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WORKSHOP SUMMARY

Investing in Europe's Competitiveness:

The Path to Competitive Advantage

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Investing in Europe's Competitiveness Initiative

In its role as a global, nonpartisan, nonprofit think tank, the Milken Institute has launched an initiative called Investing in Europe's Competitiveness. The aim is to develop actionable steps to catalyse the investment needed in the European Union (EU) and United Kingdom (UK) to meet productivity challenges and generate growth, aligned with themes diagnosed in reports by Mario Draghi, Enrico Letta, and Christian Noyer, as well as Prime Minister Keir Starmer's missions.

The initiative is centred on three pillars:

- Attracting new investment into infrastructure and decarbonisation
- Closing the innovation tech gap
- Investing in Europe's defence and security priorities

Executive Summary

On 25 October 2025, the Milken Institute convened leading figures from technology, finance, policy, and academia at the Berlin Global Dialogue to examine Europe's competitiveness challenges in the global innovation landscape. The roundtable reflected a targeted advancement of the Milken Institute's Closing the Innovation Tech Gap workstream. An earlier workshop in June 2025 identified broad thematic challenges based largely (but not exclusively) on feedback from a UK-based audience, and the October roundtable provided continent-wide insights about issues ranging from university intellectual property (IP) and entrepreneurship barriers, to debates on artificial intelligence (AI) sovereignty and defence, and to opportunities for regulatory and procurement reform.

While Europe maintains world-class research institutions and produces exceptional scientific talent, it continues to lag substantially behind the US and China in translating this excellence into commercially successful and globally competitive companies. The discussion revealed that Europe's innovation deficit stems not from research quality but from systemic barriers to commercialisation. Universities lack flexible IP frameworks that enable faculty entrepreneurship, institutional investors remain risk averse during critical scale-up phases, and fragmented regulatory systems prevent the emergence of pan-European companies that can compete at a global scale. Cultural factors compound these structural constraints, with academic institutions prioritising career stability over entrepreneurial risk-taking, while students receive minimal exposure to commercialisation pathways. The result is a pattern where Europe produces world-leading research and researchers, only to watch talent and companies migrate to ecosystems better equipped to transform scientific advances into commercial outcomes.

However, recent geopolitical disruptions have created openings for strategic intervention. Participants suggested that rather than pursuing sovereignty across entire technology stacks, Europe should focus resources on specific domains where world leadership remains attainable—whether in quantum computing, nascent clean energy technologies, advanced robotics, or the vertical integration of AI across traditional manufacturing assets. The debate between supply-side and demand-side interventions arose as particularly significant, with an emerging consensus that a greater focus on government purchasing and procurement reform may accelerate European competitiveness more effectively than institutional reform efforts alone, which have shown limited progress over the past decade.

Research and Development Commercialisation

University Ecosystems and Intellectual Property

European universities face structural disadvantages in fostering commercial innovation compared to their US counterparts. The discussion highlighted that European academic institutions typically lack the flexible IP frameworks that enable researchers to become co-founders whilst universities retain rights to the underlying innovations. This constraint is particularly acute in Germany, France, and Switzerland, where public university financial structures prohibit endowment models, effectively preventing professors from holding equity stakes in spinout companies.

Lower salaries in Europe compound the innovation challenge. Young professors are compensated less, on average, than their US counterparts,[1] which was viewed by some participants as discouraging talented researchers from pursuing academic careers and reducing the pool of potential innovators within universities. Moreover, European institutions generally prohibit faculty from undertaking consulting and side business activities that, in the US, provide both supplementary income and commercial experience.

However, the quality and scale of European research infrastructure remain substantial assets, with world-leading positions in some emerging technology domains. In magnetic confinement fusion, for instance, Germany's Wendelstein 7-X stellarator represents the world's most advanced device in its category.[2] Similarly, Europe maintains strong positions in quantum computing research, with significant public investments through the Quantum Flagship programme, and in advanced materials science. The challenge lies not in research capability but in mobilising this capacity for commercial outcomes.

Cultural Barriers to Entrepreneurship

Some participants identified cultural factors as the primary impediment to commercialisation, superseding even financial and institutional constraints. European academic culture was viewed as prioritising stability and established career pathways over entrepreneurial risk-taking. Researchers at institutions such as the Max Planck Society, despite working at the frontier of their fields, rarely pursue commercial spinouts. In contrast, faculty at institutions such as the Massachusetts Institute of Technology (MIT) routinely engage in consulting, company formation, and technology transfer activities.

European students, unlike their US counterparts, receive limited exposure to entrepreneurship programming, venture challenges, or systematic engagement with industry. This educational difference was viewed as perpetuating risk-averse career planning and narrowing the pipeline of future founders.

In AI, Europe produces world-leading scientists, but participants noted that many subsequently relocate to North American hyperscalers to access both research resources and commercial-scale opportunities. The absence of a European hyperscaler was seen as constraining both talent retention and practical application of research advances. Mistral AI represents Europe's most prominent foundation model effort, although participants acknowledged it was not able to compete effectively with cutting-edge US and Chinese models on some technical performance metrics.

However, recent geopolitical developments were seen as creating opportunities to reverse long-standing talent flows. Disruption to US scientific funding programmes and concerns about research environment stability have prompted consideration of European relocation amongst senior researchers. Notable examples include prominent Nobel Prize–winning economists who have moved from MIT to the University of Zurich. Whilst these moves signal potential, participants cautioned that attracting individual talent without comprehensive ecosystem transformation might yield limited commercial impact.

Artificial Intelligence Sovereignty and Infrastructure

Foundation Models Versus Application Layer Emphasis

Participants engaged in substantive debate regarding the appropriate degree of European AI development and support. One perspective articulated that Europe should focus on application layer development rather than foundation model competition. Foundation models often require hundreds of millions in training costs and commoditise rapidly. As newcomers emerge and open-source rivals absorb and commoditise their advances, rapid depreciation and infrastructure obsolescence become obvious risks. This trajectory suggests that European firms should leverage new AI developments, whilst differentiating through knowledge graphs, interoperability frameworks, and industry-specific applications, without bearing the capital risk and competitive disadvantage of competing in foundational compute infrastructure.

By implementing an abstraction layer across multiple large language models, companies could select optimal performers for specific applications rather than committing to a single provider. One company in attendance announced plans to host OpenAI on sovereign European cloud infrastructure, addressing data residency concerns whilst accessing frontier model capabilities. This strategy prioritises "code over concrete," with investment targeted to differentiated IP rather than computational infrastructure.

In contrast, another perspective emphasised data sovereignty as fundamental to European technological independence. An AI application company founder contended that foundation models, despite undergoing commoditisation, continue to represent essential infrastructure akin

to utilities such as water, electricity, and security. Under this perspective, dependency on US compute providers was seen as an existential business risk, as demonstrated by recent Amazon Web Services (AWS) outages affecting European operations.[3] Guaranteeing service levels to customers was viewed as impossible without sovereign control over foundational infrastructure.

Defining and Achieving Sovereignty

Participants disagreed on what sovereignty means in practice. Participants viewed complete supply chain sovereignty—from chip design through manufacturing, training infrastructure, model development, and application deployment—as economically unfeasible and strategically questionable. No nation, including the US and China, achieves full vertical integration. The relevant question concerns acceptable dependency asymmetries rather than absolute independence.

One framework distinguishes *security sovereignty* (government and defence applications requiring specific security controls) from *component origin sovereignty* (regional control over design, manufacturing, and operation). European policy must articulate which sovereignty dimensions matter most for which use cases, then mobilise resources accordingly.

Another participant emphasised that sovereignty discussions consume disproportionate policy attention given their inherent limitations. The focus on sovereignty, rather than competitiveness and leadership, was viewed as reflecting European under-ambition. Rather than accepting application layer consolation prizes (whilst the US and China lead on foundation models), Europe should prioritise specific, future next-wave technologies where world leadership is achievable and marshal resources to achieve those positions.

Developing Infrastructure Synergies

Participants discussed how US and Chinese AI success reflects integrated ecosystems spanning chips, compute infrastructure, cloud platforms, and model development. Companies in these markets can optimise across the technology stack, generating synergies that would otherwise be unavailable through specific component- or service-level excellence. DeepSeek's effectiveness, for instance, was identified as stemming from vertical integration of software, cloud, chips, and computing resources within a unified organisational structure.

Europe's fragmented approach, with companies pursuing chip manufacturing capacity independently from cloud infrastructure development, and both independently from AI model creation, misses out on these synergies. Producing chips for Apple represents manufacturing capacity but does not necessarily develop European AI competitiveness. Under this perspective, a coherent strategy requires identifying projects that span multiple layers of the technology stack and funding them as integrated programmes rather than separate initiatives.

Scaling Challenges and Market Fragmentation

Regulatory Complexity and Market Access

The European market, whilst theoretically providing access to 450 million consumers, functions as 27 distinct regulatory jurisdictions for technology companies. Germany alone maintains 16 separate state-level data protection authorities plus one federal authority. This fragmentation imposes substantial scaling costs on start-ups seeking to expand beyond their home markets. Each jurisdiction requires separate legal entity formation, regulatory compliance programmes, and often market-specific product modifications.

The regulatory burden extends beyond data protection to encompass procurement processes, technical standards, and sector-specific requirements. One participant described losing multiple guaranteed contracts because of EU procurement complexity. Another noted that achieving meaningful scale across Europe requires identifying specific vertical markets and securing anchor customers, preferably in the public sector, rather than attempting horizontal expansion across multiple jurisdictions simultaneously.

Public Procurement as a Growth Catalyst

Several participants advocated for transforming public-sector engagement from equity investment or grant funding to strategic procurement contracts. The Palantir model was cited: The company secured multi-year government contracts without immediate profitability requirements, enabling sustained technology development funded by customer payments rather than venture capital dilution. This approach generated a $440+ billion market capitalisation company with over half of its revenue derived from public-sector contracts.[4]

Under this perspective, European governments could accelerate start-up scaling by committing to contracts rather than through subsidies. This mechanism transfers risk from equity investors to government procurement budgets whilst creating stronger incentives for companies to deliver functional solutions. However, participants acknowledged that current European procurement systems lack the flexibility and technical sophistication to effectively evaluate and contract with early-stage technology providers. Reform of procurement frameworks may be a prerequisite to this strategy's success.

Capital Markets and Scale-Up Financing

The Scale-Up Funding Gap

European companies that successfully navigate early-stage funding frequently relocate to the US for growth-stage capital. US pension funds and insurance companies, on the other hand, routinely invest in technology scale-ups, viewing calculated risk as essential to portfolio returns. European institutional investors, by contrast, maintain conservative mandates that categorise growth-stage technology as inappropriately risky. This funding gap at the critical scaling phase forces companies to establish US operations, hire US executives, and ultimately exit through US financial markets.

The trapped savings problem exacerbates this dynamic. Trillions of euros sit in European consumer savings accounts earning minimal returns. Regulatory frameworks and institutional conservatism prevent these savings from flowing into equity markets that could fund European technology companies.

Savings and Investment Union Prospects

The Capital Markets Union, now rebranded as the Savings and Investment Union, has been under discussion for over a decade with limited substantive progress. Technical barriers include unharmonised insolvency legislation, fragmented securities regulation, and more than 20 central counterparty platforms for equity trading compared to the single system in the US. These barriers create cross-border transaction costs that segment European capital along national lines.

One participant argued that the directive approach has failed. Rather than attempting comprehensive harmonisation, Europe should establish a "28th regime": an optional, unified European regulatory framework that companies can adopt voluntarily whilst member states retain existing systems. This parallel structure could enable rapid scaling for companies choosing European registration whilst avoiding the political gridlock inherent in requiring unanimous member state agreement on harmonisation details.

The concept has gained traction among European policymakers and entrepreneurs. The European Commission has included the concept in its work programme, and a coalition of start-up founders is campaigning for an "EU Inc" framework featuring a single legal registry, standardised investment documents, and uniform shareholder agreements. However, some participants warned that implementation must be carefully designed and inclusive in order to become widely adopted.[5] A 28th regime imposed on top of national structures, rather than instead of them, risked creating an additional bureaucratic layer.

Participants emphasised the need to shift from supply-side to demand-side thinking. European policies were viewed as consistently focusing on creating better universities, funding basic research, and perfecting financial market legislation—supply-side interventions that have rarely

achieved their stated objectives. Creating demand for European technology through strategic public spending was emphasised by some as a more promising path forward.

Global Investment Perspectives

Investors with global portfolios also offered perspectives on European innovation challenges. One participant observed that although Chinese entrepreneurs operate under substantial regulatory constraints, they can still pursue highly ambitious work programmes. European entrepreneurs, by contrast, often frame discussions around Europe's regulatory problems rather than articulating transformative visions. Under this perspective, effective entrepreneurship requires accepting constraints as immutable whilst pursuing innovations that transcend those limitations.

This perspective emphasised *process innovation* (the operational excellence that enables rapid iteration cycles) as crucial to developing competitive advantage. Taiwan Semiconductor Manufacturing Company's evolution from a seemingly cyclical industrial company to a global technology leader resulted from sustained investment in process improvement rather than solely IP development. Closing feedback loops within tight time frames, learning from mistakes rapidly, and maintaining physical proximity between design and manufacturing teams were viewed as generating tangible advantages that are difficult to replicate through policy intervention alone.

Defence Spending and Innovation Multipliers

Participants expressed concern that European defence spending will disproportionately benefit established prime contractors and fund legacy platforms rather than driving innovation. Examples from Ukraine and Israel demonstrate that rapid innovation cycles, proximity between operators and developers, and willingness to experiment with unproven technologies generate capabilities that traditional procurement systems cannot match.

The forthcoming increase in European defence spending was seen as an opportunity for more sophisticated technology investment, with economic multiplier effects expected to exceed traditional military expenditure. Although context dependent, standard defence procurement activity tends to generate moderate positive fiscal multipliers in the economy.[6] However, defence research and development (R&D) with dual-use commercial applications can achieve substantially higher multipliers, particularly when technological spillovers are included.[7]

The US Defence Advanced Research Projects Agency (DARPA) model demonstrates this approach. DARPA operates open technology programmes that solicit proposals without pre-specifying technical approaches, funding promising ideas and providing contracts that support both military capability development and commercial spinouts. The US Army maintains similar R&D programmes that have generated significant dual-use technologies. Some participants commented that European defence policies could incorporate lessons from the US

experience, creating pathways for technology start-ups to secure contracts and direct funding toward emerging capabilities rather than incremental improvements to existing systems.

The same participant warned European firms to be wary of the current US AI investment boom. The 2000 internet bubble saw massive capital deployment followed by a greatly reduced number of sustainable businesses, and current AI investment cycles may follow a similar pattern.

Participating Organizations

The Berlin Global Dialogue convened representatives from leading organisations across technology, finance, policy, and research:

Allianz
Antler
CHEPSTOW Capital GmbH
Choco
Cisco
Claperty
Eleonorik/POMTEAM
European Center for Digital Competitiveness
Forward Global
M31 Capital
Noxtua SE
OmniBot.ai
Plan A
Primavera Capital
Proxima Fusion
SAP SE
SCALED
Terra Quantum AG
WRR

Milken Institute Attendees

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Endnotes

1. "Can Europe Pay Top Academics as Much as Bad Footballers?," Silicon Continent, accessed 29 October 2025, https://www.siliconcontinent.com/p/can-europe-pay-top-academics-as-much.
2. "Wendelstein 7-X Sets New Performance Records in Fusion Research," Max Planck Institute for Plasma Physics, accessed 29 October 2025, https://www.ipp.mpg.de/5532945/w7x.
3. "Outage, Outrage and No Plan B, AWS Failure Shows Europe Is Flying Without a Safety Net," Capacity Global, accessed 29 October 2025, https://capacityglobal.com/news/aws-outage-analysis/.
4. "Palantir Revenue Breakdown: Government vs. Commercial," Stock Dividend Screener, accessed 29 October 2025, https://stockdividendscreener.com/technology/palantir-revenue-breakdown/.
5. Anne Sanders, *The Scope of the 28th Regime: A Legal Framework for Innovation the European Way*, In-Depth Analysis (Brussels: European Parliament, Policy Department for Justice, Civil Liberties and Institutional Affairs, July 2025), PE 776.311, https://www.europarl.europa.eu/RegData/etudes/IDAN/2025/776311/IUST_IDA(2025)776311_EN.pdf.
6. Ethan Ilzetzki, *Guns and Growth: The Economic Consequences of Defense Buildups*, Kiel Report No. 2 (Kiel Institute for the World Economy, February 2025), https://www.econstor.eu/bitstream/10419/311212/1/1917343442.pdf.
7. Ibid.

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