





The Role of Venture Capital in Advancing Deep Tech in Europe:

Challenges, Opportunities, and Future Directions

Policy Paper



Funded by the European Union

Authors:

Anna Maria Darmanin Angele Giuliano Rebecca Zammit

policy@womentecheurope.eu

womentecheurope.eu



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Innovation Council and SMEs Executive Agency (EISMEA). Neither the European Union nor the granting authority can be held responsible for them.

© Women TechEU Consortium 2025

Table of Contents

1. Introduction	4
2. Europe's Deep Tech Scene	5
3. Venture Capital for Deep Tech in Europe: What Works and Doesn't	7
4. Challenges for Venture Capital in Deep Tech	9
5. Venture Capital is Vital for Europe	12
6. Recommendations	16
7. Conclusion	21
References	22



Introduction

A major force behind innovation in Europe is deep technology, or "deep tech," which is distinguished by its emphasis on significant scientific and engineering breakthroughs. Deep tech endeavors, in contrast to traditional technologies, frequently call for large sums of money, protracted research times, and a high risk tolerance.

The purpose of this paper is to examine the venture capital environment for deep tech startups in Europe, evaluate the present obstacles, and suggest legislative measures to improve the environment that fosters these businesses.









Eur Tec

Europe's Deep Tech Scene

Deep tech is the high-risk, high-reward part of the startup environment that is based on science. At the moment, it includes new developments in artificial

intelligence, biotechnology, robots, quantum computing, and high-tech materials. Deep tech startups need long R&D cycles, a lot of money, and strong scientific support, but not like other digital companies (MIT, 2022). Thus, deep tech should not be considered fixed to any business; it evolves as technologies advance (Romme et al., 2023).

Europe has a strong academic and research base that leads to worldclass scientific progress, but it has a hard time turning these discoveries into great businesses. The environment for deep tech startups in Europe is growing. Even so, it has problems compared to the U.S. and China, where venture capital (VC) investment is bolder and more willing to take risks (Edström & Klinger, 2020). Even with these problems, Germany, France, the UK, and Sweden have become well-known deep tech hubs, thanks in large part to strong public-private partnerships (Bogliacino & Lucchese, 2011). There are a number of top deep tech incubators in these countries. For example, HighTechXL in the Netherlands helps startups bridge the gap between study and commercialisation. One big worry, though, is that it's still hard to get large amounts of money, especially for deep tech startups that are just starting out.

Deep tech startups need a lot of infrastructure, legal compliance, and a lot of R&D validation before their products can reach the market. This is different from digital startups, which can change direction and grow quickly. So, even though Europe's deep tech sector has strong institutional support, it will grow more slowly than its U.S. peers. The problem is made worse by the fact that investors aren't ready to put long-term money into high-tech fields, which makes it harder for many groundbreaking projects to last.

In recent years, Europe has made a significant leap in investing in deep tech. A study by McKinsey in 2024 indicates that Europe's share of the global investment in deep tech went up to 19% in 2023 compared to 2019 (McKinsey 2024). This data and the trend over the last 15 years are encouraging. Furthermore, the geopolitical landscape globally in itself is a push for Europe to up its game in investing in deep tech.



Venture Capital for Deep Tech in Europe: What Works and Doesn't

Venture capital has been very important for deep tech companies to grow, but its performance in Europe has been mixed. Even though there is more interest in deep tech now than ever, it is still hard to get money in Europe. A report from the European Investment Fund (EIF, 2023) says that only 20% of all venture capital assets go to startups in deep tech. The EIF says that the small amount of money given is mostly because of the need for a lot of cash, the long time it takes to get returns, and the complexity and uncertainty of how technologies will work out.

To create and bring complex technologies to market, deep tech start-ups often need a lot of money up front. At the pre-seed stage, a lot of cash is needed, and start-ups often have huge cash flow problems because they have to spend a lot of money on resources and testing to make the idea ready for technology.

Deep tech innovations usually take longer to bring to market than more common technologies. This makes them less appealing to standard venture capitalists who want to make money faster. An exit plan that is more than 10 years old is not something that many VCs are ready to look at.

Deep tech projects also have a lot of unknowns and are very complicated, which can be scary for investors. The new idea might be both disturbing and appealing. VCs would want to know that the innovation has a good chance of working, so at the very least, there should be pilot projects that show the innovation's promise in a real way, not just in theory.

So, venture capital's power to spur innovation relies on many things, such as its ability to access patient capital, have regulatory policies that support it, and work with public funding programs.

3.1. Aspects of VCs that work in Europe

Public-private funding Synergies are definitely an important element in funding deep tech in Europe. The European Investment Fund (EIF) and initiatives like DeepTechXL bridge the funding gap for early-stage deep tech ventures (BCG, 2021). These funds help mitigate early financial risks and offer strategic mentorship to deep tech founders, ensuring that research-intensive ventures have the necessary financial backing to progress to the next stage.

Research-driven commercialisation is another key factor that contributes to the deep tech sector's success. University incubators and tech-transfer programs help spin out scientifically validated startups, ensuring that novel technologies transition from lab to market in a structured manner (Gebru & Awal, 2021).

Specialised Deep tech VCs, albeit few, are crucial. Funds focusing exclusively on deep tech, such as Industrifonden (Sweden) and HighTechXL (Netherlands), have improved financing for early-stage deep tech startups (Hermsen, 2023). The presence of such specialised funds ensures that deep tech startups are not judged by traditional venture capital metrics, which typically favour rapid user acquisition and low capital intensity.

3.2. What Does Not Work in Europe

Lack of Patient Capital is a hindrance in securing the interest of VCs. Many European VCs expect rapid returns, whereas deep tech requires long investment horizons (Nanda, 2020). The mismatch between investment timelines and commercialisation cycles discourages investors from committing early-stage capital to deep tech ventures.

Also, VCs hesitate to invest in startups facing stringent European regulations, especially in biotech, energy, and aerospace (Edström & Klinger, 2020). The lengthy approval processes create bottlenecks for commercialisation, making Europe a less attractive market for VC investments.

Due to their Risk Aversion, European VCs generally invest at later stages (Series A and beyond) rather than in high-risk seed-stage deep tech (Karpenko & Schmitz, 2024). This tendency leaves many promising deep tech startups struggling to secure the initial funding required for prototyping and testing.



Challenges for Venture Capital in Deep Tech

As of 2024, the biggest problem for deep tech startups was still getting the money they needed between proof-of-concept and market readiness. This is called the "Valley of Death." Because they need a lot of money to start up, startups in Europe often can't get any other support besides government grants.

Early investors who would have backed the idea but didn't because other venture capitalists didn't want to take the chance are affected by the Valley of Death. So are start-ups that fail because they don't have enough money before they can start making money. Start-ups are in the Valley of Death because, as we already said, technology makes it take a long time to get to market. Another reason for this is that the innovation ecosystem is very dependent on having a strong network of suppliers, manufacturers, and research partners. This makes budgeting even harder (Romme et al., 2023).

Consequently, a lot of start-ups fail before they can go public. On the other hand, it slows down scientific progress and delays breakthroughs in areas like energy, healthcare, and advanced materials that are important to solving societal problems.

4.1. Specific Challenges

One of the significant barriers to deep tech investment is the limited investor expertise in assessing highly technical and research-intensive startups. Many venture capitalists, particularly those accustomed to digital and software-based business models, lack the technical knowledge to effectively evaluate deep tech innovations (MIT, 2022). This lack of expertise often results in misjudgment of potential breakthroughs or overestimating risks, leading to investment hesitancy and underfunding promising startups. Unlike traditional startups, where traction and revenue streams can be assessed relatively easily, deep tech startups require VCs to understand complex scientific principles, technology readiness levels (TRLs), and regulatory constraints. Without domain-specific expertise, VCs may struggle to conduct due diligence, assess IP portfolios, and forecast commercialisation pathways accurately. As a result, many deep tech startups face prolonged funding gaps, delaying the development and deployment of critical innovations (MIT, 2022).

Another critical challenge is scaling deep tech ventures, which significantly differs from scaling software or digital enterprises. Unlike SaaS companies that require minimal physical infrastructure and can scale rapidly with cloud-based services, deep tech startups must invest in manufacturing facilities, specialised equipment, supply chains, and skilled labour forces (Edström & Klinger, 2020). These requirements make scaling far more capital-intensive and time-consuming. Moreover, deep tech companies must navigate complex regulatory and certification processes, particularly in biotechnology, energy, aerospace, and medical devices, further delaying their market entry. Many deep tech firms also rely on long-term collaborations with research institutions, government agencies, and industrial partners, adding additional layers of complexity to scaling operations. The capital demands and logistical hurdles associated with scaling deep tech ventures make them less attractive to traditional VCs,

who often favour business models with faster returns on investment (Edström & Klinger, 2020).

The high capital requirements of deep tech startups are also a challenge. These startups require significant upfront investment in R&D before revenue generation (Romme et al., 2023). They also require significant capital investments for research, development, prototyping, and scaling operations. The high capital intensity necessitates larger funding rounds, which are challenging to secure from conventional VC sources alone. Additionally, the need for specialised equipment, facilities, and talent further drives up the costs associated with deep tech ventures.

Unlike SaaS companies, deep tech ventures require 7-10 years before reaching a liquidity event, discouraging early-stage VC investment (Gebru & Awal, 2021). The development and commercialisation of deep tech innovations typically span several years, if not decades. This extended timeline conflicts with the typical VC model, which seeks faster returns on investment. As a result, deep tech startups may struggle to secure the necessary funding to sustain their long development cycles and bring their innovations to market.



The development and commercialisation of deep tech innovations typically span several years, if not decades. This extended timeline conflicts with the typical VC model, which seeks faster returns on investment. As a result, deep tech startups may struggle to secure the necessary funding to sustain their long development cycles and bring their innovations to market.



Venture Capital is Vital for Europe

Deep tech startups address societal challenges, from clean energy and sustainable agriculture to nextgeneration medical treatments (Romme et al., 2023).

Without VC investment, these ventures struggle to move from lab to market. Therefore, VC plays a pivotal role in the development and success of deep tech startups by providing the necessary funding and strategic support to transform groundbreaking research into commercial applications. Unlike traditional businesses, deep tech ventures often face long development cycles, high technological risks, and uncertain paths to profitability. Given these challenges, VC investment is beneficial and essential in enabling these startups to thrive.

One primary reason VC is crucial for deep tech is its ability to accelerate technological innovation. Research from Kortum and Lerner (2001) shows that VC-backed startups contribute significantly to patent filings and

disruptive innovations. The infusion of capital allows companies to advance cutting-edge technologies more rapidly than possible through conventional funding mechanisms. This acceleration is particularly important in fields such as artificial intelligence, quantum computing, and biotechnology, where speed to market can be a decisive factor in achieving competitive advantage.

Moreover, VC funding is instrumental in supporting high-risk, high-impact ventures. Traditional financing models, such as bank loans or public funding, are often ill-suited for deep tech startups due to their extended research and development (R&D) phases and the inherent uncertainties associated with breakthrough innovations. As Bogliacino and Lucchese (2011) highlight, the long gestation periods and unpredictable returns make deep tech less attractive for risk-averse investors. VC firms, however, specialise in high-risk investments and provide not only capital but also strategic guidance, industry connections, and operational expertise, helping startups navigate the complex journey from lab to market.

Finally, the role of VC in driving European competitiveness in deep tech cannot be overstated. With increasing investment in technological innovation from the United States and Asia, Europe risks falling behind unless it strengthens its deep tech ecosystem. Research by Bogliacino and Lucchese (2011) suggests that increased VC funding in this sector is essential for Europe to remain a key player in the global technological landscape. By fostering high-potential startups, VC investment can help bridge the innovation gap, ensuring that European companies can compete on an international scale and lead in critical technological domains.

However, currently, Europe experiences a brain drain of skilled researchers and engineers. Also, it fails to retain start-ups in Europe, who prefer going to the US or the UK for a more amiable environment. Indeed, Europe faces significant challenges in attracting deep tech companies that have left due to issues related to venture capital constraints, regulatory burdens, and business environment challenges.

5.1. The European Innovation Council (EIC)

The EIC is one of the most ambitious initiatives within the EU Horizon Europe program. It is designed to bridge funding gaps in deep tech startups and high-risk, high-reward innovations. Established as a key component of the EU's broader innovation strategy, the EIC provides blended finance (grants and equity investments) to scale disruptive technologies that struggle to secure traditional venture capital funding (Midgley, 2024). While the initiative has significantly contributed to strengthening Europe's deep tech ecosystem, it also faces challenges that raise questions about its long-term effectiveness.

One of the EIC's most vital roles is addressing the "Valley of Death"—the phase in which deep tech startups possess promising technology but lack the capital necessary for scaling. The EIC Accelerator offers up to €2.5 million in grants, along with an additional €15 million in equity investments for early-stage ventures (Nedayvoda et al., 2021).

By offering non-dilutive funding alongside equity, the EIC helps to mitigate the perceived risks for private investors, making deep tech startups more



appealing for later-stage funding. The programme ensures co-investment opportunities with private VCs, thereby fostering public-private partnerships in deep tech financing (Veugelers & Amaral-Garcia, 2025).

The EIC has strategically focused on deep tech fields such as AI, quantum computing, and biotech, sectors that are critical to Europe's global competitiveness. Its investment into deep tech ventures is the largest of its kind in Europe, aligning with broader EU policies on strategic autonomy and industrial innovation (Apodaca et al., 2022).

The EIC advocates for green technology, sustainable materials, and health innovation, assisting European startups in aligning with the EU Green Deal objectives and global sustainability targets (Nguyen et al., 2024).

One of the most frequent criticisms of the EIC is its bureaucratic and convoluted application process. Startups often encounter lengthy waiting periods for funding approval, with low acceptance rates due to the programme's intense competitiveness (Stanfield et al., 2022).

While the EIC offers essential early-stage funding, it does not have a structured mechanism for follow-on investment rounds. Many deep tech startups find it challenging to secure growth-stage funding after receiving initial EIC support, as European venture capital markets continue to be fragmented (Mittelmeijer et al., 2024).

Some critics argue that the EIC's financing structure creates dependencies on public grants rather than fostering a truly self-sustaining venture ecosystem. Unlike in the U.S. and China, where deep tech companies scale with a mix of public incentives and strong private funding, Europe's reliance on state-backed financing may deter private investors from taking higher risks (Barbosa & Oliveira, 2025).

The EIC Fund, which handles equity investments, has faced governance issues and slow investment deployment, leading to delays in disbursing funds to selected startups. Many deep tech entrepreneurs have criticised the inconsistencies in investment decision-making, highlighting the need for a faster and more transparent investment process (Çelik & Gür, 2024).

Despite the EIC's pan-European mandate, startups from Southern and Eastern Europe face greater challenges in accessing funding due to weaker national VC ecosystems. This has resulted in an uneven distribution of deep tech financing, with Western and Northern European startups receiving a disproportionate share (Deluzet, 2022).

Given Europe's fragmented funding landscape and the complex needs of deep tech startups, agile public-private partnerships are more critical than ever. Hence the EIC has launched ist's programme STEP. Initiatives like STEP are now designed to offer more flexible co-investment and nondilutive funding options. These measures help bridge early-stage capital gaps and accelerate the path to commercialisation, ensuring that deep tech ventures can leverage the region's strong industrial and academic heritage. The programme ensures co-investment opportunities with private VCs, thereby fostering public-private partnerships in deep tech financing. STEP, recently launched, is still to be evaluated as a programme, nonetheless, the concept of STEP is really moving in the right direction for deep-tech particularly the ones that would have already gone through Series A and/or B and is still needing funding but has investors who want to see additional results before investing further.



Recommendations

To ensure the continued growth of deep tech startups in Europe, it is necessary to develop specialised deep tech investment funds with longer return horizons. Unlike traditional venture capital funds, which prioritise short-term gains, these specialised funds should be structured to accommodate deep tech's

unique commercialisation timelines (Nanda, 2020). By providing long-term patient capital, venture capitalists can help bridge the funding gap that often hinders early-stage deep tech startups (Bogliacino & Lucchese, 2011).

Government-backed venture capital programs and corporate partnerships should also be expanded to provide additional de-risking mechanisms, offering financial support and market access to emerging startups (Hermsen, 2023). Public-private collaborations have proven effective in de-risking high-potential but capital-intensive startups, ensuring that early-stage funding is available for breakthrough technologies (BCG, 2021). Additionally, governments should introduce R&D tax credits and equitymatching grants to encourage venture capital firms to invest in high-risk deep tech innovations (Gebru & Awal, 2021). By reducing the financial burden on investors, such incentives can stimulate increased early-stage funding.

Successful models have demonstrated the effectiveness of public-private hybrid funding for deep tech startups, such as Singapore's Startup SG Equity programme and the EIC. A study on Sweden's deep tech ecosystem highlights that public-private financial backing is critical for fostering equitable and vibrant innovation environments, particularly for underrepresented groups in deep tech startups (Saini, 2024). Another model explored in research on philanthropic investments in deep tech illustrates a structured approach in which financiers match each other's contributions to close the capital gap (Rudat, 2024).

A study on Swedish deep tech financing strategies revealed that equity financing is on the rise, yet gaps persist in the early-stage funding cycle (Granath, 2021). A structured co-investment framework between regional development agencies and VCs is essential to address these gaps.

To operationalise Equity Matching Grants (EMG) effectively, pilot programmes should be established in key innovation hubs that focus on high-impact sectors such as quantum computing, artificial intelligence, biotech, cleantech, and semiconductors. The 1:1 matching model can be tested initially, with adjustments made based on sector-specific risks and investment traction.

A flexible approach to matching criteria should be developed, where funding intensity varies according to sector needs, technological maturity, and regional economic priorities. This strategy aligns with best practices in government-backed deep tech investment programmes, as noted in Europe and North America (Barbosa & Oliveira, 2025).

Regional development agencies should leverage public-private partnerships (PPPs) by actively involving corporate VCs, sovereign funds, and private investors to scale impact. These Partnerships will enhance capital availability and offer further mentorship and market support. access opportunities (Schmitz & Karpenko, 2024).

To ensure long-term sustainability, a revenue-sharing or convertible equity model can be integrated into the grant mechanism. This would enable funds to be reinvested into new innovation investments, reflecting the successful deep tech commercialisation strategies used in Japan and the U.S. (Ito, 2023). Improving regulatory frameworks is another crucial aspect, particularly in the biotech, energy, and aerospace sectors. Streamlining approval processes and reducing bureaucratic barriers will encourage more investors to engage with these high-potential industries (Edström & Klinger, 2020). A harmonised regulatory framework across the EU could further facilitate cross-border deep tech investments, making Europe a more attractive destination for venture capitalists (Mittelmeijer et al., 2024).

Bradford (2024) argues that while regulations are intended to promote fairness and consumer protection, they often stifle innovation by imposing heavy compliance burdens on startups. This sentiment is echoed in Lauterbach's (2019) research on AI governance, which underscores the need for regulatory sandboxes that allow deep tech firms to test innovations in controlled environments before full compliance is required. Such an approach would align Europe with regulatory models in the US and Singapore, which are seen as more innovation-friendly.



The EIC plays a vital role in shaping Europe's deep tech funding landscape, providing critical early-stage capital and de-risking investments for private VCs. Its contributions to technological sovereignty, sustainability, and deep tech innovation have been widely recognised. However, challenges related to funding bottlenecks, bureaucratic inefficiencies, and private sector engagement require reform. To maximise its impact, the EIC should streamline its application process to reduce time-to-funding for startups. It should improve follow-on funding mechanisms to assist deep tech ventures in scaling. Enhancing collaboration with the private sector by attracting more VC participation would be important, as well as ensuring equitable distribution of funding across all EU member states. To enhance Europe's regional innovation valleys, policymakers should implement targeted funding mechanisms that support deep-tech startups in emerging ecosystems. While major innovation hubs (e.g., Paris, Berlin, Stockholm) attract the majority of European Innovation Council (EIC) funding, Southern and Eastern Europe face barriers due to weaker VC networks and lower institutional R&D capacity (Veugelers & Amaral-Garcia, 2025). To this end, the EU may decide to establish regional EIC funding offices to align local VC investments with public grants, ensuring improved access for startups outside traditional hubs. The EIC could offer higher grant-to-equity ratios for less developed regions, ensuring that startups in emerging ecosystems receive the funding necessary to compete globally. Additionally, Europe could strengthen inter-regional partnerships to facilitate cross-border VC investment pools, thereby reducing fragmentation in the European deep-tech landscape (Barbosa & Oliveira, 2025).

Creating an EU sovereign investment fund and enhancing venture capital incentives to support high-risk, high-reward innovation can be one of the solutions to retaining tlent within Europe. Since a key barrier to deep tech growth in Europe is the scale-up finance gap, where companies struggle to secure late-stage funding. A study by Quas et al. (2022) highlights that while early-stage investments exist, many deep tech startups fail to scale due to limited access to patient capital.

Another crucial aspect of strengthening Europe's deep tech ecosystem is creating stronger innovation hubs and better corporate-startup partnerships. Siota and Prats (2021) explore how East and Southeast Asia have successfully fostered deep tech growth by encouraging corporate engagement with startups, a model that could be adapted in Europe. The European Commission has also acknowledged this issue, with Testa et al. (2022) highlighting the need to develop deep tech-friendly environments through collaboration between large industrial players and emerging startups.



Public procurement policies play a significant role in shaping deep tech success. Unlike the US, where organisations such as the Department of Defense that actively invest in deep tech startups, the EU's procurement processes remain slow and bureaucratic. Jacobides (2023) argues that European governments need to become more proactive in purchasing from deep tech firms to provide them with stable revenue streams. Similarly, Gilardi (2009) highlights how credibility in long-term policy commitments is crucial for attracting investment and fostering innovation.

Finally, university-based incubation programs should be further developed to bridge the gap between academic research and commercial viability (MIT, 2022). Many groundbreaking deep tech innovations originate in research labs, but a lack of structured support prevents them from transitioning into successful businesses. Expanding mentorship programs, increasing funding for spin-offs, and fostering closer collaborations between universities and investors will enhance the commercialisation pipeline and contribute to a thriving deep tech ecosystem in Europe (Romme et al., 2023).



Conclusion

Venture capital is critical for scaling deep tech startups in Europe, yet significant barriers remain. Addressing regulatory challenges, increasing patient capital, and fostering stronger government and private partnerships will enable Europe to compete globally.

To ensure the continued growth of deep tech startups, it is necessary to develop specialised deep tech investment funds with longer return horizons. These funds should be structured to accommodate deep tech's unique commercialisation timelines, providing long-term patient capital to bridge the funding gap that often hinders early-stage startups. Government-backed venture capital programs and corporate partnerships should be expanded to offer additional de-risking mechanisms, financial support, and market access to emerging startups. Introducing R&D tax credits and equity-matching grants can further encourage venture capital firms to invest in high-risk deep tech innovations by reducing the financial burden on investors.

Successful models, such as Singapore's Startup SG Equity programme and the European Innovation Council (EIC), demonstrate the effectiveness of public-private hybrid funding for deep tech startups. To address earlystage funding gaps, a structured co-investment framework between regional development agencies and VCs is essential. Improving regulatory frameworks, particularly in the biotech, energy, and aerospace sectors, will also encourage more investors to engage with these high-potential industries.

Europe can harness the full potential of its deep tech innovations, driving economic growth and addressing societal challenges. Collaboration between the public and private sectors, along with supportive policies and investment frameworks, will be essential in creating a thriving ecosystem for deep tech ventures.

References

Apodaca, O.B.R., Murray, F., & Frolund, L. (2022). What is "Deep Tech" and What Are Deep Tech Ventures?

Apodaca, O.B.R., Murray, F., & Frolund, L. (2022). Deep-tech entrepreneurship in Spain.

Bogliacino, F., & Lucchese, M. (2011). Determinants of Venture Capital in Europe. Research Policy, 40(4), 565-577.

Barbosa, C., & Oliveira, C. (2025). Southern European entrepreneurship engine: A model for deep tech commercialisation and sustainable growth.

BCG & Hello Tomorrow. (2021). The Deep Tech Investment Report.

Bradford, A. (2024). The false choice between digital regulation and innovation. HeinOnline.

Edström, A., & Klinger, D. (2020). A Landscape of Deep Tech and Venture Capital in Europe.

Erntell, H., Dörner, k., Berger-de León, M., Flötotto, M., Henz, T. (2024) European deep tech: What investors and corporations need to know. McKinsey Digital and Leap by McKinsey

European Investment Fund (EIF). (2023). Deep Tech Investment Report

Gilardi, F. (2009). Delegation in the regulatory state: independent regulatory agencies in Western Europe. Google Books.

Granath, J. (2021). The Search For a Swedish Valley of Death & Possible Ways Out: Investigating Financing Strategies for the Development of Deep Tech Innovation.

Gebru, M., & Awal, S. (2021). The Impact of Venture Capital on Deep Tech Startup Growth.

Hermsen, O. (2023). Developing a Framework for Assessing Venture Opportunities in Deep Tech Venture Building.

Ito, M. (2023). Analysis and Comparison of the Creation of University Spin-off Startups in Deep Tech between the United States and Japan.

Jacobides, M. G. (2023). Regulating Big Tech in Europe: Why, so what, and how understanding their business models and ecosystems can make a difference

Karpenko, V., & Schmitz, H. (2024). Exploring the Intersection of Early-Stage Deep Tech Hardware Startups and Venture Capital.

Kortum, S., & Lerner, J. (2001). Venture Capital and Innovation: Theory and Evidence.

Lauterbach, A. (2019). Artificial intelligence and policy: quo vadis? Emerald Insight.

Midgley, P. (2024). Scaling up innovation: European Innovation Council.

Mittelmeijer, H., et al. (2024). Designing Early-Stage Venture Capital Solutions for Deep Tech Startups.

MIT. (2022). What is Deep Tech and What Are Deep Tech Ventures? Massachusetts Institute of Technology.

Nanda, R. (2020). The Role of Venture Capital in Deep Tech Innovation.

Nedayvoda, A., Delavelle, F., & So, H.Y. (2021). Financing Deep Tech.

Nguyen, N.T.H., Kowalski, A.M., & Dzienis, A.M. (2024). Sustainable Entrepreneurial Process in the Deep-Tech Industry.

Quas, A., Mason, C., Compañó, R., & Testa, G. (2022). The scale-up finance gap in the EU: Causes, consequences, and policy solutions. ScienceDirect.

Rudat, S. (2024). Philanthropic Investments in Deep Tech Start-Ups: An Exploratory Study.

Romme, G., Bell, S., & Frericks, J. (2023). Designing a Deep Tech Venture Builder to Address Grand Challenges.

Saini, N. (2024). Evaluating the strategic alignment of public-private funding with women-led deep tech startups in Sweden.

Schuh, G., Latz, T., & Lorenz, J. (2022). Governmental Support Options for the Technology Transfer of Deep Tech Innovations.

Siota, J., & Prats, M. J. (2021). Open Innovation: How Corporate Giants Can Better Collaborate with Deep-Tech Start-ups. The Case of East and Southeast Asia. PhilPapers.

Testa, G., Compañó, R., Correia, A., & Rückert, E. (2022). In Search of EU Unicorns: What Do We Know about Them? European Commission Publications.

Veugelers, R., & Amaral-Garcia, S. (2025). Financing EU Health Innovation: The Role of Venture Capital.





