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Title: Regional Strategies for Supply Chain Resilience: A Comparative Study of the European Union and Taiwan

The contemporary global economic order is currently navigating a "transition era" characterized by a shift away from liberal trade rules toward protectionism and a heightened focus on economic security. This shift necessitates a precise understanding of the challenges facing global value chains, specifically through the lenses of resilience and diversification. Within this context, resilience is defined as an adaptive capacity that encompasses preparing for unexpected events, responding to disruptions, and recovering from them. It involves not only maintaining business continuity at an operational level but also ensuring control over the structure and function of supply chains to withstand exogenous shocks. A critical distinction must be made between resilience at the micro level, which focuses on a firm's short-term survival and competitive advantage, and the macro level, where public policy aims at the stability of the economic system, society, and the delivery of key goods. At the macro level, resilience is the ability of a complex adaptive system to maintain its original function despite disruptions.

To achieve such resilience, states employ diversification, which is fundamentally the strategy of building alternatives. At the micro level, this involves expanding sourcing options, production channels, and logistics networks to increase flexibility. At the macro level, diversification as a public policy involves expanding the supplier base to reduce dependence on risky countries or regions. This includes derisking—reducing imports from countries posing a security risk—and friendshoring, which involves collaborating with partners who share common values. The central problem addressed by this research is the "weaponization" of these trade dependencies, where production factors are used as tools of political and economic coercion. Such coercive measures, including tariffs, embargoes, and export bans, threaten the stability of economic development, particularly in high-tech sectors where production is highly fragmented. Both the European Union and Taiwan face these systemic vulnerabilities, and the challenge lies in identifying which regional policy solutions can foster macro-level resilience without incurring unsustainable losses in efficiency or competitive advantage.

The primary purpose of this paper is to identify and analyze the specific practices and policies employed by the EU and Taiwan to enhance supply chain resilience and diversification. While many studies focus on micro-level managerial perspectives, this work seeks to fill the gap in understanding macro-level public policy solutions and how specific geopolitical contexts determine their success. By comparing a transcontinental regulatory power like the EU with a technologically specialized island like Taiwan, the research aims to provide a broad perspective on diversification options and identify universal patterns of resilience.

To address these questions, this paper utilizes Program Theory to evaluate resilience policies as interconnected sets of hypotheses and mechanisms, tracing the transition from resource engagement (inputs) to specific actions and, finally, to systemic outcomes. This approach assesses not just the final results but the cause-and-effect logic of the implementation process. Furthermore, the study adopts the "most different systems" comparative approach. This method is chosen because the EU and Taiwan differ vastly in economic size, political systems, and geographic locations, which helps eliminate confounding variables and highlights whether resilience strategies are applicable across distinct geopolitical conditions.

The analysis processes a wide array of qualitative and quantitative data, including, strategic and legislative documents (e.g. The EU's *Critical Raw Materials Act*, *Chips Act*, and the *Internal Market Emergency and Resilience Act* (IMERA)), institutional data (e.g. reports from Taiwan's Ministry of Economic Affairs and the Industrial Technology Research Institute), investment figures, trade statistics, individual in-depth interviews with supply chain stakeholders

The paper argues that while both the EU and Taiwan utilize state interventionism as a shield against coercion, they represent two fundamentally different regional response models. The EU is consolidating a "regulatory fortress" model, emphasizing "near-shoring" and internal autonomy to secure its continental industrial base and raw material sovereignty. In contrast, Taiwan is weaving a "security net" model, utilizing outward "friend-shoring" to disperse geopolitical and physical risks among allies while strictly maintaining its most advanced technological "core" on the island.

Intermediary findings suggest that the EU's legislative framework currently faces an implementation gap, as effectiveness depends on the coherence of its 27 member states. However, IMERA has established a framework to reduce response times from weeks to days. Findings regarding Taiwan indicate it has effectively used its semiconductor dominance to restructure supply chains via the "China Plus One" strategy, successfully reducing geographic concentration. The research concludes that the true measure of a regional response's success is not merely the volume of allocated funds, but the visibility and the ability to rapidly reconfigure supply chains in the moment of a crisis.