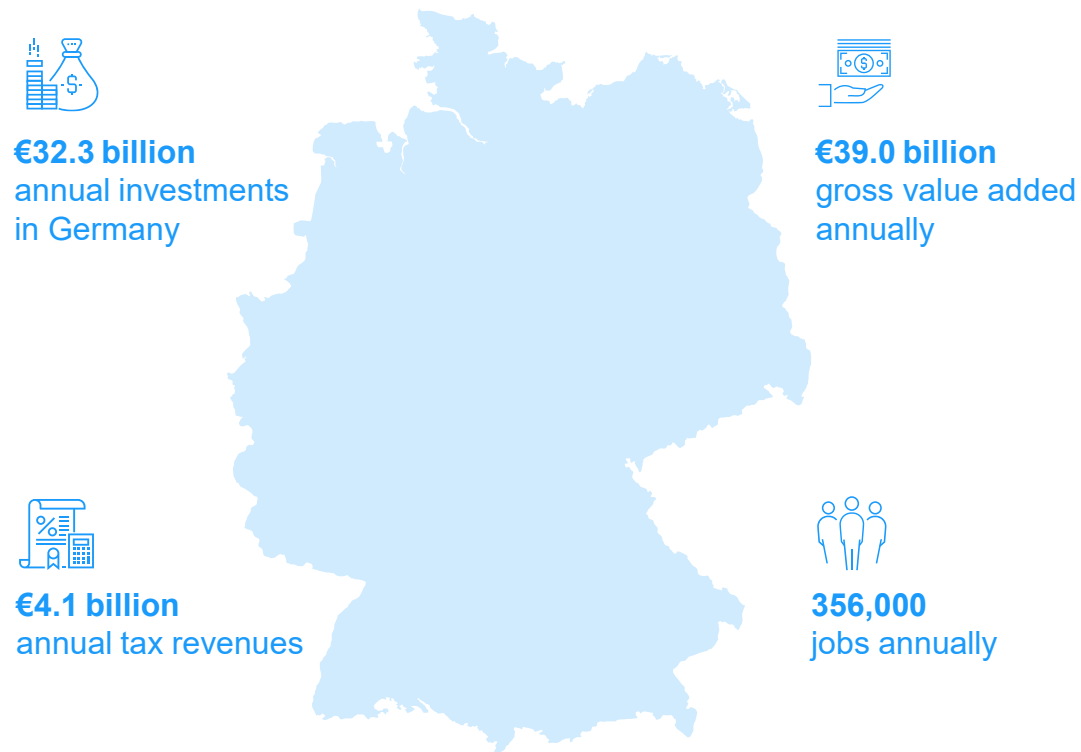
- The GVA multiplier of 2.7 illustrates: every euro of direct value creation triggers an average of €2.70 in additional effects along supply chains and through consumer spending.
- The employment impact is substantial: around 2.0 million jobs are created or maintained annually – almost 600,000 directly in the defense industry and nearly one million indirectly among suppliers.
- For every direct job, an average of 2.4 additional positions are added, underscoring the importance of defense investments for the labor market.
- Positive effects are also visible outside Europe: an additional €128 billion in value creation and about 2.6 million jobs annually (not shown). Moreover, further spending, such as on infrastructure, could provide additional growth impulses – these are not included here.
- Overall, the GVA in Europe of €149 billion corresponds to a GDP contribution of about 0.7%.

Source: 1) EY-Parthenon calculations

Notes: I) The GVA shown within European NATO states is lower than the investment sum because extra-European procurement and GVA are not represented. II) All employment effects include full-time and part-time positions..

Deep Dive – Germany: Demand for German defense goods drives impulses for the German economy and secures more than 350,000 jobs

Impact of European defense investments in Germany



Economic impact for Germany

- European investments of around €32 billion annually generate gross value added of €39 billion in Germany (about 8.6 permille of German GDP) and create or secure about 350,000 jobs.
- The increase in investments under the 3.5% target requires additional production capacities. If all NATO members were to reach 2.9% in 2029 as Germany, overall economic growth in Germany of about 0.7% by 2029 would be expected.
- German defense spending totals about €32 billion annually across domestic and foreign commitments.
- Public revenues (corporate tax, income tax, and social security contributions) rise by about €4.1 billion annually. German industry contributes most to covering defense investments.
- Significant direct and indirect effects occur particularly in the defense and metalworking industries. Overall, manufacturing accounts for about half of all gross value added and employment effects.
- If future procurement were to focus more strongly within Europe to increase independence from the USA, even stronger economic effects in Germany would be expected.

Source: 1) EY-Parthenon calculations

Notes: 1) All employment effects include full-time and part-time positions.

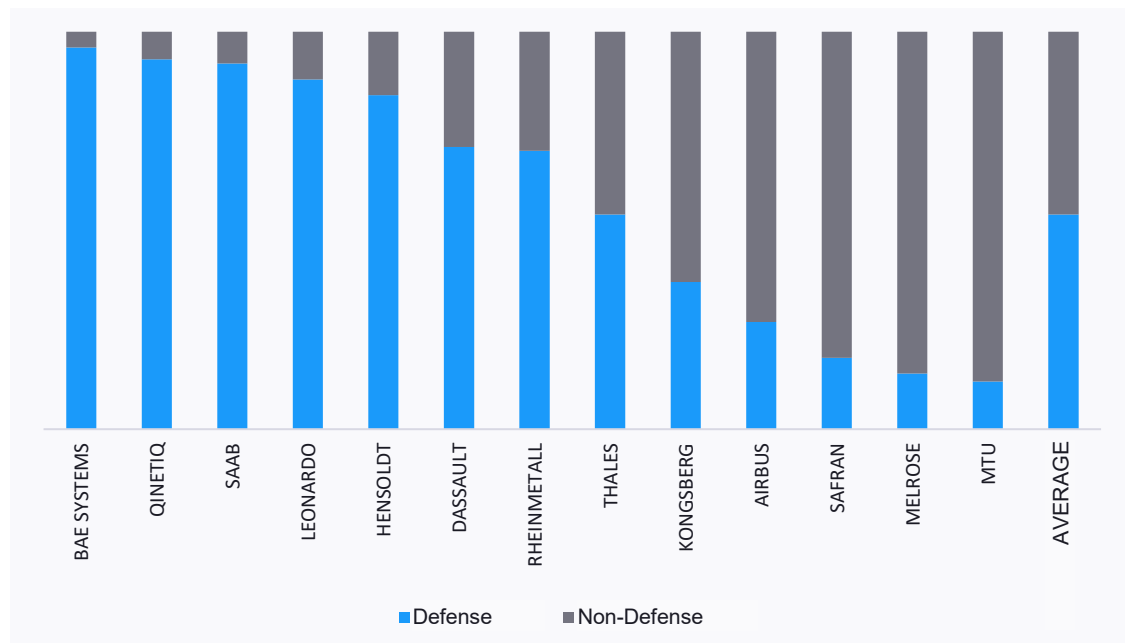
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Financial and Business Impacts



Faster growth of European companies compared to their US competitors visible

Revenue share by purpose of use for European companies¹



- A risk-sensitive approach by companies – that is, expanding the application possibilities of defense products to include civilian use to increase societal acceptance – is advisable and to be expected.

Overview of fundamental data for defense corporations²

Companies	Revenue in bn.*	CAGR 5J in %	Operating Profit	CAGR 5J in %	Operating Margin in %	EPS	CAGR 5J in %	P/E FY 2	EV/EBITDA	Div. Yield	Market Cap in bn.*
Europe											
Airbus Group	69.230	1.0	4.954	-5.3	7.2	5.1	3.9	21.3	13.61	1.48	160.79
Babcock	4.831	2.0	364	16.5	7.5	0.5	-0.5	19.5	8.43	0.55	5.88
BAE Systems	28.335	7.6	2.685	7.4	10.2	0.7	0.5	19.9	10.83	1.78	55.68
Dassault Aviation	6.230	0.3	532	-7.6	8.5	13.5	8.0	14.2	9.79	1.73	21.37
Hensoldt	2.240	15.1	184	-	8.2	1.6	0.4	35.9	9.21	0.51	11.31
Leonardo	17.763	5.4	1.197	6.2	6.7	1.9	1.2	19.2	7.81	1.04	28.94
Melrose	3.468	-16.1	-4	-	-0.1	0.3	-0.2	13.1	21.33	1.06	7.61
MTU Aero Engines	7.488	11.5	840	8.1	11.3	14.0	4.5	18.0	12.86	0.60	19.71
QinetiQ	1.932	12.8	-90	5.9	-4.7	0.3	0.1	13.6	8.09	1.88	2.53
Rheinmetall	9.751	10.3	1.391	19.6	14.3	17.8	9.0	27.5	15.62	0.46	80.62
Rolls-Royce	17.848	4.8	2.734	78.1	14.5	0.2	0.0	30.1	15.54	0.93	94.62
Saab	63.751	12.8	5.608	14.5	8.8	7.7	4.7	29.1	15.12	0.42	258.95
Safran	27.317	4.9	4.056	3.1	14.6	7.3	0.3	25.2	15.55	0.96	128.40
Thales	20.577	2.8	1.262	5.0	6.1	9.2	4.9	20.7	10.57	1.46	52.27
Average	20.054	5.4	12.6	12.6	2.6	2.6	2.6	2.6	2.6	1.1	1.1
Global											
Axon Enterprise	2.083	31.5	59	-	2.8	5.94	1.6	69.0	326.84	-	53.25
Boeing	66.517	-1.5	-10.707	-	-16.1	-20.38	-11.7	34.5	-	-	162.89
General Dynamics	47.716	4.1	4.796	1.0	10.1	13.63	12.1	18.0	13.41	1.77	90.13
General Electric	35.121	-11.9	5.499	-2.2	14.2	4.6	2.6	38.1	26.25	0.45	321.30
Howmet Aerospace	7.430	2.3	1.633	6.8	22.0	2.69	1.4	37.7	23.59	0.21	76.95
Huntington Ingalls	11.535	5.4	535	-12.0	4.6	13.96	15.2	16.1	11.51	1.90	11.16
L3Harris Technologies	21.325	11.8	1.918	8.1	9.0	13.1	6.8	20.2	13.52	1.66	53.76
Lockheed Martin	71.043	3.6	7.013	-3.7	9.9	27.99	23.7	16.0	12.58	2.63	117.00
Northrop Grumman	41.033	4.0	4.370	-0.3	10.6	26.08	27.2	19.0	13.43	1.46	85.43
Raytheon Technologies	80.738	12.5	6.538	9.3	8.1	5.73	1.9	21.7	13.09	1.63	215.15
Textron	13.702	0.4	1.268	5.0	9.3	5.48	3.5	10.7	8.85	0.10	14.63
TransDigm	7.940	9.3	3.531	11.4	44.5	33.99	16.1	27.7	25.20	6.99	72.60
Average	33.849	6.0	2.4	2.4	8.4	8.4	8.4	8.4	8.4	1.9	1.9

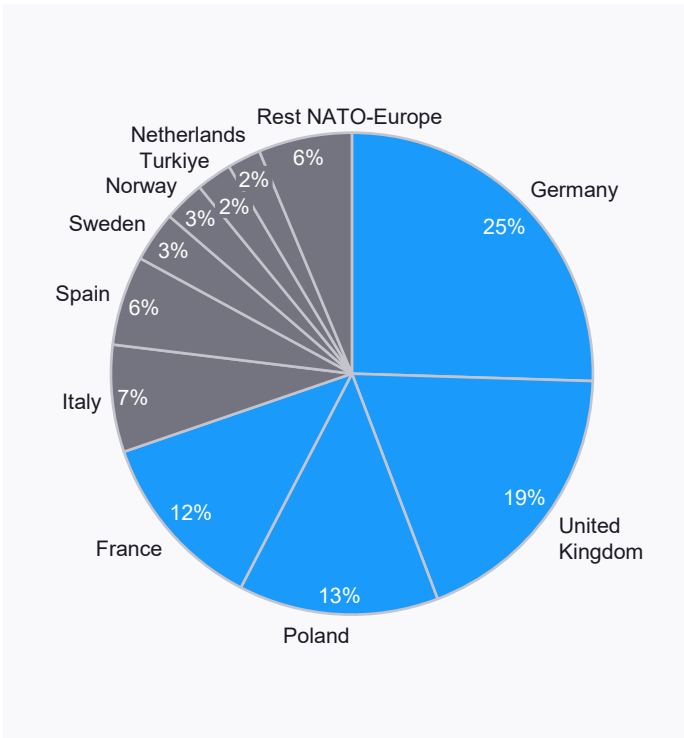
- The positive revenue and profit development of the defense industry will not be merely short-term, as the changed geopolitical situation also suggests higher defense investments in the medium to long term.
- In the past five years, European companies achieved an average revenue growth of over 5.5%. Profit has increased by an average of about 12.5%.
- Thus, the growth rates of European companies are already significantly above the level of their competitors in the US.

Source: 1) various company websites, DekaBank; 2) DekaBank

Notes: 1) local currencies

Replenishment of national defense stocks is covered primarily by companies from Germany, UK, and France

Distribution of European production values by country



Current market scenario

- Over the next ten years, defense investments by European NATO countries will remain at a level of at least €217 billion per year. This new investment level is intended to ensure the defense capability of European NATO countries.
- The US will primarily supply fighter jets and air defense systems. Germany, the UK, France, and Poland stand to benefit most, as European alliance investments create exceptionally high demand in these countries.
- For the planned increase in European defense spending to 3.5% of GDP, an additional €320 billion is necessary. This would correspond to a revenue increase for EU companies of about 40 to 50%.

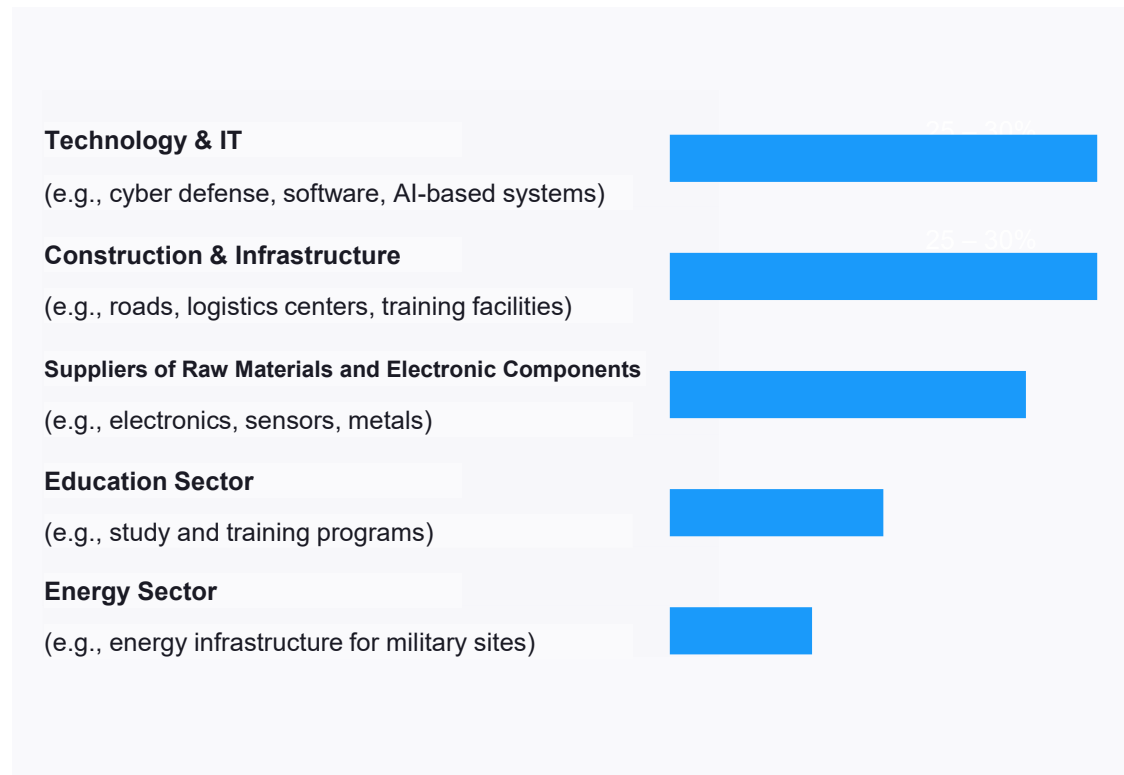
Regional and technological focus

- The growth path for defense will continue to accelerate over the coming years – even independently of a potential ceasefire in Ukraine.
- A large portion of the investments is aimed at replenishing national defense stocks. According to company statements, there have so far been hardly any medium-term investments in highly advanced systems.
- Technologically, the latest developments are being deployed. The share of installed defense electronics is increasing. For example, the new Leopard 2A7+ contains about 45% defense electronics components, compared to only 25% in the Leopard 2A4.
- Approximately two-thirds of the investment flows are expected to be distributed among Germany, the United Kingdom, and France. Companies based in these countries will benefit disproportionately.

Source: 1) EY-Parthenon calculations

Beneficiaries of higher defense budgets: Technology, Construction & Infrastructure, Suppliers of raw materials and electronic components

Beneficiaries of increased defense investments by economic sectors¹



- The distribution of economic impacts across individual sectors depends on many factors, including the type of investments, national strategies, and the prevailing geopolitical situation.
- Significant investments outside the defense sector will occur with the new NATO targets. A volume between €400 billion and €600 billion appears possible.
- According to typical investment patterns, the technology and construction industries could benefit most. But suppliers of raw materials and electronic components are also likely to experience noticeably higher revenue shares.
- Economic analysis shows supply chain focal points outside the defense sector in manufacturing, metal processing, as well as professional, scientific, and technical services.
- Should there be a (partial) withdrawal of the USA from NATO, the energy sector will also become a major beneficiary. In this case, a comprehensive build-up of new supply networks for military facilities would result.

Source: 1) DekaBank

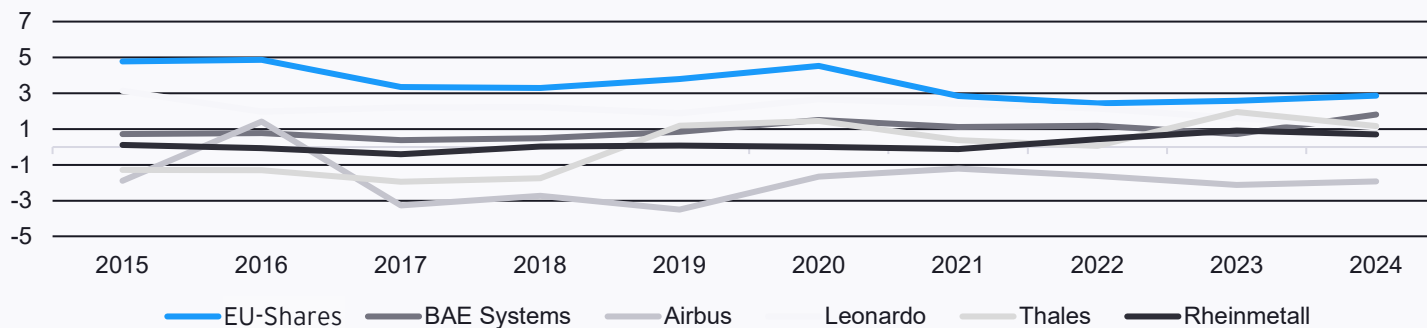
Notes: 1) The percentages shown indicate a potential distribution of increased defense investments.

Financing via the capital market will also increase in Europe and attract new investors

Financing structure of the Top 5 EU defense companies by revenue

Company	Revenue in bn. ^I	Debt bn. ^I		Equity		
		Bonds	Loans	Free Float ^{II}	State Ownership	Invested Countries
BAE Systems	28.3	10	2	100%	-	-
Airbus	69.2	8	0	74%	26%	FR 11%, D 11%, SP 4%
Leonardo	17.8	2	1.2	70%	30%	Italy 30%
Thales	20.6	4	1	45%	27% ^{III}	France 27%
Rheinmetall	9.7	0.25	0.5	100%	-	-

Net debt relative to EBITDA of the top 5 EU defense stocks in comparison to the overall market¹



Favorable conditions for new investors

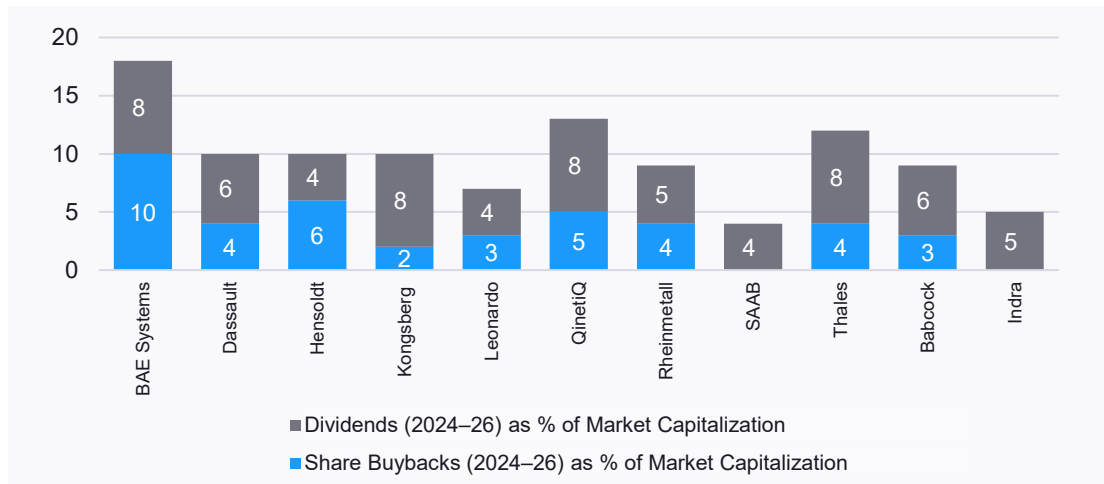
- Interim financing will require substantially more external capital, with international interdependencies and large export shares amplifying overall financing needs.
- The European sector is receiving growing support through new financing vehicles at the EU level, for example in the form of the “Security Action for Europe (SAFE)”. The financial stability of defense companies is a structural advantage. All major corporations have net debt relative to operating profit below the market average.
- For strategic investors, such as commercial banks or private investors, this can represent an attractive investment argument.
- The defense sector also sees many joint ventures to successfully execute large-scale projects together. Since the beginning of 2025, additional partnerships have been formed.

Source: 1) Companies, DekaBank

Notes: I) In local currency; II) Share of issued stock available for trading; III) Additionally, 26% at Dassault Aviation & 2% at PEG France

Long-term continuation of the convincing performance of European defense companies expected

Expected dividends and share buybacks by 2026¹



- The low net debt of listed defense companies is partly due to high cash positions, which should support dividend payouts and stock buybacks in the coming years.
- Revenue growth combined with margin improvement is expected to support company valuations. Overall, the outlook for defense firms can be described as highly promising.

Overview of fundamental data of defense companies²

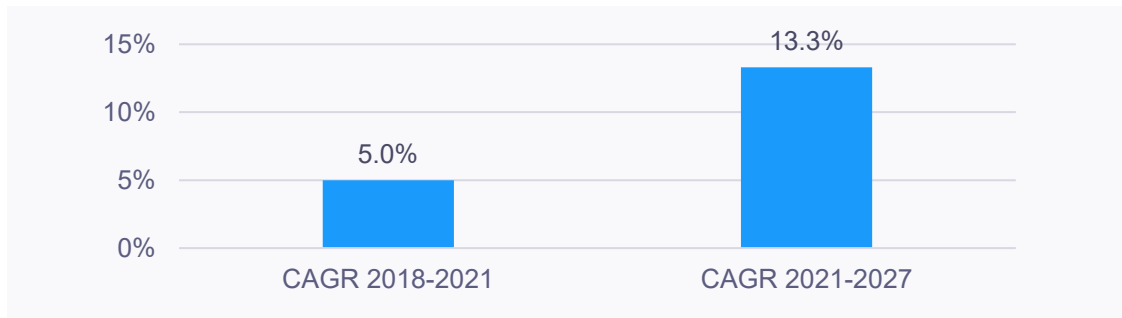


- Based on the fundamental conditions, a long-term continuation of the strong value performance of European defense companies is expectable.
- Since the outbreak of the Ukraine War, the sector has improved price performance by 150% compared to the overall market (based on the STOXX 600).
- Following recent strong outperformance, increasing price fluctuations and pronounced correction phases should not come as a surprise. Instead, these should be viewed as entry opportunities.
- The planned increase in defense investments to 3.5% of GDP has provided additional support for stock prices.

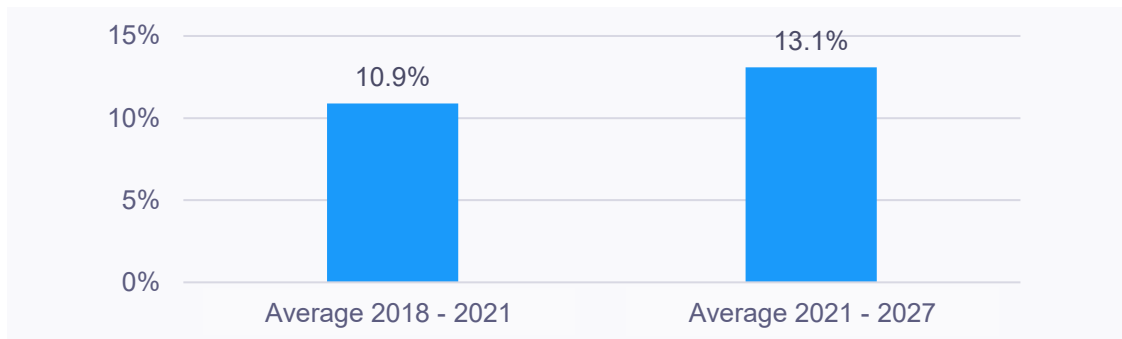
Source: 1) various company websites, DekaBank; 2) DekaBank

European companies can increase revenue growth and margins – defense sector remains attractively valued in the long term

Average margins of European defense companies¹



Average margins of European defense companies²



The European defense sector remains attractively valued due to the expected increase in revenue and margins

- Revenue of European defense companies grew by about 5% annually between 2018 and 2021. Due to rising geopolitical tensions and higher defense spending, revenue growth is estimated at over 13% for the period from 2021 to 2027 (consensus estimates)
- Robust order intake has boosted profitability, with average sector margins rising from just under 11% in 2021 to more than 13%.
- Following the announcement of higher NATO targets in June 2025, European defense companies are likely to further raise their revenue and profit expectations for the coming years.
- Currently, the expected P/E ratio for the European defense sector for 2026 is about 26.5x, representing a premium to the broader market. In a scenario of significantly growing profits, this multiple is expected to fall to about 15x by 2030.
- In the fourth quarter, several defense companies will hold investor days that could include updates to existing forecasts. First orders from expanded budgets are being placed, with multi-year contracts ensuring predictability.
- Conclusion: Positive revenue and margin trends should lead to a normalization of the sector's valuation (looking toward 2030) and make investment in the sector remain attractive due to its high growth profile and strong visibility.

Source: 1) various company websites, DekaBank; 2) various company websites, DekaBank

6

Conclusion



	m		
a-b	3.0	55.0	75.0
b-b	4.0	75.0	85.0
c-c	6.0	87.0	89.0

Conclusion

Investments for getting defense-capable in NATO-Europe

NATO aims to counter the “long-term threat” posed by Russia with rising defense expenditures (+72% to about €770 billion per year) by 2035.

The new 3.5%-of-GDP target for direct defense spending would require ~€220 billion in annual investments in equipment and ammunition.

With a gross value added of about €150 billion (~0.7% of GDP) and around 2 million jobs – half of which are in supplier industries – there will be significant impulses for the European economy.

Targeted M&A, cooperation, and technological sovereignty

Capacity expansion and industrial scaling are driving the transformation from manufacturing to serial production in the European defense industry.

The ability to mobilize and convert existing industrial production capacities is limited by structural hurdles.

Long-term order planning, joint procurement and R&D, harmonization of standards, platform concepts, as well as targeted funding programs can help reduce these hurdles.

High visibility and strong growth in the defense sector

The persistently positive revenue and margin trends are likely to normalize the valuation of the defense sector by 2030 and keep investments attractive due to the high growth profile and visibility.

Price fluctuations and correction phases should not come as a surprise and should be seen as entry opportunities.

Strong growth makes the sector remain interesting in the long term.

Abbreviations and Glossary

ATSGM	Advanced Tactical and Strategic Guided Munitions
AI	Artificial Intelligence
ASAP	Act in Support of Ammunition Production
Bn.	Billion
CAGR	Compound Annual Growth Rate
Div. Yield	Dividend Yield
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
EDF	European Defence Fund
EDIRPA	European defence industry reinforcement through common procurement act
eFP	Enhanced Forward Presence
EPS	Earnings per Share
EU	European Union
EV	Enterprise Value
EY SCRIM	EY Supply Chain Risk and Impact Measurement Macroeconomic Model by EY
FCAS	Future Combat Air System
FY	Fiscal Year
GDP	Gross Domestic Product
GVA	Gross Value Added
IISS	International Institute for Strategic Studies
IPO	Initial Public Offering
IT	Information Technology
M&A	Mergers & Acquisitions
Mio.	Million
NATO	The North Atlantic Treaty Organization
NDPP	NATO Defence Planning Process
NGMH	Next Generation Medium Helicopter
NGRC	Next Generation Rotorcraft Capability

Abbreviations and Glossary

P/E	Price-Earning Ratio
PESCO	Permanent Structured Cooperation
R&D	Research & Development
SAFE	Security Action for Europe
SMEs	Small and medium-sized enterprises
US	United States
UK	United Kingdom
USA	United States of America
USD	United States Dollar

References

1. A&O Sherman (2025). Rising geopolitical tensions ignite European defense M&A - A&O Shearman. <https://www.aoshearman.com/en/insights/global-ma-insights/rising-geopolitical-tensions-ignite-european-defense-ma>
2. Atlantic Council (2010). Deal Saves Europe's Transport Aircraft. Atlantic Council. <https://www.atlanticcouncil.org/blogs/natosource/deal-saves-europes-transport-aircraft/>
3. Bahceli, Y. (2025). Defence surge could help jumpstart Europe's flat economy. Reuters. <https://www.reuters.com/world/europe/defence-surge-could-help-jumpstart-europes-flat-economy-2025-03-06/>
4. Bergmann, M., Wall, C., Monaghan, S., & Morcos, P. (2022). Transforming European Defense. <https://www.csis.org/analysis/transforming-european-defense>
5. Brett, S. (2025). The German Defense-Industrial Zeitenwende: Implications for Transatlantic Security. INSS Strategic Perspectives. <https://digitalcommons.ndu.edu/inss-strategic-perspectives/43>
6. Christina Harward, Angelica Evans, Olivia Gibson, Anna Harvey, Jennie Olmsted, and Kateryna Stepanenko (2025) Russian Offensive Campaign Assessment, June 20, 2025, Institute for the Study of War (ISW) <https://understandingwar.org/research/russia-ukraine/russian-offensive-campaign-assessment-june-20-2025/>
7. Clapp, S. (2023). European defence industry reinforcement through common procurement act (EDIRPA). Think Tank European Parliament. [https://www.europarl.europa.eu/RegData/etudes/BRIE/2023/739294/EPRS_BRI\(2023\)739294_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2023/739294/EPRS_BRI(2023)739294_EN.pdf)
8. Cooper, J. (2025). Preparing for a Fourth Year of War: Military Spending in Russia's Budget for 2025. Stockholm International Peace Research Institute. <https://doi.org/10.55163/CBXJ2246>
9. Council of the European Union. (2022). A Strategic Compass for Security and Defence—For a European Union that protects its citizens, values and interests and contributes to international peace and security. <https://data.consilium.europa.eu/doc/document/ST-7371-2022-INIT/en/pdf>
10. DefenseNews (2025). Hensoldt completes takeover of German defense electronics firm ESG. <https://www.defensenews.com/global/europe/2024/04/03/hensoldt-completes-takeover-of-german-defense-electronics-firm-esg>
11. DGAP. (2025). How FCAS Can Move Forward | DGAP. <https://dgap.org/en/research/publications/how-fcas-can-move-forward>
12. European Commission. (2025a). EDF Work Programme 2025. European Commission. https://defence-industry-space.ec.europa.eu/document/download/ffa3769f-3b6d-4b07-b3d4-a5c156a5fde3_en?filename=EDF%20Work%20Programme%202025%20Part%20II.pdf
13. European Commission. (2025b). JOINT WHITE PAPER for European Defence Readiness 2030. https://commission.europa.eu/document/download/e6d5db69-e0ab-4bec-9dc0-3867b4373019_en?filename=White%20paper%20for%20European%20defence%20%E2%80%93%20Readiness%202030.pdf
14. European Commission. (2025c). ProtectEU: A European Internal Security Strategy. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52025DC0148>
15. European Parliamentary Research Service [EPRS] (2024): Reinforcing Europe's defence industry. https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI%282023%29749805?utm_source=chatgpt.com
16. Eurostat (2025). Industry survey results - quarterly data.
17. EY (2025). Retrieved October 16, 2025, from https://www.ey.com/de_de/newsroom/2024/04/ey-analyse-forschung-und-entwicklung-2024
18. Federal Cartel Office (2025). Bundeskartellamt clears merger of defence electronics manufacturers Hensoldt and ESG. Bundeskartellamt. https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2024/08_02_2024_Hensoldt_ESG.html

References

19. FitchRatings (n.d.). European Defence Companies' Record Backlogs Boost Cash Flow Generation. Retrieved October 16, 2025, from <https://www.fitchratings.com/research/corporate-finance/european-defence-companies-record-backlogs-boost-cash-flow-generation-20-03-2025>
20. Foy, H., Khalaf, R., & Hall, B. (2024). Ursula von der Leyen calls on EU to subsidise defence production. *Financial Times*.
21. Gamito, C., Luís, R. S., & Rebelo, N. (2025, June 16). Navigating dual-use items regulations: A strategic edge for exporters. *ITR*. <https://www.internationaltaxreview.com/article/2exwz9hvq2kb5wa1ktps/sponsored/navigating-dual-use-items-regulations-a-strategic-edge-for-exporters>
22. Hensoldt (2025a) HENSOLDT acquires ESG Elektroniksystem- und Logistik-GmbH. HENSOLDT. <http://sveltekit-prerender/news/hensoldt-acquires-esg-elektroniksystem-und-logistik-gmbh>
23. Hensoldt (2025b). HENSOLDT completes acquisition of ESG. HENSOLDT. <http://sveltekit-prerender/news/hensoldt-completes-acquisition-of-esg>
24. IfW Kiel (2024a). Kieler Konjunkturbericht Q4 2024 – Deutschland. https://www.kielinstitut.de/fileadmin/Dateiverwaltung/IfW-Publications/fis-import/b6400436-e48e-4080-8751-9b6736201b75-KKB_119_2024-Q4_Welt_DE.pdf
25. IfW Kiel (2024b). „Fit for War in Decades: Europe's and Germany's Slow Rearmament vis-à-vis Russia“. <https://www.kielinstitut.de/publications/fit-for-war-in-decades-europes-and-germanys-slow-rearmament-vis-a-vis-russia-33234/>
26. IPG Journal. (2025, April 30). Der Preis des Krieges. <https://www.ipg-journal.de/rubriken/aussen-und-sicherheitspolitik/artikel/der-preis-des-krieges-8250/>
27. Jones, M. G. (2025). Produziert Russland in drei Monaten NATO-Munition für ein ganzes Jahr? | Euronews [News]. Euronews. <https://de.euronews.com/my-europe/2025/07/16/produziert-russland-in-drei-monaten-nato-munition-fur-ein-ganzes-jahr>
28. Korsunskaya, D., & Bryanski, G. (2025, September 24). Russian finance ministry proposes raising VAT to help fund Ukraine war. *Reuters*. <https://www.reuters.com/markets/currencies/russian-finance-ministry-proposes-raising-vat-help-finance-war-ukraine-2025-09-24/>
29. Levingston, I., & Minder, R. (2025). European satellite group Iceye weighs new funding at \$2.5bn valuation. *Financial Times*.
30. NATO (2022). Strategic Concept. Brussels: NATO Headquarters. https://www.nato.int/nato_static_fl2014/assets/pdf/2022/6/pdf/290622-strategic-concept.pdf
31. NATO (2023). Vilnius Summit Communiqué. Brussels: NATO Headquarters. https://www.nato.int/cps/en/natohq/official_texts_217320.htm
32. NATO (2024a). Secretary General's Annual Report 2024. Brussels: NATO Headquarters. https://www.nato.int/cps/en/natohq/topics_184308.htm
33. NATO (2024b). Defence Ministers' Meeting Statement, October 2024. Brussels: NATO Headquarters. https://www.nato.int/cps/en/natohq/news_223902.htm
34. NATO (2024c). Enhanced Forward Presence Factsheet. Brussels: NATO Headquarters. https://www.nato.int/cps/en/natohq/topics_136388.htm
35. NATO (2024d). NATO Industry Forum – Defence Production Action Plan. Brussels: NATO Headquarters. https://www.nato.int/cps/en/natohq/news_224405.htm
36. NATO (2025) NATO releases Updated Defence Production Action Plan, Commercial Space Strategy and Rapid Adoption Action Plan. NATO. Retrieved October 16, 2025, from https://www.iss.europa.eu/sites/default/files/2025-02/Brief_2025-02_Funding%20weapons%20together.pdf

References

37. NATO (2025a). NATO-Summit Communiqué, Den Haag 2025. Brussels: NATO Headquarters. https://www.nato.int/cps/en/natohq/official_texts_236705.htm
38. OECD (2025b). Government budget allocations for R&D [Dataset]. <https://data-viewer.oecd.org/?chartId=d058a415-c17c-4c32-8bc6-7d2a8c45d4d5>
39. PESCO (2022). Next Generation Medium Helicopter (NGMH) | PESCO. <https://www.pesco.europa.eu/project/next-generation-medium-helicopter-ngmh/>
40. Reuters (2025a). Higher European defence budgets a first step, production needed, NATO's Rutte says. Reuters. <https://www.reuters.com/world/europe/higher-european-defence-budgets-first-step-production-needed-natos-rutte-says-2025-03-08/>
41. Reuters (2025b). EU countries reach deal on new defence funding programme. Reuters. <https://www.reuters.com/business/aerospace-defense/eu-countries-reach-deal-new-defence-funding-programme-2025-06-18/>
42. Reuters (2025c). European major satellite venture still needs some time to finalise, source says. Reuters. <https://www.reuters.com/business/aerospace-defense/europe-satellite-merger-talks-hit-snag-over-workshare-report-says-2025-10-06/>
43. Reuters (2025d). New satellite plant to open in Italy to boost production capacity. Reuters. <https://www.reuters.com/business/aerospace-defense/new-satellite-plant-open-italy-boost-production-capacity-2025-10-07/>
44. Roland Berger (2025). Der verteidigungspolitische Imperativ, Innovationen und Resilienz als Treiber auf Europas Weg zur strategischen Autonomie. Roland Berger. https://content.rolandberger.com/hubfs/07_presse/Roland%20Berger_Defence%20Studie_2025_DE.pdf
45. Sostak, B. (2024). NATO Allied Command Transformation: Innovating for a Stronger and More Resilient Alliance. NATO's ACT. <https://www.act.nato.int/article/innovating-for-a-stronger-and-more-resilient-alliance/>
46. VDI/VDE (2025). New Defence: Innovationspolitische Perspektiven auf eine neue Sicherheitsarchitektur. https://vdivde-it.de/sites/default/files/document/2025-08_Positionspapier_New_Defence_Innovationspolitische_Perspektiven-auf-eine-neue-Sicherheitsarchitektur.pdf
47. Wolff, G. B., Steinbach, A., & Zettelmeyer, J. (2025). The governance and funding of European rearmament. Bruegel. <https://www.bruegel.org/policy-brief/governance-and-funding-european-rearmament>
48. ZOIS (2024). Die Rolle der russischen Regionen in der Kriegswirtschaft. <https://www.zois-berlin.de/publikationen/zois-spotlight/die-rolle-der-russischen-regionen-in-der-kriegswirtschaft>

Modeling Approach EY SCRIM

- The macroeconomic results presented in Chapter 4 were estimated through input-output analysis using the global **EY SCRIM** (EY Supply Chain Risk and Impact Measurement) model.
- **Input-output analysis** is an economic method for examining the interrelationships between different sectors of an economy. It is based on input-output tables that show how the production of one sector serves the demand of another. The method, which originates from the work of Wassily Leontief, enables the analysis of the effects of changes in one economic sector on the entire economy. For example, it illustrates how an increase in production in the defense industry influences the demand for metal products. It is useful for identifying **multiplier effects in the economy** and for planning and evaluating economic policy measures. The data basis consisted of national accounts data aggregated in the Global Trade Analysis Project for 141 regions and 65 sectors. Additional information can be found here: <https://www.gtap.agecon.purdue.edu/databases/v11/>.
- The analysis identified **direct, indirect, and induced effects**. Direct effects refer to the immediate impacts of changes within a sector, such as an increase in production in the defense industry, which directly requires more labor and intermediate inputs. Indirect effects arise from downstream demand in related sectors, such as increased metal production due to higher demand from the defense industry. Induced effects encompass additional economic activities resulting from changes in household incomes of workers benefiting from the direct and indirect effects, leading to greater demand for consumer goods and services.
- The input variable for macroeconomic modeling is the level and structure of global demand for defense equipment, which then determines the demand for intermediate goods. EY's estimate of European defense investment takes into account expected increases in the volume of equipment and ammunition, market prices, and procurement sources based on historical procurement projects and market research. The volume increases were estimated from the NDPP 2025 targets and the IISS report (2025), and country-specific spending was limited to 3.5% of GDP. No increase in the procurement of European products or new technologies was assumed, so this scenario can be described as conservative.
- The reported indicators include **employment, value added**, and public revenues (such as taxes and social security contributions). No consideration is given to alternative uses of financial resources; the focus is on the two described impulses. Employment and public revenues were estimated using a multiplier analysis based on the calculated gross value added.

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