

LUISS EU IOSAC Fellowship Research Proposal: Financing European Dual-Use Technologies amid Global Geoeconomic Competition

The objective of this research is to examine how the European Union's dual-use technology financing mechanisms can reduce strategic dependencies and enhance competitiveness in an era of economic coercion and weaponization of technological interdependencies within intensifying US-China competition. The study will analyze how STEP-EDF integration, Horizon Europe, and EIC Accelerator programs can optimize European technological sovereignty through enhanced dual-use financing coordination. Recent policy analyses emphasize dual-use solutions' critical importance for enhancing strategic capabilities while European entrepreneurs face significant financing constraints with venture capital investment substantially lower than major competitors like the US (Draghi, 2024; European Commission, 2026).

The research would directly address EU-IOSAC themes on EU trade and innovation policies under strategic dependencies, where Europe experiences both external competitive pressures and exercises autonomous strategic agency in technological competition (Calcara, Teer & Zaccagnini, 2025). This builds upon established frameworks for European Open Strategic Autonomy that emphasize strengthening competitiveness while enhancing economic security through selective industrial policy approaches (Guerrieri & Padoan, 2024; Bontadini & Meliciani, 2024). Given that the EU shows greater external vulnerability than China in strategic dependencies, with the majority of critical dependencies originating from China (European Commission, 2026), the study examines how financing mechanisms can strengthen European positions in critical value chains.

The primary research question would be how European dual-use financing architectures can be optimized to enhance technological autonomy while maintaining economic competitiveness. The methodology combines quantitative analysis of European dual-use financing flows (2021-2026) across STEP-EDF integration, Horizon Europe, and EIC Accelerator programs with qualitative case studies of ten dual-use enterprises in semiconductors, quantum technologies, and biotechnology sectors. This research builds upon ongoing collaborative work on Paolo Camerotto's Masters thesis on dual-use technologies and the EU defense industrial base, with quantitative analysis conducted in partnership with Valentina Meliciani and Filippo Bontadini.

Expected contributions include developing the first empirical framework linking dual-use financing effectiveness to enhancing the EU's competitiveness and strategic autonomy, and policy recommendations for optimizing financing synergies. The timing aligns with post-2027 Multi-annual Financial Framework and European Competitiveness Fund negotiations, with the ECF designed to accompany projects along the entire investment journey from research to manufacturing (European Commission, 2025), providing a framework where dual-use financing optimization lessons could inform future policy design. Deliverables include an EU IOSAC Working Paper, Jean Monnet seminar presentation, and policy briefs for European institutions on dual-use financing optimization.

References:

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