



“Open strategic autonomy” as an industrial policy compass for the EU competitiveness and growth: The good, the bad, or the ugly?

Sergio Mariotti¹

Received: 30 May 2024 / Revised: 1 September 2024 / Accepted: 2 September 2024
© The Author(s) 2024

Abstract

This paper explores the potential of Open Strategic Autonomy to effectively foster industrial policies that boost EU competitiveness and growth. It investigates changes in the global economy and international order, with a focus on two key concepts: the "win-lose" reconfiguration of globalization and the resurgence of nations as "confrontational states," marked by interventionism, national sovereignty, techno-nationalism, and zero-sum thinking. Within this context, a "new industrial policy" is emerging, driven by a focus on economic autonomy and security. The paper analyzes the industrial strategies and legislative measures adopted by major powers, which are largely designed to weaponize policymaking and international economic relations, including the use of tit-for-tat strategies. It situates the EU within this framework and questions the compatibility and coherence between the emerging European measures inspired by new geo-dirigisme and the principles of an open economy and multilateral cooperation. The conclusion provides criteria for assessing whether Open Strategic Autonomy can serve as a positive guide for industrial policies, rather than a detrimental one.

Keywords Confrontational state · European Union · New industrial policy · Open Strategic Autonomy · Weaponizing policymaking · Win-Lose globalization

JEL Classification F50 · F60 · L50 · N44 · O25

✉ Sergio Mariotti
sergio.mariotti@polimi.it

¹ Department of Management, Economics and Industrial Engineering, Politecnico di Milano, Milan, Italy

1 Introduction

Open Strategic Autonomy (OSA) has become the defining buzz-phrase for the new direction of European industrial policy amid an increasingly complex economic and geopolitical landscape. OSA evolved from the concept of *European Strategic Autonomy* (ESA), which dates back to the postwar period with the first defense cooperation programs among Western European countries. Over time, ESA gained momentum but lost relevance after the Cold War, only to be resurrected in 2016 when the European Union (EU) published "A Global Strategy for the European Union's Foreign and Security Policy" (Helwig & Sinkkonen, 2022). Several events pushed ESA to the forefront of the European agenda: growing uncertainty and imbalances in the world order, deteriorating relations with the US during the Trump administration, new security challenges exacerbated by Russia's invasion of Ukraine, dependency on external supply chains for strategic goods during the COVID pandemic, reliance on other superpowers for digital technologies and energy, increasing international migration flows, and renewed geopolitical activism by various states (Bunde et al., 2024; Luo, 2024; Mariotti, 2022). At the height of its formal success, ESA gradually became a more ambiguous concept, extending far beyond defense issues due to varying national interests and strategic factors like relations with NATO and the transatlantic alliance. Consequently, ESA's meaning became increasingly diluted, ultimately serving as little more than a call for closer European integration (Česnakas, 2022).

Shying away from ESA, to which the concept of the European Defense Union was preferred in the military domain, the European Commission introduced the term OSA, with an explicit focus on economic rather than defense matters (European Commission, 2020). In essence, the OSA approach seeks to balance Europe's openness to international economic relations, continuing the tradition of free trade and the international division of labor, with the need to safeguard its autonomy, defined as independence from external control over strategic assets such as advanced technologies and critical resources. Implementing industrial policies that achieve this balance is seen as crucial to preserving EU competitiveness and growth (European Commission, 2021).

Two key aspects of OSA stand out: (i) the central role of industrial policy and (ii) the integration of competitiveness with continental sovereignty and security concerns. The first point highlights the global resurgence of industrial policies. Since the 1970s, these policies had declined, largely due to failures, waste of public resources, vested interests, and anti-competitive effects. Most economists, favoring the allocative efficiency of free markets, viewed any form of government intervention with suspicion, often condemning it as inadequate in line with the Washington Consensus. However, a series of events has altered this perspective: the 2008 global financial crisis (GFC), sluggish recovery with weaker growth, intensified international competition with the rise of China and other mid-sized powers, growing social and economic disparities, and the need for large-scale infrastructure investments and mission-oriented public projects to support transformative transitions like environmental and digital initiatives.

The economic literature reflects and supports this shift. Aiginger and Rodrik (2020, p. 189) welcome the «rebirth of industrial policy» and propose an «agenda for the twenty-first century». Aiginger and Ketels (2024, p. 8) later observe that «industrial policy is not only "reborn," but also "reloaded"», with the state's return in a significant way after years of market rhetoric, providing substantial financial support and programs for strategic industries. In the EU, this “new industrial policy”—commonly referred to as such by both proponents and critics (e.g., Criscuolo & Lalanne, 2024; Evenett et al., 2024; Henrekson et al., 2024; Reynolds, 2024)—is accompanied by unprecedented dirigisme. Seidl and Schmitz (2023) discuss how previous attempts to establish a dirigiste Europe failed, despite the risk of falling behind technologically and economically. Historically, the EU has relied on creating supranational markets, particularly after the 1980s neoliberal "recasting" of the European order. The European Commission's emphasis on competition policy as the primary means of increasing competitiveness, while excluding selective sectoral programs, contributed to a gap in important productive activities. However, the authors argue that today's first coherent and successful push for a "market-directing" European policy, aimed at steering markets toward long-term goals and missions, has gained traction. Crucially, this shift is driven by the need for technological sovereignty and "geo-dirigisme," as markets alone cannot provide the technological capabilities and economic competitiveness necessary to survive in a world where technology and geopolitics are increasingly intertwined.

This brings us to the second key aspect of OSA. Geo-dirigisme represents the strategic imperative to be "as open as possible, as autonomous as necessary" in response to the decline of multilateralism and the rise of geopolitical tensions between economic blocs. Countries have adopted new doctrines to manage their international rivalries, largely centered around the notion of decoupling (Witt, 2019; Witt et al., 2023): China's "dual circulation" model prioritizes productive self-sufficiency and strategic independence from major technology exporters; the US Sullivan Doctrine aims to reorganize global production systems, urging US-China decoupling based on the premise that maintaining a broad advantage over competitors is essential; and the EU's De-Risking Doctrine seeks to reduce or eliminate risks in economic relations through security divisions, balancing between decoupling and full engagement.

The debate on OSA's novelty and effectiveness has intensified over time, revealing different perspectives:

- (i) *The good.* Beyond EU policy circles, some scholars view OSA as necessary for the radical restructuring and transformation of European industry in a changed global context (Van den Abeele, 2021). They argue that participation in an open global economy must be accompanied by state-driven strategic interventions in the market, moving away from market fundamentalism—not to abandon neoliberal thinking entirely, but to find alternatives that can effectively manage the delicate trade-offs between "openness" and "strategic autonomy," which are believed to be mutually supportive in the long run (Schmitz & Seidl, 2023). Accordingly, scholars offer analyses and policy proposals to strengthen

- and implement this program (e.g., Della Posta, 2023; Guerrieri & Padoan, 2024; Janger, 2024; Li, 2023; Mirò, 2023).
- (ii) *The bad*. Other scholars warn that abandoning traditional European multilateralism in favor of political realism may lead the EU into the "autonomy trap." An EU that perceives itself as vulnerable seeks greater autonomy. However, this may lead to increased decoupling in the name of self-sufficiency and security, weakening the EU's economic and industrial influence over potential allies in its competition with other powers, especially China and the US. The resulting sense of greater weakness could drive the EU to seek even more autonomy, creating a vicious cycle (Youngs, 2021). Efforts to strengthen external ties for EU influence, while simultaneously reducing the influence of others over the EU, may prove impossible. Industrial policies guided by OSA principles risk surrendering to growing international anarchy, unintentionally contributing to a protectionist race-to-the-bottom that undermines free trade and global multilateralism (Bargués, 2021; Gomart & Jean, 2023; Mariotti, 2024; Olsthoorn, 2024).
- (iii) *The ugly*. Finally, some scholars highlight the inconsistency of the idea of openness-strategic autonomy mutuality. They note that EU policy papers do not explain how openness safeguards autonomy and vice versa (Kübek & Mancini, 2023; Soete & Burgelman, 2023). The concept is dismissed as an ugly oxymoron, useful only for camouflaging a strategy driven by pragmatism and open to varying opportunistic interpretations by EU member states (Broeders et al., 2023; Lavery et al., 2022). Similarly, the de-risking strategy is seen as a form of "decoupling à la carte," allowing for different policies to be adopted as needed (Ciuriak, 2023).

This state of the art indicates that evaluating OSA's industrial policy in terms of EU growth and competitiveness is a complex challenge, characterized by incomplete and sometimes contradictory information, dynamic developments, numerous influential actors, and links to other significant international issues. The situation is so intricate that it requires careful "problem-setting." This paper aims to contribute to this effort. Section 2 outlines the changes in globalization and the world order that set the stage for the analyses that follow. Two key concepts are introduced (Mariotti, 2024). First, *win-lose globalization*, which emphasizes the end of the "heroic" global economic integration that has in the past benefited all countries in terms of growth and prosperity, but now gives way to the perverse effects due to the endogenous accumulation of inequalities and imbalances between and within countries. Second, the reassertion of nation-states in a new, *confrontational guise*, characterized by interventionism focused on national sovereignty, economic security, techno-nationalism, zero-sum thinking, and the weaponization of interdependencies between countries to gain absolute advantages and weaken rivals. Section 3 examines how these changes are shaping the new industrial policy, discussing its autonomy- and security-driven reconfiguration, the activation of tit-for-tat strategies, and the proliferation of industrial plans and legislative packages aimed at weaponizing policymaking. Section 4 positions the EU within this context, evaluating the effectiveness of OSA as a guide for EU industrial policy and questioning the

compatibility and coherence between the emerging geo-dirigiste measures and the principles of an open economy and multilateral cooperation. The conclusion offers criteria for assessing whether OSA can serve as a positive compass for industrial policies, rather than a bad or ugly one.

2 The changing landscape of globalization and world order

In the aftermath of World War II, industrialized nations experienced a Golden Age of capitalism characterized by high growth rates, driven primarily by domestic demand and the need for postwar reconstruction (Glyn et al., 1990). Concurrently, economic integration among countries expanded, increasingly involving emerging economies and fostering multilateralism, which eventually led to the establishment of the World Trade Organization (WTO) in 1995. This era of widespread growth fueled the narrative of a win–win global order based on the paradigm of a “globalized free market economy” (Stiglitz, 2017a). The collapse of Soviet regime, hastened by the superior competitiveness of Western nations, marked the end of the Cold War. This led some scholars to assert that globalization was inherently progressive and peaceful, with Francis Fukuyama (1992) famously predicting the “end of history,” and Edward Luttwak (1990, p. 9) announcing a shift from geopolitics to geoeconomics, «as trade methods are supplanting military ones». Mainstream economics bolstered this view by promoting the so-called “globalization consensus” or “Washington consensus,” which posited that countries embracing liberalization and limiting the state’s role in the economy would experience greater growth and less inequality (Wade, 2010). Empirical evidence appeared to support this idea: Western countries grew at twice their historical rates (Toniolo, 1998), and multinational enterprises (MNEs) enjoyed record profits. Emerging economies also thrived, benefiting from the positive externalities generated by global value chains (GVCs) (Baldwin, 2012). Some even predicted a borderless world where economic growth would be unrestricted, inhabited by stateless MNEs (Ohmae, 1990), and where economic interdependence would drive global development, the spread of democracy, and peace by raising the cost of interstate conflicts (Friedman, 2005). However, it soon became clear that globalization was not exactly a marriage made in heaven. Critical research pointed out that the concept of statelessness was a fallacy (Weiss, 1998) and exposed the unequal effects of globalization, highlighting significant disparities between winners and losers, as well as stark socioeconomic inequalities across regions, countries, and social groups (Williamson, 2005). Despite this, up until the GFC, the optimistic win–win narrative prevailed, and while criticisms were present, they were largely sidelined (Rodrik, 2002).

The GFC reveals a transformed reality marked by deep economic imbalances and social contradictions, leading to the deterioration of international economic relations and dimming growth prospects for the global economy. Rodrik (2008) decrees the death of the globalization consensus, while Stiglitz (2017b) criticizes the overestimated benefits and underestimated costs of globalization. As skepticism towards globalization increases, analyses revisit the complex interplay between geoeconomics and geopolitics, which were previously considered outdated (Dabic et al., 2021).

The GFC has revealed that the world has become less conducive to the survival and balanced growth of all nations and enterprises. For new emerging powers, relying on endogenous growth is no longer sufficient, while external growth increasingly depends on competitive dynamics with established powers amidst growing global interdependencies. In this regard, the globalized free market paradigm has failed to offer effective solutions.

We describe the current reshaping of international economic interdependencies as *win-lose globalization* (Mariotti, 2024) to highlight the growing disparity between the winners and losers of globalization (O'Brien & Leichenko, 2003; Williamson, 2005). This disparity is now more pronounced and is actively pursued by nation-states rather than being an outcome of the free market's "invisible hand." Contrary to Vernon's (1971) view, nation-states have actually gained power. MNEs are kept "at bay" by the strategic actions of nation-states (Jannace & Tiffany, 2019; Petricevic & Teece, 2019), or more, a synergistic relationship between states and firms is formed, aligning their domestic and international strategy agendas (Meyer & Li, 2022). In other words, the global economy has gone beyond mere multilateral trade expansion, with the growing influence of nation-states, whose affirmation is endogenous to globalization itself (Mariotti, 2024; Traù, 2023).

Most important, the strategic content and directions of state interventionism have changed, together with its intensity. The idea of the state acting as a *strategist*, deliberately making choices and implementing policies that shape business behavior, has long been discussed in academic literature (Lenway & Murtha, 1994). Stylizing somewhat, in the latter half of the twentieth century, two key models of the strategist state emerged, each with different institutional variations, levels of interventionism, and capabilities.

On one side was the "competition state" model (Cerny, 1997), prevalent in most industrialized Western nations. This model emphasized commercialization, liberalization of cross-border movements, and privatization of public services, aligning with the principles of economic liberalism. The relationship between the state and firms under this model was one where the state acted as a guardian of the free market economy, serving business interests without interfering in specific company strategies.

In contrast, the "command and corporatist state" model involved states implementing coordination mechanisms to orchestrate national corporate strategies, employing varying degrees of state control and/or state capitalism. This model was evident in countries like China and the former USSR (command) and in West Germany, Japan, and East Asia (corporatism) (Murtha & Lenway, 1994). The corporatist "developmental state" proved to be the most successful in strategic intervention (Romano & Traù, 2024), focusing on driving domestic firms toward global strategies that centralize activities within their home countries and serve the global market through exports. In essence, developmental states followed an inward-looking strategy aimed at maximizing internal growth, in contrast to the outward-looking strategy of competition states.

In the new century, nations have moved away from both the competition state and the developmental state. This shift has been legitimized by the unresolved economic and social imbalances of globalization, which international governance institutions

have failed to address. Although this new interventionism shares the developmental state's propensity for dirigisme, it differs in several key ways:

- (i) nation-states no longer see globalization as a means of improving their domestic economies through international cooperation and externalities; instead, they view the intensifying economic interdependencies as a battleground where rival states compete in a non-cooperative manner for absolute and relative gains. This leads to a strong reaffirmation of national sovereignty and the adoption of policies aimed at expanding or defending the interests of their own businesses and citizens; such policies include extensive protectionism and an escalation of hostile actions, threats, and retaliations (Enderwick, 2011; Evenett, 2019; Helleiner, 2021).
- (ii) the primary rationale becomes national economic security, a reaction to increasing geopolitical risks posed not by generic exogenous factors, but by explicit hostile strategies from other countries; this new focus distorts traditional economic calculations and prioritizes economic policies aimed at gaining power and autonomy (Andruseac, 2015; Gomart & Jean, 2023; Hacker, 2018).
- (iii) nation-states exploit the complex financial, productive, and informational networks established by globalization to target their rivals. The "weaponization of interdependencies" for coercive purposes (Farrell & Newman, 2019) extends to virtually all areas—economic policies, energy, global value chains, migration, media, medicine, sports, and more—within an expanded concept of hybrid warfare (Hoffman, 2007).
- (iv) the techno-globalism of the twentieth century, which viewed innovation as a collaborative effort of multinational institutions leveraging technological interconnectivity and resource complementarity (Reich, 1987), is being replaced by techno-nationalism; under the banner of economic security, this approach seeks to dominate or at least control sensitive technologies through strategies that promote domestic innovation while simultaneously aiming to weaken rival nations (Ando et al., 2024; Luo, 2022; Mariotti, 2022).

We refer to this emerging model as the *confrontational state*. It is becoming ubiquitous in international relations, though it manifests differently across countries. In the next section, we will explore this diversity with a focus on economic and industrial policy, but first, we will highlight some of the main implications of this model for the global economy and society.

The actions of confrontational states have interacted with economic difficulties and imbalances in a vicious circle that has weakened crucial drivers of globalization, such as trade and foreign direct investment (FDI). This has been thoroughly documented by leading international institutions (e.g., UNCTAD, 2023). The resulting turbulence has fueled arguments for de-globalization, with some suggesting that globalization will be reversed (Enderwick & Buckley, 2020; Kim et al., 2020; Novy, 2022). However, prospective and less contingency-based approaches argue that while the fundamental social, political, economic, and cultural dimensions of globalization are unlikely to be reversed (Steger & James, 2019), globalization is now

facing new vulnerabilities from geopolitical pressures. In this environment, neither globalization nor de-globalization will prevail; rather, an ongoing and unstable conflict between the two will persist (Cui et al., 2023; Goldberg & Reed, 2023), echoing our concept of win-lose globalization.

A highly indicative measure of the current global tension is military spending. According to the SIPRI database, global military expenditure has risen by an average of 3% annually since 2017, now representing 2.3% of global GDP. The US (38.2%), China (12.3%), and Russia (4.5%) together account for 55% of this total. Since the early 2000s, both China and Russia have significantly increased their per capita military spending—five times more for China and three times more for Russia, in constant dollars—exceeding the expenditure of NATO countries. Before the Russian invasion of Ukraine, European nations benefited from the "peace dividend" alongside US military protection (George & Sandler, 2022), with only ten out of the 25 European NATO members meeting the 2% GDP defense spending target in 2023. However, a recent SIPRI report (Tian et al., 2024) highlights that military spending in Central and Western Europe reached a record high in 2023, surpassing Cold War-era levels, with increases of 62% since 2014 (the year of Russia's annexation of Crimea) and 16% since 2022. Furthermore, European governments have announced additional defense spending increases, reallocating resources from other public sectors and enhancing coordination at the European level (Dorn et al., 2024). This overall rise in military spending suggests an intensifying arms race.

Lastly, the win-lose reconfiguration of globalization raises significant questions about the future. Economic competition and zero-sum thinking of the nation-states are not per se inauspicious facts. Competition drives productivity gains and improvements in the national innovation system through investments in physical and human capital. Winners emerge, but even those who lose benefit from the increased availability of goods and services at lower prices and from the positive externalities that accrue to the global community (Armstrong & Quah, 2023). According to international relations theory, as long as the relative gains of the winners over the losers remain manageable, the stability of relational equilibria may be preserved. However, the competition for economic security presents a different scenario. The major powers currently exhibit asymmetric yet comparable strengths, which makes the possibility of altering the international order a realistic prospect. This viewpoint drives confrontational states to pursue international strategies aimed at gaining advantages by isolating their rivals, hindering their progress in productivity and technological advancement, and weakening their defensive and reactive capabilities, following a doctrine similar to Sullivan's (see Introduction above). Unlike economic competition, security competition does not produce positive externalities; the winner seeks to achieve a significant relative gain to create a lasting disparity with the loser. This undermines any expectation of cooperation, as Waltz (1979, p. 105) notes: «if an expected gain is to be divided, say, in the ratio of two to one, one state may use its disproportionate gain to implement a policy intended to damage or destroy the other. Even the prospect of large absolute gains for both parties does not elicit their cooperation so long as each fears how the other will use its increased capabilities».

The widening and consolidation of the winner-loser divide triggers a dynamic that in the long run may plunge countries into a (perhaps by all) unwanted loss-loss

equilibrium. This pessimism is shared by authoritative sources. The Munich Security Report 2024 puts it this way: «as more and more states define their success relative to others, a vicious cycle of relative-gains thinking, prosperity losses, and growing geopolitical tensions threatens to unroll. The resulting lose-lose dynamics are already unfolding in many policy fields and engulfing various regions» (Bunde et al., 2024). Armstrong and Quah (2023, p. 3) foresee an «epic fail equilibrium» due to a lose-lose cycle in which «geopolitical rivalry emerges; economics is weaponized; national security concerns mount and geopolitical rivalry sharpens yet further».

3 The weaponized “new industrial policy”

The profound changes in the globalized world and the primacy of economic security in geoeconomic and geopolitical confrontations between regional blocs and nation-states have significantly influenced and shaped the resurgence and evolution of industrial policy. Further, this resurgence is intertwined with two drivers of radical technological change: the green transition and the digital transition. The latter are large-scale changes that challenge established industrial footprints and bring back mission-oriented state policies after their heyday in the 1970s–1980s (Mazzucato, 2021). Given the scale of required investments, the inherent uncertainties of these transitions, the need to develop new infrastructure, and the importance to ensuring access to GVCs resilient to international market disruptions, substantial state intervention is necessary. As these challenges critically impact national destinies, industrial policies have become a key component of confrontational states’ strategies, both economically and politically. The desire to retain the social and economic benefits of large-scale planned investments exacerbates unfair competition and strategic protectionism, turning industrial policies into weapons of both offense and defense. This occurs within a context where even multilateral commitments painstakingly established in the past are increasingly being disregarded.

This section aims to compare and highlight how this weaponization of industrial policy is designed and implemented, particularly focusing on the major powers. In doing so we assume an open-ended definition of industrial policy, as suggested by Juhász et al., (2023, p. 4), i.e. «those government policies that explicitly target the transformation of the structure of economic activity in pursuit of some public goal typically to stimulate innovation, productivity, and economic growth».

3.1 The rise of industrial policy, tit-for-tat dynamics and the risk of a global race to the bottom

Recent studies and databases on industrial policy measures worldwide provide an initial overview and offer some insights into the topic.

Juhász et al. (2023) highlight the revival of industrial policy: the total number of industrial policy interventions globally has surged from 34 in 2010 to 260 in 2016, and nearly 1,600 in 2021. The 2023 survey by Evenett et al.’s (2024) survey indicates more than 2,500 interventions—a sharp increase, although the exact change

should be interpreted cautiously due to differing methodologies. Among these interventions, 1,806 (or 71%) are classified as distorting international economic relations. Within this predominant subset, domestic subsidies (57%) and export subsidies (10%) make up over two-thirds of the total, with import–export and FDI barriers (21%), and local procurement and location policies (12%) also playing significant roles.

Both studies agree that advanced, higher-income countries are the biggest users of industrial policy. Notably, long-standing OECD countries account for more than 70% of the total measures. Moreover, the number of interventions tends to increase as country's income per capita rises. Other sources reveal that during the 2017–2019 period, industrial policies mobilized between 0.4% (Germany and the US) and 0.55% (France) of GDP. Nevertheless, it is China's spending, which accounted for 1.7% to 2% of its GDP over the same period, that clearly highlights the new dimension of global industrial policy competition (DiPippo et al., 2022).

Perhaps the most intriguing evidence comes from Evenett et al. (2024), who describe the emergence of a "vortex of tit-for-tat retaliation," linked to the threats to economic security perceived by each country from its rivals' actions. Specifically, they estimate a 73.8% probability that a subsidy provided by one of the major economies—China, the EU, or the US—for a particular product will be matched by a subsidy from another economy within a year. An econometric analysis confirms the existence of this tit-for-tat dynamic «which implies a suboptimal use of resources at the global level if costly policy actions are taken simply to neutralize measures by others and regain lost advantage on account of similar actions by trade partners» (Evenett et al., 2024, p. 22).

Governments around the world have long recognized that no one wins when tit-for-tat strategies spiral out of control. Supranational institutions such as the IMF, OECD, UNCTAD, and WTO often warn that such unrestrained competition leads to a global race to the bottom. However, this dynamic persists, likely due to countries' lack of confidence in cooperative solutions orchestrated by the multilateral rules-based system governing international relations. Indeed, this system appears increasingly ill-equipped to address the current challenges. The WTO case serves as an example of this inadequacy. In 1995, the WTO introduced the Agreement on Subsidies and Countervailing Measures to prevent uncooperative strategies that could trigger a subsidy war among member states. However, this Agreement failed to stop China from circumventing the rules through a narrow national definition of subsidies, which applied to only a small portion of government interventions in a country dominated by state capitalism (Gomart & Jean, 2023). Over time, dissatisfaction from the US, EU, and Japan has eroded the binding nature of this Agreement. More broadly, since the early 2000s, a surge in unilateral actions by various states has undermined the multilateral system. The invocation of "Security Exception Articles" to defend national security has increased, often at the expense of WTO commitments to free trade, even though national security should only be an exception. The WTO's legitimacy is further compromised by the weakening of its dispute settlement system, particularly after the US's attack on its regulations (initiated during the Trump administration and not reversed by President Biden), leading to a shift toward unilateralism and economic nationalism among other member countries. The

emergence of limited reform initiatives offers little reason for optimism about the future (Sacerdoti & Borlini, 2023).

3.2 Autonomy & security-driven reconfiguration of industrial policies

Major powers have increasingly adopted strategic plans and legislative packages that signal a shift toward autonomy & security-driven industrial policies. These efforts have progressively been supplemented by geoeconomic tools (Bauerle Danzman & Meunier, 2024), employed by confrontational states to politicize international economic relations in pursuit of leadership and economic security. The intertwined adoption of these measures and the escalating intensity of public intervention over time are clearly observable. In the following the main evidences.

3.2.1 New strategic plans and legislative packages of major powers

The rise of China has been a pivotal factor in the global reconfiguration of industrial policy. China's ambition for leadership in critical technologies leapt into the world's eyes with the 2015 "Made in China" plan. Subsequently, in the context of the trade war initiated by the Trump administration, the "Dual Circulation Strategy" was launched with two primary goals: (i) achieving self-sufficiency in high-tech manufacturing to ensure strategic independence from key rival exporters; (ii) complementing its albeit large domestic market with increased external demand, facilitated by initiatives like the "Belt and Road Initiative", which seeks to open markets in the emerging world under the banner of a seemingly inclusive globalization (Kołodko, 2018).

In response, the US has shifted away from its traditional market-oriented liberalism, adopting a mission-oriented policy to protect industry and national autonomy from the threat posed by China. A legislative package, consisting of the "Infrastructure Investment and Jobs Act", the "CHIPS and Science Act" and the "Inflation Reduction Act", was passed in 2022, providing for massive public investment. The Chips and Science Act marks the turn toward interventionist techno-nationalism, using subsidies, export controls, investment screening, and safeguard provisions to reshape GVCs for geopolitical and geoeconomic purposes (Luo & Van Assche, 2023). The Inflation Reduction Act (IRA) is another milestone, combining large-scale green subsidies with health savings and new revenue measures. It contains protectionist elements that blatantly violate WTO rules. Of particular concern is the introduction of local content requirements and large-scale production subsidies. These measures distort trade and FDI by providing incentives for reshoring and encouraging European and Asian companies to relocate factories to the US (Kleimann et al., 2023).

In the face of this mobilization of resources, other countries have launched similar far-reaching initiatives, although they struggle to keep up on the financial deployment front (Rosén & Meunier, 2023). Indeed, only China seems to rival the US, with 546 billion dollars invested in clean energy in 2022, compared to 500 billion dollars in IRA spending and tax credits.

Japan has responded by enacting the “Economic Security Promotion Act” in May 2022 to protect the country from coercion by others on the basis of economic dependence. The act prioritizes strengthening supply chains for critical goods and raw materials, securing key infrastructure; promoting critical technologies in the public and private sectors, and preventing the leakage of sensitive inventions through secret patents (Koyu et al., 2022). The EU has implemented the "European Chips Act" (2022) and the "European Green Deal Industrial Plan" (2023), which align with US initiatives and included amendments to state aid rules to counter IRA subsidies. However, other proposed initiatives, such as the creation of a European-level "Sovereignty Fund" to mobilize financial resources of sufficient size to ensure EU competitiveness in critical technologies, have seen limited progress. Instead, existing EU funds have been repackaged under the Strategic Technology Platform for Europe (STEP), which adds only 10 billion euros to existing programs, falling short of the original ambition (Veugelers et al., 2024).

3.2.2 The proliferation of geoeconomic toolkits

Following the strategic plans and legislative packages, various nation-states have developed a range of self-enforcing instruments designed to intervene confrontationally in international economic relations, including investment, trade, subsidies, competition and regulatory laws.

Since the GFC, many countries have established regulatory frameworks for FDI screening. UNCTAD (2023) projects that by the end of 2024, at least 45 countries, including 16 from the G20, will have such frameworks in place. FDI screening is primarily driven by national security, according to a definition that includes critical know-how, strategic assets and sensitive information. Common trends include expanding the list of protected public interests, lowering thresholds for FDI requiring notification, and enhancing the power of public authorities to prescribe and inhibit investments. Notably, the scope of screening has broadened from a few sectors, like defense, to include cross- or multi-sectoral areas critical to national security, such as land/facilities in sensitive areas, critical and transportation infrastructure, critical and emerging technologies, raw materials and energy (Novik, 2024).

In the US, the Committee on Foreign Investment in the United States (CFIUS)—established in 1975 to gather information on inward FDI—has over time morphed into a full-fledged regulatory agency. Both the Trump and Biden administrations have emphasized ensuring that incoming companies do not threaten national security, particularly in relation to China (Lee & Maher, 2022). The US is also planning to introduce a new FDI review regime for its companies—the "reverse CFIUS"—to prevent other competing countries from exploiting outward FDI for high-tech leakage.

In the EU, the FDI Screening Regulation was enacted in 2020, reflecting the need to create an economic governance system that accommodates FDI for mutual interests while protecting against malicious, unfair and abusive practices (Li, 2023). The European Commission's 2023 Work Program includes revising FDI screening based on experience gained to strengthen its effectiveness. Among the hypotheses in

consultation is the introduction of controls on strategic outward FDI, following the US model.

As for China, it has developed a complex legal framework over time, promoting FDI with preferential policies while imposing market access barriers for FDI in strategic areas. The 2020 Foreign Investment Law is the key legislation for FDI screening, with initiatives subject to a National Security Review to assess risks to defense, national security, and critical industries. China's Negative Market Access List, updated almost annually, outlines areas restricted for FDI, mainly concerning agricultural products, energy and infrastructure, large equipment manufacturing, important transportation, cultural and financial services, and key technologies (Chow, 2024). Furthermore, China's unique governance system allows the government substantial control over both state-owned and private enterprises, using mechanisms like golden shares and institutional "rule-by-law authoritarianism" that prevents enterprises from maintaining their autonomy through constitutionally enshrined rights. This control extends to using enterprises for political and economic coercion abroad (McDonagh, 2023).

Coming to trade, related measures have increasingly embraced protectionism. Monitoring of policies that affect world trade conducted by Global Trade Alert (<https://www.globaltradealert.org/>) shows that since the GFC, cumulative government interventions through mid-2024 harming foreign commercial interests have outnumbered liberalizing ones by more than five to one (55,550 harmful vs. 10,610 liberalizing measures). Discriminatory measures include subsidies (56% of interventions), export-related measures (including export subsidies), tariffs, and trade-related investment measures. The US (18% of the total cumulative number), China (13%) and Brazil (13%) are the most active in implementing these measures. Overall, G20 countries accounting for three-quarters of the total.

A significant trend in trade is the flourishing of unilateral legislative packages implemented by countries outside traditional multilateral agreements (e.g., the Wassenaar Arrangement), to control the export of dual-use goods, which can serve both civilian and military or security purposes. In 2022, the US imposed export controls on high-performance computing chips and related software, as well as advanced semiconductor manufacturing equipment, strengthening these measures in 2023. In the same year, Japan adopted export controls on semiconductor manufacturing items, and China adopted controls on products containing gallium and germanium, advanced unmanned aerial vehicles, graphite and related products. The EU updated its Export Control Regulation in 2021 and is considering further revisions in response to global developments (European Commission, 2024a).

As for the EU, other measures related to international transactions through both trade and FDI have been adopted. These include: the International Procurement Facility (2022), to ensure a level playing field and introduce reciprocity in government procurement through retaliation for companies based in third countries that do not grant the EU equal access to their market; the Foreign Subsidies Regulation (2022), to monitor FDI, investigate and counter potentially distortive home-state subsidies to foreign firms when they participate in M&As or public tenders in the EU market; the Anti-Coercion Instrument (2023), which introduces a wide range of countermeasures and deterrents in case of coercive acts implemented by third

countries by imposing restrictions on trade and investment on European companies (Freudlsperger & Meunier, 2024).

Finally, mention should be made to the increasing propensity of nation-states to influence the decisions of national antitrust and regulatory authorities. Referring to Mariotti (2023) and Mariotti and Marzano (2024) for an in-depth analysis, the two factors that make it possible for national governments to "capture" regulators are the lack of international enforcement of competition laws, which makes authorities subject only to national jurisdiction, and the space left by competition law for enforcement discretion by the courts. This allows governments to manipulate antitrust and industrial regulation to condition the international movement of goods and capital to geopolitical objectives under the guise of an overriding national interest.

China has used competition law as an economic weapon during the technology and trade war with the US. Zhang (2021) documents the broad administrative discretion of the Chinese government, to the point that competition agencies can even exploit the media to pursue hostile enforcement. In the US, Omnibus Bill 2023 mandates coordination between competition enforcement agencies (FTC—Federal Trade Commission and DOJ—Department of Justice) and CFIUS, integrating national security considerations into antitrust enforcement. This coordination enables authorities to receive confidential information and influence from national security counterparts. In the EU, since the early 2000s, some member states have increasingly abused competition policy to protect domestic industries from foreign entry (Mariniello et al., 2015). Such abuses have their greatest expression in countries ruled by populist or authoritarian regimes (e.g., Hungary and Poland; see Bernatt, 2022).

4 The EU and the others

Most scholars agree that the EU was the last among the major powers to move away from multilateralism and neoliberal orthodoxy, eventually embracing unilateralism and an interventionist economic policy. In fact, the EU has taken on a more confrontational posture in recent years. The explanation is traced to concerns over the policy choices of China and the US, the crises triggered by the COVID-19 pandemic, the Russian-Ukrainian war, as well as domestic factors, such as the 2009 Lisbon Treaty (which transferred competencies to the EU level), Brexit (which prompted changes in trade policy), and the wind in favor of populism and nationalism that weakened liberal ideology. Opinions on this transformation vary. Bauerle Danzman and Meunier (2024) and McNamara (2023) view the EU as evolving from a laggard to a geo-oriented institutional innovator; others, like Caffarra (2024), argue that European leadership is pursuing a word salad such as OSA, but fundamentally remains anchored to a European-flavored version of the neoliberal consensus; still others, such as Gomart and Jean (2023), believe it is too early to draw conclusions.

Overall, the idea of a defensive European strategy has taken hold, seen as necessary to counter the aggressive strategies of other powers—a kind of "reluctant unilateralism," embodied by the OSA, where security-driven autonomy coexist with openness wherever possible. However, this justification does not change the

underlying dynamics in light of the failure of effective international governance of globalization and the basic principles of geopolitics.

Regarding the lack of effective global governance, Rodrik's (2008, p. 1) succinct assessment is telling: «unlike national markets, which tend to be supported by domestic regulatory and political institutions, global markets are only “weakly embedded.” There is no global anti-trust authority, no global lender of last resort, no global regulator, no global safety nets, and, of course, no global democracy. In other words, global markets suffer from weak governance, and therefore from weak popular legitimacy».

The anarchic nature of international economic relations and the absence of effective supranational authorities to enforce mutual commitments undermine cooperation among nation-states. While game theory suggests that cooperative outcomes can emerge through repeated interactions, the optimistic predictions of the folk theorem often fall short when compared to historical evidence. The relevant literature has developed infinitely dynamic games that align more closely with history, showing that cooperation and conflict alternate, driven not by irrationality but by forward-looking, rational, albeit collectively wasteful, behavior (e.g., Caro-Burnett et al., 2023; Skaperdas & Syropoulos, 1996).

It is important to recognize that opportunities for international cooperation do not vanish entirely, but enduring harmony is rare. Implicit consequence is the "security dilemma," which occurs when the security gains of one nation-state result in reduced security for others, even in the absence of any intention to threaten them (Jervis, 1978). The dilemma worsens when it is difficult to distinguish between offensive and defensive posture, because then rationality and prudence suggest that nation-states respond with additional security investments, in an escalation that can lead, if not mitigated, to unintended conflict.

The weaponized “new industrial policy” described in Sect. 3 mirrors this condition closely, being a blend of measures that can appear to be defensive or offensive, often serving multiple purposes depending on the circumstances (Bauerle Danzman & Meunier, 2024).

The dynamics of "win-lose" globalization both stem from and contribute to the current state of affairs, which Gomart and Jean (2023) describe as "impossible decoupling/unlikely cooperation." The notion of decoupling—or its softer counterpart, de-risking—indicates the need to separate the global economy into isolated regions due to the persistent and complex interdependencies between rival powers. However, the improbability of such a dynamic resulting from the decisions of major powers stems from the unique international relations of the past century, firstly between China and the US.

China is not only a major rival but also one of the US's top trading partners, alongside Canada and Mexico. Unlike previous rivals, China's GDP is comparable to that of the US, whereas past adversaries never exceeded 40% of the US's economic output. Further, China remains a highly critical supplier for all Western countries. "Critical" is defined as goods where China accounts for more than 50% of both imports and global market share. Boata et al. (2024) estimate that, in 2022, China was the critical supplier for approximately 45% of total US imports from China. For European countries, the figures are 29% for the UK, 28% for Spain, 27% for France,

and 22% for Germany. Moreover, the situation is asymmetrical: in a scenario where trade relations between the US, the EU, and China are disrupted, the US and EU stand to lose more from the disruption of critical supplies than China does—1.3% of GDP for the US and 0.5% for the EU, compared to just 0.3% for China.

Over the past decade, it's true that China's bilateral trade with the US and the EU has seen a noticeable decline as a percentage of global exports (Paterson, 2024a). However, in absolute terms, bilateral trade between China and the US has remained relatively stable, while trade with the EU has shown an upward trend (Fig. 1). Consequently, Hogan and Hufbauer (2023) argue that the “slow decoupling” between the US and China has not significantly reshaped the global trade landscape, with their trade relations expected to continue growing at least until 2025. Regarding the EU, Herrero (2024) suggests that the EU is not genuinely de-risking from China; instead, China is gradually replacing some of its industrial imports with domestically produced goods, thanks to its advanced technological capabilities.

Finally, and quite intriguingly, Paterson (2024b) examines China-US relations within the broader context of shifting global trade and investment patterns. The analysis reveals that the countries gaining market share in US imports are generally the same ones receiving the most exports from China. The author argues that while the US dependence on imports from China may appear reduced, it has not truly been broken—only masked. China continues to dominate global manufacturing, increasingly exporting components to third countries where Chinese investments are fostering the growth of new manufacturing hubs. From these hubs, products are assembled and then re-exported to the US.

These analyses reinforce the argument that complex multilateral relationships significantly reduce the effectiveness of decoupling, contrary to government expectations. Their efforts frequently encounter the unpredictability of overall geoeconomic gains and losses from mutual retaliations, undermining the intended impact of their policies.

Unfortunately, the unlikely prospect of significant decoupling between rival nation-states does not halt the weaponization of international relations, as discussed earlier. Instead, it intensifies this trend, driving both established and emerging powers to seek new methods to either preserve or reshape the global order. From this standpoint, the importance of multilateralism in establishing new international balances cannot be ignored; in fact, it becomes essential in addressing the governance weaknesses affecting global markets, to borrow Rodrik's terminology. This, rather than a unilateral approach that could lead to destructive cycles, represents the real challenge for the EU and its OSA compass. Is the EU up to the task? Given its strategic interactions with both allies and rivals, will the EU strengthen or further undermine supranational institutions and international cooperation in pursuit of Paretian solutions?

Addressing these questions requires a degree of perspective, as the OSA remains more a collection of intentions than of concrete achievements. On an aspirational level, every European Commission document on the topic underscores a commitment to bolstering international governance institutions. However, when it comes to tangible actions—such as the industrial policy promoted by the OSA—scholars question whether the measures, influenced by the new geo-dirigisme, are truly

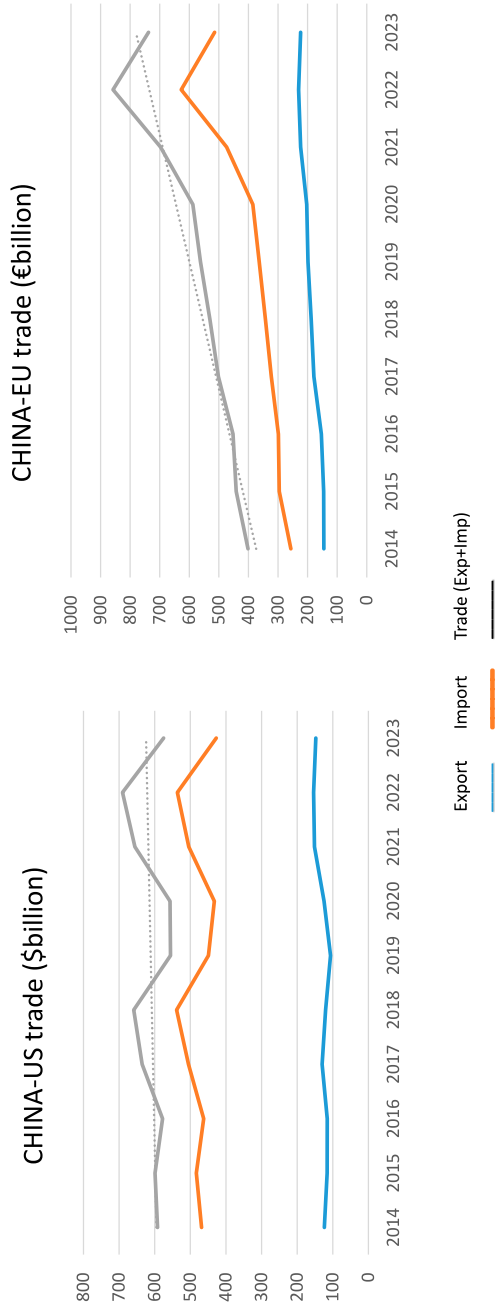


Fig. 1 Total value of EU and US trade in goods with China, 2014–2023. Source: US Census Bureau and Eurostat

compatible and coherent with a genuine commitment to an open economy and multilateral cooperation.

The current state of uncertainty can be illustrated by two key issues. The first relates to recent trade and FDI policies. Freudlsperger and Meunier (2023) examine the historical evolution of the relationship between the EU and the WTO and how these policies have impacted the latter organization. They note that, while the EU was once a staunch advocate of multilateralism, it has recently faltered in its commitment to advancing the WTO's multilateral trade agenda. Although the EU continues to formally affirm its openness and trust in the WTO as a framework for addressing global challenges like digital and green transitions, it has shifted toward what Meunier (2022) calls the “end of naiveté” in international economic relations, increasingly relying on unilateral policy tools to achieve strategic autonomy. Initiatives such as the Anti-Coercion Instrument create divisions among WTO members, making any EU effort to revive the multilateral process highly unlikely. Moreover, some scholars view this instrument critically, considering it a disguised return to illegal countermeasures, potentially violating the WTO's Dispute Settlement Understanding under questionable public morals and national security justifications (Olsthoorn, 2024).

The second major issue pertains to science and innovation policies. In a recent study, Bamberger and Huang (2024) present evidence of a strategic shift in the EU's international research cooperation policy since 2018. This shift marks a move away from a liberal agenda that emphasized openness, toward a more selective approach that favors certain partnerships while excluding others, thereby reshaping the research landscape. This transition has been gradual, driven by escalating geopolitical tensions and an increasing emphasis on sovereignty, autonomy, reciprocity, and the risks of foreign interference. The authors predict that the EU is unlikely to return to its previous stance of openness, with future international research collaborations more closely aligned with national and regional protectionist interests. Recent developments seem to confirm this outlook. In early 2024, the European Commission (2024b) released an updated version of the Horizon Europe Strategic Plan for 2025–2027. Compared to the 2021–2024 period, the new plan elevates “open strategic autonomy and ensuring Europe's leading role in the development and deployment of critical technologies” from one of the four key strategic orientations to an overarching principle that now applies to the other three priorities (green transition, digital transition, and building a more resilient, competitive, inclusive, and democratic Europe). The buzz-phrase “open strategic autonomy” is scattered throughout every line of the research agenda.

In a critical editorial, the prestigious journal *Nature* described this change in direction as “ominous”. While acknowledging the influence of the changing international landscape, marked by geopolitical and military conflicts, the editorial argued that «a security mentality cannot be embedded in what is fundamentally an open and autonomous research cooperation fund», which is meant to foster trust among nations (*Nature*, 2024, Editorial). Instead, the principle of open strategic autonomy may hinder cooperation with researchers from countries lacking formal defense and security cooperation agreements with the EU. This explicit move away from technoglobalism seems further supported by the approach taken in the EU's upcoming

research program (FP10), which «frequently stresses the importance of building FP10 around the concept of open strategic autonomy» and limits close international cooperation to «like-minded countries around the globe that share EU values» (Science/Business, 2023). The scientific community has expressed serious concerns about this direction, especially given the technological paradigms dominated by the so-called four S's (sunk costs, synergies, scalability, and spillovers; see Haskel & Westlake, 2017), which require large-scale public investment and global cooperation that transcend the narrow logic of techno-nationalism (Luo, 2022).

5 Conclusion

In the context of win-lose globalization, major powers have adopted a confrontational stance, leading to the politicization of international economic relations. This shift has significantly undermined the supranational organizations established in the postwar period to promote international cooperation and resolve disputes. The resurgence of industrial policy has played a crucial role in this dynamic, serving, at least in part, the “weaponization of everything” with the ultimate goal of enhancing national autonomy and security.

The EU has remained more committed to multilateralism than other major powers and has been the last to adopt unilateral measures in response to the proactive aggressiveness of others. The convergence of member states around the OSA concept reflects a shift in ideology but also a reluctance to abandon the multilateral approach. This is evident in the oxymoronic association of openness with autonomy—a topic of past debate between countries like France, which insisted that autonomy should not be preceded by openness, and free trade advocates, who resisted any text that excluded openness (Juncos & Vanhoonacker, 2024).

This paper sought to explore whether OSA can serve as a compass for EU competitiveness and growth, given the varying opinions in the literature, previously summarized using the “good-bad-ugly” metaphor. As the practical implementation of this new strategy is still in its early stages, assessing its effectiveness as a guide is challenging and remains an open question. Nevertheless, the analyses presented in the paper provide sufficient insight into current developments and allow for a tentative conclusion, albeit one that remains dependent on future events.

In the short term, the numerous declarations about OSA should translate into industrial policy programs that focus less on defending industries heavily exposed to global competition—especially from the BRICS—and more on the design and implementation of cooperative R&D projects among member states. For the chronically fragmented EU, which lacks a federal government and effective joint planning in critical areas like an integrated defense policy and spending, it is crucial to focus inward and achieve continental economies of scale and synergies. In this context, “Important Projects of Common European Interest” (IPCEI) tools, intended to implement the EU’s industrial strategy through large-scale consortia aimed at R&D and early industrial applications in strategic value chains, are already in place. However, they have struggled to take off, and achieving this would be a significant step forward. Given this situation, the emphasis within the EU on “completing” the

internal market as the main policy approach (European Round Table for Industry, 2024; Letta, 2024) seems justified, though concerning in light of the need to catch up with major competitors.

From a broader perspective, the delicate balance inherent in the OSA should not lead to outcomes that worsen international relations by pushing the global economy toward an epic fail. This assertion would be hollow and little more than wishful thinking without accompanying guidelines. This paper offers useful insights, pointing to some 'litmus tests' for whether the OSA will meet the conditions necessary to be a good, rather than a bad or ugly, compass. Specifically, three key points are emphasized.

First, the OSA will falter if it fails to uphold the EU's longstanding commitment to multilateralism—not through naivety, but by actively contributing to the resolution of the current disorder in international economic relations. The EU's trade and industrial policies should reinforce, rather than undermine, the efforts of existing international bodies like the WTO, while also working to establish new ones, such as global antitrust and regulatory authorities. This would revive the initiatives that were halted in 2004 when the WTO deemed conditions unfavorable for advancing the Doha Ministerial Declaration's work program (Mariotti, 2023).

Second, the OSA must actively reaffirm that techno-globalism is a more effective strategy than techno-nationalism for accelerating technological progress, reducing inequalities among countries, and increasing the global growth rate (Ostry & Nelson, 2000). It is unacceptable for strategic autonomy to contribute to the feared declines in productivity and long-term stagnation (Summers, 2015) by deliberately restricting the international flow of technologies, data, and ideas that have enabled billions to escape poverty and hunger.

Third, the OSA must promote industrial strategies that include criteria and solutions to mitigate the "security dilemma," based on the realistic assumption that this dilemma will continue to loom over international relations and the balance of power. This is the most challenging task, likely requiring responses that are geographically and sectorally specific rather than universally applied. A few examples of current practices and proposals along these lines are worth noting. A mitigation strategy to learn from is Norway's policy in the High North. Due in part to global warming, the Arctic has become an area of increasing geoeconomic and geopolitical interest among major powers, with the current equilibrium challenged by Russia's military intervention in Ukraine. Knutsen and Pettersen (2024) analyze how Norway can maintain low tension in the region through a mix of deterrence and reassurance policies, combined with trust-building measures. They also discuss how the Arctic Council could become a multilateral instrument for coordinating security and defense policies. In a similar vein, Inomata (2024) discusses potential industrial policies that leverage GVCs as channels of information transmission, which can be used to build trust between parties and mitigate the economic security dilemma posed by the dual-use nature of GVCs, where distinguishing and separating civilian and military uses, access to critical technologies, and externalities is becoming increasingly difficult. Governments should recognize this security-enhancing mechanism and create the institutional frameworks to utilize it effectively. In an era where rivalries are weaponized, the risk of

decoupling could also be reduced by engaging non-aligned countries to indirectly connect rival powers and facilitate the exchange of trust-building information.

Failure to meet these criteria in European industrial policy could stem from either the EU's unwillingness or inability. If the EU is unwilling to adhere to them, it would be a regrettable choice, as it would intensify conflicting and unilateral stances, worsening international disorder and internal fragmentation within the EU by promoting nationalistic behavior. If the EU is unable to follow them due to unresolved strategic rivalries, then openness will become merely an illusion and empty rhetoric, leading inevitably to slower technological progress, reduced productivity, and diminished global growth. Recognizing these potential outcomes is crucial for making informed decisions.

Funding Open access funding provided by Politecnico di Milano within the CRUI-CARE Agreement.

Declarations

Conflict of interest The author states that there is no conflict of interest.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Aiginger, K., & Ketels, C. (2024). Industrial policy reloaded. *Journal of Industry, Competition and Trade*, 24(1), 1–10.
- Aiginger, K., & Rodrik, D. (2020). Rebirth of industrial policy and an agenda for the twenty-first century. *Journal of Industry, Competition and Trade*, 20(2), 189–207.
- Ando, M., Hayakawa, K., & Kimura, F. (2024). Supply chain decoupling: Geopolitical debates and economic dynamism in East Asia. *Asian Economic Policy Review*, 19(1), 62–79.
- Andruseac, G. (2015). Economic security—New approaches in the context of globalization. *CES Working Papers*, 7(2), 232–240.
- Armstrong, S., & Quah, D. (2023). Economics for the global economic order: The tragedy of epic fail equilibria. ArXiv preprint, [arXiv:2310.18052](https://arxiv.org/abs/2310.18052)
- Baldwin, R. (2012). *Global supply chains*. CEPR Discussion Papers 9013.
- Bamberger, A., & Huang, T. Y. (2024). From irreversible openness to protectionism: Geopolitics and international research cooperation in the European Union. *Journal of Education Policy*. <https://doi.org/10.1080/02680939.2024.2351516>
- Bargués, P. (2021). From 'resilience' to strategic autonomy: A Shift in the implementation of the global strategy? *EU-LISTCO Policy Papers*, 9, 1–16.
- Bauerle Danzman, S., & Meunier, S. (2024). The EU's geoeconomic turn: From policy laggard to institutional innovator. *JCMS: Journal of Common Market Studies*, 62, 1097–1115. <https://doi.org/10.1111/jcms.13599>
- Bernatt, M. (2022). *Populism and antitrust: The illiberal influence of populist government on the competition law system*. Cambridge University Press.

- Boata, A., Gröschl, J., Huang, F., Kuhnathan, A., Lemerle, M., & Sebastian, N. (2024). *Protectionism mithridatism*. Allianz Trade Global Survey.
- Broeders, D., Cristiano, F., & Kaminska, M. (2023). In search of digital sovereignty and strategic autonomy: Normative power Europe to the test of its geopolitical ambitions. *JCMS: Journal of Common Market Studies*, 61(5), 1261–1280. <https://doi.org/10.1111/jcms.13462>
- Bunde, T., Eisentraut, S., & Schütte, L. (2024). Munich security report 2024: Lose-lose? In *MSC: Munich Security Conference*.
- Caffarra, C. (2024). Are Letta, Macron and Draghi marking the end of neoliberalism in Europe? *Promarket*, May 7. https://www.promarket.org/2024/05/07/are-letta-macron-and-draghi-marking-the-end-of-neoliberalism-in-europe/?mc_cid=5bd82970de&mc_eid=d0cccaa10f
- Caro-Burnett, J., Galiani, S., & Torrens, G. (2023). *Why does the folk theorem do not seem to work when it is mostly needed?* NBER Working Paper Series, No. w31343, <http://www.nber.org/papers/w31343>
- Cerny, P. G. (1997). Paradoxes of the competition state: The dynamics of political globalization. *Government and Opposition*, 32(2), 251–274. <https://doi.org/10.1111/j.1477-7053.1997.tb00161.x>
- Česnakas, G. (2022). European strategic autonomy: The origins story. In G. Česnakas & J. Juozaitis (Eds.), *European strategic autonomy and small states' security* (pp. 14–33). Routledge.
- Chow, D. C. (2024). *China's response to US calls for decoupling: The foreign investment law of 2020*. Ohio State Legal Studies Research Paper 827.
- Ciuriak, D. (2023). The economics of supply chain politics: Dual circulation, derisking and the Sullivan doctrine. Available at SSRN. <https://doi.org/10.2139/ssrn.4433712>
- Criscuolo, C., & Lalanne, G. (2024). A new approach for better industrial strategies. *Journal of Industry, Competition and Trade*, 24(1), 1–26. <https://doi.org/10.1007/s10842-024-00416-7>
- Cui, V., Vertinsky, I., Wang, Y., & Zhou, D. (2023). Decoupling in international business: The 'new' vulnerability of globalization and MNEs' response strategies. *Journal of International Business Studies*, 54(8), 1562–1576. <https://doi.org/10.1057/s41267-023-00602-5>
- Dabic, M., Maley, J., & Novak, I. (2021). An analysis of globalisation in international business research 1993–2018: Rise of the sceptics. *Critical Perspectives on International Business*, 17(3), 444–462. <https://doi.org/10.1108/cpoib-02-2019-0016>
- Della Posta, P. (2023). The European Union in the age of slowbalisation. *Journal of Policy Modeling*, 45(4), 833–847. <https://doi.org/10.1016/j.jpolmod.2023.07.006>
- DiPippo, G., Mazzocco, I., Kennedy, S., and Goodman, M. P. (2022). *Red ink: Estimating Chinese industrial policy spending in comparative perspective*, CSIS Report. Available at <https://www.csis.org/analysis/red-ink-estimating-chinese-industrial-policy-spending-comparative-perspective>
- Dorn, F., Potrafke, N., & Schlepper, M. (2024). European defence spending in 2024 and beyond: How to provide security in an economically challenging environment. *EconPol Policy Report*, 8, 45.
- Enderwick, P. (2011). Understanding the rise of global protectionism. *Thunderbird International Business Review*, 53(3), 325–336. <https://doi.org/10.1002/tie.20410>
- Enderwick, P., & Buckley, P. J. (2020). Rising regionalization: Will the post-COVID-19 world see a retreat from globalization? *Transnational Corporations Journal*, 27(2), 99–112. <https://doi.org/10.18356/8008753a-en>
- European Commission. (2020). *A renewed trade policy for a stronger Europe. Consultation Note*, 16. Retrieved from https://trade.ec.europa.eu/doclib/docs/2020/june/tradoc_158779.pdf
- European Commission. (2021). *Trade policy review: An open, sustainable and assertive trade policy*. COM/2021/66 final, February 18.
- European Commission. (2024a). *White paper on export controls*. COM(2024)25 final, January 24.
- European Commission. (2024b). *Horizon Europe strategic plan (2025–2027)*. Publications Office of the European Union.
- European Round Table for Industry (2024). *Single market obstacles*. https://ert.eu/wp-content/uploads/2024/02/ERT-Single-Market-Obstacles_Technical-Study_WEB.pdf
- Evenett, S., Jakubik, A., Martín, F., & Ruta, M. (2024). *The return of industrial policy in data*. International Monetary Fund Working Paper, WP/24/1.
- Evenett, S. J. (2019). Protectionism, state discrimination, and international business since the onset of the Global Financial Crisis. *Journal of International Business Policy*, 2(1), 9–36. <https://doi.org/10.1057/s42214-019-00021-0>
- Farrell, H., & Newman, A. (2019). Weaponized interdependence: How global economic networks shape state coercion. *International Security*, 44(1), 42–79.

- Freudlsperger, C., & Meunier, S. (2023). The EU and the WTO. In J. Chaisse & C. Rodríguez-Chiffelle (Eds.), *The Elgar companion to the World Trade Organization* (pp. 748–759). Edward Elgar Publishing.
- Freudlsperger, C., & Meunier, S. (2024). When foreign policy becomes trade policy: The EU's anti-coercion instrument. *JCMS: Journal of Common Market Studies*, 62(4), 1063–1079. <https://doi.org/10.1111/jcms.13593>
- Friedman, T. L. (2005). *The world is flat: A brief history of the twenty-first century*. Farrar.
- Fukuyama, F. (1992). *The end of history and the last man*. Free Press.
- George, J., & Sandler, T. (2022). NATO defense demand, free riding, and the Russo-Ukrainian war in 2022. *Journal of Industrial and Business Economics*, 49(4), 783–806. <https://doi.org/10.1007/s40812-022-00228-y>
- Glyn, A., Hughes, A., Lipietz, A., & Singh, A. (1990). The rise and fall of the Golden Age. In S. A. Marglin & G. B. Schor (Eds.), *The Golden Age of capitalism. Reinterpreting the postwar experience* (pp. 39–125). Clarendon Press.
- Goldberg, P. K., & Reed, T. (2023). *Is the global economy deglobalizing? And if so, why? And what is next?* World Bank Policy Research Working Paper 10392.
- Gomart, T., & Jean, S. (2023). *Impossible decoupling, improbable cooperation: Economic interdependencies in the face of power rivalries*. Études de l'IFRI.
- Guerrieri, P., & Padoan, P. C. (2024). *Sovereign Europe An agenda for Europe in a fragmented global economy*. Edward Elgar.
- Hacker, J. S. (2018). Economic security. In J. E. Stiglitz, J. P. Fitoussi, & M. Durand (Eds.), *For good measure: Advancing research on well-being metrics beyond GDP* (pp. 203–240). OECD Publishing.
- Haskel, J., & Westlake, S. (2017). *Capitalism without capital: The Rise of the intangible economy*. Princeton University Press.
- Helleiner, E. (2021). The return of national self-sufficiency? Excavating autarkic thought in a de-globalizing era. *International Studies Review*, 23(3), 933–957. <https://doi.org/10.1093/isr/viaa092>
- Helwig, N., & Sinkkonen, V. (2022). Strategic autonomy and the EU as a global actor: The evolution, debate and theory of a contested term. *European Foreign Affairs Review*, 27(SI), 1–20.
- Henrekson, M., Sandström, C., & Stenkula, M. (2024). *Moonshots and the new industrial policy: Questioning the mission economy*. Springer Nature.
- Herrero, A. G. (2024). China's central role in the globalization and slowbalization trends. *The Economists' Voice*, 20(2), 285–291. <https://doi.org/10.1515/ev-2023-0054>
- Hoffman, F. G. (2007). *Conflict in the 21st century: The rise of hybrid wars*. Potomac Institute for Policy Studies.
- Hogan, M., & Hufbauer, G. C. (2023). Despite disruptions, US-China trade is likely to grow. *Peterson Institute for International Economics Policy Brief*, 2023, 23–14.
- Inomata, S. (2024). Economic security through global value chains. *Economy, Culture & History Japan Spotlight Bimonthly*, 43(2), 58–62.
- Janger, J. (2024). *Innovation, industrial and trade policies for technological sovereignty*. Policy Brief 61, FIW-Kurzbericht.
- Jannace, W., & Tiffany, P. (2019). A new world order: The rule or law, or the law of rulers? *Fordham International Law Journal*, 42(5), 1379–1417.
- Jervis, R. (1978). Cooperation under the security dilemma. *World Politics*, 30(2), 167–214. <https://doi.org/10.2307/2009958>
- Juhász, R., Lane, N. J., & Rodrik, D. (2023). *The new economics of industrial policy*. NBER Working Paper No. w31538.
- Juncos, A. E., & Vanhoonacker, S. (2024). The ideational power of strategic autonomy in EU security and external economic policies. *JCMS: Journal of Common Market Studies*, 62, 955–972. <https://doi.org/10.1111/jcms.13597>
- Kim, H. M., Li, P., & Lee, Y. R. (2020). Observations of deglobalization against globalization and impacts on global business. *International Trade, Politics and Development*, 4(2), 83–103. <https://doi.org/10.1108/ITPD-05-2020-0067>
- Kleimann, D., Poitiers, N., Sapir, A., Tagliapietra, S., Véron, N., Veugelers, R., & Zettelmeyer, J. (2023). *How Europe should answer the US Inflation Reduction Act*. Bruegel Policy Contribution 04/23.
- Knutsen, B. O. H., & Pettersen, E. (2024). War in Europe, but still low tension in the High North? An analysis of Norwegian mitigation strategies. *Arctic Review on Law and Politics*, 15, 25–46. <https://doi.org/10.23865/arctic.v15.5065>

- Kołodko, G. W. (2018). Socialism, capitalism, or chinism? *Communist and Post-Communist Studies*, 51(4), 285–298. <https://doi.org/10.1016/j.postcomstud.2018.10.002>
- Koyu, I., Takahiro, C., Takuto, H., Takayuki, K., Yuta, M., Hiroaki, N., Ryota, S., Shunsuke, S., Isao, T., Ryuta, U., & Taku, Z. (2022). Japan's Economic Security Promotion Act: Background and overview. *Asia-Pacific Review*, 29(3), 28–55. <https://doi.org/10.1080/13439006.2022.2154520>
- Kübek, G., & Mancini, I. (2023). EU trade policy between constitutional openness and strategic autonomy. *European Constitutional Law Review*, 19(3), 518–547. <https://doi.org/10.1017/S1574019623000226>
- Lavery, S., McDaniel, S., & Schmid, D. (2022). European strategic autonomy: New agenda, old constraints. In M. Babić, A. D. Dixon, & I. T. Liu (Eds.), *The political economy of geoeconomics: Europe in a changing world* (pp. 57–80). Springer International Publishing.
- Lee, J., & Maher, R. (2022). US economic statecraft and great power competition. *Business and Politics*, 24(4), 332–347. <https://doi.org/10.1017/bap.2022.19>
- Lenway, S. A., & Murtha, T. P. (1994). The state as strategist in international business research. *Journal of International Business Studies*, 25(3), 513–535.
- Letta, E. (2024). Much more than a market. Speed, security, solidarity: Empowering the single market to deliver a sustainable future and prosperity for all EU citizens. *Institut Jacques Delors*. Retrieved from <https://policycommons.net/artifacts/12120389/untitled/13014142/> on 07 Jul 2024. CID:20.500.12592/vmcmv07.
- Li, C. (2023). The European Union's Open Strategic Autonomy: Strengthening inward foreign direct investment controls. *EurAmerica*, 53(4), 493–549.
- Luo, Y. (2022). Illusions of techno-nationalism. *Journal of International Business Studies*, 53(3), 550–567. <https://doi.org/10.1057/s41267-021-00468-5>
- Luo, Y. (2024). Paradigm shift and theoretical implications for the era of global disorder. *Journal of International Business Studies*, 55(2), 127–135. <https://doi.org/10.1057/s41267-023-00659-2>
- Luo, Y., & Van Assche, A. (2023). The rise of techno-geopolitical uncertainty: Implications of the United States CHIPS and Science Act. *Journal of International Business Studies*, 54(8), 1423–1440. <https://doi.org/10.1057/s41267-023-00620-3>
- Luttwak, E. N. (1990). From geopolitics to geo-economics: Logic of conflict, grammar of commerce. *The National Interest*, 20(Summer), 17–23.
- Mariniello, M., Neven, D., & Padilla, J. (2015). Antitrust, regulatory capture and economic integration. *Bruegel Policy Contribution*, 11, 1–12.
- Mariotti, S. (2022). A warning from the Russian-Ukrainian war: Avoiding a future that rhymes with the past. *Journal of Industrial and Business Economics*, 49(4), 761–782. <https://doi.org/10.1007/s40812-022-00219-z>
- Mariotti, S. (2023). Competition policy in the new wave of global protectionism. Prospects for preserving a FDI-friendly institutional environment. *Journal of Industrial and Business Economics*, 50(2), 227–241. <https://doi.org/10.1007/s40812-023-00263-3>
- Mariotti, S. (2024). “Win-lose” globalization and the weaponization of economic policies by nation-states. *Critical Perspectives on International Business*. <https://doi.org/10.1108/cpoib-09-2023-0089>
- Mariotti, S., & Marzano, R. (2024). Janus-like antitrust policy: How to make the pro-FDI orientation prevail. In P. Gugler & A. T. Tavares-Lehmann (Eds.), *Handbook of international business policy* (pp. 125–141). Edward Elgar Publishing.
- Mazzucato, M. (2021). *Mission economy: A moonshot guide to changing capitalism*. Penguin Random House.
- McDonagh, N. (2023). Protection or protectionism? State-driven foreign investment risks and the EU's new investment screening measures. In J. H. Pohl, J. Warchol, T. Papadopoulos, & J. Wiesenthal (Eds.), *Weaponising investments* (pp. 59–78). Springer.
- McNamara, K. R. (2023). Transforming Europe? The EU's industrial policy and geopolitical turn. *Journal of European Public Policy*. <https://doi.org/10.1080/13501763.2023.2248204>
- Meunier, S. (2022). *The end of naivety: Assertiveness and new instruments in EU trade and investment policy* (p. 55). European University Institute.
- Meyer, K. E., & Li, C. (2022). The MNE and its subsidiaries at times of global disruptions: An international relations perspective. *Global Strategy Journal*, 12(3), 555–577. <https://doi.org/10.1002/gsj.1436>
- Miró, J. (2023). Responding to the global disorder: The EU's quest for open strategic autonomy. *Global Society*, 37(3), 315–335. <https://doi.org/10.1080/13600826.2022.2110042>

- Murtha, T. P., & Lenway, S. A. (1994). Country capabilities and the strategic state: How national political institutions affect multinational corporations' strategies. *Strategic Management Journal*, 15(S2), 113–129. <https://doi.org/10.1002/smj.4250151008>
- Nature. (2024). Editorial: The EU's ominous emphasis on 'open strategic autonomy' in research. *Nature*, 628, 8. <https://doi.org/10.1038/d41586-024-00962-4>
- Novik, A. (2024). Investment screening: Remaining open but safe. In J. Dettoni (Ed.), *The fDi report 2024* (pp. 8–9). The Financial Times.
- Novy, A. (2022). The political trilemma of contemporary social-ecological transformation. *Globalizations*, 19(1), 59–80. <https://doi.org/10.1080/14747731.2020.1850073>
- O'Brien, K. L., & Leichenko, R. M. (2003). Winners and losers in the context of global change. *Annals of the Association of American Geographers*, 93(1), 89–103. <https://doi.org/10.1111/1467-8306.93107>
- Ohmae, K. (1990). *The borderless world: Power and strategy in the interlinked economy*. Free Press.
- Olsthoorn, K. (2024). The EU's anti-coercion instrument: A return of unlawful unilateral trade countermeasures in disguise? *Legal Issues of Economic Integration*, 51(1), 47–86. <https://doi.org/10.54648/leie2024003>
- Ostry, S., & Nelson, R. R. (2000). *Techno-nationalism and techno-globalism: Conflict and cooperation*. Brookings Institution Press.
- Paterson, S. (2024a). Is geopolitics now the overriding determinant in global trade? *Hinrich Foundation Report*, August. <https://www.hinrichfoundation.com/research/wp/trade-and-geopolitics/does-geopolitics-now-determine-global-trade/>
- Paterson, S. (2024b). Is China's overseas direct investment outflanking US trade strategy? *Hinrich Foundation Report*, August. <https://www.hinrichfoundation.com/research/wp/trade-and-geopolitics/china-overseas-direct-investment-outflanking-us-trade-strategy/>
- Petricevic, O., & Teece, D. J. (2019). The structural reshaping of globalization: Implications for strategic sectors, profiting from innovation, and the multinational enterprise. *Journal of International Business Studies*, 50(9), 1487–1512. <https://doi.org/10.1057/s41267-019-00269-x>
- Reich, R. B. (1987). The rise of techno-nationalism. *The Atlantic Monthly*, 259(5), 63–69.
- Reynolds, E. B. (2024). US industrial transformation and the "how" of 21st century industrial strategy. *Journal of Industry, Competition and Trade*, 24(1), 1–17. <https://doi.org/10.1007/s10842-024-00420-x>
- Rodrik, D. (2008). The death of the globalization consensus. *Project Syndicate*, Jul 11.
- Rodrik, D. (2002). Globalization for whom. *Harvard Magazine*, 104(6), 29–31.
- Romano, L., & Traù, F. (2024). *The new industrial world. Manufacturing development in the course of the globalization age*. Oxford University Press.
- Rosén, G., & Meunier, S. (2023). Economic security and the politics of trade and investment policy in Europe. *Politics and Governance*, 11(4), 122–128. <https://doi.org/10.17645/pag.v11i4.7858>
- Sacerdoti, G., & Borlini, L. S. (2023). Systemic changes in the politicization of the international trade relations and the decline of the multilateral trading system. *German Law Journal*, 24(1), 17–44. <https://doi.org/10.1017/glj.2023.10>
- Schmitz, L., & Seidl, T. (2023). As open as possible, as autonomous as necessary: Understanding the rise of open strategic autonomy in EU trade policy. *JCMS: Journal of Common Market Studies*, 61(3), 834–852. <https://doi.org/10.1111/jcms.13428>
- Science/Business. (2023). *Here's what the member states have in mind for FP10*. <https://sciencebusiness.net/news/fp10/exclusive-heres-what-member-states-have-mind-fp10>
- Seidl, T., & Schmitz, L. (2023). Moving on to not fall behind? Technological sovereignty and the 'geodirigiste' turn in EU industrial policy. *Journal of European Public Policy*. <https://doi.org/10.1080/13501763.2023.2248204>
- Skaperdas, S., & Syropoulos, C. (1996). Can the shadow of the future harm cooperation? *Journal of Economic Behavior & Organization*, 29(3), 355–372. [https://doi.org/10.1016/0167-2681\(95\)00077-1](https://doi.org/10.1016/0167-2681(95)00077-1)
- Soete, L., & Burgelman, J. C. (2023). Reconciling open science with technological sovereignty: Can the European Union do it? *Journal of Open Access to Law*, 11(1), 1–15. <https://doi.org/10.3316/agispt.20230926095827>
- Steger, M. B., & James, P. (2019). *Globalization matters: Engaging the global in unsettled times*. Cambridge University Press.
- Stiglitz, J. E. (2017a). *Globalization and its discontents revisited: Anti-globalization in the era of Trump*. WW Norton & Company.

- Stiglitz, J. E. (2017b). The overselling of globalization. *Business Economics*, 52(3), 129–137. <https://doi.org/10.1057/s11369-017-0047-z>
- Summers, M. H. (2015). Demand side secular stagnation. *American Economic Review: Papers & Proceedings*, 105(5), 60–65. <https://doi.org/10.1257/aer.p20151103>
- Tian, N., Lopes da Silva, D., Liang, X., & Scarazzato, L. (2024). Trends in world military expenditure, 2023. *SIPRI Fact Sheet*, April.
- Toniolo, G. (1998). Europe's golden age, 1950–1973: Speculations from a long-run perspective. *The Economic History Review*, 51(2), 252–267. <https://doi.org/10.1111/1468-0289.00090>
- Traù, F. (2023). La globalizzazione e la storia. *Il Mulino*, 72(2), 152–160. [Tr. Globalisation and history, Luiss Institute for European Analysis and Policy Working Paper Series, 6/2023].
- UNCTAD. (2023). *World Investment Report 2023*. United Nations Publication.
- Van den Abeele, E. (2021). *Towards a new paradigm in open strategic autonomy?* ETUI Research Paper, Working Paper 2021.03.
- Vernon, R. (1971). *Sovereignty at bay: The multinational spread of US enterprises*. Basic Books.
- Veugelers, R., Tagliapietra, S., & Trasi, C. (2024). Green industrial policy in Europe: Past, present, and prospects. *Journal of Industry, Competition and Trade*. <https://doi.org/10.1007/s10842-024-00418-5>
- Wade, R. (2010). Is the globalization consensus dead? *Antipode*, 41(s1), 142–165. <https://doi.org/10.1111/j.1467-8330.2009.00720.x>
- Waltz, K. N. (1979). *Theory of international politics*. Addison-Wesley.
- Weiss, L. (1998). *The myth of the powerless state*, Cornell University Press.
- Williamson, J. G. (2005). Winners and losers over two centuries of globalization. In UNU-WIDER (Ed.), *Wider perspectives on global development* (pp. 136–174). Palgrave Macmillan.
- Witt, M. A. (2019). De-globalization: Theories, predictions, and opportunities for international business research. *Journal of International Business Studies*, 50(7), 1053–1077. <https://doi.org/10.1057/s41267-019-00219-7>
- Witt, M. A., Lewin, A. Y., Li, P. P., & Gaur, A. (2023). Decoupling in international business: Evidence, drivers, impact, and implications for IB research. *Journal of World Business*, 58(1), 101399. <https://doi.org/10.1016/j.jwb.2022.101399>
- Youngs, R. (2021). *The European Union and global politics*. Bloomsbury Publishing.
- Zhang, A. (2021). *Chinese antitrust exceptionalism: How the rise of China challenges global regulation*. Oxford University Press.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.