



Geopolitics and Economic Statecraft in the European Union

Rosa Balfour and Sinan Ülgen, editors

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Summary

The creation of global markets unleashed powerful forces—known collectively as geoeconomics—that have led to huge challenges of adjustment to new technologies, patterns of production, and modes of communication. Policymakers must address these challenges with limited resources. To meet their political objectives in this area, national governments use their control over market and nonmarket instruments—or economic statecraft.

The concept of economic statecraft therefore relates to the ways in which states connect economic tools to foreign policy goals. Meanwhile, geopolitics is about the ways in which geography and economics influence politics and interstate relations. Economic statecraft can thus be seen as a response to geopolitics that uses economic means for foreign policy ends. In a historical context, economic statecraft reflects a shift away from a neoliberal doctrine toward more interventionism in the economy.

For decades, the general consensus was that in the international policies of the European Union (EU), commercial interests prevailed over wider foreign policy strategy. In a major shift, EU institutions and European leaders now claim that this stance no longer holds. The EU has gradually moved toward a new economic statecraft that is more infused with geopolitical aims and considerations. EU member states have converged on a shared assessment that the weaponization of interdependence requires jettisoning the neat distinction between economic and security affairs. The emerging European economic statecraft encompasses a wide range of measures: Some aim to establish a level playing field with competitors, while others pursue broader external agendas, such as environmental sustainability or human rights.

The EU's new statecraft is not only defensive but also contains offensive measures against other powers. Some of these powers complain that many new EU measures are a risk to the liberal order that the union claims to defend as its long-term strategic interest. Increasingly, the EU's narrative is about making interdependence safe for the EU rather than the wider political-strategic aim of mutually beneficial global reforms. A backlash from other states risks deepening the strategic problems that the economic security approach is designed to address.

That is why economic statecraft in a volatile and fast-changing world is, to some extent, experimental. An excessive focus on economic security risks generating harmful unintended consequences. To move forward effectively with this agenda, the EU needs to define the

larger goals that economic statecraft is supposed to serve, assess the political and strategic externalities of different policies, and tackle the trade-offs between competing priorities. This is the task for EU institutions and member states in the years ahead.

In a conflict-prone postneoliberal world, these developments require a new examination of the global ambitions and strategies of the EU—traditionally a weak foreign policy player but a strong economic actor. As a pillar of multilateralism, the EU has contributed to and benefited from the rules-based order that is now being challenged. If the EU wants to play a role in this emerging landscape, it needs to adapt its political economic model and craft an external policy fit for purpose.

Adapting to the emerging international environment may mean altering policies and approaches that have been carefully embedded in a set of liberal norms. Building greater European strategic autonomy and internal resilience may entail a shift away from these norms, raising questions about the EU's global standing. Such a shift would also require far greater coherence between the union's internal and external policies.

Internally, the search for a new paradigm for the EU's political economy is challenging, as it represents a departure from the rules-based principles of multilateralism. The compromise found in the notion of open strategic autonomy leaves much room for ambiguity, discretion, and problems of definition. The EU will need to craft an industrial strategy that strikes the right balance between the bloc's aspiration to support key industries and the imperative to maintain fair competition in the single market.

Externally, the EU will need to navigate the complexities of ensuring that its economic statecraft remains as compatible as possible with the bloc's commitments to multilateral rules. As the traditional champion of a liberal, rules-based regime, the EU has a special responsibility to protect global multilateralism.

The success of the EU's policy agenda will thus depend on the union's ability to pursue its interests while upholding global rules. Although the EU may see its economic statecraft as necessary to fulfill the bloc's ambition of economic resilience, globally there are concerns about the potential unintended effects of this approach. The external implications of the EU's burgeoning economic statecraft will require the union to engage in diplomacy to mitigate the impacts of its domestic measures on the multilateral order.

Meanwhile, finding the right balance between economic security and broader foreign policy goals will be crucial for the EU to maintain credibility and legitimacy on the global stage. The union should therefore foster an international engagement strategy to make its practice of economic statecraft compatible with the broader development concerns of the rest of the world.

The EU should, in essence, relearn the art of the strategic management of interdependence. The union should seek to be both strategic and open. Ultimately, the EU's ability to address the challenges of global turmoil, shifting political realities, and the demands of its member states will determine its future trajectory in a rapidly evolving world.

CHAPTER 1

Introduction

Rosa Balfour and Sinan Ülgen

European integration reached its peak in the 1990s. The European single market deepened economic interdependence on the continent. The attractiveness of that market made the European Union (EU) a global partner in bilateral and regional trade deals. The end of the Cold War enabled the EU's enlargement to Northern and then Central Europe. And, by leveraging Europe's interdependence and with strong public support, the EU made its first steps in foreign and security policy.

At that time, economics served the broad geopolitical goal of supporting the post–Cold War order in Europe—just as it had supported the post–World War II order. After the fall of the Berlin Wall, projecting the European model worldwide became the external corollary to the EU's internal success: The prevailing liberal, rules-based approach to international economic relations helped defuse tensions and regulate global politics.

Thirty years later, the EU's strength has turned into a liability. There is now a drive toward a politicization of the international economy, while rising geopolitical tensions impact on economics, security, and technology at a time when European countries are transitioning toward a green and digital economy. Rather than a conduit for cooperation, economic interdependence has become subjected to weaponization.¹ Together, several factors are challenging the world in which European integration was possible: the unraveling of the neoliberal order, the “fuzzy bifurcation” between globalization and geopolitics (according to political scientist Richard Higgott), war in Europe and the Middle East, and the simultaneous trends of accelerated technological change and the climate crisis.²

The EU's Political Economic Model Under Threat

War in Europe and great-power rivalry are laying bare the weaknesses of the EU's political economic model and imposing harsh choices on states. Multilateral institutions, unable to accommodate emerging demands for reform, stand by as international norms and rules are belittled, ignored, or politicized. This situation has polarizing effects on global public opinion and leaves the international order contested by both revisionist states and political actors in societies.

In a conflict-prone postneoliberal world, these developments require a new examination of the global ambitions and strategies of the EU—traditionally a weak foreign policy player but a forceful economic actor. As an experiment and a pillar of multilateralism, the EU has contributed to and benefited from the rules-based order that is now being challenged. If the EU wants to play a role in this emerging landscape, it needs to adapt its political economic model and craft an external policy fit for purpose. The task is even more daunting than it sounds, as it goes to the heart of the logic behind European integration.

Adapting to the emerging international environment may mean changing policies and approaches that have so far been carefully embedded in a set of liberal norms. Building greater European strategic autonomy and internal resilience may entail a shift away from these norms, raising questions about the EU's global standing. Such a shift would also require far greater coherence between the union's internal and external policies.

The double shock of the coronavirus pandemic and Russia's 2022 invasion of Ukraine accelerated a preexisting trend of successive EU measures in response to hostile geopolitics. The prevailing narrative about the EU's adaptation to global disorder frames the challenge as a choice between interdependence, on the one hand, and strategic autonomy or European sovereignty, on the other. There has been much lively debate and many policy discussions about this narrative.

Running through the speeches of Europe's political leaders and the policy documents of the EU institutions is a novel connection between security and economics, both at home and abroad. French President Emmanuel Macron, by far the union's most intellectually engaged political leader, has spoken of a new "prosperity pact" to underpin Europe's quest for sovereignty. Inspired by French essayist Paul Valéry's remark at the end of World War I about the mortality of civilizations, Macron has pointed out the urgency of the endeavor, noting that because of "war and peace on our continent," Europe can die.³ Launching his September 2024 report on the future of European competitiveness, former European Central Bank president Mario Draghi, too, commented on Europe's "slow agony" should it not address its problems.⁴

The strategic agenda of the EU's incoming leadership for 2024–2029 sets out a framework to connect an upgrade of the single market to the EU's ability to respond to geopolitical turmoil.⁵ A string of reports that have been published—including those by Draghi, former

Italian prime minister Enrico Letta, and former Finnish president Sauli Niinistö—all address aspects of these issues.⁶

In this context, this compilation is an inquiry into how the EU is adapting to the transformation of the international order. To address this overarching question, the chapters examine the challenges and dilemmas in a series of thematic areas where economic policy and foreign policy meet.

Economic Means for Foreign Policy Ends

The concept of economic statecraft relates to the ways in which states link economic tools to foreign policy goals. Meanwhile, geopolitics is about the ways in which geography and economics influence politics and the relations between nations. Economic statecraft can thus be seen as a response to geopolitics that uses economic means for foreign policy ends. In a historical context, economic statecraft reflects a shift away from a neoliberal doctrine and globalized economic relations toward more interventionism in the economy.

Prevalent debates frame the challenge within a binary understanding of autonomy versus interdependence. This compilation favors a multidimensional approach that simultaneously examines the politics of the EU and its external impacts. For Europe, having the political leadership to pursue economic statecraft means addressing questions of European unity, the balance between supranational and national powers, and the enduring risk of fragmentation. The interventionism required to strengthen the EU's economic statecraft raises questions about the degree to which member states are willing to cooperate through EU institutions—or, conversely, the extent to which they will resist this creeping statecraft.

In the context of great-power rivalry, Erik Jones observes in the next chapter that the global economy is characterized by a competitive search for policy autonomy, in which governments look for instruments they can use to either take advantage of or push back against the need for change. For the EU, aside from its unfulfilled ambition of greater European sovereignty, there are inevitable questions about its preferred international relationships. How far will the EU tilt toward the United States and invest in the transatlantic partnership, and what room for maneuver might Europe have in its relations with China? Which preferred modes of interaction will the EU invest in: bilateral, minilateral, plurilateral, or multilateral? What normative and practical coherence is there between the EU's internal and external policies? And, more broadly, to what extent can the EU shape the external environment and craft its own strategy, rather than respond defensively to hostile outside trends?

The following chapters in this compilation use this framework to examine how the EU is responding to the challenges to its political economic model. The compilation begins with a historical examination of the critical junctures at which the global economy has shifted into new political orders. As well as identifying the features of great historical transformation, Jones argues that the global economy is unlikely to survive the current competitive search

for greater autonomy. Yet, today's national politics place value on the pursuit of autonomy, making this quest conflictual in and of itself.

This is the background against which the EU's economic statecraft needs to be placed. While policymakers recognize the salience of the connection between economics and security, crafting a mix of economic, foreign, and security policies is harder to achieve. As Giovanni Grevi and Richard Youngs show, European political rhetoric often emphasizes a sense of victimhood in the face of a dangerous international environment, justifying a resort to defensive measures to protect the European economy. Indeed, the EU risks too strong a focus on such a defensive agenda at the expense of a more proactive approach geared toward multilateral cooperation and the protection of international public goods.

The themes explored in this compilation are broad but substantiated by specific policy analyses. Eugenia Baroncelli and Sinan Ülgen examine a range of environmental, technological, trade, and investment policies through the prism of the new doctrine of open strategic autonomy. Lizza Bomassi and Pavi Prakash Nair present supply chain resilience as the key to understanding how the EU translates its ambitions into reality with its partners. Andreas Goldthau looks at the climate agenda through the race for clean transition materials. Raluca Csernatonu considers the EU's quest for technological sovereignty as the framing for the evolving regulation of emerging digital technologies, artificial intelligence, and the security-technology nexus. And Catherine Hoeffler analyzes security through the EU's role in defense-industrial policy.

All of the chapters trace recent policy developments with the goal of understanding the logics and narratives of the EU's policy choices, the degree of continuity with the union's past practices, the policy dilemmas and possible trade-offs, and the political consensus that may—or may not—emerge to enable the union to move forward in its economic statecraft.

Internal-External Tensions

All areas of foreign policy entail an interface between internal cohesion and external projection. For the EU, these areas require a new political consensus on key choices: between openness to the world and inward-looking protectionism, and between the existing rules of international cooperation and the search for a more restrictively defined European interest. Recent policy developments also pose questions about how the EU wants to position itself in relation to other actors—allies, rivals, new partners, and, especially, the United States—and the principle of multilateralism.

At the more mundane level of policy, the EU's dilemmas feed into specific challenges about policy preferences and diplomatic tactics. For instance, protecting and enhancing strategic assets can collide with competition and trade policies. Meanwhile, climate transition goals might be achieved by exploiting the resources of third countries, which would go against the stated goals of the EU's global partnerships. Europe's task is to strengthen its autonomy

while working with partners bilaterally and multilaterally toward reforming global governance.

All of the chapters in this compilation provide policy-specific insights and illuminate broader trends. The gulf between the EU's ambition of sovereignty and the economic reality in the areas of technology, innovation, and defense is so enormous as to call into question whether the term "sovereignty" is appropriate at all. The EU's fragmentation is a chronic feature of these policy fields, and in technology the union's catch-up needs are huge. Cognitive gaps among stakeholders abound, including between states and the private sector when it comes to the resilience of supply chains. Here, as in defense, there are political tensions between the European level and the national level.

The choice between defensive posturing and protection of the EU's economic model, on the one hand, and engagement with the rest of the world, on the other, is a theme running through the chapters, which point out the contradictions between the EU's internal push for autonomy and its stated goal of multilateralism. For example, as Goldthau underlines, there is a risk that the EU's energy transition will lead to dependency-creating import structures. Baroncelli and Ülgen capture the internal-external contradictions in several recent initiatives. While underlining that the EU can exercise choice in pursuing its goal of open strategic autonomy, they wonder whether the union will be able to chart a coherent external policy on both the economic and the ideational front.

Identifying the next iterations of the economic and conceptual dimensions of European integration is the theme of the final chapter. Rosa Balfour focuses on the political legitimacy of the fledgling EU order and unpacks the economic, political, ideological, and international features that have lent legitimacy to European integration. Balfour asks whether the EU can find a new consensus when the norms that have underpinned integration are challenged by the external environment, political trends, and policy choices.



CHAPTER 2

A Global Perspective on Geopolitics and Economic Statecraft

Erik Jones

Globalization did not bring about an end to the nation-state. The creation of global markets lifted hundreds of millions out of poverty and gave a handful of thousands extraordinary wealth. Along the way, globalization accelerated innovation, improved communication, gave rise to multinational enterprises and global value chains, and redistributed economic activity from West to East and from North to South. The transformative power of global markets is manifest. And, paradoxically, that is why the nation-state remains central to global politics.

Geoeconomics—the collection of powerful forces unleashed through the creation of global markets—has led to huge challenges of adjustment to new technologies, forms of communication, patterns of production, and locations of activity. Policymakers at all levels must address these challenges with limited resources. Doing so is necessarily a political task that involves deciding who should act and who stands to gain from specific policy choices, as well as who does not.⁷ The governments of nation-states—not multinational enterprises, international organizations, multilateral forums, nongovernmental organizations, or any other form of nonstate actor—remain the focal points for this kind of political agency. The more painful or difficult the adjustments are for a given society, the more central these states become.

Each national government faces different needs with different resources. Governments search for instruments they can use effectively to take advantage of the need for change, to push back against it, or to compensate those who lose out. Often that search focuses on the economic domain. National governments use their control over market and nonmarket instruments—or economic statecraft—to achieve their political objectives. Here, it is worth underscoring that economic statecraft is, and always has been, an expression of geopolitics

and not of geoeconomics. Where state control over economic instruments is insufficient to the political task, governments are willing to deploy more coercive measures, including violence, both at home and abroad.

In extreme cases, where successive national governments cannot achieve their political objectives either by manipulating economic instruments or by using force, the state fails until some group emerges that is powerful enough to reenergize or replace it. In that sense, responding to geoeconomic forces is an existential requirement. Few, if any, national governments seek to undo the benefits that global markets make possible, and yet most, if not all, of them are determined to do whatever it takes to respond to the adjustment challenges those benefits entail—even if this comes at the expense of making global markets less efficient.

The global economy is unlikely to survive this competitive search for policy autonomy. Global markets exist by dint of political and policy coordination, not self-help. The exercise of political independence fragments global markets through the thousands of cuts inflicted by each national government and through the influence of institutional path dependence on the development of longer-term structural incompatibilities from one country to the next. Nation-states and non-state actors will continue to interact across the globe, but their interactions will be constrained by the implications of the policy choices they make.

Framing the argument as a competitive search for policy autonomy makes it easier to offer a global perspective on this dynamic. Every government that benefits from global markets wants to find a way to respond to challenges of adjustment without tearing those markets apart. The problem for each of them is that coordination cannot be neutral because any negotiation is going to pull some farther away than others from their preferred strategy for adjustment—just as any redistribution of adjustment costs is going to give rise to competing perceptions of fairness. In turn, those differences—both real and perceived—become fodder for opposition to governments in domestic politics.

Coordination across governments in support of global markets comes at a domestic political cost for all negotiating parties that cannot make a credible claim to have benefited more than they have conceded. At the same time, accepting the best alternative to a negotiated agreement is easier when the exercise of autonomy can be celebrated as a virtue in national politics. Indeed, the pursuit of policy autonomy often retains its value in national debates even when it comes at an economic cost both domestically and globally. That cost tends not only to accumulate across countries but also to reshape the possibilities for future coordination. The global economy is the victim of this political dynamic.

Sounds Familiar

There is nothing new in this diagnosis of the interaction between economic statecraft and geopolitics. Much the same argument can be found as a critique of the international economy in the interwar period in works written in the 1930s, 1940s, and 1950s by, for example,

John Maynard Keynes, E. H. Carr, Karl Polanyi, and Gunnar Myrdal.⁸ Hence, much of the intellectual and policy work of the early Cold War period focused on overcoming these dynamics by creating international organizations and other multilateral arrangements to enable market integration through common rules and the redistribution of adjustment costs. The Bretton Woods arrangement and other economic organizations created within the United Nations (UN) are one illustration; regional bodies developed in Western Europe, like the Organization for European Economic Cooperation and the various communities that preceded the European Union (EU) are another.

This process was never symmetrical across countries or even democratic. Those shortcomings were accepted as necessary. Writing in the 1970s, Charles Kindleberger argued that the only way to stabilize a global economy is for one country to be powerful and wealthy enough to help mitigate or underwrite the costs of adjusting to global markets for all the rest.⁹ John Gerard Ruggie added that even then, it is important for national governments to retain significant autonomy in the way they respond to the need for adjustment.¹⁰ And Robert Keohane suggested that a group of like-minded rich and powerful countries might find a formula for sharing the costs of stabilizing the global system.¹¹ The United States played a leading role in the creation of the international economic order immediately after World War II; the Franco-German partners led the creation of what became the EU; and the transatlantic partners may be able to pick up the reins of the global economy after the period of U.S. hegemony ends.¹²

Of course, there would always be problems associated with the exercise of power in the context of interdependence. Some countries are more politically sensitive than others to the influence of geoeconomics or economic statecraft, even when their economic vulnerabilities are much the same.¹³ Worse, both geoeconomic forces and the exercise of economic statecraft create uncertainties that few policymakers can anticipate and few non-state actors can manage.¹⁴ Policymakers therefore quickly realized that all countries—even the largest and most powerful—need to work with those other governments with whom they are most closely connected economically if their governments are to achieve their domestic policy objectives.¹⁵

Inevitably, this coordination would systematically benefit some more than others, both in material terms and in terms of perceptions.¹⁶ As a result, not every government could be expected to aspire to coordinate in the use of economic policy instruments, and some might insist on going it alone. Over time, however, the example of coordination and the power of collective action would create incentives for even the most recalcitrant national governments to join multilateral arrangements.¹⁷

Meanwhile, any turbulence or conflict could be managed through improvements in the design of coordinating institutions and market regulations. Here, the European Economic Community provided an example of continual—if sometimes halting or only temporary—improvement as it moved through different exchange-rate regimes for the promotion of monetary stability and pivoted from trade liberalization through harmonized regulation to a new approach for dealing with nontariff barriers.¹⁸ The negotiation of the 1986 Single

European Act, which launched the project to create a European internal market by 1992, was a success both economically and politically—and one that brought together the traditional Franco-German partners and the initially reluctant British government.¹⁹ The question at the end of the 1980s was whether other regions could follow Europe's lead.²⁰ That question expanded after the end of the Cold War to include the whole international system.

The global economy that emerged in the 1990s rested on these four elements: a diagnosis of the failings of the interwar economic order, a belief in the need for the collective management of interdependence, an acceptance that such collective action would never be wholly equitable, and a conviction that any resulting tensions could be managed in an overarching rules-based system. It also rested on the assumption that these elements are not only broadly applicable but also both portable and scalable—meaning that what works in Europe or across the Atlantic might serve as an inspiration elsewhere and function across the global economy.²¹

Within that assumption, it should be possible to transfer Western policies or regulations to other countries and expand Western institutional arrangements to accommodate new members: The two things go together insofar as policy and regulatory convergence can be a condition for institutional support, formal association, or even full membership. In turn, converging on Western policies or regulations and expanding Western institutions would make the global economy more cohesive as well as more inclusive.

What Went Wrong?

This whole setup for a global economy rested on a shared understanding of perceptions, values, institutions, and collective action that, with few exceptions, did not extend beyond the countries of North America, Western Europe, and other advanced industrial democracies—known collectively as the West. Non-Western participants did not accept the West's diagnosis of what had gone wrong in the interwar period, not because they rejected the theory, but because they told a different historical narrative about colonialism and structural dependence.²² Within that alternative narrative, equity is more important than economic efficiency, particularly when that efficiency is put at the service of exploitative trade and financial practices. Tolerating some inequality in the service of policy coordination is a bad trade-off. Non-Western countries would rather have equitable institutions than effective ones, and they are willing to thwart collective action to force institutional change. This was the logic behind the call for a new international economic organization in the 1970s.²³

Where that change did not happen, the governments of non-Western countries created their own organizations. Not all of these bodies were successful at garnering representation or exercising influence. The Organization of Petroleum Exporting Countries is an important outlier. But that stands to reason: The non-Western world is more heterogeneous than the West; what unites these countries in general terms is their opposition to what they perceive to be an unjust international system. The success of non-Western countries in creating

alternative arrangements is less important than the fundamental disagreement over values—equity versus efficiency—and the implications of that disagreement for the functioning of the institutions that foster collective action.

For their part, Western powers resisted the practical implications of inclusiveness. Rather than democratize institutions, these powers sought to reengineer them in ways that reinforced hierarchy and preserved privilege. When that failed, they turned against established forums for collective action and shifted to other venues, where they could exercise greater autonomy. Like their non-Western counterparts, Western governments were prone to creating new institutions when they felt they lacked control over existing ones.²⁴ This venue shopping at least partly explains why the Group of Seven (G7) was formed in the wake of debates about a new international economic order as non-Western countries pushed to democratize UN-chartered economic institutions.²⁵

Western powers also overestimated their ability to transpose their own lessons about policies and institutions to economies with very different institutional and political arrangements. This kind of template thinking aligned well with the need to attach conditions to requests for institutional support or membership, but it fitted poorly with the goal of improving economic performance in non-Western countries—and often triggered social unrest and political instability instead.²⁶ Very quickly, the policy principles of the so-called Washington consensus that were supposed to frame the emergence of the global economy became a focus for conflict between the Western governments that promoted them and the non-Western governments charged with putting them into practice.²⁷

This conflict escalated during the Asian financial crisis toward the end of the 1990s.²⁸ Many of the newly industrializing countries in Asia liberalized their capital markets in line with Washington consensus recommendations. This effort succeeded in attracting foreign capital, which was a boon for Asian countries' domestic industries, but it came at the cost of greater vulnerability to capital flight. Once the outflow started, it became contagious, first across the region, and then implicating other emerging markets, like Russia and Latin America.²⁹ Asian governments lost confidence in the International Monetary Fund (IMF) and the World Bank and decided instead to impose capital controls and build up foreign exchange reserves as a form of self-insurance.³⁰ They also began to explore ways to share U.S. dollar-denominated assets across the region, rather than rely on conditional assistance from the West.

Emerging markets were not alone in struggling to adhere to consensual recommendations for best market practice. The difficulties of shifting policy or institutional blueprints across national boundaries also applied within the West.³¹ Western countries may be less heterogeneous than their non-Western counterparts, but they are still very different in terms of both institutional endowments and the way they perceive the trade-off between equity and efficiency.³² Importantly, such differences are not limited to the national level; often they extend down to the regional and local levels. As a result, it is necessary to identify not only the relative importance of equity and efficiency but also how much diversity different political systems can tolerate.

The virtues of market liberalization through policy convergence are a case in point. As the EU pushed the completion of its internal market, the United States went in a very different direction and allowed greater diversity at the state level in terms of taxation, benefits, public procurement, licensing, and regulation.³³ These different trajectories not only complicated the negotiation of the Uruguay Round within the General Agreement on Tariffs and Trade—the precursor to the World Trade Organization (WTO)—but also added considerable tension to the debate across the Atlantic about what it means to have a free market.³⁴

These different non-Western and Western dynamics came together at the end of the 1990s in the emergence of the “no-global” protest movement and in the early to mid-2000s in the failure of the Doha Round of trade and development talks in the WTO. The no-global movement organized diverse political groups, drawn from both non-Western and Western societies and inspired by a wide array of ideological sources to challenge the exclusiveness of international economic organizations and demand greater representation for non-Western interests.³⁵ The Doha Round was partly a response to this pressure; it included development as a major focus and engaged directly with governments in emerging markets. Quickly, however, the Doha Round morphed into an arena for debating trade liberalization requirements that would give Western governments greater influence over labor standards, environmental protection, and other regulatory practices in non-Western countries.³⁶

When the Doha Round failed to generate a multilateral agreement, the United States and the EU shifted to bilateral trade negotiations with third countries, where they could use their relative market size and wealth to exercise greater leverage over any agreement. As with the venue shopping for multilateral cooperation, this shift from multilateral to bilateral trade negotiations was widely perceived in emerging markets as an attempt to reinforce Western privilege. That perception was not shared in either the United States or Europe. Instead, the West took a narrower view focused on the virtues of its own policies and the need to pursue national or European interests.³⁷

Declining State Effectiveness, Increasing Politicization, and Evolving State Capacity

The deepening divisions in the global economy were apparent in the early 2000s, long before the onset of the 2007–2008 global financial crisis. The problem was the one already identified by Keynes in his 1936 *General Theory*.³⁸ It is worth quoting him at length, because aside from the syntax and word choice, the argument sounds so contemporary:

Thus, while economists were accustomed to applaud the prevailing international system as furnishing the fruits of the international division of labour and harmonising at the same time the interests of different nations, there lay concealed a less benign influence; and those statesmen were moved by common sense and a correct apprehension of the true courses of events who believed that if a rich, old country were to neglect the struggle for markets its prosperity would droop and fail.

Keynes went on to argue that the only way to avoid having the international economy deteriorate into “what it is, namely, a desperate expedient to maintain employment at home by forcing sales on foreign markets and restricting purchases” was for states “to learn to provide themselves with full employment by their domestic policy.”

That insight was baked into the post–World War II economic system. At its core, the global economy depended on nation-states to smooth the process of adjustment and minimize the politicization of international coordination. As the global economy expanded to include ever more diverse countries, the necessary adjustments grew to exceed the ability or willingness of national governments. Over time, governments fell behind in their efforts to minimize adjustment costs and maintain full employment, and opposition groups took advantage of that failure to ramp up their efforts to politicize international cooperation. This discontent mingled with other complaints about advanced industrialized democracies and the elites who led them to form what political scientist Cas Mudde called a “populist Zeitgeist,” which was as opposed to the global economy as it was to elite privilege.³⁹

This discontent fed directly into efforts to instrumentalize trade policy in contradictory ways in both Europe and the United States. In those areas where domestic interests made no complaint about the functioning of global markets, national governments pushed for liberalization and multilateral engagement. Where domestic interests expressed opposition to global markets, governments pushed the other way, using a mix of instruments like antidumping measures or social regulations to raise barriers to international exchange. Thus, borrowing from political scientists Alasdair Young and John Peterson, “the EU is both liberal and protectionist in predictable ways.”⁴⁰ And the same could be said of the United States.⁴¹

Meanwhile, the efforts of emerging market economies to create a form of self-insurance by accumulating foreign exchange reserves began to create distortions across the global economy.⁴² Such reserves can be earned only when countries run consistent current account surpluses by exporting more goods and services than they import. This form of macroeconomic imbalance is theoretically unsustainable over the long run, but that unsustainability reveals itself in different ways from the kind of balance-of-payments crisis that arises from a lack of competitiveness. Instead of facing a progressive deterioration of the terms of trade, countries experience a sudden stop as the flow of funds on the capital account rushes out of the national economy.⁴³ To understand why, it is necessary to focus on the way the capital account finances the current account in the balance of payments.

Foreign exchange reserves are assets denominated in foreign currency. When a government wants to accumulate foreign exchange reserves as a matter of policy, it commits to buying foreign currency–denominated assets. The net export of goods and services is just one way to raise the money for these purchases. While it is common to imagine that countries that import more than they export have to borrow money, it is more common for governments to introduce policies to ensure they export more than they import to purchase foreign assets to use as foreign exchange reserves. And since the global balance of payments must balance (by definition), these two ways of looking at the financial implications of macroeconomic balances are mirror images.

The asset purchases made by governments in emerging markets as a form of self-insurance after the Asian financial crisis represented a massive export of capital.⁴⁴ This export created liquidity—or spendable money—in other countries, primarily the United States, that could be used only to buy assets or additional imports from abroad. The result was either an inflation of asset prices in the importing countries or another round of net exports and the accumulation of foreign reserves for the governments seeking this form of self-insurance. This policy was unsustainable over the long run because of the distortions it created in the asset markets of the net-importing countries—again, primarily the United States—which experienced ever-increasing prices for government bonds, real estate, stocks, and even commodities. The 2007–2008 global financial crisis started when the market for one of these asset classes collapsed.⁴⁵ What followed was a series of sudden stops as cross-border investors started liquidating their assets either to repatriate their capital or to send it to a safer investment market.

This thesis of a global liquidity glut was not readily embraced among emerging market economies—and, indeed, never has been widely accepted in much of Asia—but it was adopted in the United States and Europe. The decision to shift the focus of multilateral cooperation from the G7 to the larger Group of Twenty (G20) was a consequence. Western governments, including that of the United States in particular, needed a more inclusive forum to deal with macroeconomic imbalances that they believed originated in emerging market economies.⁴⁶

The fact that those economies embraced macroeconomic imbalances to generate foreign exchange reserves that they could use to avoid having to rely on Western institutions like the IMF closed the circle.⁴⁷ The economic institutions created after World War II had failed to represent the interests of emerging market economies. The governments of these economies turned away from these institutions and, in doing so, created market distortions at the global level. And when these distortions resulted in the global financial crisis, Western governments shifted their attention to more inclusive institutions to convince the governments of emerging markets that had created those distortions to help get them under control.⁴⁸

The implication of this story is that the creation of the global economy gave the governments of emerging market economies access to geopolitical power that Western governments could not ignore. That power included the ability not only to distort world markets but also to ignore, manipulate, or duplicate the institutions created to foster international economic cooperation. If Western governments alternated between liberalization and protectionism, governments in emerging markets could challenge the more protectionist efforts at the WTO. More importantly, they had the power to exercise leverage through and over the WTO's dispute resolution mechanism.⁴⁹

Non-Western governments were not the only ones who were empowered by the creation of a global economy. Western governments acquired new powers related to the central role they played in the development of the three basic infrastructures that underpin global markets: currency, finance, and telecommunications.⁵⁰ Global transactions need a common denominator to set prices, store value, and make payments; they need credit, insurance, clearing, settlement, and somewhere to keep things safe; and they need some way to interact at a

distance to communicate detailed information unambiguously and with a clear record of what was said, whether the message was received, and whether it was acted on.

These infrastructures are challenging enough to develop around the exchange of finished products, and the first truly global form of capitalism took many hundreds of years to emerge.⁵¹ This is hardly surprising: Even for the most basic trade, the currency needs to be widely accepted, the finance flexible and stable, and the means of communication reliable and secure. Hence, the focus for commerce was on human relationships and personal interaction. The task became more difficult in the exchange of intermediate goods as part of distributed manufacturing processes. Then it became necessary to work more with numbers than with people and to trust technology more than personal relationships.⁵² With the introduction of global value chains and the emergence of the internet, the endeavor reached new magnitudes of complexity.⁵³ And, for historical reasons, Western countries were at the center of that infrastructural revolution.

This central location gave Western governments two largely unexpected forms of power: One was to oversee the transactions that make up the global economy, and the other was to prevent them from happening.⁵⁴ The United States has taken advantage of its central role in the world economy—and, specifically, the central role of the U.S. dollar—at least since World War II.⁵⁵ The U.S. Treasury created the first entity responsible for monitoring dollar-denominated payments in 1940, renamed the Office of Foreign Assets Control in 1950. But it was only after the terrorist attacks on September 11, 2001, that the U.S. government realized the full extent of its ability to sift through the internet and the record of interbank transactions to track terrorist financing and restrict access to the U.S. financial system.

The first administration of former U.S. president Barack Obama used this control to compel Iran to engage in negotiations over its nuclear program. It did so by preventing Iranian banks from participating in dollar-denominated clearing and forcing the Society for Worldwide Interbank Financial Telecommunication (SWIFT) to disconnect Iranian banks from the global network for interbank telecommunications. The second Obama administration joined the EU in using many of the same instruments against Russia after its 2014 annexation of Crimea, cutting Russia off from access to European and U.S. capital markets.⁵⁶ The transatlantic partners went even further in putting pressure on Russia after its 2022 full-scale invasion of Ukraine.⁵⁷ These new instruments of economic statecraft were unbelievably powerful. They also proved to be a wasting asset.

Economics, Security, and Strategic Autonomy

The problem with weaponizing interdependence—the process by which states leverage global networks of informational and financial exchange for strategic advantage—is that it encourages governments everywhere to disengage from institutionalized cooperation and find ways to reduce their vulnerability to economic integration.⁵⁸ If the lesson for the countries of East and Southeast Asia at the end of the 1990s was about the importance of self-insurance, even

if that creates global market distortions, the lesson from the 2010s for governments everywhere was about the importance of economic security and strategic autonomy. And that lesson applied within the West as well as between Western and non-Western countries.⁵⁹

This point is worth underscoring and putting into historical context. The use of economic sanctions did not start the shift away from neoliberal forms of market competition. The turn to economic statecraft and related nonmarket forms of state intervention, like industrial policy, began long before the coronavirus pandemic or the 2022 invasion of Ukraine. The EU started turning away from neoliberal free-market ideology even before the global financial crisis.⁶⁰ By that time, the first administration of former U.S. president George W. Bush had already demonstrated its willingness to use tariffs to restore the competitiveness of the U.S. steel and agricultural sectors.⁶¹

This shift toward more nonmarket interventions accelerated during the global financial crisis as governments everywhere sought to bail out strategic industries and banks. And it continued to develop as the rise of U.S. technology companies and Chinese manufacturing industries underscored the changing nature of the global economy. Donald Trump's 2016 presidential campaign was a symptom, not a cause, of this transformation. When Trump was elected and his incoming administration made clear the transactional nature of his presidency, Europe's response was to begin planning an even more interventionist shift in its approach to the use of industrial policy instruments and the politicization of trade policy.⁶²

The end of the 2010s was a fertile period for the development of new approaches to economic policymaking—both foreign and domestic—on both sides of the Atlantic. In the United States, Democrats hoping to return to office forged what Carnegie's Salman Ahmed and Rozlyn Engel called a “foreign policy for the middle class,” which would blur the lines between economic and foreign policies to use the same instruments to achieve multiple objectives: income distribution and manufacturing competitiveness at home, and military security and supply chain resilience abroad.⁶³ European officials were also looking for ways to strengthen the EU's strategic autonomy in terms of both technological innovation and military procurement.⁶⁴

What the use of sanctions did was deepen the friction and suspicion already being created by the breakdown of the Washington consensus and the shift away from neoliberalism. When the Obama administration cut Iran out of SWIFT in 2012, it had to push hard to get Europeans to go along because they feared that this weaponization of a global financial cooperative, headquartered in Belgium, would set a bad precedent in the eyes of the wider world.⁶⁵ When the United States and the EU cut Russian firms out of Western capital markets in 2014, the Chinese and others were quick to take note of the wider implications for their own reliance on the dollar and the euro.⁶⁶ And when the Trump administration announced in 2018 that it would pull out of the Joint Comprehensive Plan of Action (JCPOA), which lifted sanctions on Iran in exchange for restrictions on the country's nuclear facilities, and instead threatened secondary sanctions on European firms that refused to comply with this change in U.S. policy, the EU began planning its own legal instrument to push back against such economic coercion.⁶⁷

The experience of the coronavirus pandemic reinforced this dynamic by revealing both the fragility of global supply chains and the reflexive nature of economic nationalism, and not just in Europe and the United States. Although EU member states may have been surprised by the sudden fights that broke out over personal protective equipment and respirators, the European Commission was quick to swing into action and the European Council found new ways to strengthen European solidarity.⁶⁸ The same was not true of relations between Europe, the United States, and the rest of the world. Non-Western countries experienced severe shortages of basic personal protective equipment and lacked the necessary tools to shut down their economies to slow the spread of the virus. These countries faced even greater difficulties getting access to vaccines once they became available. The pandemic put the self-serving and transactional nature of the global economy on full display.⁶⁹

The Western response to Russia's full-scale invasion of Ukraine only reinforced the contrast. The United States and the EU quickly rolled out unprecedented sanctions against the Russian government and economy in response to Russia's unprovoked and unjustifiable aggression.⁷⁰ Once again, this move demonstrated the vulnerability of any country to key forms of interdependence with lead actors in the global economy. It also provoked a series of unintended disruptions to supply chains, food distribution, energy prices, and transportation routes, with serious negative consequences for other parts of the global economy. For many non-Western governments, the costs of trying to contain the Russian aggression appeared disproportionate when compared with efforts to address violent conflict elsewhere.⁷¹

The sanctions against Russia proved less effective than many in the West had imagined.⁷² This outcome raises the question of whether the Russian government may have used the time between its 2014 annexation of Crimea and its 2022 invasion of Ukraine to limit its vulnerability to Western leverage.⁷³ This situation may also strengthen the regime's authoritarian character to limit domestic political sensitivity to the costs of disengaging from the West. Such concerns are worth noting because they underscore the waning effectiveness of weaponized interdependence.⁷⁴ They also suggest that China may already be prepared to push back against the West. Weaning the Chinese economy off dependence on U.S. dollar-denominated assets and transactions may not yet be realistic, nor may reducing China's dependence on U.S. markets and advanced technology.⁷⁵ But the Chinese government can make its economy more resilient in the face of U.S. pressure and rally its population against U.S. economic coercion in ways that will only diminish popular support for the Western-led rules-based international system.

Putting It All Together and Longer-Term Implications

The administration of U.S. President Joe Biden was probably right that the only effective way to build political support for an open U.S. economy is to ensure that such an economy benefits the middle class. For its part, the EU is probably right to aspire to strengthen its strategic autonomy both in general terms and with particular reference to the United States. No U.S. administration can take popular support for American global leadership

for granted, and no EU official should expect to count automatically on support from the United States. The bonds that hold the West together as a global political construct still exist, and so do the Western institutions that structure the global economy. But the West is no longer so monolithic, and the non-Western world is no longer so eager to accept Western leadership.

Two scenarios flow from this weakening of the West, one negative and the other positive. The negative scenario is that national governments can be expected to use the instruments of economic statecraft to address different domestic agendas in a more loosely coordinated fashion within the West and largely without systematic coordination with governments elsewhere.⁷⁶ This is a troubling prospect, because it leaves significant room for friction of the kind that arose across the Atlantic around the Biden administration's 2022 Inflation Reduction Act.⁷⁷ It is also troubling because it suggests that many problems that require truly global responses, like climate change, will be met with only piecemeal efforts that work to varying degrees from one national jurisdiction to the next. When the nation-state is the center of attention, that is about the best that can be hoped for. Whether it will be sufficient is an open question. Economic statecraft is no replacement for global economic leadership.

A more extreme version of this negative scenario is that the world economy will become divided into blocs that use competing standards for manufacturing and digital technology. This is a logical consequence of the ever-increasing weaponization of interdependence.⁷⁸ Such a world will be neither representative nor effective. On the contrary, it will be prone to the kind of conflict that existed in the interwar period and that the creation of a global economy under Western leadership was meant to address.⁷⁹ The results will not be identical to what has been experienced in the past, but they will be similar enough to be familiar.

The more positive scenario is that Western and non-Western governments find a way to come together to address these global problems in ways that are more symmetrical, inclusive, and democratic. Doing so is a question not of virtue but of necessity and resilience. The global financial crisis showed that the forces of geoeconomics are too large to be managed by the West acting alone. They are also too powerful to be ignored. The climate crisis is a good illustration, but it is only one among several.

Moreover, the costs of dismantling the global economy—higher prices, lower real incomes, greater job insecurity, and more inequitable access to resources—are simply too high for societies to bear in any part of the world. As Keynes made clear, peace is possible only when security and economics reinforce one another everywhere. By implication, the new world economy will have to win support far beyond the West if it is to be durable. And durability will be the true measure of its success.

CHAPTER 3

Economic Statecraft and EU Strategic Interests

Giovanni Grevi and Richard Youngs

Economic statecraft consists of using economic means to pursue foreign policy goals.⁸⁰ Rising competition and volatility on the global stage have heightened the salience of connections between economic policies, security issues, and foreign policy. The European Union (EU) insists that political-strategic considerations have begun to play a more prominent role in its external economic policies. The union started to move tentatively in this direction some years ago, and Russia's war on Ukraine has reinforced this shift in an apparently decisive way. At least in formal terms, the EU has begun to fashion a different kind of statecraft, in which economic policies serve broader strategic goals alongside policy-specific commercial objectives. This approach represents a potentially deep-seated change, given that the EU has traditionally been seen as an overwhelmingly economic actor bereft of strong geopolitical orientations.

While the rise of a more strategically oriented EU economic statecraft is a significant change, two nuances should be noted. First, a degree of short-term and defensive mercantilism persists in EU economic policies that does not appear to be informed by strong strategic dynamics. Second, it is not yet clear how the EU's current emphasis on economic security fits with other priorities on the union's foreign policy agenda. Although the EU has started to frame a different approach to economic security, it still needs to conceptualize how this relates to a broader understanding of economic statecraft and to other political-strategic priorities.

Economic security is an increasingly important component of economic statecraft, but the latter covers a much wider ground. Viable economic statecraft requires a clearer definition of which European interests are to be advanced and a more coherent mix of economic and strategic policies. As the EU rightly moves away from market primacy over foreign and security policy, it risks overcorrecting toward a defensive and competitive geopolitics.

A New Economic Statecraft?

For decades, the general consensus was that in the EU's international policies, commercial interests prevailed over wider foreign policy strategy. In a major shift, EU institutions and European leaders have come to claim that this position no longer holds. The EU has gradually moved toward a new economic statecraft that is more infused with strategic considerations and aims. EU member states have converged on a shared assessment that the weaponization of interdependence—in which states leverage global economic and information flows for strategic advantage—requires softening the divide between economic and security affairs.⁸¹

The emerging European economic statecraft encompasses a wide range of measures: Some aim to establish a level playing field with Europe's economic competitors; others pursue broader external agendas, such as environmental sustainability; and yet others deal with the security impact of other states weaponizing interdependence.⁸² In this context, security-related concerns appear to be playing a growing role in shaping Europe's fledgling economic statecraft.

The shift has occurred incrementally over the last decade and deepened in the wake of Russia's February 2022 invasion of Ukraine. In the 2010s, the EU's approach to and perspective on globalization shifted toward a more politically managed form of globalism. The union became increasingly concerned with mitigating economic vulnerabilities and less enthused by the abstract value of supposedly win-win multilateral rules.⁸³ The COVID-19 pandemic extended these shifts in the EU's external economic policy, as it added to concerns about the union's dependence on global supply chains for medical equipment and other goods.

Into the 2020s, several new EU strategies and documents promised economic policies geared toward the defense of "Europe's sovereignty"—implying a more political tenor to economic strategy.⁸⁴ In early 2021, the European Commission placed open strategic autonomy at the core of its Trade Policy Review, defining the concept as "the EU's ability to make its own choices and shape the world around it through unity and engagement, reflecting its strategic interests and values."⁸⁵ The notions of open strategic autonomy and European sovereignty do not fully overlap, but they share much common ground. They emphasize the need to reduce economic vulnerabilities and defend EU interests while restating the importance of multilateral cooperation and engagement.

The war on Ukraine has added to the priority that European governments attach more specifically to economic security. Most governments have interpreted the conflict as a strong vindication of the need for a tighter focus on the threats and risks that economic interdependence entails. A postwar narrative of Europe taking back control of key supplies and pursuing more strategic trade and investment has become ubiquitous.

Crystallizing such developments, in June 2023 the commission presented a landmark economic security strategy.⁸⁶ In 2024, the EU strengthened commitments to move further in this direction, bringing slightly different terms coming into use. The influential report on European competitiveness presented by former Italian prime minister Mario Draghi in

September 2024, called for “a genuine EU “foreign economic policy” that is in tune with security interests.⁸⁷ The European Commission’s political guidelines for 2024–2029 promise a “new economic foreign policy” premised on the conviction that, “In today’s world geopolitics and geoeconomics go together. Europe’s foreign and economic policy must do the same.”⁸⁸ The remit of incoming High Representative, Kaja Kallas, includes the instruction to “shape a new foreign economic policy, focusing on economic security and statecraft.”

Significantly, the heightened focus on economic security appears to entail a new relationship between economic and political strategy. The EU’s stated priorities have become more explicitly political-strategic in nature. Some argue that in the wake of the war, the EU has moved fast to adopt a “geo-dirigisme” that deploys economic tools for strategic aims.⁸⁹ European leaders insist that the new approach to economic security fuses economic and political interests as it seeks to curtail and manage the strategic vulnerabilities of interdependence. The combined effect of more than a decade of financial crisis, the coronavirus pandemic, tensions with China, and the invasion of Ukraine has propelled the EU toward a more evidently strategic variant of economic statecraft.⁹⁰

The EU’s emerging approach nominally embodies a rebalanced position between economic efficiency and geopolitical resilience to the extent that European powers now appear willing to bear a premium to achieve political insulation from other powers’ leverage.⁹¹ French President Emmanuel Macron has insisted that strategic coherence is now much tighter as EU economic policies “obey a rationale which goes beyond the purely economic logic.”⁹² The 2023 German national security strategy captured this ethos by saying that the government would “focus more on security when it comes to decisions on economic policy.”⁹³ The EU’s economic security strategy points to economic decisions “merging with national security concerns.”⁹⁴

In a speech in June 2024, anticipating one of the core themes of his report on European competitiveness, Mario Draghi captured the zeitgeist: “The paradigm which brought us prosperity in the past was designed for a world of geopolitical stability, which meant that national security considerations played little role in economic decisions,” whereas deteriorating geopolitical conditions now required “a fundamentally different approach” to Europe’s industrial policies and “a genuine ‘foreign economic policy’ – or as it’s called today, statecraft.”⁹⁵

European governments and EU policymakers argue that a hardened policy of economic security dovetails with tougher geopolitical strategies.⁹⁶ Indeed, the general assumption is that these are two sides of a single strategic-adjustment coin and two strands of the EU adapting to the more threatening and inhospitable world that is taking shape in the shadow of Russia’s war on Ukraine. Outgoing EU High Representative for Foreign Affairs and Security Policy Josep Borrell has asserted that “de-risking and strategic autonomy go hand in hand.”⁹⁷

The EU has established a mechanism to screen inward investment, and more European states are also undertaking tougher national security reviews of such investment. The union’s economic security strategy promises a new EU mechanism to assess security risks linked to outward investment in some technology sectors too, to prevent critical technologies from

going to strategic rivals. The same strategy also recommends a more coordinated approach to tightening export controls on dual-use goods. Following the strategy's adoption, the commission recommended that EU member states assess the risks associated with four areas of critical technology.⁹⁸ In January 2024, the commission outlined five new initiatives to build on the economic security strategy and take it forward.⁹⁹ In a separate element of economic statecraft, European powers have made trade offers more dependent on reciprocity, while due diligence rules have become another tool for strategically managed trade.

Competing Logics at Play

Although these changes in the EU's economic posture are significant, the fusion of political-strategic and economic statecraft remains embryonic. A tougher approach to market access and sensitive exports and investments may be justified and overdue, but the EU's assertion that economic policies are now tailored to wider strategic imperatives is a bolder claim that is so far only partly borne out by the evidence. In fact, several logics are simultaneously at play in shaping the EU's incipient economic statecraft, some of which are at odds with each other and none of which is clearly predominant.

Even if signs of a more political-strategic dynamic have emerged, parts of the EU's economic security agenda reflect narrower commercial aims. Alongside elements of a new EU economic statecraft, a revived European mercantilism is evident in some key policy developments. What is needed for short-term commercial interest may be an important element of economic security, but this is not the same as strategically oriented economic statecraft—despite EU leaders' tendency to conflate the two.

If anything, the EU's quest for economic diversification is pulling it toward agreements with regimes that clearly do not share its strategic outlook—and discouraging the union from loading such accords with noneconomic demands. A paper published under the Spanish presidency of the EU Council in the second half of 2023 suggested more trade accords with “like-minded” countries and more restrictions on investments from and exports to “non-like-minded countries”—but these categories were not defined, and this is not the approach the EU has adopted systematically to date.¹⁰⁰

In an effort to diversify commercial opportunities, the EU has new trade-and-investment agreements with regimes in Africa, Central Asia, and Latin America that are far from like-minded on foreign policy issues. In a similar vein, the choice of infrastructure projects under the EU's Global Gateway investment initiative seems devoid of any apparent foreign policy logic.¹⁰¹ Indeed, the commission has acknowledged that the Global Gateway is oriented toward EU economic interests rather than “foreign policy approaches.”¹⁰² While there is a clear security logic to restricting some of Europe's most sensitive exports to certain regimes, some of the EU's trade-and-investment controls are clearly guided by the more immediate commercial interests of European companies. The EU has increasingly used the externalization of its regulations to advance commercial interests—a form of what might be termed regulatory mercantilism.¹⁰³

The EU insists its emerging approach is about managing specific sectors in which there might be high levels of vulnerability and supplies come from just one or two countries. But the union has made at least some steps toward a more generalized policy of import substitution and preferential domestic support.¹⁰⁴ These are commercially defensive moves more than changes that reflect long-term strategic reflection. Moreover, EU member states have dramatically increased their domestic industrial subsidies and economic controls, which may threaten the single market; each state's measures are in part about boosting national economic sovereignty in relation to other EU states and do not form a united approach to European strategic interests. It also remains difficult to detect a clear political or security logic behind investment screening decisions.¹⁰⁵

Part of the trend in the last several years reflects European geopolitical power targeting immediate economic difficulties and commercial interests.¹⁰⁶ Experts note a gathering "commercial realism" that has increasingly conditioned EU positions on when and how international markets need to be controlled and the precise ways in which the union seeks to shape global interdependence.¹⁰⁷ While the EU's economic security strategy talks of strategic priorities directing economic policies, it also insists that foreign and security policy instruments are to be used in pursuit of economic interests.¹⁰⁸

Crucially, this commercial realism breeds a narrow and defensive perspective on foreign policy dynamics. In its emerging approach to economic security, the EU does not appear to attach as much priority as it did previously to mutually beneficial problem solving, but rather seeks to craft economic relations that are more tightly attuned to the union's own weaknesses and challenges. The EU's focus is increasingly on instrumentalized economic relations through political negotiation, as opposed to stronger rules-based frameworks.¹⁰⁹ At least in many of its new measures, the EU is moving toward a less commons-oriented and more power-oriented understanding of the international order. The union has tended to paint itself in a rather one-way fashion as the victim of other powers weaponizing interdependence, justifying these more defensive positions on external economic policies.¹¹⁰

The emerging EU approach to economic statecraft is mainly defensive but also contains offensive measures against other powers.¹¹¹ Several countries, mainly in the so-called Global South, complain that some of the new EU measures outlined above risk affecting both their interests and the liberal order that the EU claims to defend. Even if the EU may feel that some of this criticism is unfair, these countries' diplomatic pushback matters for the union's wider priorities. Increasingly, the EU's narrative is narrowly about making interdependence safe for itself rather than about pursuing the wider political-strategic aim of mutually beneficial reforms to the global order. A backlash from other states risks deepening the very strategic-order problems that the EU's economic security strategy is notionally designed to address.¹¹²

In sum, a mix of logics is now apparent: In some instances, the EU is shaping economic policies to reflect strategic concerns; in others, the dynamic is inverted, with the union deploying foreign policy leverage for immediate economic interests. EU policy still lacks a fully strategized use of economic statecraft. So far, the union's policies focus on defensive

commercial interests more than they use commercial tools for noneconomic strategic goals. European powers may justifiably feel that this is the kind of trade-off now required, but they are walking a thin line in the way they endeavor to combine the EU's new economic and security agendas.

Economic and Strategic Interests: Unresolved Tensions

The EU's now well-established economic security agenda marks a much-needed reckoning with the vulnerabilities that result from weaponized interdependence. Yet, this agenda is still at an early stage of development and, for now, falls short of a fully consistent or comprehensive concept of EU economic statecraft. To move forward effectively with its economic security agenda, the union needs to define the larger goals that economic statecraft is supposed to serve, assess the political and strategic implications of different policies, and tackle the trade-offs between competing priorities.

At present, conflicting goals drive different measures and sit uneasily with each other. An excessive focus on economic security risks generating harmful unintended effects. Speaking a few days after the publication of the EU's economic security strategy, Borrell noted that “de-risking is itself not without risks.”¹¹³ The union's institutional capacity to articulate fully the links between foreign and economic policies remains insufficient.¹¹⁴ While the EU often carries out cost-benefit analyses for individual policy measures, these assessments do not encompass a broad strategic perspective.¹¹⁵ If a more robust form of economic statecraft is in order, the EU should avoid veering toward an overcorrection that is detrimental to other priorities. In an instructive lesson for Europeans, others have warned that the United States may be overcorrecting in just this way in its rivalry with China.¹¹⁶

As the EU moves into a new institutional term in 2024, the bloc's economic statecraft still lacks clear definition. The EU insists it aims to shore up multilateralism, and the bloc remains more committed to rules-based cooperation than most other major economies. At the same time, however, the EU relies increasingly on unilateral tools to defend its interests across the trade agenda and is, to some extent, taking part in a global subsidies race. There is divergence among European officials on the right balance between multilateral and unilateral policy pathways.¹¹⁷ The risk is that by adopting a defensive agenda, the EU neglects a proactive approach that focuses on promoting a better multilateral order that can deliver global public goods. Playing defense is necessary but not sufficient to preserve a relatively stable global economic order, on which Europe's prosperity largely depends.

Calibrating Europe's approach to China in the context of systemic rivalry between Washington and Beijing will be a pivotal dimension of Europe's overarching economic statecraft. The EU has outlined a policy of derisking—as opposed to decoupling—as its approach to frame the various elements of its economic relations with China.¹¹⁸ While the derisking agenda addresses serious concerns that need to be tackled, its implementation faces many challenges.¹¹⁹ Europe is more exposed than the United States to the potential fallout of

a geoeconomic clash with China. Derisking carries the risk of escalation into a spiral of tit-for-tat measures, too.¹²⁰ The potential spillover from derisking would affect not only Europe's economic interests but also other strategic priorities, such as the clean energy transition, for which Europe depends for now on imports of critical raw materials and goods from China. At the same time, the EU has clout and partners, and China stands to lose conspicuously from a potential deterioration of economic links with Europe, the United States, and other countries.

The EU's stance toward China will likely continue to be a matter of balance between countervailing requirements, not least because balancing acts allow the union to paper over differences among its member states.¹²¹ However, EU economic statecraft needs a sharper—and shared—assessment of Europe's overall strategic stance toward China. The bloc's extensive economic relationship with Beijing requires a clear economic security focus in strategic sectors and further efforts to achieve reciprocity in EU-China trade relations. At the same time, the EU should avoid a largely China-driven approach to its global economic statecraft, which would look like a response to Beijing's agenda rather than reflect Europe's own priorities.

Another area that requires tighter definition is the way in which EU economic statecraft relates to the union's engagement with the developing world, where the EU faces a tough competition of narratives amid offers from other powers. The polarizing effect of Russia's aggression in Ukraine and the grave consequences of this crisis for the development agenda have made North-South relations both more contested. Meanwhile, the gap between development needs and available means has widened in the last few years.¹²² The EU's emerging economic security agenda says little about the priorities and order-related concerns of many developing states. The January 2024 enlargement of the BRICS group to five major countries in the Middle East and Africa, with others expressing an interest in joining, also adds to the challenge of EU engagement with middle powers.

EU leaders have called for the establishment of a new quality of partnership with countries and regions across Africa, Asia, and Latin America. They point to joint efforts, including the Team Europe approach, which is based on pooling the resources of the EU institutions and the member states; the deployment of the Global Gateway initiative; and a new generation of partnerships on raw materials. Developing countries often retort that the EU and its member states primarily cater to their own needs and take unilateral measures that risk damaging the interests of the developing world, such as the EU's Carbon Border Adjustment Mechanism, a tariff on carbon-intensive imports. On climate finance, the first pledges to a new international loss-and-damage fund for developing countries were made at the 2023 United Nations Climate Change Conference (COP28), and Europe accounted for almost half of these.¹²³ However, investment falls far short of the estimated requirements. The EU will have to forge a leadership coalition to increase funds to meet developing countries' needs in coping with climate change and advancing their energy transitions.

Finally, the EU's global infrastructure development agenda will be an important test of the union's ability to shape new partnerships based on mutual interests and generate

corresponding public-private finance. The Global Gateway provides a useful framework but needs to be scaled up, owned by EU member states, accompanied by a strong focus on the rule of law and accountability, and better connected to foreign policy and development goals.¹²⁴ The ongoing debate on how to reform multilateral development banks—specifically, how to ensure their adequate funding given fast-expanding lending needs—will be another important aspect of cooperation-driven economic statecraft for Europe.¹²⁵

Conclusion

A new European economic statecraft has been in gestation for some time and is not yet fully dovetailed with broader strategic interests. On the one hand, a fresh EU approach to economic security has been taking shape since 2023 and meets real needs. On the other hand, a wider EU economic strategy based on a comprehensive understanding of long-term strategic interests is so far less evident. Contrary to now-ubiquitous official EU claims, the former does not necessarily imply the latter. The union still needs to work out and specify how economic statecraft can contribute to wider strategic priorities.¹²⁶ If it fails to do so, economic security measures could unwittingly weaken the EU's foreign policy goals, as opposed to help advance them.

This redefinition of interests needs to avoid economic statecraft focusing too heavily on immediate imperatives at the expense of more diffuse, order-related, and long-term goals. The EU may, in some measure, be justified in striking ad hoc and pragmatic deals as it seeks to manage interdependence defensively. Yet, it also needs a statecraft that aims to deepen and improve the multilateral order and contain illiberal power. While European economic security rightly eschews the kind of hard-security primacy that some see gaining ground in U.S. economic statecraft, it faces the different challenge of still having to incorporate a clearly defined political-strategic logic.¹²⁷ The now gathering debate over foreign economic policy just might provide a framework for fine-tuning strategic priorities in this direction.

At present, the emerging security-driven approach to EU economic statecraft seeks primarily to insulate Europe from geostrategic challenges and mitigate its dependencies on critical supplies. The EU has moved away from its erstwhile faith that market globalism axiomatically benefits strategic goals, but the bloc should not go to the other extreme of letting defensive interests marginalize efforts to sustain international cooperation and shape the norms that underpin it. Balancing different dimensions of economic statecraft will require institutional and policy agility, depending on the evolution of the strategic context and the behaviors of other major powers, including their reactions to EU initiatives.

Overall, EU economic statecraft needs to work more concertedly to uphold the union's interests in the international order—not only by fending off challenges and threats but also by preserving strong multilateral agency. The latter effort will not always deliver, but it should be the proposition of first resort to a wide range of partners.

CHAPTER 4

EU Open Strategic Autonomy and the Future of the Global Economic Order

Eugenia Baroncelli and Sinan Ülgen

Since 2021, the European Union (EU) has begun to adopt the concept of open strategic autonomy (OSA) with the aim to maximize the opportunities of economic openness while assertively defending the EU's interests both internally and externally.¹²⁸

Three major factors lay behind this move. The first was the shift from post–Cold War unipolarity to the current multipolar order, which is marked by growing U.S.-China rivalry. Contrary to the expectation that China's multilateral engagement would quietly align the country with the U.S.-led, rules-based, liberal international order, traditional balance-of-power dynamics have resurfaced. Even in areas where compatible goals existed, faltering policy cooperation has hampered the functioning of multilateral institutions, notably the World Trade Organization (WTO). That has increased disconnects in technological standards, supply chains, and export markets. In response, the EU seeks to assert itself as a champion of a new global order, in which openness is rules-based, fair, and sustainable, but in which strategic economic policies and regulations are routinely adopted to maximize political autonomy in interstate relations.

The second factor was Europe's declining weight in the global economy. Three decades ago, Europe accounted for a quarter of the world's wealth; by 2023, its share had decreased to 17.4 percent.¹²⁹ Multiple policy tools have been developed under the OSA umbrella to enhance the EU's trade and investment competitiveness in this evolving scenario and maximize the union's attractiveness as a strategic partner in international networks while also providing it with new tools to tackle unfair practices.

The third driver behind the EU's move toward OSA was technological innovation, particularly in digital transformation and sustainable industrial development. The EU's relative decline in the world economy has increased the benefits that Brussels can derive from technology-oriented policies, which can provide crucial incentives to regain shares in trade volumes and leadership in investment partnerships. Europe currently faces unprecedented pressure to innovate in critical future technologies, such as artificial intelligence and quantum computing. OSA-sponsored incentives for technology-driven transnational partnerships may be key to help the EU meet this challenge.

Together with the EU's 2016 Global Strategy, the concept of OSA has shaped Europe's evolving climate change and technology policies. The European integration process has tilted toward autonomy, and the EU has carefully crafted its technological cooperation to preserve Brussels's capacity to act independently.¹³⁰ As such, OSA has set the union a goal that is both ambitious and, in the current global context, unavoidable.

Critics believe that OSA-driven unilateralism, such as the incentives provided for strategic green- and high-tech partnerships outside the WTO framework, shows that the EU is renegeing on its commitments to economic freedom and openness as key drivers of prosperity.¹³¹ Supporters, by contrast, praise the beneficial effects of the EU's new approach in a context of growing market segmentation.¹³² While some observers have argued that OSA will unnecessarily weaken the transatlantic compact, others have suggested the concept has a strategic value for the union with regard to both partners, such as the United States, and adversaries, such as China.¹³³ Meanwhile, evidence from specific policy areas unveils how OSA-related EU regulation can trigger internal fragmentation, pushing member states to prefer national solutions and shun EU-led initiatives altogether.

Redefining EU Foreign Economic Policy

OSA embodies a new EU approach to the making of foreign economic policy in several ways. The concept signals both Brussels's distancing from the neoliberal excesses of past decades and its attempt to manage the challenges of an increasingly geopoliticized world. As such, OSA aspires to meet different needs and incorporates complex, potentially conflicting priorities. In many respects, then, OSA policies are the EU's strategic response to evolving power dynamics in the international system, which have also led to an intellectual rethink of EU foreign policy making. Incipient research on OSA has increasingly looked at the influence of external forces—most notably, the U.S.-China rivalry, the COVID-19 pandemic, and, more broadly, the weaponization of interdependence—on the EU's allegedly protectionist shift.¹³⁴

In the unipolar age, the transatlantic consensus on multilateral trade liberalization gained momentum, leading to the creation of the WTO in 1995.¹³⁵ Ideological homogeneity and U.S. tutelage paved the way to the EU's ambitious approach of democratic anchoring through economic support—that is, the provision of economic benefits to help prospective

EU member states along their democratization paths.¹³⁶ The current multipolar order, instead, is characterized by major ideological heterogeneities—between North and South and between free-market and state-led capitalism—and by widespread unilateralism, including in the transatlantic camp. U.S.-China competition and former U.S. president Donald Trump’s aggressive stance toward both adversaries and allies pushed Brussels farther toward a more autonomous foreign economic policy.

On the domestic front, the EU’s supranationalization of investment competencies allowed the European Commission to take the lead on industrial policy.¹³⁷ Brexit, in turn, weakened the EU’s free-marketeer camp and enhanced the weight of sovereigntist countries, such as France. Since the advent of populist regimes, the EU has been keener to protect the so-called losers of globalization, striking deals with China even in defiance of U.S. requests. Over time, however, perceptions of unfair Chinese competition mounted, shifting the balance of arguments toward greater autonomy and self-reliance.

Overall, OSA is not so much an EU strategy to renege on past commitments to an open economic system as an adaptive response to a changing external environment. While not amounting to pure protectionism, OSA has reoriented the EU’s approach to openness in a targeted fashion. Both the feasibility and the consequences of the concept remain to be seen. Global economic integration is deeper than in previous decades, so severing profitable ties for political reasons entails higher costs for businesses and consumers. The excesses of neoliberal austerity and the COVID-19 shock have further increased these costs and elicited calls for renewed embeddedness—that is, state intervention to regulate market dynamics, reduce inequality, and maximize welfare-enhancing outcomes of economic policies.¹³⁸

The EU can rely on two dimensions to chart a more autonomous course: its economic policies and its distinctive model of sociopolitical progress based on liberal ideals. The EU can choose whether to carve out a role as a more autonomous leader vis-à-vis the United States or continue to operate as a mostly passive follower. While the concept of OSA will inform the economic and technological elements of the EU’s foreign economic policy strategy, the EU can also count on its reputational capital as a model for responsible democracy by externalizing its version of liberal solidarity to attract like-minded countries in the Global South.

Brussels has cast its new economic policy in terms of both autonomy and openness. Unsurprisingly, this is the result of two opposing influences in the EU institutions: neomercantilist, protectionist voices in the European Commission Directorate General for Internal Market, Industry, Entrepreneurship, and Small and Medium-Sized Enterprises and in the EU Council, on the one hand; and neoliberal, free-market voices in the commission’s Directorate General for Trade and the commission more broadly, on the other.¹³⁹ Based on its distinctive approach to solidarity-based liberalism, the EU could play a leading role in bringing together a coalition of like-minded partners to enlarge the minilateral design of OSA. Yet, whether the EU can chart a coherent course of external action in both economic and ideational terms—combining selective protectionism and a rules-based, progressive approach to global governance—remains to be seen.

Examining the Impact of Open Strategic Autonomy

To delineate the likely implications of OSA for the future global economic order, this chapter examines nine OSA-related acts, regulations, instruments, and mechanisms. The analysis tracks each measure's expected impact on, first, the EU's autonomy from the United States and, second, the EU's alternative coalition choices and preferred negotiation forums, particularly given the measures' compatibility with WTO regulations.

The first dimension of the analysis refers to the degree to which a particular measure is likely to impact—or has already impacted—the EU's autonomy from the United States. OSA-related actions may entail either minimal or major changes to the EU's current status as a follower of the United States in energy, technology, trade, and investment policies. Uncoordinated, adverse EU measures that lead to negative market impacts on the United States or open criticism from the United States are treated as evidence of increased EU autonomy. By contrast, when measures that are adopted in response to existing U.S. schemes—so-called catch-up measures—have complementary policy designs and are expected to create synergies, these suggest a continued follower role for the EU and therefore low autonomy. Meanwhile, contrasting or symmetric catch-up measures that are unlikely to generate synergies count toward higher EU autonomy. Finally, when EU-U.S. complementarity is likely to result instead from U.S. adaptation to EU-led solutions, this again suggests greater European autonomy.

The second dimension relates to the impact of each OSA measure on the EU's choice of negotiation forum and the likely changes in coalition dynamics that this choice entails. The measures are assessed in terms of their compatibility with existing WTO regulations and their support for different negotiation venues and coalition dynamics. These venues can be either multilateral; plurilateral, such as sectoral agreements; minilateral, as with preferential trade agreements; bilateral, such as cooperation agreements, association agreements, or thematic tables; or unilateral.

Concretely, each of these two dimensions is examined in terms of the expected impacts of the following nine recently enacted EU initiatives:

1. the Carbon Border Adjustment Mechanism (CBAM);
2. the Critical Raw Materials Act (CRMA);
3. the European Chips Act;
4. the Net-Zero Industry Act (NZIA);
5. the Foreign Direct Investment (FDI) Screening Mechanism;
6. the EU's export control regime;
7. the Single Market Emergency Instrument (SMEI);
8. the Foreign Subsidies Regulation (FSR); and
9. the Anticoercion Instrument (ACI).

The first four of these initiatives fall within the remit of environmental or technology policies, while the last five belong to the domain of more traditional trade, investment, or industrial policies.

Combining variations in the two dimensions outlined above produces three possible scenarios. In the first, OSA is regulated in ways that only marginally increase the EU's autonomy from the United States, so the EU's choice of negotiating forum is determined mostly by U.S. policies. In short, the EU is mostly a passive follower of the United States. The result can be either open stabilization or deeper bipolar competition, depending on how the United States approaches the EU and other partners, on the one hand, and China and other adversaries, on the other.

In the second scenario, OSA is implemented in ways that strategically enhance the EU's autonomy from the United States, allowing the union to realign itself in selected economic areas with countries outside the U.S.-led bloc. In essence, the EU is an active follower. Tripolar coalition dynamics could emerge in multilateral forums, but there could also be a rise in plurilateral, minilateral, and bilateral agreements in which the EU is a party and the United States is not. If Brussels can exert influence over Beijing through EU-U.S. agreements and over Washington through EU-China initiatives, the union could become a third pole in the international system with a positive impact on global stabilization and openness. However, tripolar competition could also trigger destabilization and a heightened preference for minilateralism.

In the third scenario, OSA has a regressive impact on the EU's ability to act cohesively on the external front, as the adoption of new measures drives EU member states to shun OSA altogether and favor national solutions. This scenario is compatible with a broad drift toward economic nationalism, trade restrictions, and greater instability.

All other things being equal, progressive outcomes—EU joint action and cooperative, rules-based, welfare-enhancing achievements—will depend on the union's ability to capitalize on the selective nature of OSA and creatively marry the goals of openness and autonomy. Such outcomes will also depend on how the EU's partners and competitors react amid ongoing changes in economic, environmental, and technology politics.

Strategizing Between Openness and Autonomy

The first dimension along which OSA can be assessed is the way in which the nine measures identified above affect the EU's autonomy from the United States. Examining all nine measures together offers a checklist to support decisionmakers, private-sector actors, and concerned citizens who seek an informed understanding of the implications of OSA.

The Carbon Border Adjustment Mechanism

After discussions that lasted a decade, the EU adopted CBAM in 2021 to accompany the European Green Deal, a set of initiatives that aim to make the EU carbon neutral by 2050. When it is fully in force from 2026, CBAM will impose tariffs on carbon-intensive imports into the EU, with the goals of containing carbon leakages that arise from such imports and aligning exporting countries with the union's goal of carbon neutrality.

International reactions to the scheme have ranged from competitive approximation, as in China, to an openness to joint schemes, as in Canada, Turkey, and the United Kingdom (UK). However, there has also been mounting criticism, particularly from developing nations, of CBAM's alleged discrimination against carbon-intensive exporters to the EU.

CBAM has increased the EU's autonomy from the United States, which has shifted from outright opposition to consideration of a similar polluter import fee.¹⁴⁰ But discussions of a Global Arrangement on Sustainable Steel and Aluminum (GASSA), a proposed zone of joint import tariffs on these two metals, have stalled as Washington seeks a CBAM exemption for its aluminum and steel exports.¹⁴¹ In turn, Brussels has loaded the GASSA talks with grievances against allegedly discriminatory nontariff barriers to trade introduced by the 2022 U.S. Inflation Reduction Act. Amid these stagnant negotiations, the EU has proceeded along its timeline for the introduction of CBAM.

The Critical Raw Materials Act

Since December 2023, the CRMA has set minimum targets for the EU's extraction, production, consumption, and imports of seventeen raw materials that are deemed critical in the manufacture of technologies such as semiconductors.¹⁴² At present, however, the initiative appears underfunded and potentially divisive among EU member states, as the union has no common procurement strategy, dedicated budget, or business case to attract FDI in critical raw materials.¹⁴³ Less affluent member states risk remaining in the backseat, clearing the way for richer countries to engage in an EU race for scarce incentives. Internal fragmentation within the EU would delay the bloc's alignment with the United States, narrowing Brussels's policy margin in a critical raw materials alliance.

These weaknesses should not be underestimated, as both the EU and the United States are heavily dependent on Chinese supplies of critical raw materials, while Beijing depends on the United States and the EU for the design and manufacture of advanced semiconductors.¹⁴⁴ To manage such interdependence, since 2021 Brussels and Washington have strengthened their bilateral cooperation through the Trade and Technology Council.

The European Chips Act

In force since July 2023, the European Chips Act aims to double the EU's share in the global semiconductor market, reversing the course of events in the 1990s, when Europe accounted for 15 percent of global chip production and member states then relocated most of their chip manufacturing to Asia.¹⁴⁵ Far from attempting to regain control of the market, the act merely seeks to secure basic chip supplies for the EU through geopolitical controls on dual-use technologies and avoid critical shortages, such as those experienced during COVID-19-related lockdowns.

While representing a first step to align the EU with the 2022 U.S. CHIPS and Science Act, the European Chips Act lags behind the United States' planned efforts: The EU has pledged to mobilize €43 billion (\$47 billion), against the U.S. goal of \$52 billion, excluding private funds.¹⁴⁶ As a result, the European act will likely not alter the EU's status as a follower of U.S. primacy in the transatlantic partnership.

The Net-Zero Industry Act

Like the European Chips Act, the NZIA supports investment in EU-based cutting-edge manufacturing of green technology. The NZIA sets a target for the EU's overall manufacturing capacity in strategic net-zero technologies to cover 40 percent of the union's needs by 2030.¹⁴⁷ The act is both a response to the green components of the U.S. Inflation Reduction Act and a counterbalance to Chinese primacy in specific clean-tech sectors. The NZIA supports EU net-zero strategic projects through targeted financing and reduced red tape for clean tech, deep tech, and biotech.¹⁴⁸

However, the NZIA is minimally resourced—even more so than the European Chips Act. An accompanying instrument, the Strategic Technologies for Europe Platform (STEP), is to be financed through the EU budget. The commission estimates that the total new investments through STEP could reach up to €160 billion (\$175 billion).¹⁴⁹ Yet, this amount is dwarfed by the green financing package in the U.S. Inflation Reduction Act, which, according to global consultancy McKinsey, will “direct nearly \$400 billion in federal funding toward clean energy.”¹⁵⁰ Not surprisingly, the downgrading of EU funding for the NZIA objectives attracted fierce criticism from some member states, such as France, and from centrist members of the European Parliament, who support a sovereigntist interpretation of OSA.¹⁵¹

The risk of internal fragmentation within the EU is particularly high. Richer member states, such as Germany, have wider fiscal margins to comply with the NZIA provisions even without EU funding, while poorer states will likely fall behind in the race for investment in clean tech.

A Green Leader in the Making?

On the external front, all four of the measures examined so far—CBAM, the CRMA, the European Chips Act, and the NZIA—have elicited criticism for amounting to disguised protectionism. To contain the rise of anti-EU sentiment, Brussels will have to rethink the current underfunding of its green-tech initiatives. In particular, the CRMA and the NZIA require a greater effort to shore up domestic support and expand the EU's autonomy when it comes to building coalitions with the Global South.

CRMA-sponsored EU strategic projects between the union and third partners are financed mainly through the Global Gateway infrastructure investment initiative and member states' resources. Yet, it is unclear how the CRMA—and the many other new acts that tap into preexisting EU facilities—will help the union reach the targets set by its critical raw materials policy. Global Gateway support for sustainable infrastructure development in third countries has already borne fruit in terms of the EU's search for green critical raw materials, for example through EU preferential agreements with the Democratic Republic of the Congo, Kazakhstan, and Kenya.

On the autonomy front, CBAM represents an innovative EU tool for fairer pricing of carbon-intensive imports, an area in which the United States has been caught off guard and seems to be lagging behind. By contrast, the CRMA and the NZIA are reactive steps by the EU to contain the impacts of measures in the U.S. Inflation Reduction Act on self-sufficiency in critical raw materials and on trade and investment in clean tech, respectively. These two EU acts also strengthen the deterrent effect of EU-U.S. economic cooperation against coercive practices by China and Russia in critical supplies and enhance the resilience of supply chains in the event of global shocks.

Going forward, the EU and the United States should adopt a comprehensive strategy to coordinate their investment procurement and the resilience-enhancing measures of their respective legislative packages. Upgrading the transatlantic cooperation agenda—beyond the current consultations within the Trade and Technology Council on an agreement on clean and deep tech—would be a step in the right direction. Brussels and Washington should also encourage plurilateral deals in the wake of new multilateral rules for trade in clean tech-intensive goods. That means forging partnerships with like-minded countries, such as Australia and Taiwan, within the Climate Club created in December 2022 under the German presidency of the Group of Seven (G7).

At the same time, the EU and the United States need an honest assessment of the impacts of their green packages on global markets. For example, the combined effects of subsidies, export restrictions, domestic content requirements, and limits on intellectual property rights in the NZIA are suboptimal compared with an unrestricted scenario of lowest-cost sourcing. In economic terms, subsidizing domestically based joint ventures and imposing local content requirements are regressive choices. Politically, however, this is the strategy chosen by major players seeking a greener, more tech-intensive future.

To make this approach viable on a multilateral basis, Brussels and Washington should offer gradual phaseouts and compensatory measures to suppliers in developing countries. After decades of EU industrial development through emissions-intensive sourcing from developing countries, production patterns cannot be reoriented without incentives for the EU's developing partners. Beyond the issue of climate justice, this should be a political and economic priority for a union that will always depend on third countries for critical raw materials that are both emissions intensive and key inputs for clean-tech products.

The FDI Screening Mechanism

Adopted in October 2020, the EU's FDI Screening Mechanism moves the governance of FDI inflows to the supranational level to protect national security and public order. More specifically, this coordination mechanism among member states seeks to guard against further expansion of Chinese investment into Europe.¹⁵² The mechanism was particularly welcomed by France, Germany, and Italy, which receive Chinese FDI in high-tech sectors, as the initiative has mitigated their concerns about technology leakages. Conversely, recipients of Chinese FDI in low-tech infrastructure, such as Cyprus, Greece, and Portugal, have resisted the mechanism's adoption for fear of jeopardizing potential future Chinese investment.¹⁵³ As of this writing, twenty-two of the twenty-seven EU member states have established national FDI screening regulations.¹⁵⁴

Contrary to expectations of higher barriers and more red tape, early evidence indicates that the EU mechanism is neither overly restrictive nor burdensome.¹⁵⁵ In addition to successfully blocking several sources of mostly Chinese FDI, the mechanism has been more effective in terms of its economic selectivity than its geopolitical targeting.

The EU's Export Control Regime

The EU has further substantiated its deployment of OSA through two export-related tools. In 2021, the EU updated its export control regime for dual-use items; and in its July 2023 Economic Security Strategy, the union issued a longer, constantly updated list of exports that are subject to controls on national security grounds. The EU has also hardened its restrictions on semiconductors to contain the theft of vital technology and catch up with Beijing in the race for semiconductor development.

In this area, the EU has closely followed the United States, where in 2018 export controls were effective in banning the use by the U.S. government of technology developed by Chinese firms Huawei and ZTE. Since Russia's 2022 invasion of Ukraine, Brussels has aligned itself even more closely with Washington by prohibiting exports of all military supplies to Russia as well as exports of dual-use microelectronics to Russia and its allies. Despite tighter EU-U.S. alignment, however, bilateral ties between the United States and certain EU member states—such as the Netherlands, the main EU producer of semiconductors—indicate that unilateral moves persist despite the EU's regulations.

Overall, combined with closer U.S.-Japan coordination on export controls for semiconductors, the EU's economic balancing has strengthened the transatlantic front against China and Russia. The future strength of this alliance will also depend on the EU's ability to engage South Korean and Taiwanese producers, which have agreed to build new-generation manufacturing plants in the United States, to deter Beijing's coercive practices against Taiwan, the top producer of raw semiconductors and a trusted EU supplier.¹⁵⁶

The Single Market Emergency Instrument

Proposed by the commission in September 2022, the SMEI is the EU's response to the shocks to the European single market that occurred during the COVID-19 pandemic, when member states restricted critical supplies on the grounds of a national emergency. The instrument seeks to enhance the union's preparedness for EU-wide critical shortages.¹⁵⁷ Under the SMEI, the commission can request that companies voluntarily disclose data on critical items if disruption is expected within six months or in the event of a severe disruption. If critical disruptions persist, the EU Council can invoke the so-called dual emergency procedure, under which the commission can request formal justifications from firms that refuse to comply with the EU's binding orders.

The SMEI's expected impact on the single market is ambiguous, however. On the one hand, the commission considers the instrument to be far less ambitious than crisis-management tools adopted by the EU's partners, such as the U.S. Defense Production Act, which has been in force since 1950 and regularly updated during crises since. On the other hand, the commission has highlighted the SMEI's relevance as a permanent guard against member states' protectionism in the European single market.¹⁵⁸

Critics, on the contrary, have lamented the commission's lack of expertise and sectoral knowledge needed to interact effectively with players in complex supply chains, particularly in critical conditions.¹⁵⁹ Instead of supporting a more resilient and effective internal market, the SMEI may therefore fuel member states' resistance and encourage bureaucratic battles within the EU. Overall, while enhancing the union's autonomy from the United States, the SMEI puts the EU on a par with several of its partners. As such, the instrument is a catch-up response rather than an assertive display of protectionist dirigisme.

The Foreign Subsidies Regulation

The FSR, which came into force in July 2023, extends the EU rules on state aid to foreign entities that subsidize non-EU companies or intermediaries that carry out certain economic activities in the EU. As a bold move toward greater European autonomy, the FSR addresses a rise in distortive subsidies entering the EU not only from nonmarket economies, most notably China, but also from the United States. Modeled as an instrument of competition policy, the FSR is nonetheless geared toward the EU's external counterparts. The regulation's

reach is both deep and broad: It potentially applies to any step in a foreign public procurement process, covers all sectors, and includes multiple undertakings, such as concessional loans, unlimited guarantees, and capital injections.

The FSR is likely to increase the EU's autonomy from the United States because it endows the union with its own mechanism to scrutinize foreign subsidies. Together with the EU's digital and green regulations, the FSR should counterbalance U.S. support for companies that invest in the EU under the Inflation Reduction Act. While essentially a defensive tool, the FSR will allow Brussels to negotiate with Washington on a more equal footing, including when it comes to revising WTO regulations on foreign subsidies. Joint—or, at least, coordinated—action to redefine the rules on foreign procurement systems would be compatible with the WTO Agreement on Subsidies and Countervailing Measures (SCM).

However, a sustainable FSR requires the EU to step up its financial commitments and expertise. The EU task force dedicated to the FSR comprises only five staffers, even though the commission had originally envisaged that 145 positions would be needed to make the regulation fully operational.¹⁶⁰

The Anticoercion Instrument

In force since December 2023, the ACI raises the EU's ambitions in the field of OSA. Amid the prolonged stalemate at the WTO Appellate Body, WTO rules allow the organization's members to adopt countermeasures against partners that do not comply with the adjudication of a WTO panel. The ACI empowers the union to anticipate and respond to economic coercion, which the EU defines as existing “where a third country applies or threatens to apply a third-country measure affecting trade or investment in order to prevent or obtain the cessation, modification or adoption of a particular act by the Union or a Member State, thereby interfering in the legitimate sovereign choices of the Union or a Member State.”¹⁶¹

This wording clarifies the instrument's intent, which is to allow mercantilist reactions to potential or actual mercantilist practices by others against the EU or its members. The ACI therefore permits compensatory restrictions in response to economic pressure by third countries against the union. In other words, the ACI, which is defensive in nature, seeks to contain the influence of aggressive third-country policies.¹⁶² As the instrument's proponents have noted, the ACI is in fact a tool of deterrence and has maximum value when it is not used.¹⁶³ If employed in this way, the instrument should be activated only in critical situations short of outright trade wars. Yet, as defensive tools can lead to offensive action when conditions worsen, the EU should guard against both preemptive and preventive uses of the ACI in the event of an actual trade war.

Restrictive countermeasures under the ACI would certainly reduce global openness. Unlike anti-China measures by the United States, the ACI is not country specific and does not have safeguards to exempt allies and target nonmarket economies. Overall, the instrument

enhances the EU's autonomy from the United States. In most respects, though, the ACI is a reactive move: EU officials have stated that one of the instrument's triggers was the United States' aggressive reliance on Section 301 of the 1974 U.S. Trade Act, which authorizes an extensive range of measures in response to certain foreign trade practices.

In fact, the EU's approximation to the U.S. anticoercion approach would be in Washington's interests. A stronger and more resilient EU is essential to counter economic intimidation from China. From an EU perspective, the ACI can be regarded as an insurance mechanism should the United States become less open on the grounds of domestic policy. If the ACI is successfully employed as a deterrent and in cooperation with a like-minded U.S. administration, Brussels and Washington could greatly enhance their anticoercion synergies against Beijing and Moscow.

Internally, the ACI marries EU trade and security policies and could lead to an expansion of the commission's powers into areas that currently fall under the EU's intergovernmental Common Foreign and Security Policy (CFSP), which sits under the purview of the EU Council. Like the SMEI, the ACI establishes the commission and the council as parties in a complex process that involves the selective triggering of different phases. While giving the commission extensive authority, the ACI entails multiple interactions between the EU institutions, whereas decisions made under the CFSP exclude the commission and may be faster in critical circumstances.

Compliance With Multilateral Rules

The second dimension of the EU's panoply of OSA-related instruments is their impact on the EU's choice of negotiation forums and, in particular, their compatibility with multilateral trade rules. There are inherent tensions between the initiatives motivated by the EU's willingness to enhance OSA, on the one hand, and the multilateral order, which the EU has traditionally championed, on the other.

The Carbon Border Adjustment Mechanism

Various actors, such as India's Minister of Finance Nirmala Sitharaman, have criticized CBAM for being a green protectionist policy disguised as climate action.¹⁶⁴ In response, the EU argues that the mechanism is not a protectionist measure because its pricing will be the same as that imposed by the EU on domestic industries, so local and foreign products will be treated equally.¹⁶⁵ According to the WTO's most-favored-nation principle, an importer should apply equal treatment to any given imported product, regardless of its origin. But CBAM applies different treatment based on each import's carbon content. In addition, inconsistencies between CBAM and the distribution of emissions allowances under the EU's Emissions Trading System could create concerns about the mechanism's compliance with WTO rules.

CBAM could also have negative economic and developmental impacts on third countries.¹⁶⁶ This risk is particularly acute for developing and least developed countries whose exports to the EU either play a significant role in their economies or are major sources of income in sectors covered by the mechanism. In addition, developing and least developed countries tend to have more carbon-intensive economies than developed nations and often lack advanced, low-carbon production methods; as a result, they may lose their competitive advantages over their developed counterparts.

What is more, CBAM places an obligation on exporting companies to report the amount of emissions generated during the production processes of affected exports. This requirement has the potential to put additional burdens on the private sectors of certain developing or least developed countries, as their administrative and statistical capacities are more limited than those of developed nations. CBAM's disproportionately negative impacts on certain developing and least developed countries are also contrary to the principle of common but differentiated responsibilities, which asserts that the burden of climate change mitigation should be distributed equitably, taking into account nations' levels of development.

The Critical Raw Materials Act

The CRMA provides financial support and incentives to EU-based companies—an arrangement that could be seen as discriminating against foreign firms. The WTO's SCM Agreement prohibits subsidies that are contingent on the use of domestic over imported goods or are limited to certain enterprises or industries. The CRMA's support for EU-based companies may be seen as a violation of these rules.

There are also several concerns and criticisms about the CRMA's environmental and social justice implications. One of these concerns stems from the act's lack of a global justice approach to international partnerships. The CRMA's focus on supply security could jeopardize sustainability standards in international investments, the participation of civil society, and the protection of human rights, especially for local populations. To prevent these potential risks, the act should be accompanied by monitoring mechanisms and regulations that ensure civil society participation and transparency.¹⁶⁷ Additionally, the act's streamlined procedures for greenlighting critical raw materials projects in the EU could increase environmental and health risks and decrease public participation by shortening the time frames of important procedures, such as environmental evaluations.¹⁶⁸

The European Chips Act

It could be argued that the European Chips Act violates several key WTO principles and, as such, may be incompatible with multilateral trade rules. Four aspects stand out.

First, the act provides financial support and incentives for companies that produce microchips in the EU. This could be seen as a form of local content requirement, which is prohibited under WTO rules. The organization's Agreement on Trade-Related Investment Measures (TRIMs) forbids provisions that require the use of domestic content, the export of domestic goods, or the substitution of domestic goods for imported ones. More generally, the act's support for EU-based companies could also be seen as discriminatory against foreign companies and therefore a violation of the WTO's SCM Agreement.

Second, the act includes provisions that restrict the export of certain types of microchip, particularly those used in critical infrastructure, such as energy, transportation, and health care. These provisions could be interpreted as a breach of the Agreement Establishing the WTO and the General Agreement on Trade in Services (GATS), which prohibit restrictions on the export of goods and services, except in certain circumstances.

Third, the act's provisions on intellectual property rights could be seen as a violation of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which sets out the rules for the protection of patents, copyrights, and trademarks. The act could potentially violate the TRIPS Agreement by limiting the ability of foreign companies to protect their intellectual property rights in the EU.

Fourth, the act could be understood as a protectionist measure that carries the risk of a trade war, this time between allies. Europe, Japan, South Korea, Taiwan, and the United States may seek to outbid each other with ever-larger subsidy handouts to entice global companies to make new investments. The results would be the duplication of supply chains among allies, inefficiencies in global semiconductor production, a waste of taxpayers' money, and a race to the bottom that would be incompatible with WTO guidelines.¹⁶⁹ The paradox is that the success of the European Chips Act will be measured against the backdrop of a zero-sum mentality, including among Europe's geopolitical allies. According to a 2022 report by the Brookings Institution, approximately \$164 billion of semiconductor capital expenditure is required to achieve the EU's ambition of a 20 percent share of the global market by 2030.¹⁷⁰

The Net-Zero Industry Act

Like the CRMA and the European Chips Act, the NZIA provides financial support and incentives for EU-based companies, which could be seen as discriminating against foreign firms and a violation of the SCM Agreement. Critics see the NZIA's target for the EU to become 40 percent self-sufficient in the manufacturing of strategic net-zero technologies by 2030 as a protectionist signal.¹⁷¹

The act also requires that a certain percentage of the value of renewable energy equipment be produced in the EU. This could be seen as a local content requirement, which is prohibited under the TRIMs Agreement, which forbids measures that require the use of domestic content or limit the participation of foreign investors in a particular sector.

Further provisions in the NZIA restrict the export of certain renewable energy technologies, such as solar panels and wind turbines, to countries that do not have free-trade agreements with the EU. These provisions could violate article 11 of the General Agreement on Tariffs and Trade (GATT), which prohibits export restrictions that are not based on legitimate reasons, such as conservation or national security.

The NZIA also includes clauses that restrict the use of certain intellectual property rights, such as patents and trademarks, for renewable energy technologies. These provisions could be seen as a breach of the TRIPS Agreement.

Finally, there is a growing concern that the NZIA might trigger an intra-EU subsidies race because the act lacks provisions that encourage cooperation among member states. Similarly, there are fears that together, the NZIA and the U.S. Inflation Reduction Act could lead to a subsidies race between the EU and the United States. Therefore, instead of accelerating decarbonization, the transatlantic partners' increased subsidies and protectionist policies risk slowing decarbonization efforts and raising the costs of necessary materials and components globally.¹⁷²

The FDI Screening Mechanism

The FDI Screening Mechanism applies only to non-EU investors and, as such, could be seen as a violation of the GATS, which states that countries must not discriminate against foreign services or service providers, including investors.

The mechanism gives the EU the power to restrict or prohibit foreign investments in sensitive sectors, such as critical infrastructure and critical technologies. This power could be understood as a violation of the TRIMs Agreement, which prohibits restrictions on the movement of capital and investment, except in certain circumstances.

Although the mechanism applies to foreign investments in the EU, it could be seen as extending to investments outside the bloc. For example, it could be interpreted as applying to EU-based subsidiaries of non-EU companies, or to investments in non-EU countries that have a link to the EU. This arrangement could be seen as a breach of the TRIPS Agreement, which forbids extraterritorial application of intellectual property rights, again except in certain circumstances.

The EU's Export Control Regime

Historically, the United States and the EU have been the main proponents and guardians of a multilateral, rules-based order with the WTO as the main forum for resolving problems and disputes in international economic relations. However, both actors have consistently used trade and economic relations as an effective geopolitical tool in the form of unilateral

and geostrategic sanctions. To be permitted under WTO rules, such measures need to be condoned as exceptions that are justified by national security concerns. WTO panels have so far had limited experience in interpreting the scope of these exceptions.

The new era of global geopolitical tension has rekindled interest in export controls. After a hiatus of almost twenty-five years, the WTO has handled four such cases since 2021, including when a WTO panel rejected the United States' invocation of article 21 of the GATT in disputes brought by China, Norway, Switzerland, and Turkey.¹⁷³ So far, the WTO approach has proved to be much more restrictive than the trend in both the United States and the EU toward expanding the scope of export controls. This situation raises the question of how compatible these measures are with WTO rules.¹⁷⁴

As export controls remain a gray area under WTO rules, increased reliance on these instruments will trigger criticism that the United States and the EU are becoming more inclined to impose unilateral measures based only on their own assessments and with too broad a definition of national security.

The Single Market Emergency Instrument

The WTO's most-favored-nation principle requires that the organization's members treat all other members equally and in the same way as they treat their closest trading partners. The EU's use of the SMEI could be seen as a violation of this principle if the instrument is deemed to discriminate against certain countries or industries. If deployed in a protectionist or discriminatory way, the instrument could also be interpreted as a breach of article 21 of the GATT, which allows WTO members to take emergency measures to protect their domestic industries but only in limited circumstances.

The WTO's Agreement on Import Licensing Procedures includes a requirement that such procedures be transparent, predictable, and fair. The SMEI could therefore be seen as a violation of this agreement if it is deemed to be opaque, unpredictable, or unfair.

Meanwhile, the WTO's Agreement on Technical Barriers to Trade requires that technical regulations be based on relevant international standards and not create unnecessary obstacles to trade. The SMEI could thus be seen as a breach of article 3 of this agreement if the instrument is found to create unnecessary obstacles to trade or be based on noninternational standards.

The Foreign Subsidies Regulation

At present, trade-distorting aspects of subsidies are covered by the WTO's SCM Agreement. The scope of the FSR, however, goes beyond this agreement, and there are no binding multilateral rules on the nexus between subsidy regimes and domestic investments. In addition, while the WTO has specific rules on subsidies, these generally apply only to goods and do not cover services.¹⁷⁵

The Anticoercion Instrument

The essentially mercantilist nature of the ACI—a selectively restrictive economic tool in service of broader, political-economic goals—counters the free-trade philosophy that permeates all WTO regulations. The instrument has its origins in the current decade-long paralysis in the WTO Appellate Body. The ACI’s creation of a substitute mechanism for mediation between affected EU member states and alleged third-party infringers and a sanctions procedure may appear to signal an end to the multilateral apparatus built by WTO members.

In response to these criticisms of the ACI, the EU has argued that the instrument’s mechanisms deal specifically with cases of economic coercion not covered by WTO rules and agreements, and that the ACI is a different tool that addresses illegal economic coercion.¹⁷⁶ However, the stage at which economic coercion becomes illegal is a highly controversial issue in international law. One of the main problems in this regard is the lack of a clear definition of what even constitutes economic coercion. As a result, concepts such as intervention, interference, and coercion are used in different and varied ways in international law.

In addition, international court rulings on this issue have held that certain actions that the EU defines as economic coercion do not violate the principle of nonintervention, which prohibits states from intervening in the affairs of others.¹⁷⁷ In a case between Nicaragua and the United States, the International Court of Justice found that economic coercion by the United States, including trade embargoes and the suspension of aid, did not breach this principle.¹⁷⁸ As a result, economic coercion by means of trade and investment restrictions does not necessarily constitute illegal intervention.

Toward Increased EU Autonomy

The EU’s pursuit of OSA is leading the union toward increased autonomy from the United States. Furthermore, OSA-related measures espouse a clear preference for unilateral, bilateral, or minilateral schemes over WTO-based multilateralism, resulting in lower levels of openness than in the past.

Through OSA, the EU has carved out a more autonomous role from the United States in green policies while embracing a more adaptive approach in traditional trade and industrial policies. Moving forward, increased EU autonomy—punctuated by occasional frictions but grounded in general agreement with the United States on broad objectives—appears the most likely scenario. The EU remains on a course of reluctant geopoliticization based on an ostensible preference for multilateralism but in reality pursued through unilateral, bilateral, or minilateral solutions.¹⁷⁹

The EU as a Responsible Climate Leader

Through CBAM, the EU's shift from a reactive follower to a more proactive player shows that there is space for a more assertive EU role in global climate policies. The impact of the mechanism, however, depends on the union's ability to widen its coalition options beyond the transatlantic partnership. To minimize CBAM's incompatibility with core WTO norms, Brussels should ensure that the mechanism complies with the GATT provisions on special and differential treatment, which give developing countries special rights and allow other WTO members to treat them more favorably.

At the same time, the EU should introduce targeted carbon-financing schemes, including through the Global Gateway, to compensate developing exporters during CBAM's transition phase. Such targeting would not only strengthen the EU's image as a responsible climate leader but also enhance the union's reach toward potential new partners and major exporters of carbon-intensive goods, including Egypt, India, Kazakhstan, Mozambique, and South Africa.

Financial support for decarbonization could mitigate criticisms of EU double standards when it comes to Ukraine, which is a major carbon-intensive exporter to the union but is currently exempt from CBAM, unlike the bloc's developing partners. Overall, coupling CBAM with compensatory measures for developing exporters could advance the EU's economic and strategic goals as well as its objective of a green and just transition. If China aligns with the EU by adopting its own domestic emissions-trading system, Brussels could fine-tune CBAM and become a global leader on decarbonization, exerting pressure on both Washington and Beijing.

However, if CBAM, the CRMA, the European Chips Act, and the NZIA are to jointly advance green transitions worldwide, the EU needs to make a bigger effort to realize its potential as a green and just coalition leader. This requires a twofold strategy of bargaining with the United States for a more ambitious approach to global equitable development, on the one hand, and prioritizing Global Gateway resources for green projects, on the other.

As in global development finance, excellent internal coordination will be needed if the EU is to lead multilevel, multiactor initiatives to promote clean transitions.¹⁸⁰ Yet, this effort appears worth making: The combination of a solid EU-U.S. partnership and an EU-led green coalition that includes targeted developing partners may be crucial if the U.S.-China rivalry hardens further. The economic, environmental, and strategic implications of such a repositioning may prove vital for the future of Europe.

The EU as a Third Economic Pole

Similarly, the early impacts of the EU's OSA-related trade and investment measures also indicate that Brussels may strengthen its role as a third pole beyond the U.S.-China duopoly in the global political economy. The ACI provides the union with unprecedented authority

to deter third countries' economic manipulation and retaliate against distortive practices, even before a case has been concluded at the WTO. The SMEI, meanwhile, should manage the domestic implications of disruptions in complex critical supply chains, empowering the EU Council and the commission to deal with sudden shortages through an EU mechanism.

The FDI Screening Mechanism, the EU's export control regime, and the FSR are also expected to lead to enhanced EU capacity, but in the form of greater loyalty to the United States rather than more independence as a third pole. As mostly reactive moves to catch up with established U.S. practices, these instruments are likely to enable the EU's alignment with the United States' top foreign policy priority of outcompeting China in the global race for technological and, ultimately, security primacy.

Most of the EU trade and investment instruments discussed in this chapter are partly or even fully contrary to existing WTO rules. The EU's green-tech tools, however, are similar to their U.S. counterparts and may provide a basis from which the EU and the United States can deepen their dialogue on revising current WTO regulations.

Some measures, such as the FDI Screening Mechanism and the export control regime, may reduce the EU's internal cohesion and increase fragmentation—or even escalate state- or company-specific disagreements over their intended goals to the global level, with potentially destabilizing effects.¹⁸¹ Although unlikely at the moment, a scenario of outright fragmentation is a possible outcome of the competitive dynamics that have emerged among EU member states when it comes to green-tech initiatives. Under the NZIA, the European Chips Act, and the CRMA, the challenges of scarce funds, embryonic strategies, and the lack of an EU-wide procurement system, respectively, have raised major concerns within the EU.¹⁸²

Further worries stem from the commission's lack of in-house expertise to implement crisis-management tools for complex supply chains, meet the private sector's many demands, and ensure effective coordination with the EU Council. These challenges have exposed the risk that the SMEI, the FSR, and the ACI may harm the EU's internal cohesion. While the aim of these instruments is to attract foreign partners and forge alliances between EU producers and non-EU suppliers, Brussels will have to carefully assess the risks that arise from the union's internal differences.

A fragmented EU would weaken support for rules-based economic governance and mean greater global instability. In the short term, international economic regulations will become more heterogeneous and more complex. More global exchanges than ever before now involve countries that are aligned neither with the West nor with China, as evidenced by a 2024 International Monetary Fund (IMF) study, so any steps the West can take to increase the traction of transparent, rules-based governance are particularly important.¹⁸³ For any meaningful economic activity, the worst possible outcome in a contested global context is regulatory uncertainty.

The Implications of Selective Protectionism

The EU is overhauling OSA-related policies across different domains, from trade to climate change, to better equip itself to respond to perceived geopolitical needs. As highlighted by Giovanni Grevi and Richard Youngs in this compilation, the EU has started to devise a different kind of economic statecraft in which geopolitical factors increasingly shape economic policies.¹⁸⁴

Except for specific initiatives, most notably CBAM in the broader context of the European Green Deal, OSA policies substantiate Brussels's adaptive response to distortive practices, especially from China, and regulatory changes, particularly from the United States. Mostly defensive in nature, these policies embody a catch-up approach that in principle aligns the union with the United States, rather than widening the distance between Brussels and Washington.

The EU's policy shift to a more assertive version of selective protectionism, while potentially incompatible with WTO regulations, is rules based and more transparent than most protectionist measures adopted by nonmarket economies. This not only makes the EU's approach more actionable but also means it represents a sensible strategy for the EU amid the politicization of economic exchanges and the militarization of long-standing geostrategic cleavages.

Only by relying on solid instruments to protect its internal market and promote its competitiveness can the EU minimize its vulnerabilities to the further weaponization of interdependencies by China. Similarly, only by negotiating from a position of relative strength can Brussels exert influence on Washington to begin a review of the WTO system and engage developing partners in a shared effort to advance multilateral solutions fit for the twenty-first century.

At the same time, the shift in EU policies has taken place in an environment that has tended to downplay the external reactions to this transformation. In this respect, two issues are especially salient. The first relates to the EU's traditional position as the champion of the multilateral trading system. Even more so than the United States, the EU has distinguished itself as the economic power intent on maintaining and consolidating this multilateralism. Thus, the EU's possible departure from multilateral norms is an area of concern for many nations eager to protect these rules.

A second and related issue is the perception that the modernization of the EU's legal and regulatory arsenal—allegedly to prepare the EU to better deal with a more challenging geopolitical order—in fact amounts to trade protectionism in disguise. For instance, many least developed countries have labeled the EU's CBAM “green protectionism.”¹⁸⁵ Going forward, the union should become more receptive to these concerns, especially in the context of its evolving relationships with the Global South. To address these issues, the EU should consider a holistic strategy that combines a political track and a policy track.

Political Objectives

With respect to politics, the EU's first objective should be to recast OSA as a beacon for like-minded countries. In doing so, the union's aims should be to increase the reach of its coalitions and to maximize the benefits of selective partnerships. In addition to the United States, the UK, and other long-standing partners, such as Australia, Canada, and Japan, the list of like-minded nations includes Indo-Pacific states such as India, South Korea, and Vietnam.¹⁸⁶

This objective entails not only building wider coalitions but also paying particular attention to the multiple cleavages over OSA, both within the EU and when it comes to the concept's external projection. EU policymakers will have to engage foreign interlocutors to weave shared strategies for mutually beneficial goals. This effort should involve political partners, particularly Australia, Japan, and the United States, especially in strategic sectors, such as dual-use technologies, semiconductors, and critical raw materials. Crucially, the success of the EU's assertive projection of OSA also depends on the degree of convergence that will materialize with the policies of the post-2024 U.S. administration.

The second objective of the political track should be to engage in high-level political discussions, in a bilateral or plurilateral format, with leading members of the Global South. The aim would be to foster a mature deliberation of the ongoing transformation of the EU's approach. The trap to avoid is Western-centrism: It would be a dangerous fallacy for the EU to assume that its political initiatives will be accepted by the rest of the world merely because they are justified by moral and ethical considerations, like fighting climate change or preventing social dumping.

This connection has been established among the European policy community and European public opinion; EU leaders now need to make the case convincingly to a global audience. This thought leadership should also aim to engage the U.S. policy community, given how potentially damaging certain U.S. initiatives—such as the U.S. CHIPS and Science Act, with its large reliance on domestic subsidies, or the increased use of Section 301 investigations—can be to the integrity of the multilateral regime.

Policy Goals

The policy track, in turn, should involve a work agenda focused on identifying possible revisions to multilateral rules. Many nations are moving to enact domestic measures on the basis of geopolitical considerations that are not necessarily compatible with those nations' commitments to multilateral norms. In many respects, the WTO rules that were adopted in the unipolar international system of the early 1990s now appear out of sync with today's competitive, multipolar, and ideologically heterogeneous context.

At present, there is no real effort to foster a policy dialogue that will address this thorny question. The panoply of geopolitically motivated domestic measures seems to reflect strong

political tendencies in the West and beyond. These measures are likely to remain in force even if they are largely incompatible with multilateral norms. Reforming these norms is therefore vital to protect the integrity of multilateralism.

This agenda should focus on four elements. The first is reform of domestic subsidy regulations to carve out space for so-called good subsidies. The idea of such subsidies is that provided they could be justified by an accepted set of shared objectives, such as climate change mitigation or other collective aims, they would be impossible to countervail, even if they created trade distortions.¹⁸⁷

Second, while proponents of the green transition should take the accusation of green protectionism seriously, the WTO will have to adapt to the greener trade and production needs of the twenty-first century. This could be done by providing for an exception under article 20 of the GATT to allow selective carbon tariffs and targeted domestic sourcing of clean tech-intensive goods.¹⁸⁸

The third element is a reinterpretation of core WTO norms, such as special and differential treatment, the dispute settlement framework, and the national security exemption. The WTO allows exceptions to its trade rules for national security emergencies, but such exceptions have been abused several times in the past, most recently in the U.S.-China trade war and by the first Trump administration's aggressive mercantilist approach to U.S.-EU relations.¹⁸⁹ Indeed, maintaining a multilateral rule on national security exceptions to free trade may prove unrealistic in the current context. Instead, the increased geopoliticization of economic exchanges and the intensification of conflicts on the EU's borders and at strategic trade choke points push the union toward more limited goals. A bilateral EU-U.S. consensus and support from other transatlantic partners for a revision of WTO regulations would be steps in the right direction.

Finally, the EU should be more confident in pursuing openings toward new partners in emerging market economies. Now and in the future, the cooperation of such partners is vital to ensure continuous innovation, stable supply chains, and EU access to critical markets. In return, the EU will have to offer wider and fairer—although still selective—market access to Indo-Pacific partners while incorporating China in green efforts downstream. A group led by the EU and the United States could steer the course toward greener, more open technologies and catalyze a wider, gradually more inclusive group of green exporters in line with the United Nations Sustainable Development Goals. However, the EU should still carefully select its partners based on its political priorities, not only to balance China, but also to avoid economic emasculation by the United States and distance the union from coercive actors.

CHAPTER 5

Unpacking the Tensions in the EU's Approach to Supply Chain Resilience

Lizza Bomassi and Pavi Prakash Nair

The term “supply chain resilience” has come into vogue of late to highlight the many strategies being deployed across various sectors to mitigate supply chain disruptions. In the past few years, the European Union’s (EU’s) globalized supply chains, especially in critical sectors, have come into focus. Some of this attention was spurred by the coronavirus pandemic, which exposed the EU’s deep vulnerabilities, given how reliant the bloc is on global supply chains—much more so than the United States or China.¹⁹⁰ Certainly, the EU’s dependence in this area has come at a heavy cost: In 2021, for example, the eurozone lost €112.7 billion (\$122.3 billion) because of supply chain challenges.¹⁹¹

At the same time, a host of other factors have exacerbated the EU’s vulnerabilities to supply chain disruptions: Russia’s war in Ukraine, the crisis in the Middle East, and the unpredictability of Europe’s future relations with the United States. Yet, these vulnerabilities have also created opportunities for the EU to ramp up its response mechanisms. Within a relatively short space of time, the EU launched an array of initiatives as part of its industrial policy strategy with the aim of shoring up businesses’ capacities to adjust to shocks in the global trading system: the Net-Zero Industry Act, the Critical Raw Materials Act, the European Chips Act, and REPowerEU, to name a few.¹⁹²

At their core, these initiatives reflect a set of resilience-building strategies that marry the EU’s approach to the twin challenges of the climate and digital transitions, on the one hand, with efforts to increase diversification and reduce reliance on individual actors or entities, on the other. While the jury is still out on whether these policies will achieve their intended purpose, it is clear that the EU’s ambitions to build strategic autonomy are well and truly underway.¹⁹³

The notion of strategic autonomy—or its cousin, open strategic autonomy—denotes the EU’s policy of protecting itself while simultaneously upholding its liberal values. It is a critical concept in the context of supply chain resilience because it affects the union’s current and future terms of engagement both internally and externally, as supply chains are created with the union’s geopolitical strategy in mind. These terms of engagement set the bloc’s approaches toward trade agreements, mutual dependencies, technological integration, and geopolitical alliances. This is important because the vulnerabilities of critical supply chains across industries globally have seemingly created an arms race toward supply chain resilience, which is exacerbating geopolitical pressures.

Efforts to relieve these pressures have yielded proposals such as the highly divisive U.S. decoupling strategy and the EU’s slightly more palatable strategy of de-risking. Both approaches include elements of protectionist tactics based on a risk assessment that moves away from—or, at least, minimizes—reliance on actors such as China. Yet, as far as the EU’s de-risking efforts and broader economic statecraft are concerned, the evidence suggests a sobering picture: Instead of the EU mitigating the risks of supply chain disruptions, it appears that China has been the one to do so.

Three Tensions: Definitional, Temporal, and Political

European efforts to improve supply chain resilience face several distinct yet interlinked tensions that have so far been poorly understood by EU policymakers, who need to acknowledge these factors if they are to advance their understanding of how to improve supply chain resilience. Much recent research has examined EU-level policies in supply chains, highlighting their advantages and disadvantages. Analysts have also studied the initiatives and strategies being developed by corporate actors.¹⁹⁴ What is less available is an overview of the underlying tensions that hamper efforts to build supply chain resilience—tensions that can be definitional, temporal, or political.

Tension One: A Definitional Gap

The first tension stems from a lack of consensus on what resilience means in the context of supply chains. The importance of a consensual framing of resilience cannot be overstated: Without this, there is a real risk that the current divergence between businesses and policymakers on how to address the same fundamental challenges will become entrenched.

Strikingly, this divergence has not always existed. The gap between stakeholders’ understandings of the term “resilience” has widened in the past few years and been compounded by today’s global pressures. The initial premise for factoring resilience into supply chains in Europe was the notion of climate sustainability. The 2016 Paris Agreement—the first global, legally binding climate agreement of its kind—paved the way for the 2020 European Green Deal, which signaled the union’s intent to achieve net-zero emissions and for Europe to

become the first “climate-neutral continent” by 2050.¹⁹⁵ These goals effectively put the EU at the forefront of the climate challenge and the green transition.¹⁹⁶

The EU’s effort to steer a “transformation to a more sustainable, digital, resilient, and globally competitive economy” has imbued all aspects of the union’s industrial strategy.¹⁹⁷ In the years before the Paris Agreement, businesses were already thinking through—or, at least, becoming increasingly aware—of their obligations to transition to net zero and minimize their carbon footprint. The steps taken by companies to meet these obligations ranged from sourcing sustainable raw materials to adjusting to cross-border pollution tariffs that had been unthinkable in the heyday of globalization.

Regardless of where businesses fell on the values spectrum of the climate debate, the Paris Agreement set the goalposts and provided a clear, if not coherent, vision for the global direction of travel on climate change. Yet, these goals—and the initiatives that have succeeded them—were set during a period that was markedly different from today. And despite the tectonic geopolitical and economic shifts in recent years, by 2021 only 12 percent of leading global companies had managed to adjust to future disruptions.¹⁹⁸ This is largely because the business community sees resilience through the lens of business continuity—essentially, an organization’s ability to maintain or resume acceptable levels of product or service delivery after an event that disrupts normal operations.¹⁹⁹ Business resilience rests on the premise of predictability, with room for maneuver to adjust to foreseeable, long-term situations or small-scale, isolated incidents.

For the policymaking community, however, resilience has come to mean something quite different. The EU’s focus on securing its supply chains has become motivated by wider geostrategic considerations. First, Donald Trump’s first term in the White House signaled the beginning of a major shift in the global approach to the climate crisis, with the United States announcing its withdrawal from the Paris Agreement.²⁰⁰ Although the administration of President Joe Biden rejoined the accord in 2021, the uncertainty of U.S. domestic dynamics has altered the ways in which trade and foreign policies interact. Second, the United States rebranded its relationship with China from engagement to strategic competition.²⁰¹ The EU eventually followed suit in 2019 by adopting a trifecta strategy in dealing with China, labeling the country either a partner, a competitor, or a rival, depending on the circumstances.²⁰²

This was the geopolitical background for fervent debates in the EU about the bloc’s strategic autonomy.²⁰³ Combating supply chain disruptions has therefore become not only an economic necessity for the EU’s green and digital transitions but also intricately linked to the EU’s goal of achieving strategic autonomy. All of this is based on an understanding that the world has become more hostile and that, to safeguard the European way of life, the EU needs a more protectionist and introverted approach to its external engagement.

Thus, the difference between businesses’ and policymakers’ approaches reflects two divergent attitudes to the same fundamental problem. While the latter group is trying to negate or minimize the effects of globalization, the former accepts its longevity.

Tension Two: Temporal Dynamics

The second tension stems from the timescales involved in making changes to global supply chains. These are extremely complex processes that rely on a host of interlinked factors, including the availability of supplies, such as raw materials and processed goods; physical infrastructure and the reliability of logistical channels; and border and customs regulations at the national and international levels. These variables are linked by an interdependent ecosystem that has taken years, if not decades, to mature into today's global trading system. As such, attempts to untangle this system will create a domino effect that will unfold over many years. Yet, as the supply chain environment becomes more volatile and climate and digital objectives spur the need to reinvent existing processes, investment in long-term solutions becomes an existential imperative.

Long-term solutions, though, require huge investments of both capital and human resources. They also require a healthy dose of hedging. The role of the European Battery Alliance (EBA) in shoring up the EU's supplies of clean transition materials is a useful illustration of the temporal challenges facing the Union as it tries to extricate itself from global value chains.²⁰⁴ The EBA was introduced in 2017 to strengthen the EU's battery supply chains and has been lauded by observers as a successful example of how the Union is harnessing Europe's green and digital transitions to enable a technology that is essential to the EU's competitiveness.²⁰⁵ However, despite building four lithium-ion gigafactories in the EU between 2017 and 2022, the European Commission admitted in 2023 that the EU still faced important "structural challenges, such as the lack of 800,000 skilled workers by 2025, high energy, land, and permitting costs, as well as the fact that Europe is now home of only 1% of the production of key battery raw materials."²⁰⁶

This situation is not forecast to change anytime soon. Human capital needs time to be trained—or imported, which means reevaluating migration policies. Government bureaucracy needs to be better aligned with the innovation needs of various sectors. New infrastructure needs substantial amounts of financing and investment. All of these elements are risky and time-consuming.

Given the EU's vulnerabilities to irregularities in global supply chains and the union's exposure to global markets, any geopolitical variations may have a one-two effect that not only has a significant impact on the EU's overall balance sheet but also threatens the EU's transformation toward a green and digital economy.

Tension Three: National Politics and the Geopolitical Landscape

The third tension is political and affects two layers of policymaking, as supply chains are undergoing intense politicization at both the national and the international levels. A key challenge for the EU's ambition of open strategic autonomy is that the union remains a primarily economic, trade-based bloc, not a political federation. While the commission has

many exclusive trade and economic powers, there are important areas of so-called shared competence that remain beholden to member states' decisionmaking, which is driven by national interests.

This is why, for example, the United States and Japan have been better able to buttress their national economies by introducing investment review frameworks well before the EU. Japan's Foreign Exchange and Foreign Trade Act was originally enacted in 1949 and has undergone several revisions since.²⁰⁷ Meanwhile, the Committee on Foreign Investment in the United States has been operational since 1975.²⁰⁸ By comparison, the EU—not its member states—was a relative latecomer to this field, introducing an EU-wide mechanism only in 2020 with the Foreign Direct Investment (FDI) Screening Regulation, which aimed “to make sure that the EU is better equipped to identify, assess and mitigate potential risks to security or public order.”²⁰⁹

The consequences of this lag and the incoherence among EU member states' foreign policy priorities have affected the union's relationships with other global players, creating strategic dependencies on increasingly hostile actors and limiting the EU's room for maneuver. In the years before the introduction of the FDI Screening Regulation, China made substantial headway into EU member states' markets, buying significant shares in the European automotive industry. For example, Brilliance Auto Group, a Chinese auto manufacturer, owned a 50 percent stake in Germany's BMW until February 2022—a partnership that was established in the early 2000s, well before the FDI Screening Regulation.²¹⁰ Similarly, since 2010, the Swedish auto manufacturer Volvo has been owned by the Chinese multinational automotive company Zhejiang Geely Holding.²¹¹

The absence of a clear and coherent EU framework for supply chain resilience has allowed the member states to pursue different priorities based on national interests.²¹² The exposure of the member states, even the bigger ones, like Germany, to countries such as China and Russia has not been conducive to fostering a coherent EU-level policy. In many ways, the EU's FDI Screening Regulation was a watershed moment in helping move toward bridging the gap between national and EU-level approaches because the law is directly applicable and binding in all member states. The litmus test for the regulation, however, will be its implementation and effectiveness, which remain uncertain given that the EU's trifecta strategy toward China is likely to continue for the foreseeable future.

Case Study: The EU's Lackluster Efforts to De-Risk From China

The EU's efforts to shore up its supply chain resilience and mitigate its vulnerabilities to the global market make for an extremely complicated situation. The difficult geopolitical circumstances, combined with the challenge of corralling member states with divergent interests, have limited the EU's leeway, and the short-term outlook for progress in this area remains somber. This is especially true when it comes to understanding the prospects for the EU's strategy of de-risking from China—a cornerstone of the union's approach to building supply chain resilience.

Stinging from the painful lesson of overreliance on Russian gas in the aftermath of Russia's 2022 invasion of Ukraine, the EU turned to reevaluating its relationship with China.²¹³ In March 2023, concerns about Beijing's hardening strategic posture, willingness to manipulate dependencies to punish its neighbors for doubting its coronavirus origin theory, and "no limits" partnership with Russia led European Commission President Ursula von der Leyen to introduce the term "de-risking" into the international policy vernacular.²¹⁴ The members of the Group of Seven (G7) quickly embraced the term, with the United States also choosing to pivot away from the more controversial Trump-led strategy of decoupling.²¹⁵ Ostensibly, the new, more diplomatic phrasing reflected, on the one hand, the EU's approach of assessing its supply chains for critical strategic dependencies and, on the other, its ambitions to diversify those supply chains and introduce tools such as the Foreign Subsidies Regulation to confront economic distortions.²¹⁶

These efforts, as well as other resilience-building initiatives introduced by the EU in the past few years, send two noteworthy signals: first, that the union has identified, assessed, and diagnosed the problem of overreliance on global supply chains and on China, particularly, for critical raw materials; and second, that the EU has responded to this problem in pre-scriptive and clearheaded terms.²¹⁷ Yet, the union's measures have been reactive rather than proactive, leaving the bloc in an almost perpetual state of playing catch-up. In addition, the three tensions outlined above have hampered the viability of the EU's de-risking strategy.

The EU's approach to the green and digital transitions has become inextricably linked both to its commitment to the Paris Agreement and to its efforts to build strategic autonomy, of which ensuring supply chain resilience is a critical element. And yet, the EU's messaging around these efforts has become rather confused, leaving the definitional tension unresolved. Concretely, the Union encouraged the private sector to adjust for climate neutrality by 2050 but then told businesses that the functional and political tools needed for the transition were increasingly problematic: The materials required to move toward net zero rely on a handful of countries, not all of them friendly, and a shortlist of critical raw materials of which those countries have a monopoly. China, for example, dominates the league tables for the extraction and processing of critical resources and minerals needed to meet the climate and digital transitions.²¹⁸ The EU's approach was, at best, a way to carry on with business as usual until permanent solutions could be put in place and, at worst, a means of leaving the hard decisions to businesses in the hope that the market would self-correct.

Unfortunately, the temporal factor is perhaps the most consequential because of its impacts on the prospects for course correction. The bottom line is that the union's de-risking strategy comes about a decade too late—if not more.²¹⁹ In those years, China has had the time and foresight to make significant headway with its own plans for de-risking from the rest of the world. In 2015, China launched its Made in China 2025 strategy, which signaled Beijing's ambition to ramp up manufacturing in ten key industries by implementing state subsidies and promoting domestic firms.²²⁰ China understood early on that its bid to transform itself from the world's cheap manufacturing base into its own stand-alone powerhouse meant betting on an industrial strategy with a high return on investment, notably in infrastructure and technology, such as electric cars and telecommunications.

This is an approach that Beijing has pursued doggedly since 2015.²²¹ When *Made in China 2025* was launched, China watchers cautioned that Beijing's growing ambitions heralded new terms of engagement with the Chinese Communist Party (CCP) and an end to business-as-usual practices.²²² Fast-forward a decade, and China has become the indispensable genie in the bottle: It is relatively easy for China to cordon itself off from the rest of the world and much more difficult for the rest of the world to cordon itself off from China.

The political context for the EU's de-risking strategy was equally challenging. While the United States under Trump strongly criticized *Made in China 2025* for distorting competition. In turn, the United States imposed tariffs on steel and aluminum imports, the EU's response was muted by comparison.²²³ This was partly because EU member states were grappling with their own internal turmoil—2015 was also the year of Europe's migration crisis—but it also had a lot to do with divisions in the EU over how to engage with China.

Indeed, until relatively recently, Beijing still enjoyed exclusive access to many EU member states. At various times, between fourteen and seventeen Central and Eastern European countries were engaged in a cooperation framework with China. Greece, Italy, and Portugal ascribed to projects under Beijing's Belt and Road Initiative. And at the eleventh hour of its six-month presidency of the EU Council in 2020, Germany rammed through the EU-China Comprehensive Agreement on Investment, much to the chagrin of the then newly elected Biden—although the accord is now, to all intents and purposes, defunct.²²⁴ This roller-coaster engagement with Beijing has characterized much of the EU-China relationship over recent years. And yet, the EU's proverbial cold shower only really came with Russia's invasion of Ukraine and the CCP's actions since, which include propping up the Russian war effort by providing critical components for military equipment.²²⁵ Unfortunately, the EU's response has been too little, too late.

As for the EU's de-risking strategy, all indicators point to a dismal picture: Rather than the union de-risking, it is China that has successfully de-risked by replacing its European imports with products from elsewhere. A snapshot of the bilateral trade relationship shows that in 2023, China accounted for just 9 percent of the EU's exports in goods but more than 20 percent of the EU's imports.²²⁶ Indeed, in the same year, the EU's exports to China decreased by 3 percent.²²⁷ Similarly, from 1995 to 2020, China more than doubled its share in the global manufacturing market, while the G7 nations experienced significant decreases.²²⁸ Simultaneously, while the G7 has increased its dependence on China for industrial inputs, China has become less reliant on others.

The message from the data is clear: For all the Western bluster about decoupling or de-risking, there is now a significant and obvious asymmetry in supply chain reliance between China and the G7, making the EU's strategy of de-risking from China a moot point—at least for the time being.

Prospects for Course Correction

Given this sobering outlook, the EU needs a realistic and pragmatic reevaluation of its prospects for building supply chain resilience. Bluntly put, the EU must recognize that its ambitions—laudable as they may be—do not square with its limitations, so the union needs to better align its aspirations with more modest and achievable goals.

The first step in this process is to go back to basics. A starting point would be to resolve the ambiguity of the term “resilience.” If different stakeholders continue to approach resilience with different definitional frameworks, the task of measuring what is possible and effective will remain elusive. This will need to be a multistakeholder process that maximizes consensus. There are several tracks for pursuing this goal, including through existing frameworks like the EU-funded European Raw Materials Alliance, of which one stated aim is “to make Europe economically more resilient by diversifying its supply chains.”²²⁹ Another nascent effort is the Supply Chain Resilience Platform, which focuses on small and medium-sized enterprises (SMEs) that are affected by supply chain disruptions in sectors such as agrifood, electronics, health care, and raw materials with the goal to connect these firms with global partners.²³⁰ One of the platform’s objectives is to enable cross-border contacts between businesses, industries, academia, and other stakeholders.

Within one of these entities, a working group could bring together representatives from each sector to define resilience. This would ensure that questions of business continuity and strategic autonomy are put on the table and addressed in an unconvoluted way, with all stakeholders’ concerns out in the open.

An ideal next step would be to broaden the scope of the EU’s approach beyond the union’s borders to include not only like-minded partners but also those on the fence. This approach would serve two functions. First, it would offer original insights into ways of tackling some of the challenges highlighted above. Due to the particular trade dynamics of global regions, some economies are far more dependent on China than the EU is. Looking at these regions’ risk assessments and their responses to the vulnerabilities they face would provide the EU with valuable lessons.

Second, this type of engagement would send a signal that the EU is sincere about taking external partners’ experiences and concerns into account. For many in the Global South, the competition among actors that have built up their supply chain resilience in an uncoordinated way is extremely disruptive to their own development models as they struggle to adjust to various incoherent standards. At the same time, these actors have become much more aware of their agency in these processes—a marked shift from previous times, when many in the Global South were spectators to their own fates. The dissonance at the international level needs to be addressed, and the most likely place for this to happen remains within a multilateral framework where collective bargaining decisions are applicable to all. This is where the United Nations Conference on Trade and Development and the World Trade

Organization still have crucial roles to play and where the EU has lost its credibility and needs to rebuild it.²³¹

For its part, the EU should focus on harmonizing and prioritizing resilience-building strategies across sectors and member states. The union has already taken the first steps in this regard by identifying the critical raw materials it needs to ensure the green and digital transitions. The next crucial step is to standardize, across sectors, the surveillance mechanisms for monitoring the availability of these materials. Currently, different sectors have their own such mechanisms, with no single overview to sound the alarm—regardless of any FDI screening mechanism, efforts to ensure collective resilience fall flat. This is a case where the EU needs to leverage the sum of its parts to foster better coherence.

Here, there is an important lesson to take from the EU's General Data Protection Regulation, whose implementation has been lacking, notably in the member states, where the responsibility for enforcement lies. The commission's Directorate General for Internal Market, Industry, Entrepreneurship, and SMEs (DG-GROW) has launched several important initiatives in this regard to encourage national implementation. The European Cluster Collaboration Platform is one example that has shown promise. But it could be beefed up to move from the current voluntary disclosures of key resilience metrics, like risk assessment methodologies, mitigation strategies, and governance and sustainability practices, to binding rules or guiding principles to incentivize and condition the terms of engagement between actors working on supply chain resilience.²³² This process needs to be politically driven by an executive body that is one step removed from business or national interests, which is why DG-GROW may be best positioned to take on this task.

An important step in this direction is the provisional agreement reached between the EU Council and the European Parliament in February 2024 on the Internal Market Emergency and Resilience Act (IMERA).²³³ The act's goal is to provide continuous monitoring to prepare for possible crises that could cause disruption. One of the proposed measures requires the commission to undergo stress tests to ascertain the effects of supply chain disruptions on the free movement of goods, services, and people. Such efforts to centralize risk-monitoring systems at the EU level are both necessary and noteworthy, as they will help the union to prioritize its supply chains and identify where weaknesses lie. Going forward, it will be important to cast a critical eye over how IMERA is eventually deployed.

Finally, the EU needs to look at its investments in diversification—a key element of resilience building—through a different lens. The EU needs a shift of mindset away from seeing resilience building simply as state-led tactics of reshoring or friendshoring (a process of returning manufacturing to a country or an ally nation) to a whole-of-society effort that brings together civic and industry actors alongside government representatives. This is where attempts to harness the potential of the circular economy have shown promise, and it is an area that is beginning to gain traction in mainstream circles.

This approach is not about replacing current strategies, but about complementing them in a manner that resonates with the EU's ambitions to diversify its supply chains.²³⁴ The EU boasts a handful of countries—such as Belgium, France, the Netherlands, and Spain—and companies, for example Aurubis and Boliden, that are industry leaders in this field.²³⁵ Grassroots initiatives like the Belgian Greenlab Accelerator showcase how public-private partnerships can be leveraged to contribute to the EU's diversification efforts.²³⁶

Conclusion

Given the complexity of the issues involved, the three tensions highlighted above—definitional, temporal, and political—provide a useful lens through which to understand the challenge of building out European supply chain resilience. Clearly, the EU will need to factor in substantial and creative investments as well as patience for the long haul, as solutions will not materialize overnight. Government policies, industrial investment, and patterns of consumer behavior will all need to be aligned in a collective effort. Simultaneously, this needs to be done without exacerbating current geopolitical tensions.

At the same time, none of the actions suggested above necessarily requires the creation of new structures. There are certainly more than enough existing frameworks into which new initiatives can be embedded. The EU will need imagination and investment in capacity building to better understand how current fragmented efforts can be scaled up. By injecting humility into the task at hand and being more realistic about the prospects of success, Europe can envisage a more resilient future.

CHAPTER 6

The Race for Clean Transition Materials and EU Geoeconomic Statecraft

Andreas C. Goldthau

Europe's ambitious energy transition comes with increasing needs for clean transition materials (CTMs), which include cobalt, copper, graphite, lithium, manganese, nickel, and rare-earth elements.²³⁷ These materials are needed to manufacture clean technologies, such as batteries, wind turbines, solar photovoltaic materials, and electric vehicles (EVs). The European Commission estimates that by 2050, the European Union's (EU's) demand for lithium will increase more than 50 times and demand for cobalt fifteen times, from 2020 levels.²³⁸ The EU imports between 75 and 100 percent of the critical metals it consumes.²³⁹

In some CTMs, the upstream part of the supply chain—exploration and extraction—is concentrated in a small number of countries. For example, China accounts for some 70 percent of global production in rare-earth minerals. In addition, the country plays a dominant role in the midstream stage—refining and processing—for most materials; in rare-earth minerals, China makes up fully 90 percent of this stage.²⁴⁰ Amid the EU's efforts to both electrify and decarbonize its energy and industrial systems over the next few decades, this lopsided nature of current global supply chains is an emerging concern for the EU, not least given Europe's rising geopolitical tensions with China.

What is more, the EU will face stiff global competition for the materials it needs. Global growth in clean-energy technologies is anticipated to significantly push up overall consumption. The sector's demand for CTMs is expected to rise about fourfold by 2040 from 2020 levels.²⁴¹ Some observers even raise the specter of a new commodity supercycle driven by

the clean transition.²⁴² Against the backdrop of inelastic supply, this trend may amount to a demand shock with considerable price impacts.²⁴³

While the EU's energy transition is central to weaning the continent off external fossil-fuel suppliers, this goal must not come with new, uneven import structures for the materials needed for clean solutions. Given that the EU's Net-Zero Industry Act set an aim for the union to manufacture at least 40 percent of strategic clean technologies at home, a reliable and resilient supply of critical minerals and raw materials is a matter of strategic autonomy.²⁴⁴ To ensure a timely rollout of clean technologies at scale, Europe must make its import portfolio more resilient, cost efficient, and sustainable. At the same time, the EU needs to hedge against the risk that asymmetric dependencies in supply structures may be used for political coercion, which warrants a geoeconomic approach to CTMs. Short of doing so, the EU may be in danger of significantly delaying or even endangering its energy transition and exposing itself to new threats from the low-carbon push.

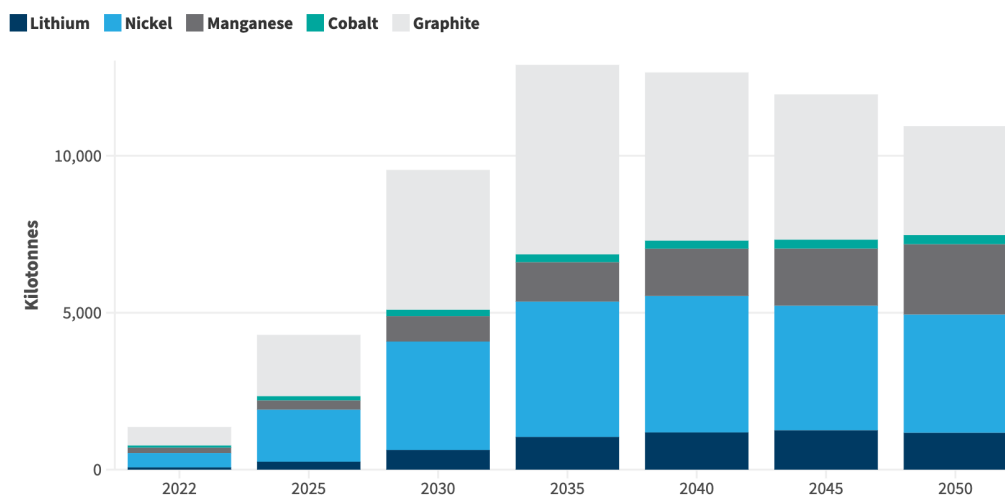
To make full use of its economic, financial, and regulatory toolbox, the EU should leverage its financial means and network effects while making a clear value proposition to resource-rich countries in the shape of sustainable CTM partnerships. By combining the principles of environmental issues, social issues, and corporate governance (ESG) and CTM partnerships as instruments of economic statecraft, the EU can live up to its potential as a catalytic power and a benign geoeconomic player.²⁴⁵

The Central Role of Batteries

Batteries epitomize the EU's CTM challenge. They are central for value creation in the automotive sector, which is strategic for Europe's industrial future in a low-carbon economy. Within the battery industry, cell manufacturing is predicted to account for some 40 percent of value creation by 2030.²⁴⁶ At present, Europe is severely lagging behind other regions in the industry. The EU's share of global capacity for EV battery production was 7 percent in 2022, while its share of global battery manufacturing stood at 3 percent.²⁴⁷ Meanwhile, Chinese firms CATL and BYD have come to dominate the EV battery market, accounting for 34 and 12 percent of the market respectively in 2022, followed by South Korea's LG and SK, with 14 percent and 7 percent, and Japan's Panasonic, with 10 percent.²⁴⁸ Some Chinese carmakers, notably BYD, pursue a strategy of vertically integrating their supply chains, which makes battery production an integral part of their auto manufacturing process.

The global trend toward EVs is strongest in China, the leading market, where sales increased by more than 80 percent from 2021 to 2022, compared with a 15 percent rise in Europe, the second-largest global market, and a 55 percent increase in the United States.²⁴⁹ Going forward, the demand for the CTMs needed for EV manufacturing and other clean-energy appliances and technologies is set to grow exponentially into the 2030s (see figure 1). This trend pits the three main markets against each other, not only in terms of manufacturing and competition for batteries as an end product, but also when it comes to securing access

Figure 1: Mineral Demand for Electric Vehicles in the IEA Scenario of Net-Zero Emissions by 2050 (Base Case), 2022–2050



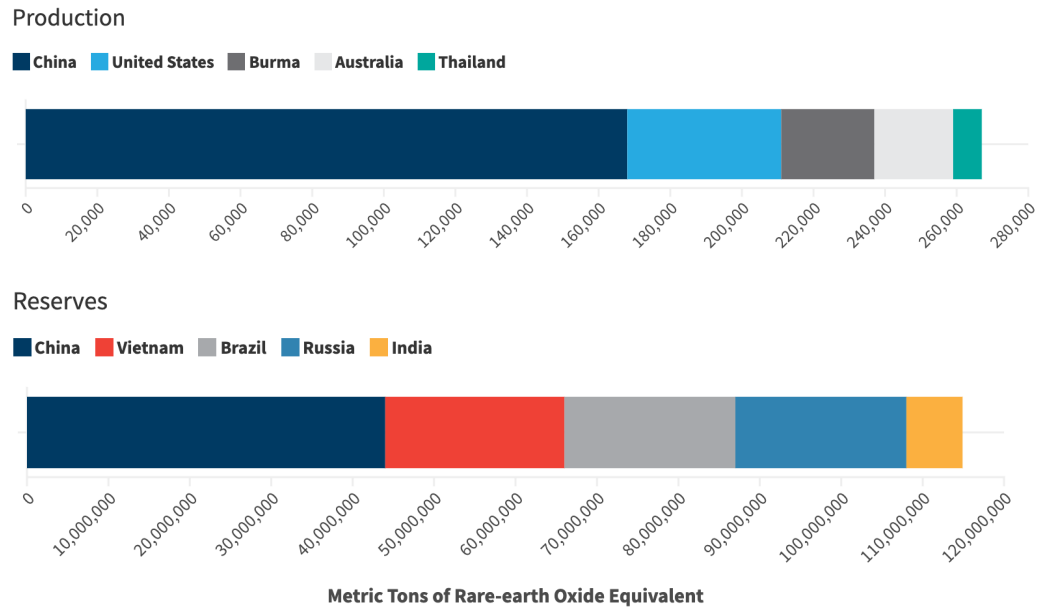
Source: “Critical Minerals Data Explorer,” International Energy Agency, May 17, 2024, <https://www.iea.org/data-and-statistics/data-tools/critical-minerals-data-explorer>.

to raw materials. By some estimates, the EU’s growing consumption of EV batteries will increase demand for lithium more than forty times by 2050, and demand for graphite and cobalt tenfold, compared with current consumption in all applications where these materials are used.²⁵⁰

For reasons related to geology, environmental regulation, and social acceptance, the European upstream stage of CTM supply chains is highly limited and likely to make only a marginal difference to the diversity and resilience of these supply chains. In other words, the EU will continue to be a major importer of raw materials.

CTMs differ from each other in terms of market concentration and the dominance of particular suppliers along the various segments of their supply chains. In nickel, for example, the market is highly concentrated, with production and reserves resting mostly with Indonesia. Graphite is produced mainly in China, whereas lithium production is concentrated in Chile, Argentina, and Australia. In lithium, cobalt, and graphite, Chinese companies hold more than 50 percent of the midstream capacity. These firms also refine up to 70 percent of global supplies of lithium and 35 percent of nickel.²⁵¹ In iron ore and phosphorus, by contrast, the market is competitive. And in rare-earth minerals, China dominates the market both upstream and midstream, although reserves are more dispersed across the globe than production (see figure 2).

Figure 2: Rare-Earth Mineral Production and Reserves, Top Five Countries, 2021



Source: “Mineral Commodity Summaries 2022,” U.S. Geological Survey, 2022, <https://doi.org/10.3133/mcs2022>.

The production and processing of CTMs often have significant environmental impacts. Challenges include extensive water consumption and strains on regional water systems, the use of toxic substances that may leak into groundwater, the risks entailed in hazardous waste, and the release of greenhouse gas emissions as part of mining and refining.²⁵² Mining can also violate the rights of indigenous communities, as has been the case with rare-earth minerals in Brazil and lithium in Chile.²⁵³ In the Democratic Republic of the Congo, much of the upstream stage of cobalt production takes the form of artisanal mining, which raises issues of health and safety, impacts on local communities, and labor rights.²⁵⁴

Overall, the challenges associated with the CTMs needed for EVs, including in battery manufacturing, mirror the EU’s broader imperatives: securing supplies against the backdrop of clear limitations on domestic production; making supply chains resilient either by bypassing incumbent chains characterized by lopsided market structures or by finding a way into segments dominated by large competitors, such as China; hedging against price spikes in increasingly strained global markets; and addressing social and environmental concerns.

Europe’s Policy and Industrial Initiatives: Not up to the Task

EU policy measures to address Europe’s looming CTM supply challenge go back to the 2008 Raw Materials Initiative (RMI), which was the union’s first effort to develop a comprehensive strategy for raw materials in general. The initiative rested on three pillars,

which have since come to define the European approach more broadly. The first was a fair and sustainable stance toward raw material supplies from global markets, which aspired to combine active diplomacy on raw materials with international cooperation, aid, and capacity building in resource-rich states. The second pillar was an emphasis on enhancing domestic supply through sustainable production and research. The third pillar was a focus on recycling and increasing resource efficiency.²⁵⁵ In 2012, the EU sought to bring the RMI to life by establishing the European Innovation Partnership on Raw Materials as a stakeholder platform that consisted of representatives of industry, public services, and academia as well as civil society actors.²⁵⁶

Support for research and development (R&D) on aspects defined by the RMI materialized through the EU's Horizon 2020 program, which started in 2014. But it was not until 2020 that the EU's Action Plan on Critical Raw Materials defined ten priorities for enhancing the security and sustainability of the EU's raw material supplies. A centerpiece of the action plan was the European Raw Materials Alliance, which was created in 2021 to provide "an independent forum for discussion and analysis with the primary objective of supporting Europe's raw materials industry," in the words of the International Energy Agency (IEA).²⁵⁷

The European Battery Alliance (EBA), an important initiative launched in 2017, put a specific emphasis on supporting the creation of a "competitive batteries 'ecosystem'" and the development of manufacturing capacity along the entire manufacturing value chain, including the upstream part, which deals with raw materials.²⁵⁸ In line with the RMI, both the 2020 action plan and the EBA stress recycling, innovation, sustainability, and the imperative of securing access to raw materials from outside the EU.

Finally, the EU's 2023 Critical Raw Materials Act (CRMA) singled out thirty-four critical minerals and metals for EU action. Aimed at reducing the union's exposure to supply-side risks, the act stipulated that the EU must import no more than 65 percent of such strategic raw materials from a single external supplier.²⁵⁹ The legislation further included the option of strategic stockpiling and opened up the opportunity for the EU to use its Global Gateway infrastructure investment initiative to support upstream projects abroad. The act also envisaged a Critical Raw Materials Club that would bring together like-minded nations to increase the EU's supply chain resilience.

At the EU level, there exists no legislation that deals specifically with CTMs. The union's 2006 Battery Directive focuses notably on market regulation as well as the recycling and disposal of waste batteries. A planned overhaul of the directive places a strong emphasis on the circular economy of the battery life cycle by specifying targets for recycled content in new battery production for materials such as cobalt, lead, lithium, and nickel.²⁶⁰ Meanwhile, a 2017 regulation on supply chain due diligence for minerals from conflict-affected areas partly targeted critical minerals but with a view to preventing their sales to finance armed conflicts.

In addition to efforts at the EU level, individual member states pursue their own CTM initiatives (see table 1). Germany's 2010 raw materials strategy placed a significant focus on

Table 1: Selected EU and National Initiatives in Raw Materials

Year	Entity	Policy	Key Elements and Focus
2008	EU	Raw Materials Initiative	Recycling and resource efficiency; R&D; fair and sustainable international trade
2010 (updated in 2020)	Germany	Raw materials strategy	R&D; recycling; competence centers in selected partner countries; dialogue as part of raw materials partnerships (abandoned in updated strategy)
2011	France	Committee for Strategic Metals	Stakeholder and industry networks
2012	EU	European Innovation Partnerships for Raw Materials	Stakeholder platform; innovation partnerships
2012	United Kingdom	Supply of mineral resources	R&D
2012	United Kingdom	Resource Security Action Plan	Recycling; information
2014	EU	Horizon 2020 program: climate action, environment, resource efficiency, and raw materials	R&D
2018	France	Resources for France Plan	Recycling; ESG
2020	EU	Action Plan on Critical Raw Materials	R&D, innovation, and skills; standards for sustainable finance in mining and extraction
2021	EU	European Raw Materials Alliance	R&D; stakeholder and industry networks
2021	EU	Canada-EU Strategic Partnership on Raw Materials	R&D and technological innovation; ESG; supply chain integration
2021	Italy	Technical Roundtable on Critical Raw Materials	Stakeholder and industry networks
2022	EU	European Battery Alliance	Stakeholder and industry networks
2022	France	France 2030 Investment Plan: investment in critical minerals	Equity among actors in the mining sector
2022	United Kingdom	Critical minerals strategy	R&D and skills; the circular economy; ESG; resource diplomacy
2023	EU	Critical Raw Materials Act	Standards and benchmarking; resource diplomacy; circular economy and recycling

Source: Author's compilation.

R&D, emphasizing data acquisition and information management as key areas of action. France, by contrast, seems determined to build a national investment fund to acquire stakes in strategic raw materials companies, although the pledged sum of €500 million (\$546 million) arguably remains small given the magnitude of the challenge.²⁶¹ Overall, however, initiatives by national EU governments tend to fall into line with the broader EU approach as enshrined in the initiatives outlined above.

What unites these European initiatives are an emphasis on R&D, recycling, and the circular economy; a commitment to sustainability and environmental standards at home and abroad; a focus on leveraging industry and cross-sectoral networks; and a clear acknowledgment of the need to address the international upstream stage of raw material supply chains. However, on the latter point, these initiatives do not amount to tangible policy measures for diversifying Europe's global supply chains. The initiatives fail to mobilize dedicated funding lines to support and derisk international upstream projects that involve European companies—despite this being a policy goal clearly defined by European Commission President Ursula von der Leyen and a much-discussed imperative for ensuring the EU's clean transition.²⁶² The measures also lack a tangible proposition for the added value that possible bilateral or multilateral raw materials partnerships would offer resource-rich countries. Overall, existing European initiatives fail to strengthen Europe's supply chains or enhance the EU's strategic autonomy.

Remarkably, industry-led initiatives are largely absent. Although the EBA has a central role for the European automotive industry, which is a key sector thanks to the structural shift toward EVs, the main impetus for establishing the alliance did not come from the carmakers themselves. Auto manufacturers have long pursued a strategy of importing batteries from non-European—mostly Asian—suppliers and therefore, arguably, developed little appetite for ensuring resilient supply chains for raw materials.²⁶³ This stance ties into what researcher Carole Mathieu has called the European automotive sector's “wait-and-see” approach to batteries.²⁶⁴

Going forward, technological innovation may, to some extent, allow for a reduction in the demand for certain raw materials. For example, while nickel-based batteries, such as nickel-manganese-cobalt (NMC) batteries, are considered to offer the best combination of range, power, and size, they are relatively expensive. In addition, NMCs have been found to be prone to so-called thermal runaway, which can result in fires. Lithium iron phosphate (LFP) batteries, by contrast, are safe in this regard but are heavier and harder to recycle than NMCs. Also, LFPs do not rely on manganese or cobalt and, in general, require fewer materials for which international supply chains are strained. LFPs have so far been dominant in China, but they are experiencing a surge in production in North America. Against the backdrop of limited opportunities to significantly increase Europe's domestic supply, this trend may somewhat bend the demand curve for CTMs, but it will not flatten it.

Toward More Resilient Supply Chains

The EU has put in place various raw materials policies that do not yet amount to a full-fledged strategy of economic statecraft. Crucially, the EU needs to go beyond the important but limited efforts of recycling and domestic mining. In addition, the union should proactively address the international dimension of its CTM supplies. It is time to close the gap between the lofty ambitions of the CRMA and the EU's policies as they have been implemented. Concretely, the union should apply the key instruments of economic statecraft, which include not only sanctions but also institutionalized economic cooperation, financial aid, strategic commercial policy, and strategic regulation, all of which can be wielded at the supranational level.²⁶⁵

More specifically, to make full use of its economic, financial, and regulatory toolbox, the EU should combine the following elements in its strategy to enhance the resilience of its CTM supply chains: a CTM bank, CTM partnerships with key suppliers, and a clear value proposition to resource-holding countries. All of these elements should be underpinned by a system of EU-level CTM demand aggregation and clear ESG principles. At the same time, the EU should build up strategic reserves of selected materials.

First, the EU should consider establishing a CTM bank akin to the European Hydrogen Bank, which was launched in 2022 as a financing instrument to speed up the creation of a full hydrogen value chain in Europe. The central aim of a CTM bank would be to accelerate the buildup of additional global production of CTMs by focusing on the investment challenge facing private companies. While demand for these materials will exist on the European side, it is the lopsided market structures and uneven playing field that such a facility needs to address, to incentivize European companies to build out upstream and midstream capacity abroad. The focus of a CTM bank would be to enhance investment security for EU businesses and derisk private-sector involvement in upstream projects with long lead times and the structural disadvantage of unbalanced supply chains.

Second, the EU should expand its CTM partnerships with selected resource-rich states. Such partnerships exist, but they are either nascent, like the *Canada-EU Strategic Partnership on Raw Materials*, or limited in scope, as with Germany's raw materials partnerships. The EU has developed a well-tested combination of resources and nonregulatory instruments to create network structures and foster cooperation between private and state agencies, at home and abroad, on which it can build. As envisaged in the CRMA, the EU can use Global Gateway funds to support upstream and midstream projects within such partnerships.

Third, and crucially, CTM partnerships should make a clear value proposition to the resource-holding countries as part of the EU's strategic trade policy. The partnerships will need to focus on infrastructure and technology transfer to ensure that supplier countries gain from the arrangements by building up local knowledge and capacity in the midstream stage. Europe's approach to establishing green hydrogen partnerships may serve as an example

here. For example, Germany's partnership with Namibia focuses on enhancing domestic energy access and renewable energy infrastructure in return for excess clean electricity turned into locally produced green hydrogen for export.

In this way, the EU can turn the domestic processing requirements that some resource-rich countries have established for their materials into a virtue and avoid the specter of green extractivism. European access to Indonesian nickel, for example, would become a function of European companies building up joint ventures with local partners in nickel processing—and, possibly, farther up the value chain toward battery production. EU strategies for developing domestic processing capacity in resource-holding countries may also support European efforts to diversify various segments of raw material supply chains and thus make them more resilient.

A system of CTM demand aggregation, as planned under the CRMA, could strengthen the economic case for such partnerships and the financial support structure of the CTM bank. Lessons from the EU Energy Platform, a joint purchase vehicle for liquefied natural gas put in place during the 2022 energy crisis, should help the EU organize the contractual structures that will underpin long-term CTM partnerships and cater to the specific circumstances of highly concentrated markets.

Fourth, the EU should make it a signature policy to build all of the above on clearly articulated ESG principles. This is where the EU has credibility thanks to its domestic track record and a well-developed set of norms and standards. This goes not only for sustainable mining but also for refining and processing. As the example of Indonesia's nickel sector suggests, the often environmentally hazardous approach of incumbent Chinese companies may open the door for Western firms to enter the midstream segment if their approach represents a sustainable alternative.²⁶⁶

At the same time, ESG principles should be a condition for financial support for European companies, to incentivize both the private sector and resource-holding nations to build long-term relations based on a sustainable model. In this way, the EU can ensure that European firms can be competitively involved in upstream and midstream efforts. Externalizing European ESG principles would amount to a classic exercise in strategic regulation, with a view to defining standards and tilting the rules of the game in CTM extraction, processing, and trade.

Finally, the EU should move quickly to establish strategic CTM reserves, as Japan and South Korea have done and as envisaged in the CRMA. The notion that such reserves aim at safeguarding public goods is well proved for other commodities, such as oil, and this kind of insurance policy is imperative for an import-dependent actor like the EU. In fact, against the backdrop of recent swings in some CTMs, such as lithium, the buildup of strategic stocks has great potential to smooth market fluctuations, which helps investment.²⁶⁷ A stockpiling effort would need to be coordinated across EU member states, with mechanisms for drawing on the stock that may be modeled on the IEA's policies for oil. Ideally, such policies would

be synchronized with those of other large importing blocs, such as Japan, South Korea, and the United States, or be part of a possible EV minerals buyers' club consisting of the EU, Japan, and the United States. These policies would also need to be complemented by a clause on EU solidarity—a lesson from the 2022 energy crisis, when such a policy was lacking in the face of gas shortages.

Taken together, these steps would strengthen international supply chains in CTMs, which is important for enhancing Europe's strategic autonomy and geoeconomic stature in the clean transition.

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CHAPTER 7

The EU's Vision for Technological Leadership

Raluca Csernatonu

The European Union's (EU's) technopolitical identity and global agency are being formed.²⁶⁸ Experts have repeatedly tried to agree on a suitable conceptualization of the EU's role and influence on the global stage as well as the markers that define this role.²⁶⁹ The challenge of agreeing on what being a global actor entails for the EU is exacerbated by the fact that EU governance itself is continuously evolving, often because of both exogenous and endogenous systemic drivers. The geopolitics of emerging and disruptive technologies (EDTs) is one such driver. Against the backdrop of rising geopolitical competition between great powers and corporate tech giants, access to critical EDTs gives an actor a competitive advantage and reduces strategic dependencies.

Over the past decade, the EU has steadily increased its commitment to industrial and technological transformation by focusing on the transition to Industry 4.0.²⁷⁰ This emphasis has centered on cutting-edge technological advancements, such as cyber-physical systems, enhanced efficiency through digital connectivity, and EDTs like artificial intelligence (AI). However, as it stands, Industry 4.0 fails to tackle deep-seated social, economic, and geopolitical tensions and may be ill suited to addressing broader EDT-induced global challenges. Instead, it is structurally designed to optimize the business models and geoeconomic thinking that are at the root of current global governance challenges. This is because the digital economy today operates on a winner-takes-all model that fosters technological monopolies, deepens digital divides, and exacerbates wealth inequality across the globe.

What is more, the EU's current limited capacity in key technological domains weakens the union's ability to navigate such challenges and jeopardizes its global position and ability to deliver on its rhetoric of "technological sovereignty."²⁷¹ Not only that, but as technological

competition rapidly increases amid decentralized networks of global power relations, Europe's pursuit of technological sovereignty may even hasten the fragmentation of global innovation ecosystems. Despite these pitfalls, the European Commission cemented the EU's push for technological sovereignty by appointing Finland's Henna Virkkunen as the commission's next executive vice president for tech sovereignty, security, and democracy in September 2024.²⁷² This appointment signals a clear strategic orientation in the EU's digital and technological policies, although it remains to be seen how the concept of technological sovereignty will be interpreted by the EU's new leadership.

From EU Strategic Autonomy to Technological Sovereignty

States are increasingly weaponizing interdependencies by leveraging their technological monopolies as well as global networks of digital trade and financial exchange for strategic advantage.²⁷³ Likewise, conflicts based on value systems and sociopolitical models of governance are likely to develop. This trend is already visible in different approaches to internet governance, digital rights, data privacy, AI, and surveillance systems.

The EU's approach to these issues entails reorienting traditional views of economic progress and technological innovation toward apparently contradicting objectives: on the one hand, mainstreaming strategic autonomy, protectionism, and security considerations into home-grown technological innovation and capacity building for dual-use EDTs; and, on the other hand, supporting more qualitative engagement with the norms, principles, and democratic values that underpin EDTs at home and on the global stage. These ambitions come with tensions and repercussions, both internally and externally. A cursory examination reveals the external impacts of these policies, the tensions they generate, and the way they intersect with geopolitical dynamics and the initiatives of other global players, potentially leading to fragmentation or, alternatively, the creation of bridges for a common agenda.²⁷⁴

For instance, the EU's push for open strategic autonomy—the ability to act autonomously when and where needed as well as work with partners whenever possible—emphasizes the need to maintain and create bridges for open collaboration.²⁷⁵ By contrast, the EU's drive for technological sovereignty has significant external implications.²⁷⁶ While aimed at reducing the bloc's reliance on foreign tech giants, this strategy risks deterring international collaboration. By focusing on self-sufficiency, Europe could inadvertently isolate itself from global tech advancements, slowing innovation. Restrictive policies might also repel international investors and start-ups, which are vital to foster a dynamic tech ecosystem in Europe. Consequently, an overemphasis on strategic autonomy and sovereignty could lead to protectionism, undermining the open-market principles that underpin global trade.

Moreover, by promoting stringent data protection laws, such as the General Data Protection Regulation (GDPR), and advancing digital policies that emphasize European values and standards, the EU aims to set European and global norms. However, this ambition often clashes with the interests of other major tech players, notably the United States and China. The United States, home to many of the world's tech giants, views some EU regulations as

protectionist measures that could hamper innovation and limit market access for U.S. companies. Conversely, China's state-driven approach to technology and digital infrastructure, exemplified by projects like the Belt and Road Initiative and its technological standards, diverges sharply from the EU's more privacy-focused and democratically oriented framework.²⁷⁷

These differing approaches amplify the risk of the world economy splitting into competing blocs with different standards for manufacturing and digital technology. This scenario is increasingly plausible given the weaponization of interdependence, in which interlinked economies and technologies become tools for geopolitical leverage.

Shaping the Global Digital Economy?

The EU has the potential to act as a bridge in this fragmented landscape. By advocating multilateralism and inclusive digital governance, the EU can promote international cooperation on setting common standards and norms. Such an approach would reflect the EU's commitment to a fair and open digital economy—principles that could resonate globally if coupled with effective diplomacy. For instance, working with the United States on shared challenges, like industrial and digital infrastructure, can create synergies rather than conflicts. Similarly, engaging with China's digital strategies in areas of mutual interest, such as green technologies and AI ethics, could help harmonize standards despite broader geopolitical tensions. Moreover, international forums like the Group of Seven (G7) and the Group of Twenty (G20) offer platforms for the EU to advocate its technological and digital policies as well as foster global consensus. By championing issues such as digital rights and cross-border data flows within these forums, the EU can help build a cohesive global digital economy.

Yet, the EU's potential to act as a bridge is intrinsically linked to its capacity in EDTs. Without substantial improvements and investment in these technologies, the EU's ambitions of multilateralism and global influence will face significant limitations. To truly shape the global digital economy, the EU must first bolster its own technological foundations. It is therefore no surprise that innovation has become a leitmotif of the EU's recent policymaking and efforts to build technological sovereignty: Hardly a month passes without the announcement of a new digital, cyber, industrial, or technological development.²⁷⁸

In recent years, there has been a plethora of important EU initiatives, including the Cyber Resilience Act, the Digital Services Act, the Digital Markets Act, the Data Act, the Data Governance Act, the AI Act, the European Chips Act, and the Critical Raw Materials Act. That is not to mention other ongoing civilian and defense programs, such as Horizon Europe, the EU's key funding program for research and innovation; Digital Europe, which aims to accelerate Europe's digital transformation; the European Defense Fund (EDF), the EU's financial tool to support defense innovation; and the European Defense Industrial Strategy.²⁷⁹

Connecting the dots between such initiatives will be a challenge. Historical legacies, bureaucratic hurdles, and political divisions continue to curb the EU's potential to deliver these programs and become a technological powerhouse in EDTs. In the global race for

technological dominance, the EU finds itself grappling with a fundamental paradox: The rhetorical aspiration of technological sovereignty in EDTs comes against the backdrop of formidable innovation and funding challenges. While the notion of technological sovereignty entails asserting control over critical technological domains to safeguard economic and strategic imperatives, the EU's approach has so far faltered in translating this aspiration into tangible outcomes. Despite ambitious strategies, the EU's endeavors in critical domains, such as AI, quantum technologies, and semiconductors, appear beset by hurdles.

A Confluence of Obstacles

The EU's difficulties lie in a confluence of factors that obstruct its path to technological sovereignty. Foremost among these is the union's fragmented landscape, which is marked by a multitude of national interests, regulatory disparities, innovation gaps, and bureaucratic complexities. This fragmentation undermines the EU's capacity to foster cohesive strategies across its member states and take the concerted steps that are essential for achieving collective action and technological agency on the global stage.²⁸⁰ Thus, while the EU strives for unity, member states' divergent agendas often hinder progress and dilute the effectiveness of collective action.

The EU suffers from a pronounced innovation deficit: The union achieves relatively few breakthrough discoveries and transformative inventions compared with its global counterparts. While Europe boasts a rich pool of scientific talent and research prowess, translating these advantages into commercially viable technologies is a formidable challenge. Hindered by bureaucratic inertia and a risk-averse investment climate, European innovators often struggle to incubate and scale EDTs to rival those emerging from more agile and resourceful ecosystems.

This lack of an integrated innovation ecosystem in Europe poses a significant obstacle to positioning the EU as a vibrant innovation hub, particularly in the growing AI sector. This deficit not only constrains European tech excellence but also jeopardizes the EU's standing in the global competition to innovate. Consequently, there is an urgent need to cultivate the conditions that are conducive to fostering an ecosystem of excellence across the EU in critical EDTs. Building internal cohesion and ensuring that all member states can participate meaningfully in EDTs are crucial steps. Without these, the EU's external advocacy of common standards and norms may ring hollow.

What is more, the EU's quest for technological sovereignty is hampered by deficiencies in critical infrastructure, particularly in areas that are pivotal for AI and digital transformation. Inadequate investment in high-performance computing, semiconductor manufacturing, and digital infrastructure undermines the bloc's capacity for self-sufficiency and technological independence.²⁸¹ The EU suffers from a marked funding gap in AI research and development (R&D) compared with its global counterparts, notably the United States and China. For instance, despite ambitious EU initiatives, such as the AI strategy, the Digital Europe program, and the commission's latest AI innovation package, which all aim to bolster the

innovation and adoption of AI across the continent, the EU's allocated resources pale in comparison to the colossal investments pouring into AI R&D in competing jurisdictions.²⁸²

This resource asymmetry undermines the EU's capacity to nurture a vibrant AI ecosystem and cultivate the required talent pool to spearhead generative AI (GenAI) breakthroughs, in particular. With GenAI, the EU is missing yet another tech wave. Europe's struggle in AI innovation can be traced back to the 1970s and 1980s, pivotal decades for the United States' current AI dominance. Unlike in the United States, Europe's computing industry has suffered from diffuse development because of historical, regulatory, and political factors. Despite recent efforts, Europe's AI market remains fragmented and influenced by national biases toward either regulation, innovation, or national security that stifle the union's global competitiveness.

EU Policy Framings for Technological Innovation

Amid rising geopolitical tensions and a fierce race to research, develop, and field dual-use EDTs, the EU increasingly views the task of maintaining its technological edge in critical domains as a panacea for the bloc's geostrategic, socioeconomic, and security and defense ailments.²⁸³ However, the success of the EU's EDT strategies hinges largely on how well they can align with or influence global initiatives.²⁸⁴ Influence in global tech governance is not just about diplomacy: It is also about economic power, policy frameworks, statecraft, and strategic leverage. The United States and China exert substantial influence not only because of their diplomatic efforts but also because they possess dominant tech companies and cutting-edge innovations.

To gain comparable leverage, the EU must foster its own technological power. EDTs are elements of geopolitical power in international relations and an arena of intense trade and tech rivalry between the United States and China. Both the coronavirus pandemic and Russia's 2022 invasion of Ukraine have exposed a range of critical vulnerabilities in Europe, from the security of supply chains—in the cases of semiconductors and energy—to defense capabilities.²⁸⁵ Such vulnerabilities have also shown that policy framings for technological innovation are pivotal for addressing gaps and securing Europe's strategic autonomy and economic competitiveness.

The EU's preferred approach has been to elevate the role of science and technology within the union's policy frameworks.²⁸⁶ Such frameworks are key not only for the EU's strategic autonomy and sovereignty but also for the bloc's values-based, responsible approach to desirable and future innovation. These framings and the strategies mobilized to enact them tell an important story about the way the EU sees itself as a technological actor as well as the notion of European technological power, which helps construct the EU's technopolitical identity. For instance, aspirations of technological sovereignty play an important role in the EU's research, innovation, and regulatory initiatives, including in key technological domains, such as semiconductors, AI, and quantum technologies.²⁸⁷

The EU has embraced several policy frameworks for technological progress that have become commonplace in the EU's governance of the innovation-society-security nexus. These overlapping framings consist of mission-oriented innovation, responsible research and innovation, strategic foresight and anticipatory innovation governance, and technological sovereignty and economic security. They play crucial roles in shaping issue definitions, goals, and governance processes across the EU. An exploration of these cross-cutting frameworks reveals their influence on the EU's unique approach to technological innovation. This highlights the need for more supranational solutions to nurture and safeguard a competitive, sovereign, and innovative industrial and technological base in Europe in both the civilian and the military domain.

Yet, when it comes to critical technological domains, there is a clear capabilities-expectations gap—a concept first introduced by political scientist Christopher Hill in 1993—that highlights the tension between the EU's collective aspirations and its innovation capacities.²⁸⁸ While the EU articulates ambitious policy goals, the reality of implementation often falls short because of resource constraints, bureaucratic hurdles, regulatory complexities, a fragmented innovation ecosystem, and fierce global competition. Effective policy framings can help bridge this divide by aligning expectations with achievable capabilities to foster a more coherent and realistic approach to technological innovation.

Mission-Oriented Policy Innovation

The EU's approach to innovation hinges on mission-oriented policies designed to address complex challenges. These missions entail ambitious, measurable, and time-bound targets with a market-shaping approach that requires the active involvement of the public sector. Mission-oriented policies, or governing missions, cover a wide spectrum of technological, social, and organizational solutions to respond to societal challenges, drive sustainable growth, and improve well-being.²⁸⁹ For instance, the commission's 2030 Digital Compass is a prominent mission that envisages Europe's digital transformation by 2030.²⁹⁰ It outlines digital principles, multicountry projects, legislative frameworks, and monitoring of progress.

Thus, mission-oriented policies redefine the role of public policy by moving beyond fixing market failures to actively shaping markets and channeling investment toward long-term solutions to complex innovation challenges. For example, in the case of EU Framework Programs for Research and Innovation, such as Horizon Europe, this approach helps steer top-down investments toward tackling innovation challenges in a focused, problem-solving manner.²⁹¹

While mission-oriented policies showcase the EU's ambition to govern complex societal challenges through innovation, they may face significant hurdles in the realm of EDTs. The inherently dynamic and unpredictable nature of these technologies poses challenges to setting clear, measurable targets with predetermined time frames. One example is the impact of GenAI, which has been propelled to the forefront of the Fourth Industrial Revolution and ranks among today's most rapid and transformative innovations. Comparable in significance

to the steam engines of the Industrial Revolution, GenAI is set to revolutionize global value chains across sectors, from creation to production to distribution. Its unparalleled speed and accessibility have profound implications—both positive and negative—for societies and industries worldwide. Alongside opportunities, policymakers must grapple with inherent risks, ethical questions, and societal concerns. Unlike traditional sectors, such as energy or transportation, where goals can be more easily defined, emerging technologies like GenAI evolve rapidly, making it difficult to establish long-term objectives.

Moreover, the effectiveness of mission-oriented policies relies heavily on active public-sector involvement and market shaping, which may not align well with the fast and often market-driven nature of new and emerging technologies. These sectors are dominated by the oligopolies of corporate tech giants that increasingly control everything from critical infrastructure to compute power and from big data to human talent. The sectors also often require flexible approaches to accommodate rapid technological advancements and changing market dynamics, which may not be conducive to rigid, top-down policy frameworks.

Finally, the complexity of EDTs calls for interdisciplinary, multistakeholder collaboration and cross-sectoral partnerships, which may be challenging to coordinate in the confines of more dirigiste mission-oriented policies. As such, while these policies may offer a valuable framework for addressing certain innovation challenges, they may prove less effective in navigating the uncertainties and complexities intrinsic to EDTs.

Responsible Research and Innovation

The concept of responsible research and innovation (RRI) prioritizes values, ethics, and norms in science and technology.²⁹² RRI aims to mitigate risks associated with new and disruptive technologies and champion social fixes to technological innovation. RRI also emphasizes democratic values and a market-liberal international order—elements that underpin the EU's own commitment to responsible innovation.

For example, Horizon 2020, the EU research and innovation program that preceded Horizon Europe, made RRI a priority by aligning research with societal needs, promoting multistakeholder dialogues, and incorporating strategic foresight to address unintended consequences.²⁹³ The body of RRI knowledge and practice that is relevant to Horizon Europe thus includes the RRI elements of the Horizon 2020 guidelines on ethics, gender equality, open access, public engagement, and science education. Consequently, RRI fosters an ethical research culture and a human-centric approach that exemplifies the EU's dedication to responsible technological development. The EU's approach to the innovation and governance of trustworthy AI, including the flagship regulatory framework of the AI Act, is an example of RRI.

Yet, while RRI offers a commendable framework for addressing the ethical and societal implications of EDTs, it may have limited efficacy in the EU in certain contexts. An RRI-based approach might even hamper innovation because of its emphasis on ethical considerations

and societal impacts, which may lead to increased regulatory scrutiny and compliance requirements. While these measures are intended to safeguard against potential risks and harms, they may also introduce bureaucratic hurdles and slow the pace of innovation, particularly in fast-moving fields like AI and quantum technologies.

Moreover, the need for multistakeholder engagement and consensus building in RRI processes could result in delays and inefficiencies in decisionmaking. Divergent national interests, regulatory disparities, and cultural differences among EU member states already complicate efforts to harmonize RRI practices and standards across the bloc. Achieving consensus among diverse stakeholders with varying interests and perspectives can be time consuming and may impede timely responses to emerging technological opportunities.

Additionally, the rigid application of RRI principles may stifle experimentation and creativity by imposing overly prescriptive guidelines and norms on R&D activities. This could discourage risk taking and the exploration of unconventional ideas. Finally, the EU's commitment to RRI may inadvertently create a regulatory environment that favors incumbent players and established industries over disruptive newcomers, deterring innovative start-ups and small enterprises from entering the market.

Strategic Foresight and Anticipatory Innovation Governance

The EU recognizes the need for strategic foresight, anticipatory policymaking, and resilience building in the face of evolving geopolitical dynamics and EDTs.²⁹⁴ The union engages in strategic foresight through several institutions and initiatives with a focus on anticipating and preparing for future challenges and opportunities. Former European Commission vice president Maroš Šefčovič was the first-ever European commissioner in charge of strategic foresight.²⁹⁵ Part of his mission was to lead the EU's efforts to embed strategic foresight at the heart of policymaking. The commission's Secretariat-General and Joint Research Centre led the implementation of this mandate, and its Strategic Foresight Network ensures long-term policy coordination among the commission's directorates-general.

The commission is also building close foresight cooperation and alliances with other EU institutions via the European Strategy and Policy Analysis System (ESPAS), which promotes foresight and anticipatory governance. It brings together nine EU institutions and bodies that are committed to thinking longer term about the challenges and opportunities facing Europe and, through foresight, to supporting policymakers to make the right policy choices.

While these endeavors aim to anticipate and adapt to future challenges, including EDTs, the rapid evolution and the emergent nature of disruptive technologies pose formidable obstacles. Predicting the trajectories of AI or quantum technologies is daunting because of hype cycles that hinder the development of effective anticipatory policies. Despite established mechanisms for coordination, translating foresight efforts into actionable policies that can navigate the uncertainties of EDTs remains a huge task for the EU.

Technological Sovereignty and Economic Security

In the context of growing geopolitical rivalries and the effects of the COVID-19 pandemic, the concept of technological sovereignty has emerged as a key policy-framing tool for the EU. According to the European Innovation Council (EIC), technological sovereignty should be understood as the avoidance of situations in which the EU relies on a sole third-party supplier, or a limited number of such suppliers, for technologies that are critical to the EU's economic and societal well-being—and, one could add, to the union's strategic autonomy in security and defense.²⁹⁶ The EIC suggests that the EU's technological needs should be evaluated against three key questions: Does Europe have the technology required? If not, does Europe have several suppliers from stable, reliable countries? And if not again, does Europe have guaranteed access to monopoly or oligopoly suppliers from a single country, often the United States or China?

The EU's March 2022 Strategic Compass noted that attaining “technological sovereignty in some critical technology areas, mitigating strategic dependencies in others, and reducing the vulnerability of our value chains are critical if we are to meet the challenges of a more dangerous world and be more resilient.”²⁹⁷ Meanwhile, “investing in innovation and making better use of civilian technology in defence [are] key to enhancing our technological sovereignty, reducing strategic dependencies and preserving intellectual property in the EU.”

To complement its efforts to build technological sovereignty, the commission in June 2023 issued a communication on a European Economic Security Strategy. This strategy would aim to promote European competitiveness, protect the EU from commonly identified economic security risks, and partner with countries that share Europeans' concerns on economic security.²⁹⁸ The communication focused on “minimising risks arising from certain economic flows in the context of increased geopolitical tensions and accelerated technological shifts, while preserving maximum levels of economic openness and dynamism.” The communication further emphasized critical dual-use technologies in the context of risk assessments, export regimes, and strategic R&D and innovation. The words “dual use” appeared no fewer than fourteen times in the fourteen-page document, mostly in terms of technological security.

Following the communication, the commission in October 2023 adopted a recommendation on critical technology areas for the EU's economic security that should undergo further risk assessment with the member states.²⁹⁹ Of the ten areas, the recommendation identified four that it considered highly likely to present the most sensitive and immediate risks to technological security: advanced semiconductors, AI, quantum technologies, and biotechnologies. These areas were selected on the basis of the technologies' enabling and transformative nature; the technologies' risk of civil-military fusion—a clear hint at China's civil-military fusion strategy—and relevance to both the civilian and the military sector, including the potential to advance both domains; and the risk of the technologies being used to undermine peace and security or violate human rights.

The communication also proposed new actions to further support EU technological sovereignty and the resilience of EU value chains by developing critical technologies through a Strategic Technologies for Europe Platform (STEP).³⁰⁰ STEP would rely on the reprogramming of funds under existing EU instruments, with an additional budget of €10 billion (\$11 billion). Overall, the platform could leverage up to €160 billion (\$177 billion) in investment. Thus, STEP is meant to direct funding to strategic projects that support the development and manufacture of deep, digital, and clean technologies and biotech as well as the strengthening of their value chains to meet the challenges of the twin green and digital transitions. This approach would help the EU limit or prevent strategic dependencies.

Nevertheless, challenges persist in translating rhetoric into tangible outcomes. The EU's policy framings of technological sovereignty and, more recently, economic security guide the union's governance processes and shape issue definitions in the case of EDTs. Yet, the efficacy of these framings hinges on their effective implementation, market integration, and alignment with evolving global dynamics. Thus, while technological sovereignty features prominently as a rhetorical device in the context of key EDTs, its true test lies in the EU's ability to realize its vision through concrete actions and sustained collaboration across the bloc. Only by fostering a favorable environment for innovation, collective action, and supranational solutions can the EU strengthen its position as a global technological powerhouse in EDTs.

The State of Play in Key Emerging and Disruptive Technologies

Given recent seismic events in Europe and across the globe, the EU needs a robust technological dimension more than ever. Yet, to make this a reality, the EU must contend with major gaps between its own standing and those of the United States and China. In terms of its share of global business R&D expenditure, the EU is surpassed by other players when it comes to technological innovation, particularly advanced digital technologies.³⁰¹ Among the leading companies in software and computer services in 2020, EU firms represented only 7 percent of worldwide R&D spending, compared with 71 percent for the U.S. firms and 15 percent for Chinese ones. Similarly, the EU accounted for just 12 percent of R&D expenditure among leading companies that produce technology hardware and electronic equipment, against 40 percent for the United States and 19 percent for China.

More worrying data were presented in a 2022 commission communication on strategic foresight and the green and digital transitions.³⁰² The commission warned that control over technology is an increasingly crucial geopolitical battleground and that the EU is losing the investment race in quantum computing, fifth-generation (5G) technology, AI, and biotech, limiting the bloc's capacities in these areas. Citing figures from a 2022 McKinsey Global Institute report, the communication further painted a bleak picture regarding investment: In quantum computing, 50 percent of the top companies were in the United States, 40 percent in China, and none in the EU. In 5G, China captured nearly 60 percent of external funding, the United States 27 percent, and Europe 11 percent. In AI, the United States took 40 percent of external funding, while Europe lagged behind with 12 percent, and Asia

(including China) took 32 percent. And in biotech, the United States spent \$260 billion in 2018–2020, Europe \$42 billion, and China \$19 billion.³⁰³

The commission's communication did not mention EU R&D funding programs as a solution to this situation but instead proposed deepening banking and capital market integration in the EU to allow more private investment. The communication also reflected an EU-level shift toward prioritizing scientific links and a proactive research and innovation agenda with like-minded democracies and partners.

The technological innovation policies of the EU's adversaries and allies may converge or diverge with the union's own cross-cutting policy framings. Understanding how these policies impact the power dynamics of an increasingly fragmented and insecure international system is important, especially when EDTs become instruments of power projection and strategic competition. This is why EDTs—from AI systems and big data to quantum computing, autonomous robotics, cyber capabilities, and semiconductors—have become central to the EU's science, technology, and security agendas.

These and other EDTs present both risks and opportunities in terms of their responsible governance, their broader impact on economic security, and their increasing weaponization for military purposes. Unsurprisingly, the commission's 2022 communication urged the EU to increase R&D spending, leverage private and public long-term investment in research and innovation across critical technologies and sectors, and, importantly, deepen the civil-military synergies between technologies, human capital, and infrastructure.³⁰⁴

In terms of these synergies, the commission's 2021 Action Plan on Synergies called on Europe to enhance its technological edge and support its industrial base.³⁰⁵ This action plan was designed to reinforce European innovation by exploring and exploiting the disruptive potential of technologies at the interface between defense, space, and civilian uses, such as cloud computing, processors, cyber, quantum technologies, and AI. The action plan also crystallized the commission's role as a policy entrepreneur that is charting a new approach to dual-use critical technological domains.

Recognizing the pervasiveness of EDTs across civilian, defense, and space industries, the action plan called for the creation of new opportunities for synergies among various EU programs and instruments. In other words, it urged the EU to connect the dots between civilian programs like Horizon Europe and defense initiatives like the EDF in a more structured way at both the EU and the regional level, including through national co-funding of EU projects to multiply these programs' expected positive effects.³⁰⁶ The EDF regulation envisages that up to 8 percent of the fund's budget may be used to support disruptive technologies, promote the participation of nontraditional defense players, and attract start-ups to defense projects through open calls or prizes for innovative defense applications.³⁰⁷

The term “technological sovereignty” appears seven times in the Action Plan on Synergies, especially in relation to the EU's industrial strategy and alliances, market competitiveness,

critical raw materials and technologies, and the security of supply chains and infrastructure.³⁰⁸ In the context of the action plan, critical technologies are defined as those that are relevant across the defense, space, and related civilian industries and contribute to Europe's technological sovereignty by reducing risks of overdependence on others for the things the bloc needs the most. Three such critical technological domains are worth exploring further: semiconductors, AI, and quantum technologies.

Semiconductors

Semiconductors are strategic assets for key industrial value chains. The EU's Digital Decade program for the years leading to 2030 focuses on emerging markets for the chip industry, such as highly automated and electric vehicles, edge and cloud computing, the Internet of Things, connectivity, space, defense, and quantum computing.³⁰⁹ To prepare for, anticipate, and swiftly respond to future supply chain disruptions in these technological domains, the commission in February 2022 unveiled a proposal for a European Chips Act that would entail more than €43 billion (\$48 billion) of public and private investment until 2030.³¹⁰ By way of reference, new semiconductor foundries—the factories where silicon wafers are manufactured—take years to build; an entry-level foundry can cost about \$15 billion, whereas more advanced ones cost over \$20 billion each.³¹¹ The goal of the European Chips Act, which was passed in September 2023, is for the EU to account for 20 percent of the global market share of chip production by 2030 as a precondition for Europe's competitiveness and as a matter of technological sovereignty and security.

Yet, looking at the semiconductor value chain as a whole, the EU ranks as a second-rate player with marginal capabilities in design and manufacturing, on the one hand, but as a leader in the field of automotive chips, on the other, with certain member states controlling some crucial choke points. For instance, the most important producer of manufacturing equipment used in foundries is the Dutch company ASML, while Belgium's IMEC is considered one of the most important research institutes when it comes to high-end design.³¹² No one country or region can be fully independent or sovereign in semiconductor supply—not even those that currently dominate the global market.

Also of note is the fact that semiconductors are dual use and play a crucial role in high-tech warfare, not only with regard to cutting-edge technologies and applications such as AI, cybersecurity, and hypersonic guidance systems, but also for more mundane applications, such as sensors and communications. While the security and defense sectors rely heavily on off-the-shelf and commercially available semiconductors, there are also specific requirements and military-grade criteria for reliable, high-performance microchips with higher durability, heat tolerance, and even radiation tolerance. European defense contractors have regularly prioritized partnerships with Asian manufacturers like TSMC and Samsung over EU-based firms.³¹³

Artificial Intelligence

In recent years, the commission and the member states have joined forces to make the EU a world-class hub for AI while ensuring that the technology is responsible, human-centric, trustworthy, and grounded in European values and fundamental rights. This ambitious objective translates into a European approach to excellence and trust based on concrete rules and actions, such as the commission's 2021 AI package. This package included a communication on fostering a European approach to AI; a review of the EU's Coordinated Plan on AI together with the member states; and the AI Act, the first-ever attempt to enact a horizontal, risk-based regulation of AI systems in use.³¹⁴ With the act, the commission also put forward the first-ever legal framework on AI, which addresses the risks of these technologies and positions Europe to play a leading norms-setting role globally.

The act, which was adopted by the European Parliament in March 2024, categorizes the risks of AI into four levels: unacceptable, high, limited, and minimal.³¹⁵ Governments and companies that use AI tools will have different obligations depending on the risk level of the technology involved. The act also includes new rules on the use of facial recognition, biometric surveillance, and other AI applications like GenAI, such as ChatGPT.³¹⁶

Military uses of AI are not within the scope of the act. Yet, civilian-oriented regulatory frameworks like the act can be important sources of inspiration for the military sector. Given the dual-use nature of AI systems, the EU and its member states should further explore how the norms, regulations, and technical principles proposed for the civilian sector, such as the act's risk-based approach, could be translated to security and defense contexts.³¹⁷ However, in the global race for AI dominance, the EU faces challenges in establishing an international gold standard for AI regulation and preserving its technological advantage. While certain aspects of the act may hold significant sway over global markets, the EU's efforts alone will not be enough, especially given the increasingly fragmented and competitive regulatory regime complex across the globe.

The commission and the member states have also agreed to boost excellence in AI by joining forces on policies and investments. The 2021 review of the Coordinated Plan on AI outlined a vision to accelerate the EU's priorities, align these with the current European and global AI landscape, and bring the EU's AI strategy into action.³¹⁸ Expanding resources and managing investments are critical steps to preserve a homegrown technological edge in this strategic domain. Through the Horizon Europe and Digital Europe programs, the commission plans to invest €1 billion (\$1.1 billion) a year in AI.³¹⁹ This will mobilize additional investment from the private sector and the member states to reach an annual investment volume of €20 billion (\$22 billion) over the course of the digital decade.

As for AI innovation, current indications suggest that the EU may struggle to pursue technological sovereignty and assert global leadership in the AI sphere because of Europe's lack of major high-tech corporations and limited investment in this field. On the latter, the EU is falling behind the United States, which leads the world in terms of private AI investment,

and China.³²⁰ In 2022, the United States invested \$47.4 billion in AI, roughly 3.5 times the amount invested by the next country, China, with \$13.4 billion. The United States also continues to lead in terms of the number of newly funded AI companies, with almost twice as many as the EU and the United Kingdom combined, and 3.4 times more than China. Thus, in a trend that goes back a decade, the United States continues to outpace both Europe and China.

In an effort to boost innovation, in January 2024 the commission unveiled a set of initiatives aimed at bolstering European start-ups and small and medium-sized enterprises in cultivating responsible AI technologies that adhere to EU values and regulations. Backed by financial support from the commission totaling approximately €4 billion (\$4.4 billion) until 2027 via the Horizon Europe and Digital Europe programs, these efforts aim specifically to stimulate public and private investment in GenAI.³²¹ Furthermore, accompanying measures seek to enhance the EU's GenAI talent pool through educational and reskilling activities and faster development and deployment of Common European Data Spaces.

Quantum Technologies

To achieve technological sovereignty, the EU also aims to harness the transformative power of quantum technologies by developing a solid scientific, industrial, and technological base across Europe.³²² Not only are these technologies radically disruptive, but their implications are also inherently different from those of technologies based on classical mechanics, since they follow the laws of quantum mechanics, which describe physical systems in terms of probabilities rather than definite properties. Global investment by start-ups in quantum technologies reached a record high of \$2.4 billion in 2022, indicating investor confidence in the technologies' commercial potential.³²³ In the same year, the global quantum computing market was estimated to be worth \$10.1 billion.³²⁴ Because of the enormous expenditure by governments and companies, the global market for quantum computing is booming and is predicted to hit around \$125 billion by 2030.³²⁵

In the EU, the fear is that without coordinated research and funding efforts at the European level, bolstered by the bloc's tradition of excellence in quantum research, Europe risks falling behind its global competitors.³²⁶ Indeed, in the race to commercialize quantum computing, Europe trails the United States and China, partly because of its considerably weaker coordination among research, start-ups, venture capital, and leading industries.³²⁷ Among the key EU initiatives in this area, the commission in 2016 launched the Quantum Flagship Program with a budget of €1 billion (\$1.1 billion) to accelerate the development of quantum technologies across the union.³²⁸ The program engages with four main areas: computing, simulation, communications, and metrology and sensing. The EU recognizes the dual-use potential of these technologies while emphasizing the need for strong ethical and security safeguards.

The next phase of the Quantum Flagship Program, funded under Horizon Europe, aims to consolidate and expand European research leadership in quantum technologies and bring

research results closer to industrial exploitation.³²⁹ The Digital Europe program will provide additional funding to develop and reinforce the bloc's strategic digital capacities in quantum technologies.³³⁰ This funding builds on the 2017 European Quantum Technologies Roadmap, which outlined the steps needed to advance the development of quantum technologies in Europe and emphasized the need for collaborative multistakeholder engagement.³³¹

In terms of civil-military synergies, quantum technologies are dual use and, as such, of great interest to militaries. Many of the technologies being developed in the private sector, such as sensors and communication systems, have direct military applications, like detecting stealth aircraft and providing secure communications. However, keeping a tempered eye on research, innovation, and the hype surrounding applications is equally important, particularly from a security and defense policy perspective.

Importantly, despite significant EU public funding for quantum technologies, the EU continues to lag behind its major global competitors, such as the United States, in terms of private investment in the sector. The commission's 2023 Report on the State of the Digital Decade underscored the need to nurture start-ups in the nascent quantum ecosystem, both by addressing technological requirements and by enabling the scaling up of projects.³³² The report emphasized ongoing efforts to establish a federated quantum infrastructure across the EU aimed at fostering a secure and interconnected quantum landscape.³³³ This strategic direction highlights the EU's ambition to leverage quantum technologies as a cornerstone of its digital agenda and technological sovereignty.

Conclusion

Despite the EU's ambitious rhetoric, realizing technological sovereignty remains a distant goal for the union. Fragmentation, innovation deficits, global competition, and infrastructure gaps pose formidable obstacles. To balance technological autonomy and openness, the EU must ensure that its strategies enhance rather than hinder its integration into the global tech and digital economies. Indeed, the EU's emphasis on technological sovereignty and the creation of an independent digital sphere could inadvertently contribute to fragmentation if it leads to the development of parallel systems that are incompatible with those of other regions.

That is why the EU's EDT strategies are a double-edged sword: They can both drive global tech standards and contribute to economic fragmentation. The external impacts of these strategies are complex and influenced by the EU's regulatory and normative stance as well as the bloc's interactions with other major players. The key challenge lies in balancing the pursuit of technological sovereignty—whatever this term entails—with the need for international cooperation. Through strategic multilateralism and diplomatic engagement, the EU can mitigate tensions and promote a more collaborative global digital framework, preventing the dystopian scenario of being caught between competing technological blocs.

Moreover, given intense global competition and shifting geopolitics, ensuring the EU's global agency in EDTs is crucial but far from assured. This priority requires high-level political attention across the bloc, especially as geopolitical conflicts increasingly shape tech policies. EDTs are now a battleground for power struggles, as they influence politics, economics, and security. Both democratic and autocratic systems compete through EDTs to challenge national sovereignty, military power, governance models, and political systems.

To address these challenges, the EU needs proactive measures and effective policy frameworks that translate rhetoric into practice, shape responsible innovation, set regulatory agendas, and uphold democratic governance in EDTs. However, there are also potential tensions between the EU's policy goals and its values-based approach to innovation. The EU should preempt the possible incompatibilities between its policies and values while making the most of international and European cooperation based on norms and responsible innovation.

Bridging this gap demands political will, substantial investment, innovation capacity, and strategic planning. Overcoming these challenges requires coordinated EU efforts, visionary leadership, the creation of European tech champions, and strategic foresight. Failure risks relegating the EU to the technological sidelines and perpetuating the union's dependence on external forces in the digital age.

CHAPTER 8

More Strategic, but Autonomous? Divergences Limiting EU Economic Statecraft in Defense

Catherine Hoeffler

The COVID-19 pandemic and the 2022 Russian invasion of Ukraine sparked renewed discussions of the European Union's (EU's) role in a world marked by the return of intensified great-power competition and geopolitics. Economic and security motives are increasingly intertwined, as a variety of EU policies testify, such as those on trade, technology, and raw materials, as well as the 2023 Economic Security Strategy.³³⁴

With its focus on the security motives in economic policies, this shift has received little attention when it comes to the EU's role in the defense industry. This is unfortunate, because the European defense industry is embedded in global markets and affected by geopolitics, for instance in the competition for semiconductors. In other words, foreign policy may well be waged through economic policies, but the latter affect defense industries as well.

Moreover, the EU cannot conceive of its power in market terms alone. Global defense spending rose to an all-time high of \$2.4 trillion in 2023, fueled not only by the war in Ukraine, but also by rising tensions, for example in Asia.³³⁵ This state of play raises questions about whether Europeans are sincere in wishing to step up their security commitments and, if so, how—by relying on foreign sources, including suppliers in the North Atlantic Treaty Organization (NATO), or by adopting EU-centered protectionist measures.

The EU's evolving role in defense-industrial regulation reflects the kinds of shifts toward strategic autonomy and market intervention found in other policy areas. The EU has developed economic statecraft to move from a market-making approach toward a hands-on industrial policy in defense. The conflict in Ukraine has empowered pro-EU voices

who advocate greater autonomy in defense matters, yet internal political rifts persist over three fundamental questions: how integrated this statecraft should be at the EU level; how dirigiste economic instruments should be, against the EU's liberal tradition; and what political-economic territory this statecraft should privilege—that is, whether the EU should promote homegrown capacities and firms.³³⁶

Economic Statecraft and the EU's Role in Defense

Economic statecraft involves leveraging economic tools to advance foreign policy goals and safeguard national security in an interconnected global economy.³³⁷ It shares with other conceptual frameworks, such as geoeconomics or weaponized interdependence, a blurring of the lines between economic and security interests.³³⁸ One form that economic statecraft often takes is industrial policy: Away from market regulation, states have shifted toward more dirigiste policies that favor economic insiders and promote homegrown industrial production. For the EU, this shift has profound implications both for the union's international positioning and, internally, for EU polity building and legitimacy.³³⁹

Some may argue that looking at the defense industry through a lens of economic statecraft is irrelevant, because this business has always enjoyed state protection from market dynamics. Yet, this view is misleading. State regulation of the defense industry has never been homogeneously and efficiently protectionist across the board. This is not to deny the specific legal frameworks of this industry or the cozy relationships it oftentimes enjoys with governments. However, there is significant variation in the ways states have regulated the defense industry, from traditionally protectionist stances, like that of France, to more liberal approaches, like that of the United Kingdom, where privatization, outsourcing, and reliance on foreign actors were considered good business. This model has become more widespread since the 1980s.³⁴⁰ Hence, applying economic statecraft to defense is relevant, as states may create new protectionist measures in this area or strengthen existing ones in a context of heightened international security risks.

Given this situation, and despite the European defense industry's connections to state sovereignty and security interests, the industry has become internationalized and is now embedded in global interdependencies. European defense firms are major global players behind the United States and China: In a 2022 ranking of one hundred defense companies by the Stockholm International Peace Research Institute, twenty-six were European. EU firms accounted for 12.9 percent of the total arms revenue of the one hundred firms, and France was the second-largest arms exporter globally.³⁴¹ Conversely, the EU's defense-industrial chain depends on foreign firms, whether in terms of the ownership of defense companies, the nationality of firms that win big contracts, or the presence of non-EU firms in cooperative armament programs.³⁴² More broadly, defense companies are as vulnerable as those in other industries to global interdependencies for critical materials and semiconductors.

An economic statecraft lens helps explain changes in the locus and type of economic regulation. Historically, the EU had limited influence on defense and defense-industrial matters.

Arms production and procurement remained national. When the EU began encroaching on armament regulation, it did so from a liberal, market-making perspective by focusing on improving competitiveness and market efficiency. National and EU-level rules on production and procurement have never stipulated a preference for armaments of EU origin, reflecting the historical weight of NATO and U.S. equipment in European militaries.

Adopting an economic statecraft perspective on defense involves understanding whether the EU's role has evolved along three dimensions: a strengthening and centralization of EU competencies in defense-industrial policy, a shift toward interventionist economic instruments for foreign policy goals, and a preference for homegrown capacity building by insider firms.

Early Steps: From Market Making to Industrial Policy

The EU's role in defense production and procurement has long been limited. European states sourced their armaments mostly through NATO, through bilateral or multilateral programs, or off the shelf. Within the EU, defense and defense procurement, by extension, remained national competencies. Cooperation became institutionalized but remained intergovernmental, from EU Council working groups in the early 1990s to the 1999 creation of the European Security and Defense Policy—later the Common Security and Defense Policy (CSDP)—and the 2004 establishment of the European Defense Agency.

Although the CSDP operates on an intergovernmental basis, the European Commission gradually expanded its role into defense-industrial regulation by invoking EU competencies in the single market and competition. Starting with a few publications in the 1990s, the commission successfully pushed for the 2009 Defense Procurement Directive, which aimed at standardizing national arms procurement to increase the competitiveness of EU defense firms. This directive was emblematic of the EU's overall market-making approach to defense production and procurement in this period.

In more recent years, the EU has transitioned from this market-making approach to a more interventionist defense-industrial policy that aims to support the development or maintenance of European defense- and security-related capabilities. In December 2013, EU leaders approved the commission's suggestion to create EU support for military research and development (R&D). This move paved the way for subsequent EU measures: the Pilot Project on EU defense research, the European Defense Industrial Development Program, and the Preparatory Action on Defense Research, which led to the European Defense Fund (EDF), adopted in 2021.

Overall, these instruments aim to finance military R&D through the EU budget. The EDF represented a shift in the distribution of competencies between the EU and its member states in terms of arms production. While the EU did not take away states' responsibilities, the EDF, as an instrument of supranational industrial policy, constituted a notable step in the direction of EU economic statecraft.

Several factors drove this evolution. Externally, a perception of heightened security risks was later exacerbated by uncertainties stemming from global geopolitical shifts and the unreliability of the United States as Europe's security provider in the future. The U.S. presidency of Donald Trump and Brexit were major factors in the decisions of more Atlanticist-leaning capitals, such as Amsterdam, Berlin, and Stockholm, to back proposals for more EU cooperation in the field of armaments and more generally defense.³⁴³

Internally, the EU's shift from market making to industrial policy was also a way for the commission to expand its mandate. The EU framed its new initiatives as a cost-efficient way for Europeans to invest in their security amid the fragmentation of European markets. For instance, the EU's militaries use—and therefore finance—seventeen different main battle tanks, against just one for the United States.³⁴⁴ This context provided an impetus for EU-centered defense initiatives despite persistent divisions among the member states about the extent of the EU's involvement and its relationship with NATO.

The EDF can be said to represent a first step of EU economic statecraft in defense—and one that is comparable with similar steps taken in other industrial domains. Three characteristics justify such a view. First, in terms of governance, while the EDF only supports member states' efforts, it represents a new EU competency and a foot in the door for the commission, which became empowered in later stages. Second, the fund's creation resulted from a growing consensus among Europeans, even Atlanticist ones, to collectively address rising uncertainties about their reliance on foreign—including U.S.—military capacities. Third, the EDF marks a shift from market-making to more dirigiste and protectionist measures, since it aims to direct industrial activity toward politically desirable, security-motivated ends by giving preference to firms that produce homegrown, European industrial capacities.

At the same time, the EDF has faced criticism for its limitations. The fund focuses on military R&D rather than on comprehensive defense capabilities, reflecting member states' reluctance to cede substantial sovereignty over defense procurement. National capitals rebuffed initial proposals for EU ownership of dual-use military equipment in favor of a more cautious approach that focused on R&D funding. And the EDF's €8 billion (\$9 billion) budget for 2021–2027 is nowhere close to anything that resembles a standalone R&D budget.³⁴⁵ That said, it is important to put the EDF into context. Despite the hype around the fund, at the time of its creation, the overall dynamic was one of decreasing, not increasing, cooperation in arms production: Cooperative armament programs accounted for €4.1 billion (\$4.5 billion) in 2020, down from €6.3 billion (\$6.9 billion) in 2008.³⁴⁶ This picture led many observers to be skeptical of the EDF's capacity to change states' behavior.

Russia's Invasion of Ukraine: Disagreements Despite the War

The 2022 Russian invasion of Ukraine highlighted the need for Europe to reinvest in military capabilities and brought the risks of high-intensity war to the fore. European leaders discussed enhancing defense capabilities at their March 2022 summit in Versailles. The EU's subsequent Strategic Compass aimed to boost the union's strategic autonomy by securing

defense supply chains and technologies. Speaking in early 2024, European Commission President Ursula von der Leyen emphasized the link between the needs of war and economic statecraft: “Europe should strive to develop and manufacture the next generation of battle-winning operational capabilities . . . That means turbocharging our defense industrial capacity in the next five years. At the heart of this must be a simple principle: Europe must spend more, spend better, spend European.”³⁴⁷

The EU has since launched numerous defense-industrial policy initiatives to ramp up its military capabilities by focusing on directing public spending to EU firms and improving access to private capital. However, despite the urgency driven by the war in Ukraine, member states still disagree over the extent to which they should strengthen and centralize EU competencies, move toward more dirigiste economic strategies, and prioritize EU economic actors over foreign ones.

Subsidizing Arms Production and Procurement

The EU has introduced specific defense-industrial policy instruments to subsidize joint arms production and procurement. In July 2022, the commission proposed the European Defense Industry Reinforcement Through Common Procurement Act (EDIRPA) to support joint military capacity building by addressing the depletion of national stocks and the lack of European military capabilities that the war had revealed. This initiative aimed to replenish stocks in a cost-efficient way and support Europe’s defense-industrial base by increasing investment. In contrast to the EDF’s focus on R&D, the proposed act marked a significant shift toward EU involvement in the acquisition process.

To bolster EU firms’ production capacity, the commission then introduced the Act in Support of Ammunition Production (ASAP) in April 2023 to enable common ammunition production, arms transfers to Ukraine, and the replenishment of stocks. The act supported the member states’ three-track approach, approved the previous month, of short-term help for Ukraine, medium-term stock replenishment, and a long-term EU military buildup.

The EDIRPA proposal outlined a long-term defense-industrial strategy, which was confirmed by von der Leyen in her 2023 State of the Union address. In March 2024, the commission duly revealed the European Defense Industrial Strategy (EDIS) and the European Defense Investment Program (EDIP) to sustain the EU’s defense- and technological-industrial bases. EDIS aims to enhance EU military readiness by promoting European-built military capacities until 2035, counteracting the trend toward non-EU suppliers. The strategy’s goal is for member states to procure at least 50 percent of their defense investment from within the EU by 2030 and 60 percent by 2035.³⁴⁸

To achieve this goal, EDIS incentivizes cooperative programs through various economic tools: reinforcing the institutional links between EU instruments with a bonus system, expanding EU budget coverage for common costs, creating an administrative carrier for collaborative programs, and promoting value-added tax (VAT) exemptions for joint

procurement through the EU Structure for European Armament Program. EDIP, meanwhile, supports industrial production both in the buildup phase and through so-called ever-warm facilities that ensure readily available production capacity during crises.

Financing Rearmament

These new industrial policy instruments require massive investment. EU leaders have discussed various ways to go about this, from incentivizing public spending to improving access to private capital.

One approach is for the EU to provide financial incentives for member states to spend more on collaborative defense projects. An example of such incentives lies in recent reforms to the EU's Stability and Growth Pact, which seeks to regulate member states' finances and coordinate their fiscal policies. Southern EU countries, like France and Italy, have long sought exemptions from EU fiscal rules for defense spending, but have faced opposition from frugal Northern member states like Germany and the Netherlands. The war in Ukraine reignited this debate, with Central and Eastern EU members advocating changes to the pact's rules. In November 2022, the commission made defense investment a strategic priority, and by December 2023, the member states had reached a compromise that permitted some additional flexibility for defense-related deficits.

The commission has also tried to promote the creation of EU-level funds. In 2022, it proposed a European Sovereignty Fund to support homegrown industrial production. By 2023, this idea had evolved into the more modest Strategic Technologies for Europe Platform (STEP), which could add €1.5 billion (\$1.7 billion) to the EDF or to another defense-industrial policy instrument.³⁴⁹ European Commissioner for Internal Market and Services Thierry Breton has also advocated a new €100 billion (\$110 billion) EU defense fund to support EDIS.³⁵⁰

In this context, the issue of EU defense bonds has resurfaced. Member states such as France had toyed with this idea in the past, and the commission had suggested the creation of such bonds to finance its EDF proposal in early 2017. Although not included in the final declaration of the EU's Versailles summit, the concept gained traction in 2023, when it was supported by Kaja Kallas, the EU's incoming foreign policy chief. Outgoing European Council President Charles Michel endorsed EU defense bonds in November 2023. By spring 2024, these calls had been backed by EU governments such as those of Belgium and Poland, while others, like those of the Czech Republic and Finland, were open to discussions of the idea. The creation of EU defense bonds is unlikely in the near future given Germany's strong objections.³⁵¹ But the fact that such a project has gained salience and that many member states see collective defense as a legitimate motive for it testifies to the logic of increased economic statecraft in European defense.

Finally, the EU has launched new initiatives that aim to improve defense firms' access to private capital, which had been an important issue for businesses long before the war. The rise of sustainable finance and the EU's 2020 environmental taxonomy have made access to bank

loans and investors more difficult for firms involved in defense-related activities. Investors like the Norwegian pension group KLP have divested from the sector. According to EU business representatives, environmental, social, and governance (ESG) lending and investing presents a fundamental risk, as it widens the gap with these businesses' U.S. counterparts, which enjoy better access to capital.

To address this, many governments—those of the Czech Republic, Finland, France, and Italy, among others—and the commission have urged the European Investment Bank (EIB) to get more involved in financing European rearmament. This idea is not new, but the EIB had historically opposed such a move. Since 2022, the bank has moved into financing dual-use projects, whose expected profits will derive mostly from their civilian uses. In January 2024, the commission's Directorate-General for Defense Industry and Space and the European Investment Fund established the Defense Equity Facility, a €175 million (\$192 million) initiative that aims to attract private investment and reach €500 million (\$551 million) in funding. This initiative is supposed to stimulate private investment in defense innovation.³⁵²

Countries like Germany and the Netherlands were previously hesitant to risk the EIB's credibility, but they now support this shift in policy as long as the bank's risk profile and ESG performance remain intact. This change in mindset reflects the increased urgency of bolstering the EU's defense capabilities amid the ongoing conflict in Ukraine. Under much pressure, the bank has been more open to reconsidering its stance since the start of the war, although it remains cautious at the time of writing. The bank's president, Nadia Calviño, in April 2024 presented a new Security and Defense Industry Action Plan, which loosened dual-use rules to allow more security and defense firms to enjoy EIB support.³⁵³

The Enduring Limits of EU Economic Statecraft in Defense

While these initiatives illustrate the EU's ongoing shift toward economic statecraft in defense, they also highlight why this turn is not yet complete. Europeans disagree on three major questions: Who should steer EU rearmament, with what kind of industrial policy, and for whose benefit?

First, EU member states remain cautious about ceding control over defense matters, including financing, to the union, preferring to limit centralization and maintain their national prerogatives in defense and defense-industrial strategy. The commission's proposals for increased centralization of arms production and procurement have been met with opposition from state and industry representatives, who view the plans as a power grab.³⁵⁴ Defense remains a national responsibility, as emphasized by German Chancellor Olaf Scholz in June 2024, when he overtly opposed extensive EU financing for defense.³⁵⁵

The budgets of EU defense programs like the EDF remain low, and while initiatives such as the EDF and EDIRPA mark initial steps toward more centralized EU defense, substantial financial commitments from the member states for EDIS and cooperative procurement remain uncertain. The project of a European Sovereignty Fund, floated by von der Leyen in

2022, persists, but concrete initiatives are more limited. Breton's ambitious plan for a €100 billion defense fund also faces skepticism. Overall, the likelihood of a transformative EU fund for European industries is doubtful. Additionally, debates in spring 2024 on the EU's proposed capital markets union revealed opposition to further EU centralization, particularly from smaller countries, like Ireland and Sweden.³⁵⁶

Second, member states are divided on how much they want the EU to deviate from its liberal role and take on more protectionist and dirigiste economic instruments. Governments have agreed to subsidize defense, but uncertainties remain as to how to proceed more concretely. During negotiations on ASAP and more recent discussions of EDIS and EDIP, member states expressed skepticism about dirigiste instruments. A proposal to emulate the U.S. Defense Production Act by allowing the EU to repurpose production lines in crises remains contentious.

Disagreements extend to the various options for financing European rearmament. Initial support for increased defense spending has waned, with some countries, like France and Germany, returning to austerity measures. The German national budget unveiled in July 2024 illustrated a return to orthodox liberal thinking on debt reduction, which sacrifices other priorities. This highlights enduring tensions between fiscally conservative states and those that advocate higher spending. Likewise, the EU's December 2023 reform of its Stability and Growth Pact testifies to the strength of fiscal orthodoxy, as the revised pact keeps its numerical targets and main procedures.

Member states also disagree on issuing common debt for defense spending. Germany, in particular its liberal Free Democratic Party, remains strongly opposed to this approach, viewing Next Generation EU—the union's economic recovery fund in the wake of the COVID-19 pandemic—as an exception rather than a precedent. A frugal coalition that includes Austria, Denmark, and the Netherlands resists new EU debt, fearing it would shift power toward the EU. Discussions among European leaders in spring 2024 failed to reach a consensus on this issue.³⁵⁷ Former Dutch prime minister Mark Rutte and allies argued against the issuance of common debt, emphasizing the need to retain national fiscal sovereignty. How the fiscally conservative coalition will respond to future demands for increased EU involvement in defense funding remains uncertain. This ongoing debate demonstrates that behind the rally-around-the-flag effect of the war in Ukraine, political economic traditions persist even in the current context of heightened security risks.

Third, EU leaders remain divided over various “Buy European” measures in defense. This is likely the most contentious issue, as the commission's attempts to promote EU industry is at odds with its long-standing liberal approach and most member states' Atlanticist or neutral preferences. The core debate is whether EU subsidies should be restricted to EU firms or extended to the union's friends—that is, U.S. companies. Resistance to prioritizing EU firms, even in long-term industrial strategies, has been evident despite ongoing conflicts.

EDIRPA, proposed in July 2022 as an emergency measure to replenish Europe's armaments stocks and boost its military capabilities, exemplifies these disagreements. Lengthy

negotiations delayed the act's adoption until September 2023, primarily because of disputes over the principle of economic preference for EU firms. Initially, discussions leaned toward a liberal approach, allowing EDIRPA funds to be used to purchase U.S. equipment. However, the final version of the act imposed stricter conditions and permitted such exceptions only in specific circumstances. The European Parliament initially resisted EU preference, citing the inability of the union's defense industry to meet immediate military needs.

The compromise reached requires at least 65 percent of the value of a finished product to originate in the EU, Iceland, Liechtenstein, or Norway.³⁵⁸ Additionally, EDIRPA, like the EDF, ensures that no third parties can restrict the export or use of EDIRPA-financed products. Exceptions for urgent defense products are allowed, provided that states seek autonomous long-term solutions or the acquisition occurred before Russia's 2022 invasion. Under the European Peace Facility, an EU financing instrument to support military and defense actions, French President Emmanuel Macron also conceded to non-EU purchases.

Similar disputes delayed the publication of EDIS until March 2024. While many governments now support the EU defense-industrial base, they are still reluctant to promote a clear EU preference. Overall, the prospects for a true "Buy European" policy face significant obstacles. Since the war started, 78 percent of member states' military acquisitions have been from non-EU sources, predominantly the United States, which accounts for 80 percent of this share.³⁵⁹ Projects like the German-led European Sky Shield Initiative and the high number of countries that have acquired U.S. F-35 combat aircraft show a preference for NATO frameworks over EU ones. Reversing this trend would require a fundamental shift from the alliance to the union as a credible entity for defense investment and procurement. This appears unlikely given NATO's centrality in the current geopolitical context, the resurgence of budgetary constraints, and enduring distrust of the European Commission in defense matters.

Conclusions: A Glass Half Empty or Half Full?

The war in Ukraine has had a mixed impact on the development of EU economic statecraft in defense. The commission has leveraged the crisis to advance policy proposals aimed at greater centralization, stronger economic dirigisme, and a preference for EU firms. However, despite initial hopes that the crisis might enhance regional integration, long-standing resistance from the EU member states has persisted, if not intensified, on three core dimensions of economic statecraft. First, member states still resist further centralization of EU competencies, preferring to keep control of procurement, production, and financing. Second, there is no consensus among Europeans on the extent and forms of EU economic dirigisme in Europe's rearmament and its financing. And third, Europeans still disagree over how open EU subsidies should be to foreign—mostly American—suppliers.

However, despite the current limitations of EU economic statecraft in defense, it would be foolish to discard its development outright. The union's current defense-industrial policy instruments definitively privilege EU-centered defense initiatives over a free-market approach.

As very often in EU politics, these instruments will pull their full weight only in a few years' time, so the jury is still out.

Is this evolution different from what is happening in other industrial sectors? A major difference is that unlike economic policies, the EU's defense-industrial policy rests on a competency that is limited and contested on political, legal, and normative grounds. As illustrated by the European preference for U.S. equipment and by political statements like Scholz's in June 2024, there are disagreements about whether the EU is the right arena for defense-industrial cooperation, whether the union's treaties even allow for such a role, and whether rearmament is what the EU should be about. But in more ways than is usually acknowledged, this situation is comparable with that in other sectors. The central questions are how open the EU can afford to remain and how open it wishes to be. As in other industrial sectors, the incoming commission will need to craft a consensus among the member states, which diverge on how to respond to U.S. and Chinese moves.

Similarly, a key determinant of the EU's approach to defense-industrial policy lies beyond the union's control: U.S. politics, with its impact on the future of the Atlantic alliance. The uncertainty of the U.S. commitment to European security, especially amid rising tensions in Asia, has revived the concept of a European pillar in NATO. If U.S. politics exacerbates European fears, the internal balance in Europe may shift toward more EU-centric defense statecraft, however reluctantly.

In any case, Europeans will have to address challenging questions about the form and scope of EU economic statecraft in defense. Given both Europe's concrete dependence on foreign armaments and its political traditions that privilege foreign—most often, U.S.—equipment, this is an uphill battle for proponents of more European sovereignty in defense. Divisions between intergovernmental and supranational approaches to EU statecraft, and between liberal and protectionist preferences, are expected, especially given the rise of nationalist political parties in many member states. These parties often hold anti-Brussels views and, in some cases, pro-Russia sympathies, potentially hindering major institutional and financial innovations in EU defense policy.

As in the post-Brexit dynamics, some EU leaders and the commission have used calls for more EU defense integration to foster a rally-around-the-flag effect. While this strategy is understandable, it must be employed cautiously. Many policymakers, including Macron and the EU's foreign policy chief, Josep Borrell, have called the war in Ukraine an existential threat to the EU that demands increased defense investment. However, unchecked supranational militarization could provoke a backlash from various constituencies, including left-leaning, socially oriented, militarily nonaligned groups opposed to militarization, on the one hand, and right-leaning, nationalist, or Atlanticist groups opposed to centralization, on the other.

Such a backlash would constitute a serious blow to the EU's legitimacy in general and to the commission's ambitions in particular.³⁶⁰ Given the persistent disagreements among European capitals over the next steps the EU should take on defense, the chances are that the EU's future will be determined by nondecisions rather than by a common vision.

CHAPTER 9

EU Political Legitimacy in a Postneoliberal World

Rosa Balfour

An observation by Italian Marxist philosopher Antonio Gramsci in the 1930s ominously captures today's anxiety about the future: "The crisis consists precisely in the fact that the old is dying and the new cannot be born; in this interregnum a great variety of morbid symptoms appear."³⁶¹ Diagnoses of the end of the liberal international order have been qualified by assessments of the perils of weaponized interdependence, the "fuzzy bifurcation" between geopolitics and globalization, the overstretch of hyperglobalization, and the end of neoliberalism, which had been the ideology behind the so-called Washington consensus.³⁶²

In April 2023, U.S. National Security Adviser Jake Sullivan spelled out how the United States needed to respond to this global and domestic turmoil by restoring "the *compacts* between governments and their voters and workers" (emphasis added).³⁶³ To do so, he said, the United States and its global partners needed to build a new international order underpinned by norms that would address the challenges of technology and security. Sullivan is not alone in seeing this time as a period of great transformation that will lead to a new political order after half a century of neoliberalism.³⁶⁴ His speech was a clear outline of the norms and goals of the new consensus. While recognizing that a novel international order cannot be built overnight, Sullivan's remarks painted an end to Gramsci's interregnum.

Europe is equally affected by these great global transformations, which run deep in society and call for far-reaching adaptations from governments. For the European Union (EU), adapting to a new, dangerous international environment could affect the legitimacy on which the European integration project was built. A long decade of crisis in the 2010s was the prequel; after 2020, the EU was jolted into accelerated action by the double shock of the

coronavirus pandemic and Russia's invasion of Ukraine. However, the EU's complex political nature makes it hard to build consensus around a shared vision for political action. Unlike the United States or China, the EU cannot express a coherent or singular vision of its future.

That said, recent policy and legislative proposals in response to global turmoil have the potential to revise the EU's role. New initiatives in climate, technology, and security and defense; the politicization of economic policies that affect the European single market and international trade; and the securitization of previously technocratic policy areas: All of these developments could bring about changes in the EU's internal and international postures. Pursuing these goals could entail moving away from some of the EU's fundamental norms at a time of shifting political realities at home and affect the union's relationships with other countries.

The Political Legitimacy of the EU's Old Order

In democracies, political order rests on several features: leadership backed by a dominant ideology, a capacity to exercise that ideological hegemony through governments that can deliver supporting policies, political parties that can win elections, and a network of think tanks and public opinion shapers that provide a degree of societal consensus.³⁶⁵ Because the EU's political order is distinct from that of states and is based on interests rather than identities, it requires a specific precondition: legitimacy.³⁶⁶

In the literature on the EU, the bloc's political legitimacy stems from a combination of three elements: inputs, procedures, and outputs.³⁶⁷ Input legitimacy rests largely with the member states. Procedural legitimacy, also called throughput, addresses the accountability of technocratic elites.³⁶⁸ And output legitimacy refers to the effectiveness of policies, the involvement of stakeholders in their implementation, and their visibility among citizens.³⁶⁹ Debates on the EU's democratic deficit have focused on the balance between EU bodies and the representation of the member states.³⁷⁰ Classic approaches to political legitimacy in the EU concentrate on the interinstitutional balance of powers, including the distribution of power between the union's supranational and intergovernmental branches, and the union's democratic deficit compared with national representative democracy.

However, a focus on institutional processes and accountability underestimates the transnational legitimacy that the EU offers its member states.³⁷¹ This is especially relevant for matters that transcend internal and external boundaries, such as those addressed in this compilation. Nor does such an approach capture what political scientist John G. Ruggie described as the "intersubjective quality" of the political order beyond its constituent features, or "the underlying principles of order and meaning."³⁷² These principles shape and transform the political order, and the language—or "generative grammar"—that gives meaning to the acceptance of political systems can be used as a clue to understand a changing order.

Interpreting legitimacy as a "social and relational phenomenon," in the words of political scientist Martha Finnemore, seems more appropriate to capture the nature of European integration, as the many studies of European successes and crises have illuminated.³⁷³

Regardless of the preferred theory of integration, there is a general convergence in the literature and among practitioners that political will is an essential ingredient in explaining the EU.³⁷⁴ Rarely spelled out precisely, political will refers to the leaderships of governments and institutions, which, informed by their respective political and ideological backgrounds, make choices to pursue a collective course of action.

That course of action can be rooted in and justified by a set of norms that underpin the integration project. Anthropologist Karl Polanyi's classic study masterfully dissected the ideas that underlie political order.³⁷⁵ In the case of the EU, the principles of the European single market provide a legally binding set of norms around which the political leadership could mobilize and justify European integration.³⁷⁶ The intuitive ingenuity of Jean Monnet, one of the EU's founding fathers, was to provide security and economic advantages—peace and prosperity—in what was a deeply political and normative process.

In light of these insights, a framework composed of four sources of legitimacy can help achieve a clearer understanding of the EU's political order: the balance of power between the EU institutions and the member states; the norms and principles that bind the union together; the political and ideological consensus that enabled the building of European integration; and the EU's international dimension. The EU's political order requires consensus on these four features, which have evolved over time to keep pace with EU treaty reform and enlargement.

The Balance Between EU and National Power

The balance between intergovernmentalism and supranationalism is reflected in the EU's institutional dynamics and captured by the debate on the EU's political legitimacy. The history of European integration is a process in which the member states unanimously agreed to shift some powers and competencies to a supranational executive. The traditional bargain of European integration between intergovernmentalism and federalism gradually shifted with the assignment of powers to the EU institutions. In 2005, a more ambitious attempt to endow the EU with a constitution met the resistance of publics in France and the Netherlands. The ensuing Treaty of Lisbon marked the end of the post-Cold War period of incremental reform, with little appetite among the union's decisionmakers or populations to take another integrating step forward.

The Norms of European Integration

The EU's second source of legitimacy consists of the norms and principles that underpin the union's policies. The founding narrative of the European order was about peace and prosperity among the EU's members, with prosperity provided by the single market. The creation of the single market was a turning point in the history of integration as it accelerated European interdependence. The single market included Europe's response to the neoliberal turn of globalization and served the EU well, with estimates that it contributed to an increase in the union's

gross domestic product (GDP) of between 2 and 5 percent.³⁷⁷ After the end of the Cold War, the single market also played a role in expanding peace and prosperity to Central Europe.

The external dimension of the single market is international trade. For decades, EU member states outsourced their economic integration and global trade to Brussels, which governed them technocratically, rooted in the multilateral, rules-based order of the World Trade Organization (WTO). Trade policy is never politically or normatively neutral, but a permissive consensus allowed the EU to pursue global economic interdependence through a variety of free-trade agreements with relatively little domestic conflict compared with other policy areas.³⁷⁸

In contrast, EU foreign and security policy was, at best, managed through intergovernmental cooperation among the member states. This approach represents a disjunction in EU governance and in the legitimacy of the union's international economic and foreign policies, as foreign policy lacks the accountability and autonomy that external economic policy enjoys.³⁷⁹ As discussed below, this disjunction can become problematic in the context of the securitization of economic policy—the challenge of EU economic statecraft.

The EU's Political and Ideological Consensus

European integration was led by a compromise between the three main political families that governed Europe's postwar politics for decades: Christian democrats, social democrats, and liberal democrats. The technocratic, solutions-oriented nature of integration helped depoliticize ideological differences over the relationship between states and markets, making a modicum of supranationalism acceptable to the postwar political parties. Integrated market-based capitalism with a human face was accompanied by national control of key fiscal and welfare competencies, where national preferences on redistribution were maintained.

The EU's own redistribution approach focused on agricultural, regional, and cohesion policies, which were reformed over time to reflect changes brought about by EU enlargement, deindustrialization, and socioeconomic change more generally. This was the European social model on which the political forces found consensus in launching the single market. The European single currency, however, did not bring about economic convergence among EU countries and regions, with inequalities between centers and peripheries highlighting deep cleavages during the 2009–2010 eurozone crisis.³⁸⁰

The marriage between neoliberal globalization and social democracy reached its peak in the 1990s with the end of the Cold War and social democracy's embrace of the third way.³⁸¹ This was a time of great reform and expansion for the EU: The 1992 Treaty on European Union created an economic and monetary union and the Common Foreign and Security Policy; the following year, the single market entered into force and the EU committed to enlarge to the countries that had just emerged from behind the Iron Curtain. This period saw a shift away from the post-Keynesian compromise between states and markets toward a tilt in favor of the latter, which was also embraced by the social-democratic left.³⁸²

The EU's International Dimension

Finally, from the 1990s onward, the EU's international legitimacy also evolved, thanks to the strength of the single market and enlargement and the same narratives of peace and prosperity that had led to the creation of the EU in the first place. In the words of the Treaty on European Union, the EU's external action was to be based on "the principles which have inspired [the EU's] own creation, development and enlargement."³⁸³

The EU's international legitimacy revolves around the union's distinctive identity as both a unique economic power that pacified relations between states and an entity that has left key security and defense competencies to the member states, most of which benefit from membership in the North Atlantic Treaty Organization (NATO) and reliance on the United States for their territorial defense. This arrangement allowed the EU to carve out its international legitimacy as dependent on the unique nature of European integration rather than on classical attributes of state power. Conceptions of the EU's international role are rooted in the way the union exported and projected its internal integration to the rest of the world. Scholars developed the notion of "civilian power" and included among its features the need to accept cooperation, a focus on nonmilitary tools, and a willingness to develop supranational structures.³⁸⁴ Further analyses identified benign attributes that, rather idealistically, define the EU as a "normative power."³⁸⁵

More recently, studies of the external impacts of the single market have highlighted the degree to which the EU projects power onto the rest of the world by virtue of its regulatory impact. Through what is now widely understood as the Brussels effect, thanks to the size of its market, the EU has a transformative impact on the rest of the world multilaterally as well as unilaterally because of the need for global businesses to adapt to its regulations.³⁸⁶

The Crisis of the EU Order

This picture did not last long. By the time the global financial crisis struck the EU in 2008, public opinion had already hit the pause button on EU reform with the 2005 rejections of the proposed constitutional treaty. Neoliberal dogma blinded the EU elites to the problems that the financial crisis exposed in the ensuing eurozone turmoil.³⁸⁷ Whereas the United States was able to bounce back from the crisis, in Europe it spread across different domains of integration, affecting various parts of the continent, and was met with muddled responses that never added up to deeper political solutions.

In foreign policy, the EU's ambitions in the 1990s and 2000s to strengthen its security and defense capacities were thwarted by political realities. Most notably, the EU proved unable to prevent its own neighborhoods in Eastern Europe, North Africa, and the Middle East, whose citizens had staged revolutions in the name of political reform, from descending into conflict and geopolitical competition. These developments called into question the concepts and rhetoric that formed the EU's international identity.

During the 2010s, trust in the EU reached some of its lowest points. The political-party system that had supported European integration had become increasingly fragmented from the 1980s onward.³⁸⁸ This fragmentation led first to the emergence of new green parties and movements and then to the rise of left- and right-wing populist parties, many of which, especially on the radical right, became an established part of the European political landscape. The space in which to build consensus for European integration changed significantly: The three main political families now share a shrunken center, while Euroskepticism has consolidated on the left and right of the political spectrum.³⁸⁹ A growing nationalist-populist radical right, in particular, is questioning the value and reach of the EU itself.

Meanwhile, a series of crises cut across traditional distinctions between internal and external policies, affecting the disjunction between economic and foreign policies and creating path dependencies between them. The term “polycrisis,” used by former European Commission president Jean-Claude Juncker, became a catch-all word that encapsulated the complex nature and breadth of the crises and the speed at which they unfolded.³⁹⁰

By the early 2020s, when the coronavirus pandemic hit and Russia invaded Ukraine, the EU had been crippled by a long decade of polycrisis that included the United Kingdom’s (UK’s) departure from the bloc; the accentuation of an international environment hostile to the EU; the deterioration of security around the union, with conflicts and wars of aggression; a neuralgic vulnerability to immigration and refugee crises, triggered mostly by the proliferation of conflicts around the EU; and the fragmentation of the political landscape, with the consequent rise of populism across Europe. The politicization of European integration also meant the end of the permissive consensus that had characterized the first decades of integration.

Against this background, the EU has responded to the polycrisis and geopolitical turmoil through an intense period of policy and legislative initiatives. Yet, the EU is caught between an unwillingness to pursue institutional reform and the geopolitical imperatives of transforming its economy, building out its security, and enlarging to Eastern Europe and the Western Balkans. How this situation will affect the EU’s balance of power and representation, the union’s political and ideological support, and the normative consensus for the EU’s policies remains to be seen.

Emerging Tensions Between Economic and Foreign Policies

The EU’s recent legislative activism is a response to the emerging postneoliberal world. To address the climate crisis, geopolitical ruptures, and disruptions to globalization, the EU has responded with new policies, strategies, and regulations. All of these initiatives, including those addressed in this compilation, accentuate the nexus between political and economic tools as well as their internal and external dimensions. The notion of strategic autonomy, for instance, has ballooned from a controversial debate on security and defense to a concept that includes the economy, health, and welfare.³⁹¹

Tensions between the EU's norms and policy practice have always existed. But the new linkage between domestic and foreign policies that runs through the challenges of geopolitics and globalization requires the union to take a novel view of the kind of consensus that should underpin EU policies going forward. An April 2024 report by former Italian prime minister Enrico Letta described the EU's economic security, trade policy, enlargement, and relations with strategic partners as “pivotal” for the future of the single market.³⁹² The union's 2024–2029 Strategic Agenda, approved at the June 2024 European Council meeting, was an attempt by EU leaders at fusing internal and external policies.³⁹³ Yet, the degree to which the agenda will make the union fit for the current international geopolitical context remains unclear.

Meanwhile, the September 2024 report on EU competitiveness by former European Central Bank president Mario Draghi, which informs the agenda of the 2024–2029 commission, focuses more firmly on internal policies than on their external implications.³⁹⁴ Much will depend on the implementation of the EU's policies, their impact in practice, and the responses of stakeholders in and outside the EU.

The Balance Between EU and National Power

The commission has enhanced its role in recent years in several ways. Following the British decision in 2016 to leave the EU, the other member states agreed to resist London's attempts to divide the bloc and tasked the commission with negotiating the UK's departure. Later, in response to the coronavirus pandemic, the member states gave the commission a role in managing matters of health—not an EU-level competency—to procure vaccinations. The EU activated extraordinary financial tools not only to support the response to the pandemic but also to provide military assistance for Ukraine in the wake of its 2022 invasion by Russia.

These developments raise questions of legitimacy about the balance between representation and the executive. In areas where the commission's mandate is ambiguous, such as health, there are questions of democratic accountability with respect to both competencies and procedures.³⁹⁵ There also is a risk of a backlash from the member states against the leadership of the commission.³⁹⁶

Looking ahead, some of the EU's recent measures on foreign investment screening to defend the EU from foreign interference, as well as the EU's new Economic Security Strategy to protect essential sectors, will require active collaboration between the commission and the member states to avoid imbalances and vulnerabilities. This collaboration will require substantial buy-in from the member states and an acceptance of greater interference from Brussels.

Meanwhile, calls for greater investment in security and defense, an industrial policy for a green and digital economy, and further EU enlargement do not square with the EU's budget resources, which are capped at 1 percent of the union's GDP.³⁹⁷ The question of how to pay for the EU's plans will be accompanied by tensions over who should pay for them. Draghi's

assessment of the need for €800 billion (\$879 billion) a year to prevent the EU’s “slow agony” was met with skepticism in European capitals.³⁹⁸

These are salient questions with respect to the EU’s output legitimacy. In other words, the EU needs public trust to fend off accusations of technocracy and ensure its decisionmaking process is transparent and democratic and has the buy-in of Euroskeptic actors.

The Norms of European Integration

All of the emerging policies entail a degree of normative departure from past principles. The new policies’ language and framing—what Ruggie called “generative grammar”—focus far more than previous approaches on protecting Europe’s economy and democracy from foreign interference and on safeguarding the European way of doing things. In contrast with the creation of the single market, where the EU’s task was to overcome barriers between member states to create a level playing field and strengthen the union’s competitiveness, today’s policy documents emphasize the risk of the EU losing out amid global competition and the race toward new technologies.³⁹⁹

EU industrial policies, technological innovation, investment in climate action, and attempts to compete with the U.S. Inflation Reduction Act, which aims to spur investment in green technology, all risk creating protectionist pockets in the EU, whereby member states with healthier public finances can subsidize their national industries. This situation could lead to a subsidies-driven race to the bottom that would challenge the notion of a level playing field in the single market by engendering competition among the member states.

Examples of this scenario are already visible. EU state aid increased threefold between 2015 and 2021. Between March 2022 and August 2023, Brussels approved €733 billion (\$808 billion) in state support, of which Germany accounted for half, undermining the level playing field in favor of the big member states.⁴⁰⁰ The EU’s approval in early 2024 of a matching subsidy to persuade a Swedish battery maker to invest in Germany rather than in the United States was described by one observer as “a showcase of the EU’s new protectionism.”⁴⁰¹ As well as raising questions over imbalances in the EU because of changing rules on competition and state aid, the protectionism critique also underlines a potential discrepancy among European norms. As Giovanni Grevi and Richard Youngs argue in this compilation, the EU’s new Economic Security Strategy seems to be focused more on instrumentalized economic relations through political negotiation than on socially balanced, rules-based market liberalization.

Another potential normative departure relates to the EU’s need to invest in security and defense to counter the Russian threat on NATO’s Eastern flank, which overlaps with the EU’s Eastern edge, and U.S. disengagement from European security promised by President-elect Donald Trump. One taboo was already broken in early 2024, when EU leaders agreed to change the rules of the European Investment Bank to allow it to lend for investments in the defense sector.⁴⁰² As Catherine Hoeffler argues in this compilation, defense spending by the

EU—as opposed to its member states—would represent a break from the EU’s peace-oriented DNA. Hoeffler also observes that paradoxically, this trend is not making European defense more European but more tied to the United States.

Shifts in the EU’s Political and Ideological Consensus

The shift toward a narrative centered on the notion of European sovereignty, with greater EU autonomy and self-reliance in a competitive world, is visible in the political rhetoric of most European leaders, especially since the United States passed the Inflation Reduction Act in 2022. German Chancellor Olaf Scholz, in a much-awaited speech on his vision for Europe’s future, even spoke of “Made in Europe 2030.”⁴⁰³ Hungary’s slogan for its presidency of the EU Council in the second half of 2024 was inspired by Trump: Make Europe Great Again. French President Emmanuel Macron contextualized these shifting norms in the framework of defining a postneoliberal order, arguing that protecting strategic assets from foreign interference was a “complete ideological change.”⁴⁰⁴

Some EU leaders seem to value openness, coherence between external and internal policies, and multilateralism more than others. In 2021, the Dutch and Spanish prime ministers unusually banded together to produce a nonpaper on open strategic autonomy, which argued that “rather than independence, what strategic autonomy must foster is greater resilience and interdependence, in the context of more balanced, and better governed globalization. . . . Strategic autonomy must be a means for this, not an end in itself.”⁴⁰⁵ The commission’s Directorate General for Trade also embraced the addition of the word “open” to the concept of EU strategic autonomy.⁴⁰⁶

The space for a new compromise between Europe’s political families is also unclear. Macron is the strongest advocate of the notion of greater intervention in the European economy, which, he said, used to be a “taboo in Europe” and is now possible because “our competitors are interfering in the markets.”⁴⁰⁷ Paradoxically, Macron sits in the liberal-democratic political family, which continues to place importance on free and open trade.

How the consolidation of the radical right will affect the political compromise in the EU remains uncertain, as until recently, the radical right’s electoral successes had not translated into an ability to shape policies. Radical-right parties themselves are divided between free-traders, as in the Netherlands and Sweden, and economic protectionists, as in France and Italy. But most of these parties converge on a deep hostility to EU-level competencies. Enhancing Europe’s security by protecting the economy and investing in defense would require a greater oversight role for the commission and collaboration between the EU and national levels. The area of economic security would also require a strengthened EU role in monitoring and governing investment flows, which would interfere in domestic policy. This would clash with the economic nationalism that most of the radical right embraces. Hungary’s deep ties with Russia and China would be questioned by an advancing EU economic security agenda.⁴⁰⁸

The fragmentation of Europe's political landscape adds another layer of complexity to the emerging consensus. To both the right and the left of the ever-shrinking majority of pro-EU parties are groups that might agree on the need to protect national security but disagree on the need to collaborate among themselves to do so, especially if it entails giving greater responsibilities to Brussels.

Europe's International Legitimacy

After decades of praising interdependence as a win-win, peace-supporting economic growth strategy, the EU's public narrative has shifted to prioritize defending its interests from outside weaponization and promoting them elsewhere. In an effort to balance EU interests with global public goods, the notion of open strategic autonomy tries to reconcile protection of the European economy with an openness to trade and a commitment to the WTO rules-based order. But, as Grevi and Youngs argue in this compilation, the EU is moving toward a less commons-oriented and more power-oriented understanding of international order.

The EU's acceleration of its climate change policies has been a source of friction with the rest of the world. Global partners from Brazil to Indonesia have accused the EU of using climate conditionality as a cover for protectionism. In trade and climate change policies, the EU stands accused of pursuing extractive diplomacy to access raw materials or raise environmental standards to the detriment of development.⁴⁰⁹ Some policies, such as the Carbon Border Adjustment Mechanism, a tariff on carbon-intensive imports into the EU, can create negative externalities for third countries. The EU's Critical Raw Materials Act could shift climate risks to third countries or conflict with international norms on human rights, the environment, and social justice. Other policies could even contradict the rules-based order: EU export controls, the European Chips Act to encourage semiconductor production, the Net-Zero Industry Act to increase clean technologies, and foreign direct investment screening are in danger of breaching or bending WTO rules.⁴¹⁰

Finally, an excessive focus on domestic interests, especially when economic nationalism has political value at home, or on defensive measures risks driving what British economist Joan Robinson called "beggar-thy-neighbor" policies, whereby governments compensate for economic weaknesses at home by externalizing problems to other countries, for instance through tariffs.⁴¹¹

All of these measures, negative externalities, and blind spots present the risk of a departure from the EU's treaty-based principles and general global commitments. The potential consequences of such a departure include reputational damage in terms of the EU's credibility in upholding a rules-based order and functioning multilateral institutions, an erosion of bilateral relations with global partners, and a risk of contamination across policy fields.

Conclusions: EU Political Legitimacy in Flux

The shift toward a postneoliberal international environment suggests the need for a new European consensus to deal simultaneously with the end of U.S. hegemony, global economic and security shocks, and social and political transformations at home that deepen the connections between domestic and international politics. The neat separation between economic and foreign policies is long over, but the EU has not upgraded its governance to reflect the linkages between them. While elements of change are visible, the way in which a new consensus may come about is less clear.

Revised political legitimacy for the EU would require three elements. First, the member states and the institutions must strike a new bargain over EU governance and economic statecraft, which, among other things, would make foreign and economic policies more integrated. Second, the EU needs a clearer vision of the norms and goals for a postneoliberal world on which political consensus can be found. And third, if any international ambition remains, the EU must reconcile its domestic and external norms to match its internal principles with global shared values.

Instead, the EU is struggling to manage the global misalignment of geopolitics and globalization because the union itself is disjointed as a result of its different governance models for domestic and foreign policies. This disjunction will persist, making the EU's use of economics for foreign policy ends subject to political and institutional uncertainty.

Tensions are visible along the relationship between national and EU powers, and economic and security imperatives may require a stronger and more centralized executive at the expense of national competencies. This situation is compounded by the rise of a nationalist radical right that is deeply hostile to ceding power to Brussels. And even if a new compromise can be reached, it will require a profound rethink of the accountability of the union and its democracies.

Externally, the EU's direction of travel in many instances goes against the principles of the rules-based order by which the union's international standing and policies are defined. Striking a new balance between multilateralism and global commons, on the one hand, and European resilience and security, on the other, may be out of reach in a disorderly, competitive, and dangerous world. Yet, reducing global tensions will be impossible without international actors who are committed to greater cooperation and can rely on the attractiveness of their proposition. When focusing on its interests, the EU should not forget where its strengths lie.

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CHAPTER 10

Reluctant Statecraft for a Corrosive Era

Rosa Balfour and Sinan Ülgen

The gradual weakening of the West's global influence is leading to a more fractured world economy. This trend is likely to result in less extensive international cooperation on reshaping economic institutions or addressing geoeconomic forces. Essentially, it will compel national governments to use instruments of economic statecraft to deal with domestic issues. This shift may lead to increased friction within the West and with the rest of the world, and may result in only piecemeal efforts to tackle global challenges like climate and technological change.

Against the backdrop of such consequential geopolitical developments, the European Union (EU) has been forced to devise a new paradigm for its economic statecraft. The EU's policy activism, designed to bolster the union's capacity to enhance its economic security, is testament to the political priority attached to this objective. Compared with the principles that originally underpinned the European single market—such as an almost complete ban on industrial subsidies, a rejection of national champions, and the identification of strategic industries that were to benefit from public largesse—the EU is now moving in the direction of a more dirigiste and ambitious industrial policy.

To be fair, the EU is not the only economic power on this journey. An April 2024 analysis by the International Monetary Fund showed that there had been over 2,500 industrial policy interventions worldwide in 2023, more than two-thirds of which were trade distorting; China, the EU, and the United States accounted for almost half of these new measures.⁴¹² And yet, the decision to take this path, which is tantamount to a gradual loosening of the neoliberal principles of economic governance that sustained the philosophy of European integration, means that EU policymaking will face novel internal and external challenges.

Addressing Internal Divisions

Internally, the search for a new paradigm for the EU's political economy is challenging from a normative point of view, as it represents a departure from the rules-based principles of multilateralism. The compromise found in the notion of open strategic autonomy leaves much room for ambiguity, discretion, and problems of definition. Even if the EU's member states and institutions were to agree on recipes that entailed greater dirigisme and interventionism, there would be no agreement on the financing of investment in strategic sectors.

The EU will need to craft an industrial policy strategy that strikes the right balance between the bloc's aspiration to support key industries and the imperative to maintain fair competition in the single market. Yet, the member states still disagree about the level of ambition for the union's industrial policies. These disagreements are based not only on member states' divergent principles but also on problems of redistribution among the twenty-seven countries. Small member states are concerned that without corrective measures, the politics of scale may disadvantage them. Hence, small EU countries gave a tepid response to the proposals in the April 2024 report by former Italian prime minister Enrico Letta on the future of the single market.⁴¹³ Europe's general vacuum of vision when it comes to strengthening the EU's economic statecraft is also visible in the lack of reaction to French President Emmanuel Macron's dense speeches about Europe's mortality or to former European Central Bank president Mario Draghi's lengthy report on how to prevent the EU's "slow agony."⁴¹⁴

Even if the member states were to agree on the imperative of upscaling the single market, the quest to catch up with the United States and China may lead to shortcomings, such as defensive measures to plug gaps and internal weaknesses at the expense of more rounded objectives that balance other interests. Frontloading goals of European sovereignty or national security can be detrimental to the pursuit of other public goods, such as climate and technological leadership.

The shift toward protectionism requires a new balance of powers between the EU's executive arm and its member states. The European Commission has a particular interest in strengthening its coordination role to ensure the implementation of measures on which the member states have agreed. This centralization needs to be squared with the commission's role as guardian of the EU's treaties and the level playing field required for the functioning of the single market. And with the rise of Euroskeptic, radical-right forces, even if the EU reaches a consensus on the need to protect the economy and pursue a dirigiste industrial policy, this consensus may not necessarily translate into EU-level action. On the contrary, it might unleash the dynamics of fragmentation between competing states, with each pursuing its perceived national interests.

Mitigating External Impacts

On another level, the EU will need to navigate the complexities of ensuring that its economic statecraft remains as compatible as possible with the bloc's commitments to multilateral rules. As the traditional champion of a liberal, rules-based regime, the EU has a special responsibility to protect global multilateralism. Weaponized interdependence unleashes dynamics that incentivize disengagement from international cooperation. Even if the EU portrays itself as responding to such weaponization by others, the bloc's emphasis on European sovereignty can jeopardize the search for global solutions to shared problems.

Without adequate balances between the EU's internal and external priorities and between foreign policy and economic goals, the union risks externalizing its economic weaknesses and pursuing what economist Joan Robinson called "beggar-thy-neighbor" strategies.⁴¹⁵ Such approaches are often compounded by the value placed on national protection in domestic political debates. The EU would do well to avoid this trap, lest it squander what is left of its reputational capital.

Ultimately, the success of the EU's policy agenda will depend on the union's ability to strike a balance between pursuing its interests and upholding global rules. While the EU may see its economic statecraft as necessary to address the bloc's ambition of economic resilience, globally there are concerns about the potential unintended consequences of this approach. The external implications of the EU's burgeoning economic statecraft will require the union to engage in diplomacy with other countries to mitigate the impact of its domestic measures on the multilateral order.

A particularly salient policy challenge is reform of industrial subsidies. Today's subsidy regime, which is embedded in multilateral trade rules, has become antiquated in the face of an evolving global economy and the rise of prominent priorities like climate change. Compliance can no longer be guaranteed, as illustrated by the increased proclivity of many players, including China, the EU, and the United States, to adopt domestic measures that clearly contradict the global subsidy regime. Therefore, either governments will strive to reform the regime, or it will collapse under its own contradictions.⁴¹⁶ Global discussions in this area should focus on the creation of a category of acceptable industrial subsidies to advance the green and digital transitions.⁴¹⁷

Meanwhile, when tailoring its economic statecraft, the EU should strike a balance between its aspiration of economic security and its broader foreign policy goals to avoid undermining the rules-based international order. This balance will be crucial for the union to maintain credibility and legitimacy on the international stage. The EU should therefore foster an international engagement strategy to make its practice of economic statecraft compatible with the broader development concerns of the rest of the world.

In this respect, the trap to avoid is Western-centrism—or, to put it another way, the dangerously mistaken belief that the EU's political initiatives will be accepted by the rest of the

world merely because they are justified by moral and ethical considerations, like fighting climate change or preventing social dumping. A new conceptual framework, which is guided by the principle of liberal solidarity and links the EU's economic statecraft to the global development agenda, should form the basis of this dialogue.

Under this rubric, EU policymakers should discuss ways to mitigate possible negative impacts of their policy actions designed to enhance the EU's economic resilience. One clear target is the Carbon Border Adjustment Mechanism, which the EU introduced to support its internal Emissions Trading System, but which has the potential to be interpreted by the Global South as green protectionism. The EU should therefore be ready to discuss the unintended developmental impacts of this package with the third countries affected. Similarly, in the context of the EU's approach to clean transition materials, the union should seek to establish partnerships that make a clear value proposition to resource-holding countries as part of the EU's strategic trade policy.

A complementary track would be for the EU to leverage its resources to assist the development of global infrastructure. In this respect, the EU should aim to shape new partnerships based on mutual interests, generate public-private finance, scale up the Global Gateway infrastructure investment initiative, and connect this initiative better to foreign policy and development goals.

These imperatives highlight the pressing need for the EU to balance its economic statecraft with its broader strategic goals and avoid a disproportionate focus on immediate prerogatives at the expense of long-term, order-related, global public goods. Along with its tailoring of economic statecraft, the EU should in essence relearn the art of the strategic management of interdependence. The union should seek to be both strategic and open. Ultimately, the EU's ability to address the challenges of global turmoil, shifting political realities, and the demands of its member states will determine its future trajectory in a rapidly evolving world.



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Notes

- 1 Henry Farrell and Abraham L. Newman, “Weaponized Interdependence: How Global Economic Networks Shape State Coercion,” *International Security* 44, no. 1 (2019): 42–79, <https://doi.org/10.1162/isec.a.00351>.
- 2 Richard Higgott and Simon Reich, “The Age of Fuzzy Bifurcation: Lessons From the Pandemic and the Ukraine War,” *Global Policy* 13, no. 5 (2022): 627–639, <https://doi.org/10.1111/1758-5899.13141>.
- 3 “Discours du Président de la République sur l’Europe à la Sorbonne” [Speech by the President of the Republic on Europe at the Sorbonne], Élysée Palace, April 25, 2024, <https://www.elysee.fr/front/pdf/elysee-module-22625-fr.pdf>.
- 4 Philip Blenkinsop, “Draghi Urges EU to Catch Up Rivals or Face ‘Slow Agony,’” Reuters, September 9, 2024, <https://www.reuters.com/markets/europe/draghi-urges-reform-massive-investment-revive-lagging-eu-economy-2024-09-09/>.
- 5 “European Council Meeting (27 June 2024) – Conclusions,” European Council, June 27, 2024, <https://www.consilium.europa.eu/media/qa3lbg/a/euco-conclusions-27062024-en.pdf>.
- 6 Enrico Letta, “Much More Than a Market,” Council of the European Union, April 2024, <https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf>; and “The Future of European Competitiveness: Part A | A Competitiveness Strategy for Europe,” European Commission, September 2024, https://commission.europa.eu/document/download/97e481fd-2dc3-412d-be4c-f152a8232961_en?filename=The%20future%20of%20European%20competitiveness%20%20A%20competitiveness%20strategy%20for%20Europe.pdf.
- 7 Kathleen R. McNamara, “Transforming Europe? The EU’s Industrial Policy and Geopolitical Turn,” *Journal of European Public Policy* 31, no. 9 (2024): 2371–2396, <https://doi.org/10.1080/13501763.2023.2230247>.
- 8 John Maynard Keynes, *The General Theory of Employment, Interest, and Money* (London: Macmillan, 1936); E. H. Carr, *The Twenty Years’ Crisis, 1919-1939* (London: Macmillan, 1981); Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston: Beacon Press, 2001); and Gunnar Myrdal, *An International Economy: Problems and Prospects* (New York: Harper & Brothers, 1956).
- 9 Charles P. Kindleberger, *The World in Depression, 1929-1939* (Berkeley: University of California Press, 1986).
- 10 John Gerard Ruggie, “International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order,” *International Organization* 36, no. 2 (1982): 379–415.
- 11 Robert O. Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy* (Princeton: Princeton University Press, 1984).
- 12 David P. Calleo, *Beyond American Hegemony: The Future of the Western Alliance* (New York: Basic Books, 1987).

- 13 Robert O. Keohane and Joseph S. Nye, Jr., *Power and Interdependence* (London: Pearson, 2011).
- 14 Susan Strange, *Casino Capitalism* (London: Basil Blackwell, 1986).
- 15 Richard N. Cooper, *The Economics of Interdependence: Economic Policy in the Atlantic Community* (New York: McGraw Hill, 1968).
- 16 Robert Gilpin, *U.S. Power and the Multinational Corporation: The Political Economy of Foreign Direct Investment* (New York: Basic Books, 1975).
- 17 Lloyd Gruber, *Ruling the World: Power Politics and the Rise of Supranational Institutions* (Princeton: Princeton University Press, 2000).
- 18 Daniel Gros and Niels Thygesen, *European Monetary Integration: From the European Monetary System to Monetary Union* (London: Longman, 1992); and Jacques Pelkmans, "The New Approach to Technical Harmonization and Standardization," *Journal of Common Market Studies* 25, no. 3 (1987): 249–269.
- 19 Nicolas Jabko, *Playing the Market: A Political Strategy for Uniting Europe, 1985-2005* (Ithaca: Cornell University Press, 2006).
- 20 Robert O. Keohane and Stanley Hoffmann, eds., *The New European Community: Decisionmaking and Institutional Change* (Boulder: Westview, 1991).
- 21 Lora Anne Viola, *The Closure of the International System: How Institutions Create Political Equalities and Hierarchies* (Cambridge: Cambridge University Press, 2020).
- 22 Raúl Prebisch, "The Economic Development of Latin America and Its Principal Problems," *Economic Bulletin for Latin America* 7, no. 1 (1962): 1–22; and Fernando Henrique Cardoso and Enzo Faletto, *Dependency and Development in Latin America* (Berkeley: University of California Press, 1979).
- 23 Robert W. Cox, "Ideologies and the New International Economic Order: Reflections on Some Recent Literature," *International Organization* 33, no. 2 (1979): 257–302.
- 24 Gruber, *Ruling the World*.
- 25 Viola, *The Closure of the International System*.
- 26 Elinor Ostrom, *Understanding Institutional Diversity* (Princeton: Princeton University Press, 2005).
- 27 John Williamson, "A Short History of the Washington Consensus," *Law and Business Review of the Americas* 15, no. 1 (2009): 7–26, <https://scholar.smu.edu/lbra/vol15/iss1/3>.
- 28 Paul Blustein, *The Chastening: Inside the Crisis That Rocked the Global Financial System and Humbled the IMF* (New York: Public Affairs, 2003).
- 29 Richard Bookstaber, *A Demon of Our Own Design: Markets, Hedge Funds, and the Perils of Financial Innovation* (London: Wiley, 2008).
- 30 Manuela Moschella, *Governing Risk: The IMF and Global Financial Crises* (London: Palgrave Macmillan, 2010).
- 31 Nancy Cartwright and Jeremy Hardie, *Evidence-Based Policy: A Practical Guide to Doing It Better* (Oxford: Oxford University Press, 2012).
- 32 André Sapir, "Globalization and the Reform of European Social Models," *Journal of Common Market Studies* 44, no. 2 (2006): 369–390, <https://doi.org/10.1111/j.1468-5965.2006.00627.x>.
- 33 Thomas Philippon, *The Great Reversal: How America Gave Up on Free Markets* (Cambridge: Harvard University Press, 2019).
- 34 Sophie Meunier, *Trading Voices: The European Union in International Commercial Negotiations* (Oxford: Oxford University Press, 2005).
- 35 Tony Clarke, "Taking on the WTO: Lessons From the Battle of Seattle," *Studies in Political Economy* 62, no. 1 (2000): 7–16, <http://dx.doi.org/10.1080/19187033.2000.11675238>.
- 36 Alasdair R. Young and John Peterson, "The EU and the New Trade Politics," *Journal of European Public Policy* 13, no. 6 (2006): 791–810, <https://doi.org/10.1080/13501760600837104>.

- 37 Alasdair R. Young and John Peterson, *Parochial Global Europe: 21st Century Trade Politics* (Oxford: Oxford University Press, 2014).
- 38 Keynes, *The General Theory*, 382.
- 39 Cas Mudde, “The Populist Zeitgeist,” *Government and Opposition* 39, no. 4 (2004): 541–563, <https://doi.org/10.1111/j.1477-7053.2004.00135.x>.
- 40 Young and Peterson, *Parochial Global Europe*.
- 41 Veronica Anghel and Erik Jones, “The Transatlantic Relationship and the Russia-Ukraine War,” *Political Science Quarterly* (2024), <https://hdl.handle.net/1814/76987>.
- 42 Blustein, *The Chastening*.
- 43 Guillermo A. Calvo, “Capital Flows and Capital Market Crises: The Simple Economics of Sudden Stops,” *Journal of Applied Economics* 1, no. 1 (1998): 35–54, <https://doi.org/10.1080/15140326.1998.12040516>.
- 44 Blustein, *The Chastening*.
- 45 Martin Wolf, *Fixing Global Finance: How to Curb Financial Crises in the 21st Century* (New Haven: Yale University Press, 2009).
- 46 Gordon S. Smith, “G7 to G8 to G20: Evolution in Global Governance,” Centre for International Governance Innovation, May 2011, <https://www.cigionline.org/sites/default/files/g20no6-2.pdf>.
- 47 Blustein, *The Chastening*.
- 48 Erik Jones, “Shifting the Focus: The New Political Economy of Global Macroeconomic Imbalances,” *SAIS Review of International Affairs* 29, no. 2 (2009): 61–73, <https://doi.org/10.1353/sais.0.0055>.
- 49 Robert McDougall, “The Crisis in WTO Dispute Settlement: Fixing Birth Defects to Restore Balance,” *Journal of World Trade* 52, no. 6 (2018): 867–896, <http://dx.doi.org/10.54648/TRAD2018038>.
- 50 Henry Farrell and Abraham L. Newman, *Underground Empire: How America Weaponized the World Economy* (New York: Henry Holt and Company, 2023).
- 51 Maarten Prak and Jan Luiten van Zanden, *Pioneers of Capitalism: The Netherlands 1000–1800* (Princeton: Princeton University Press, 2022); and Michael Sonenscher, *Capitalism: The Story Behind the Word* (Princeton: Princeton University Press, 2022).
- 52 Quentin Bruneau, *States and the Masters of Capital: Sovereign Lending, Old and New* (New York: Columbia University Press, 2022).
- 53 Gottfried Leibbrandt and Natasha de Terán, *The Pay Off: How Changing the Way We Pay Changes Everything* (London: Elliot & Thompson, 2021).
- 54 Henry Farrell and Abraham L. Newman, “Weaponized Interdependence: How Global Economic Networks Shape State Coercion,” *International Security* 44, no. 1 (2019): 42–79, https://doi.org/10.1162/isec_a_00351.
- 55 Calleo, *Beyond American Hegemony*.
- 56 Erik Jones and Andrew Whitworth, “The Unintended Consequences of European Sanctions on Russia,” *Survival* 56, no. 5 (2014): 21–30, <http://dx.doi.org/10.1080/00396338.2014.962797>.
- 57 Farrell and Newman, *Underground Empire*.
- 58 Farrell and Newman, “Weaponized Interdependence.”
- 59 Anghel and Jones, “The Transatlantic Relationship.”
- 60 Franco Mosconi, *The New European Industrial Policy: Global Competitiveness and the Manufacturing Renaissance* (London: Routledge, 2015).
- 61 Erik Jones, “Introduction,” *International Affairs* 80, no. 4 (2004): 587–593, <https://doi.org/10.1111/j.1468-2346.2004.00405.x>.
- 62 McNamara, “Transforming Europe?”; and Sarah Bauerle Danzman and Sophie Meunier, “The EU’s Geoeconomic Turn: From Policy Laggard to Institutional Innovator,” *Journal of Common Market Studies* 62, no. 4 (2024): 1097–1115, <https://onlinelibrary.wiley.com/doi/full/10.1111/jcms.13599>.

- 63 Salman Ahmed and Rozlyn Engel (eds.), “Making U.S. Foreign Policy Work for the Middle Class,” Carnegie Endowment for International Peace, September 23, 2020, <https://carnegeendowment.org/research/2020/09/making-us-foreign-policy-work-better-for-the-middle-class?lang=en>.
- 64 Sebastian Heidebrecht, “From Market Liberalism to Public Intervention: Digital Sovereignty and Changing European Union Digital Single Market Governance,” *Journal of Common Market Studies* 62, no. 1 (2024): 205–223, <https://doi.org/10.1111/jcms.13488>; and Daniel Fiott, “From Liberalisation to Industrial Policy: Towards a Geoeconomic Turn in the European Defence Market?,” *Journal of Common Market Studies* 62, no. 4 (2024): 1012–1027, <https://doi.org/10.1111/jcms.13600>.
- 65 Jones and Whitworth, “The Unintended Consequences.”
- 66 Daniel McDowell, *Bucking the Buck: US Financial Sanctions and the International Backlash Against the Dollar* (Oxford: Oxford University Press, 2023).
- 67 Christian Freudlsperger and Sophie Meunier, “When Foreign Policy Becomes Trade Policy: The EU’s Anti-Coercion Instrument,” *Journal of Common Market Studies* 62, no. 4 (2024): 1063–1079, <https://doi.org/10.1111/jcms.13593>.
- 68 Erik Jones, “COVID-19 and the EU Economy: Try Again, Fail Better,” *Survival* 62, no. 4 (2020): 81–100, <http://dx.doi.org/10.1080/00396338.2020.1792124>.
- 69 Rajiv J. Shah, “The COVID Charter: A New Development Model for a World in Crisis,” *Foreign Affairs*, August 24, 2021, <https://www.foreignaffairs.com/articles/africa/2021-08-24/covid-charter>.
- 70 Christine Abley, *The Russia Sanctions: The Economic Response to Russia’s Invasion of Ukraine* (Cambridge: Cambridge University Press, 2024).
- 71 David Miliband, “The World Beyond Ukraine: The Survival of the West and the Demands of the Rest,” *Foreign Affairs*, April 18, 2023, <https://www.foreignaffairs.com/ukraine/world-beyond-ukraine-russia-west>.
- 72 Bruce W. Jentleson, *Sanctions: What Everyone Needs to Know* (Oxford: Oxford University Press, 2022).
- 73 Abley, *The Russia Sanctions*.
- 74 Agathe Demarais, *Backfire: How Sanctions Reshape the World Against U.S. Interests* (New York: Columbia University Press, 2022).
- 75 McDowell, *Bucking the Buck*.
- 76 Anghel and Jones, “The Transatlantic Relationship.”
- 77 Bruce Stokes, “EU-US Relations After the Inflation Reduction Act, and the Challenges Ahead,” European Parliamentary Research Service, February 2024, [https://www.europarl.europa.eu/RegData/etudes/STUD/2024/759588/EPRS_STU\(2024\)759588_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2024/759588/EPRS_STU(2024)759588_EN.pdf).
- 78 Demarais, *Backfire*.
- 79 Anghel and Jones, “The Transatlantic Relationship.”
- 80 See also David A. Baldwin, “Economic Statecraft,” *Britannica*, January 21, 2016, <https://www.britannica.com/topic/economic-statecraft>.
- 81 Matthias Matthijs and Sophie Meunier, “Europe’s Geoeconomic Revolution: How the EU Learned to Wield Its Real Power,” *Foreign Affairs*, August 22, 2023, <https://www.foreignaffairs.com/europe/european-union-geoeconomic-revolution>; and Henry Farrell and Abraham L. Newman, “Weaponized Interdependence: How Global Economic Networks Shape State Coercion,” *International Security* 44, no. 1 (2019): 42–79, https://doi.org/10.1162/isec_a_00351.
- 82 For a similar taxonomy, see Ferdi De Ville, Simon Happersberger, and Harri Kalimo, “The Unilateral Turn in EU Trade Policy? The Origins and Characteristics of the EU’s New Trade Instruments,” *European Foreign Affairs Review* 28 (2023): 15–34, <https://doi.org/10.54648/err2023012>.
- 83 “Trade Policy Review – An Open, Sustainable and Assertive Trade Policy,” European Commission, February 18, 2021, https://eur-lex.europa.eu/resource.html?uri=cellar:5bf4e9d0-71d2-11eb-9ac9-01aa75e-d71a1.0001.02/DOC_1&format=PDF; and “Strengthening the EU’s Contribution to Rules-Based Multilateralism,” European Commission and High Representative of the Union for Foreign Affairs and Security Policy, February 17, 2021, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021JC0003>.

- 84 Johan Bjerkem and Marta Pilati, “A Renewed Start for Europe? 4 Takeaways From the EU’s New Industrial Strategy,” European Policy Centre, March 12, 2020, <https://www.epc.eu/en/Publications/A-renewed-start-for-Europe-4-takeaways-from-the-EUs-New-Industrial-S-30b2cc>.
- 85 “Trade Policy Review,” European Commission.
- 86 “European Economic Security Strategy,” European Commission and High Representative of the Union for Foreign Affairs and Security Policy, June 20, 2023, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52023JC0020>.
- 87 Mario Draghi, “The Future of the European Competitiveness: Part A, A Competitiveness Strategy for Europe,” European Commission, September 2024, https://commission.europa.eu/document/download/97e481fd-2dc3-412d-be4c-f152a8232961_en?filename=The%20future%20of%20European%20competitiveness%20-%20A%20competitiveness%20strategy%20for%20Europe.pdf.
- 88 Ursula von der Leyen, “Political Guidelines for the Next European Commission 2024-2029,” European Commission, July 18, 2024, https://commission.europa.eu/document/download/e6cd4328-673c-4e7a-8683-f63ffb2cf648_en?filename=Political%20Guidelines%202024-2029_EN.pdf.
- 89 Miguel Mota Delgado, “State Aid and the Geoeconomic Turn of the Internal Market,” *Agenda Pública*, April 25, 2023, <https://agendapublica.es/noticia/18557/state-aid-and-geoeconomic-turn-of-internal-market?rlc=an>.
- 90 Pawel Swieboda and Georg Riekes, “Europe’s Make-or-Break Moment: Putting Economic Security at the Heart of the EU’s 2024-2029 Strategic Agenda,” European Policy Centre, February 7, 2024, <https://www.epc.eu/en/publications/Europes-make-or-break-moment-Putting-economic-security-at-the-heart-57d26c>.
- 91 Simone Tagliapietra, “Economic Efficiency Versus Geopolitical Resilience: Strategic Autonomy’s Difficult Balancing Act,” Bruegel, March 7, 2023, <https://www.bruegel.org/first-glance/economic-efficiency-versus-geopolitical-resilience-strategic-autonomys-difficult>.
- 92 “Official Speeches and Statements – April 18, 2023,” Embassy of France in Washington, D.C., April 18, 2023, <https://franceintheus.org/spip.php?article11269>.
- 93 “Robust. Resilient. Sustainable. Integrated Security for Germany,” German Federal Government, 2023, <https://www.nationalesicherheitsstrategie.de/en.html>.
- 94 “European Economic Security Strategy,” European Commission and High Representative.
- 95 “Mario Draghi: An Industrial Strategy for Europe,” Groupe d’études géopolitiques, June 14, 2024, <https://geopolitique.eu/en/2024/06/14/mario-draghi-grand-continent-an-industrial-strategy-for-europe/>.
- 96 Authors’ interviews with European Commission officials, October 2023.
- 97 “EP Plenary: Speech by High Representative/Vice-President Josep Borrell on EU-China Relations,” European External Action Service, April 18, 2023, https://www.eeas.europa.eu/eeas/ep-plenary-speech-high-representativevice-president-josep-borrell-eu-china-relations_en.
- 98 “Critical Technology Areas for the EU’s Economic Security for Further Risk Assessment With Member States,” European Commission, October 3, 2023, https://defence-industry-space.ec.europa.eu/system/files/2023-10/C_2023_6689_1_EN_ACT_part1_v8.pdf.
- 99 “Advancing European Economic Security: An Introduction to Five New Initiatives,” European Commission, January 24, 2024, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52024DC0022>.
- 100 “Resilient EU2030,” Spanish National Office of Foresight and Strategy, 2023, <https://futuros.gob.es/sites/default/files/2023-09/RESILIENTEU2030.pdf>.
- 101 Fanny Sauvignon and Stefania Benaglia, “An EU Global Gateway ... to What?,” Centre for European Policy Studies, November 27, 2023, <https://www.ceps.eu/ceps-publications/an-eu-global-gateway-to-what/>.
- 102 “Briefing Book | International Partnerships,” *Politico*, April 2024, <https://www.politico.eu/wp-content/uploads/2024/04/18/draft-IntPa-briefing-for-next-Com-April-2024-1-cleaned.pdf>.
- 103 Anu Bradford, *The Brussels Effect: How the European Union Rules the World* (Oxford: Oxford University Press, 2020), 23.
- 104 Niclas Poiriers et al., “The EU Net Zero Industry Act and the Risk of Reviving Past Failures,” Bruegel, March 9, 2023, <https://www.bruegel.org/first-glance/eu-net-zero-industry-act-and-risk-reviving-past-failures>.

- 105 “Screening Foreign Direct Investments in the EU,” European Court of Auditors, 2023, https://www.eca.europa.eu/ECAPublications/SR-2023-27/SR-2023-27_EN.pdf.
- 106 Sophie Meunier and Kalypso Nicolaidis, “The Geopoliticization of European Trade and Investment Policy,” *Journal of Common Market Studies* 57 (2019): 103–113, <https://doi.org/10.1111/jcms.12932>.
- 107 Katharina L. Meissner, *Commercial Realism and EU Trade Policy: Competing for Economic Power in Asia and the Americas* (Abingdon: Routledge, 2018).
- 108 “European Economic Security Strategy,” European Commission and High Representative.
- 109 Simon J. Evenett, “Trade Policy: Time for a Rethink?,” in *Fragmented Power: Europe and the Global Economy*, ed. André Sapir (Brussels: Bruegel, 2007), 61–62; and Daniel Gros, “What EU ‘Geopolitical’ Power Will Cost,” Project Syndicate, December 6, 2019, <https://www.project-syndicate.org/commentary/eu-geopolitical-commission-economic-power-by-daniel-gros-2019-12>.
- 110 Farrell and Newman, “Weaponized Interdependence.”
- 111 Matthijs and Meunier, “Europe’s Geoeconomic Revolution”; and Sarah B. Danzman and Sophie Meunier, “The EU’s Geoeconomic Turn: From Policy Laggard to Institutional Innovator,” *Journal of Common Market Studies* 62, no. 4 (2024): 1097–1115, <https://ideas.repec.org/a/bla/jcmkts/v62y2024i4p1097-1115.html>.
- 112 Guntram Wolff and Federico Steinberg, “Dealing With Europe’s Economic (In-)security,” German Council on Foreign Relations, November 14, 2023, <https://dgap.org/en/research/publications/dealing-europes-economic-security>.
- 113 “Rethinking ‘Security’ in a World of Power Politics: Speech by High Representative Josep Borrell at the EU ISS Annual Conference,” European External Action Service, June 27, 2023, https://www.eeas.europa.eu/eeas/rethinking-%E2%80%98security%E2%80%99-world-power-politics-speech-high-representative-josep-borrell-eu-iss-annual_en.
- 114 Swieboda and Riekeles, “Europe’s Make-or-Break Moment.”
- 115 Authors’ interviews with European Commission officials, October 2023.
- 116 Henry Farrell and Abraham Newman, “The New Economic Security State: How De-risking Will Remake Geopolitics,” *Foreign Affairs*, October 19, 2023, <https://www.foreignaffairs.com/united-states/economic-security-state-farrell-newman>.
- 117 Authors’ interviews with European Commission officials, October 2023.
- 118 “Speech by President von der Leyen on EU-China Relations to the Mercator Institute for China Studies and the European Policy Centre,” European Commission, March 30, 2023, https://ec.europa.eu/commission/presscorner/detail/en/speech_23_2063.
- 119 Agathe Demarais, “Why Europe Will Struggle to ‘De-risk’ From China,” *Foreign Policy*, September 19, 2023, <https://foreignpolicy.com/2023/09/19/europe-eu-china-derisking-decoupling-economy-sanctions-trade-investment-taiwan-geopolitics/>.
- 120 James Crabtree, “U.S.-China De-risking Will Inevitably Escalate,” *Foreign Policy*, August 20, 2023, <https://foreignpolicy.com/2023/08/20/derisking-decoupling-us-china-biden-economy-trade-technology-semiconductors-chips-supply-chains-ai-geopolitics-escalation/>; and Ian Johnston et al., “Can Europe Go Green Without China’s Critical Minerals?,” *Financial Times*, September 20, 2023, <https://ig.ft.com/rare-earths/>.
- 121 Bernhard Bartsch et al., “From a China Strategy to No Strategy at All: Exploring the Diversity of European Approaches,” French Institute of International Relations, July 27, 2023, <https://www.ifri.org/en/external-books/china-strategy-no-strategy-all-exploring-diversity-european-approaches>.
- 122 Iliana Olivié et al., “EU Development Policy in Times of Polycrisis: 2nd ETTG Dialogue on the EU and Global Development,” European Think Tanks Group, July 2023, <https://ettg.eu/wp-content/uploads/2023/07/EUDevelopment-Policy-in-times-of-Polycrisis.pdf>.
- 123 “COP28,” European Council, August 30, 2024, <https://www.consilium.europa.eu/en/policies/climate-change/paris-agreement/cop28/#finance>.
- 124 Chloe Teevan and San Bilal, “The Global Gateway at Two: Implementing EU Strategic Ambitions,” ECDPM, November 27, 2023, <https://ecdpm.org/work/global-gateway-two-implementing-eu-strategic-ambitions>; and Sauvignon and Benaglia, “An EU Global Gateway.”

- 125 Martin Wolf, “How to Finance a Faster Shift to a Better World,” *Financial Times*, October 17, 2023, <https://www.ft.com/content/b0ba46e4-77ae-495b-9166-2d11a077858d>.
- 126 Giovanni Grevi, “What Grand Strategy for Europe? Three Competing Visions and One Proposal,” Centre for Security, Diplomacy and Strategy, February 2024, <https://csds.vub.be/wp-content/uploads/2024/02/In-Depth-Paper-102024.pdf>.
- 127 Farrell and Newman, “The New Economic Security State.”
- 128 “Questions and Answers: An Open, Sustainable and Assertive Trade Policy,” European Commission, February 18, 2021, https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_645.
- 129 “European Union GDP,” Trading Economics, <https://tradingeconomics.com/european-union/gdp>.
- 130 Ana E. Juncos and Sophie Vanhoonacker, “The Ideational Power of Strategic Autonomy in EU Security and External Economic Policies,” *Journal of Common Market Studies* 62, no. 4 (2024): 955–972, <https://doi.org/10.1111/jcms.13597>.
- 131 Scott Lavery, “Rebuilding the Fortress? Europe in a Changing World Economy,” *Review of International Political Economy* 31, no. 1 (2024): 330–353, <https://doi.org/10.1080/09692290.2023.2211281>.
- 132 For a reconstruction of the debate, see Federico Steinberg and Guntram Wolff, “Dealing With Europe’s Economic (In-)security,” *Global Policy* 15, no. 1 (2024): 183–192, <https://doi.org/10.1111/1758-5899.13303>.
- 133 Arlo Poletti, Lorenzo Zambenardi, and Dirk De Bièvre, “Time for a New Atlanticism: The EU-China Comprehensive Agreement on Investment and the International Order,” *The International Spectator* 58, no. 1 (2023): 23–37, <https://doi.org/10.1080/03932729.2022.2138054>.
- 134 Tobias Gehrke, “EU Open Strategic Autonomy and the Trappings of Geoeconomics,” *European Foreign Affairs Review* 27 (2022): 61–78, <https://doi.org/10.54648/err2022012>.
- 135 John H. Barton et al., *The Evolution of the Trade Regime: Politics, Law, and Economics of the GATT and the WTO* (Princeton: Princeton University Press, 2008).
- 136 Amichai Magen and Leonardo Morlino (eds), *International Actors, Democratization and the Rule of Law: Anchoring Democracy?* (Abingdon: Routledge, 2009).
- 137 Sarah Bauerle Danzman and Sophie Meunier, “The EU’s Geoeconomic Turn: From Policy Laggard to Institutional Innovator,” *Journal of Common Market Studies* 62, no. 4 (2024): 1097–1115, <https://doi.org/10.1111/jcms.13599>.
- 138 Emily Blanchard and Gerald Willmann, “Unequal Gains, Prolonged Pain: A Model of Protectionist Overshooting and Escalation,” *Journal of International Economics* 135 (2022): 103559, <https://dx.doi.org/10.1016/j.jinteco.2021.103559>.
- 139 Gehrke, “EU Open Strategic Autonomy”; and Luuk Schmitz and Timo Seidl, “Protecting, Transforming, and Projecting the Single Market: Open Strategic Autonomy and Digital Sovereignty in the EU’s Trade and Digital Policies,” SocArXiv, May 1, 2022, <https://doi.org/10.31235/osf.io/wjb64>.
- 140 Louise van Schaik, Giulia Cretti, and Pieter Pauw, “The CBAM Effect: The World’s Response to the EU’s Climate Stick,” Clingendael, May 24, 2022, <https://www.clingendael.org/publication/cbam-effect-worlds-response-eus-climate-stick>.
- 141 Alberto Nardelli, Jorge Valero, and Eric Martin, “US Seeks Exemption From EU Carbon Border Levy to End Tariff Dispute,” Bloomberg, March 23, 2023, <https://www.bloomberg.com/news/articles/2023-03-23/us-seeks-exemption-from-eu-carbon-border-levy-to-end-tariff-spat>.
- 142 “An EU Critical Raw Materials Act for the Future of EU Supply Chains,” European Council, September 12, 2024, <https://www.consilium.europa.eu/en/infographics/critical-raw-materials/>.
- 143 Frédéric Simon, “EU’s Critical Minerals Act Welcome but Falling Short, Say Green Groups and Industry,” Euractiv, December 7, 2023, <https://www.euractiv.com/section/circular-economy/news/eus-critical-minerals-act-welcome-but-falling-short-say-green-groups-and-industry/>.
- 144 Andreas Goldthau in this compilation.

- 145 “Electronics Industry Submits Plan to Make Europe a Global Leader in Micro and Nano-electronics,” European Commission, February 14, 2014, https://ec.europa.eu/commission/presscorner/detail/en/ip_14_148.
- 146 “European Chips Act,” European Commission, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-chips-act_en.
- 147 “Net-Zero Industry Act,” European Commission, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan/net-zero-industry-act_en.
- 148 Edward White, “How China Cornered the Market for Clean Tech,” *Financial Times*, August 9, 2023, <https://www.ft.com/content/6d2ed4d3-c6d3-4dbd-8566-3b0df9e9c5c6>.
- 149 “EU Budget: Commission Proposes Strategic Technologies for Europe Platform (STEP) to Support European Leadership on Critical Technologies,” European Commission, June 20, 2023, https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3364.
- 150 “The Inflation Reduction Act: Here’s What’s in It,” McKinsey, October 24, 2022, <https://www.mckinsey.com/industries/public-sector/our-insights/the-inflation-reduction-act-heres-whats-in-it>.
- 151 Théo Bourgery-Gonse, “Commission ‘Annihilated Symbolic Value’ of EU Sovereignty Fund, Leading MEP Says,” Euractiv, June 21, 2023, <https://www.euractiv.com/section/economy-jobs/news/commission-annihilated-symbolic-value-of-eu-sovereignty-fund-leading-mep-says/>.
- 152 Danzman and Meunier, “The EU’s Geoeconomic Turn.”
- 153 Zenobia T. Chan and Sophie Meunier, “Behind the Screen: Understanding National Support for a Foreign Investment Screening Mechanism in the European Union,” *The Review of International Organizations* 17 (2022): 513–541, <https://doi.org/10.1007/s11558-021-09436-y>.
- 154 “List of Screening Mechanisms Notified by Member States,” European Commission, August 5, 2024, <https://circabc.europa.eu/rest/download/7e72cdb4-65d4-4eb1-910b-bed119c45d47>.
- 155 “EU Foreign Investment Screening and Export Controls Help Underpin European Security,” European Commission, October 19, 2023, https://ec.europa.eu/commission/presscorner/detail/en/ip_23_5125.
- 156 Andrea Ciani and Michela Nardo, “The Position of the EU in the Semiconductor Value Chain: Evidence on Trade, Foreign Acquisitions, and Ownership,” European Commission Joint Research Centre, April 5, 2022, https://joint-research-centre.ec.europa.eu/reports-and-technical-documentation/position-eu-semiconductor-value-chain-evidence-trade-foreign-acquisitions-and-ownership_en.
- 157 János Allenbach-Ammann, “SMEI: The Many Pitfalls of the EU’s New Supply Chain Control Tool,” Euractiv, September 20, 2022, <https://www.euractiv.com/section/economy-jobs/news/smei-the-many-pitfalls-of-the-eus-new-supply-chain-control-tool/>.
- 158 Allenbach-Ammann, “SMEI.”
- 159 Pietro Lombardi, “EU’s Supply-Chain Plan Criticized for Overreaching,” *Politico*, September 16, 2022, <https://www.politico.eu/article/eu-supply-chain-plan-criticize-overreaching/>.
- 160 Varg Folkman, “EU Strapped for Staff to Combat Chinese Subsidies,” *Politico*, October 5, 2023, <https://www.politico.eu/article/european-union-commission-foreign-subsidies-regulation-unit-strapped-staff/>.
- 161 “Regulation (EU) 2023/2675 of the European Parliament and of the EU Council,” article 2, Official Journal of the European Union, December 7, 2023, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023R2675>.
- 162 Danzman and Meunier, “The EU’s Geoeconomic Turn”; and Albert O. Hirschman, *National Power and the Structure of Foreign Trade* (Berkeley: University of California Press, 1945).
- 163 “EU Foreign Investment Screening,” European Commission; and Kim B. Olsen and Claudia Schmucker, “The EU’s New Anti-Coercion Instrument Will Be a Success If It Isn’t Used,” *Internationale Politik Quarterly*, January 10, 2024, <https://ip-quarterly.com/en/eus-new-anti-coercion-instrument-will-be-success-if-it-isnt-used>.
- 164 John Reed et al., “India Denounces ‘Stifling’ EU Carbon Tax on Imports,” *Financial Times*, October 9, 2024, <https://www.ft.com/content/40648adc-b621-41a3-958a-dd038c811986>; Van Schaik, Cretti, and

- Pauw, “The CBAM Effect”; and Emily Benson, “CBAM Precedents: Experts Weigh In,” Center for Strategic and International Studies, September 8, 2022, <https://www.csis.org/analysis/cbam-precedents-experts-weigh>.
- 165 Emily Benson et al., “Analyzing the European Union’s Carbon Border Adjustment Mechanism,” Center for Strategic and International Studies, February 17, 2023, <https://www.csis.org/analysis/analyzing-european-unions-carbon-border-adjustment-mechanism>.
- 166 Sinan Ülgen, “A Political Economy Perspective on the EU’s Carbon Border Tax,” Carnegie Europe, May 9, 2023, <https://carnegieendowment.org/research/2023/05/a-political-economy-perspective-on-the-eus-carbon-border-tax?lang=en¢er=europe>.
- 167 “For a Just Critical Raw Materials Act,” *Observatori del Deute en la Globalització* (blog), July 13, 2023, <https://odg.cat/en/blog/for-a-just-critical-raw-materials-act/>.
- 168 “For a Just,” *Observatori del Deute en la Globalització*.
- 169 Liv Klingert, “EU Gets Serious on Microchip Production Amid Fears of Subsidy Race,” *Brussels Times*, December 12, 2022, <https://www.brusselstimes.com/297331/eu-gets-serious-on-microchip-production-amid-fears-of-subsidy-race>.
- 170 Paul Timmers, “How Europe Aims to Achieve Strategic Autonomy for Semiconductors,” The Brookings Institution, August 9, 2022, <https://www.brookings.edu/articles/how-europe-aims-to-achieve-strategic-autonomy-for-semiconductors/>.
- 171 Simone Tagliapietra, Reinhilde Veugelers, and Jeromin Zettelmeyer, “Rebooting the European Union’s Net Zero Industry Act,” Bruegel, June 22, 2023, <https://www.bruegel.org/policy-brief/rebooting-european-unions-net-zero-industry-act>.
- 172 Noah Kaufman, Sagatom Saha, and Christopher Bataille, “Green Trade Tensions,” International Monetary Fund, June 2023, <https://www.imf.org/en/Publications/fandd/issues/2023/06/green-trade-tensions-kaufman-saha-bataille>.
- 173 Tania Voon, “Testing the Limits of WTO Security Exceptions,” East Asia Forum, June 14, 2023, <https://www.eastasiaforum.org/2023/06/14/testing-the-limits-of-security-exceptions/>; and “DS597: United States — Origin Marking Requirement,” World Trade Organization, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds597_e.htm.
- 174 “DS512: Russia — Measures Concerning Traffic in Transit,” World Trade Organization, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds512_e.htm.
- 175 Sinan Haluk Tandoğan, “Foreign Subsidies Under Scrutiny; An Analysis of the EU Foreign Subsidies Regulation,” Mondaq, April 5, 2023, <https://www.mondaq.com/turkey/government-contracts-procurement-ppp/1301834/foreign-subsidies-under-scrutiny-an-analysis-of-the-eu-foreign-subsidies-regulation>.
- 176 “Question and Answers Regarding the Anti-Coercion Instrument,” European Commission, https://policy.trade.ec.europa.eu/enforcement-and-protection/protecting-against-coercion/qa-political-agreement-anti-coercion-instrument_en.
- 177 Chien-Huei Wu, “The EU’s Proposed Anti-Coercion Instrument: Legality and Effectiveness,” *Journal of World Trade* 57, no. 2 (2023): 297–316, <https://doi.org/10.54648/trad2023012>.
- 178 *The Republic of Nicaragua v. The United States of America*, International Court of Justice, June 27, 1986.
- 179 Anna Herranz-Surrallés, Chad Damro, and Sandra Eckert, “The Geoeconomic Turn of the Single European Market? Conceptual Challenges and Empirical Trends,” *Journal of Common Market Studies* 62, no. 4 (2024): 919–937, <https://doi.org/10.1111/jcms.13591>.
- 180 Eugenia Baroncelli, “Cooperating Through Competition: EU Challenge and Support to the World Bank Focality in Multilateral Development Finance,” *Global Policy* 12, no. 4 (2021): 80–89, <https://doi.org/10.1111/1758-5899.12916>.
- 181 “Protecting Against Coercion,” European Commission, https://policy.trade.ec.europa.eu/enforcement-and-protection/protecting-against-coercion_en.
- 182 Afq Fitri, “The European Chips Act Will Not Restore the Continent’s Semiconductor Industry to Its Former Glory,” November 28, 2022, Tech Monitor, <https://www.techmonitor.ai/hardware/silicon/the-european-chips-act-will-not-restore-the-continent-semiconductor-industry-to-its-former-glory?cf-view>.

- 183 Gina Gopinath, “Geopolitics and Its Impact on Global Trade and the Dollar,” International Monetary Fund, May 7, 2024, <https://www.imf.org/en/News/Articles/2024/05/07/sp-geopolitics-impact-global-trade-and-dollar-gita-gopinath>.
- 184 Giovanni Grevi and Richard Youngs in this compilation.
- 185 Ülgen, “A Political Economy Perspective.”
- 186 “A Strategic Compass for a Stronger EU Security and Defence in the Next Decade,” Council of the European Union, March 21, 2022, <https://www.consilium.europa.eu/en/press/press-releases/2022/03/21/a-strategic-compass-for-a-stronger-eu-security-and-defence-in-the-next-decade/>.
- 187 See, for instance, Jennifer Hillman and Inu Manak, “Rethinking International Rules on Subsidies,” Council on Foreign Relations, September 2023, <https://www.cfr.org/report/rethinking-international-rules-subsidies>.
- 188 Kaufman, Saha, and Bataille, “Green Trade Tensions.”
- 189 Doug Palmer, “WTO Says Trump’s Steel Tariffs Violated Global Trade Rules,” *Politico*, December 9, 2022, <https://www.politico.com/news/2022/12/09/wto-ruling-trump-tariffs-violate-rules-00073282>.
- 190 Marcin Szczepeński, “Resilience of Global Supply Chains: Challenges and Solutions [Policy Podcast],” European Parliamentary Research Service, November 26, 2021, <https://epthinktank.eu/2021/11/26/resilience-of-global-supply-chains-challenges-and-solutions/>; and “The Impact of Global Value Chains on the Euro Area Economy,” European Central Bank, April 2019, <https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op221-38185e6936.en.pdf>.
- 191 Jean-Marc Ollagnier, Kris Timmermans, and Michael Brueckner, “From Disruption to Reinvention: The Future of Supply Chains in Europe,” Accenture, May 23, 2022, <https://www.accenture.com/content/dam/accenture/final/a-com-migration/r3-additional-pages-1/pdf/pdf-177/accenture-disruption-reinvention.pdf>.
- 192 “European Industrial Strategy,” European Commission, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy_en; “The Net-Zero Industry Act: Accelerating the Transition to Climate Neutrality,” European Commission, https://single-market-economy.ec.europa.eu/industry/sustainability/net-zero-industry-act_en; “Critical Raw Materials: Ensuring Secure and Sustainable Supply Chains for EU’s *[sic]* Green and Digital Future,” European Commission, March 16, 2023, https://ec.europa.eu/commission/presscorner/detail/en/ip_23_1661; “The EU Chips Industry,” Council of the European Union, [https://www.consilium.europa.eu/en/policies/eu-chips-industry/#:~:text=The%20Chips%20for%20Europe%20Initiative,to%20the%20%E2%80%99Chips%20Act%E2%80%99](https://www.consilium.europa.eu/en/policies/eu-chips-industry/#:~:text=The%20Chips%20for%20Europe%20Initiative,to%20the%20%E2%80%99Chips%20Act%E2%80%99;); and “REPowerEU: Affordable, Secure and Sustainable Energy for Europe,” European Commission, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowerEU-affordable-secure-and-sustainable-energy-europe_en.
- 193 Mario Damen, “EU Strategic Autonomy 2013-2023: From Concept to Capacity,” European Parliamentary Research Service, July 2022, [https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733589/EPRS_BRI\(2022\)733589_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733589/EPRS_BRI(2022)733589_EN.pdf).
- 194 Towfique Rahman et al., “Supply Chain Resilience Initiatives and Strategies: A Systematic Review,” *Computers & Industrial Engineering* 170 (2022): 108317, <https://doi.org/10.1016/j.cie.2022.108317>.
- 195 “EU Green Deal,” EUROPARC Federation, <https://www.europarc.org/european-policy/eu-green-deal-protected-areas/>.
- 196 Reinhilde Veugelers and Simone Tagliapietra, *A Green Industrial Policy for Europe* (Brussels: Bruegel, 2020), <https://www.bruegel.org/book/green-industrial-policy-europe>.
- 197 Rahman et al., “Supply Chain Resilience.”
- 198 Georgia Collins, “Kearney/WEF: Supply Chain Resilience to Avoid Disruption,” *Manufacturing Digital*, July 23, 2021, <https://manufacturingdigital.com/procurement-and-supply-chain/kearneywef-supply-chain-resilience-avoid-disruption>.
- 199 “What Is Business Continuity?,” Cisco, <https://www.cisco.com/c/en/us/solutions/hybrid-work/what-is-business-continuity.html>.
- 200 Matt McGrath, “Climate Change: US Formally Withdraws From Paris Agreement,” BBC News, November 4, 2020, <https://www.bbc.com/news/science-environment-54797743>.

- 201 “National Security Strategy of the United States of America,” The White House, December 2017, <https://trumpwhitehouse.archives.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf>.
- 202 “EU-China – A Strategic Outlook,” European Commission, March 12, 2019, <https://commission.europa.eu/system/files/2019-03/communication-eu-china-a-strategic-outlook.pdf>.
- 203 Damen, “EU Strategic Autonomy.”
- 204 “European Battery Alliance,” European Commission, https://single-market-economy.ec.europa.eu/industry/industrial-alliances/european-battery-alliance_en#:~:text=In%20October%202017%2C%20Vice%20President,storage%2C%20and%20Europe%E2%80%99s%20economic%20strategy.
- 205 Claudia Detsch, “Waking the Sleeping Beauty of European Industrial Policy,” International Politics and Society, February 16, 2023, <https://www.ips-journal.eu/topics/economy-and-ecology/waking-the-sleeping-beauty-of-european-industrial-policy-6512/>; “Nordics Playing a Significant Role in Battery Boom,” Business Norway, <https://businessnorway.com/articles/anticipating-the-european-battery-boom>; and Bart Brouwers, “How the European Battery Alliance Is Driving Decarbonization in Europe,” Innovation Origins, May 6, 2023, <https://innovationorigins.com/en/how-the-european-battery-alliance-is-driving-decarbonization-in-europe/>.
- 206 “7th High-Level Meeting of the European Battery Alliance,” European Commission, March 2023, https://single-market-economy.ec.europa.eu/system/files/2023-03/Main%20takeaways_7th%20High-Level%20Meeting%20of%20EBA.pdf.
- 207 “Foreign Exchange and Foreign Trade Act,” Japanese Law Translation, <https://www.japaneselawtranslation.go.jp/en/laws/view/4412>.
- 208 “Executive Orders,” National Archives, August 15, 2016, <https://www.archives.gov/federal-register/codification/executive-order/11858.html>.
- 209 “Investment Screening,” European Commission, https://policy.trade.ec.europa.eu/enforcement-and-protection/investment-screening_en.
- 210 “Ad-hoc: BMW AG Acquires Majority Stake in BMW Brilliance Automotive Ltd. Leading to Full Consolidation Effective 11 February 2022,” BMW Group, February 11, 2022, <https://www.press.bmwgroup.com/global/article/detail/T0367989EN/ad-hoc:-bmw-ag-acquires-majority-stake-in-bmw-brilliance-automotive-ltd-leading-to-full-consolidation-effective-11-february-2022?language=en>.
- 211 “Who Owns Volvo?,” Volvo Cars Waterloo, <https://www.volvocarswaterloo.com/who-owns-volvo/>.
- 212 Marie Krpata, “The Future of the Franco-German Tandem,” French Institute of International Relations, September 22, 2021, <https://www.ifri.org/en/external-articles/future-franco-german-tandem>.
- 213 Judy Dempsey, “Europe’s Dangerous Dependence on China,” *Strategic Europe*, April 4, 2023, <https://carnegieendowment.org/europe/strategic-europe/2023/04/europes-dangerous-dependence-on-china?lang=en>.
- 214 “Speech by President von der Leyen on EU-China Relations to the Mercator Institute for China Studies and the European Policy Centre,” European Commission, March 30, 2023, https://ec.europa.eu/commission/presscorner/detail/en/speech_23_2063; and “Moscow-Beijing Partnership Has ‘No Limits,’” Reuters, February 4, 2022, <https://www.reuters.com/world/china/moscow-beijing-partnership-has-no-limits-2022-02-04/>.
- 215 “G7 Hiroshima Leaders’ Communiqué,” The White House, May 20, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/20/g7-hiroshima-leaders-communication/>; and “Remarks by President Trump in Press Conference | September 7, 2020,” The White House, September 7, 2020, <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-press-conference-september-7-2020/>.
- 216 “Commission Presents an Updated In-Depth Review of Europe’s Strategic Dependencies,” European Commission, February 23, 2022, https://single-market-economy.ec.europa.eu/news/commission-presents-updated-depth-review-europes-strategic-dependencies-2022-02-23_en; and “Foreign Subsidies Regulation,” European Commission, https://competition-policy.ec.europa.eu/foreign-subsidies-regulation_en.

- 217 Charlie Cooper, Antonia Zimmermann, and Sarah Anne Aarup, “China Leaves EU Playing Catchup in Race for Raw Materials,” *Politico*, March 10, 2023, <https://www.politico.eu/article/white-gold-rush-salt-lithium-batteries-raw-materials-chile-salar-atacama/>.
- 218 “Critical Minerals Market Review 2023,” International Energy Agency, July 2023, p. 68, <https://iea.blob.core.windows.net/assets/c7716240-ab4f-4f5d-b138-291e76c6a7c7/CriticalMineralsMarketReview2023.pdf>.
- 219 Oliver Noyan, “Critical Raw Materials: China 15 Years Ahead, Expert Says,” Euractiv, June 9, 2023, <https://www.euractiv.com/section/energy/news/critical-raw-materials-china-15-years-ahead-expert-says/>.
- 220 James McBride and Andrew Chatzky, “Is ‘Made in China 2025’ a Threat to Global Trade?,” Council on Foreign Relations, May 13, 2019, <https://www.cfr.org/backgrounder/made-china-2025-threat-global-trade>.
- 221 James Kynge, Sun Yu, and Leo Lewis, “Fortress China: Xi Jinping’s Plan for Economic Independence,” *Financial Times*, September 15, 2022, <https://www.ft.com/content/0496b125-7760-41ba-8895-8358a7f24685>.
- 222 McBride and Chatzky, “Is ‘Made in China 2025’ a Threat?”
- 223 Lingling Wei, “Beijing Drops Contentious ‘Made in China 2025’ Slogan, but Policy Remains,” *Wall Street Journal*, March 5, 2019, <https://www.wsj.com/articles/china-drops-a-policy-the-u-s-dislikes-at-least-in-name-11551795370>; and “Trump Tariffs: US President Imposes Levy on Steel and Aluminium,” BBC News, March 8, 2018, <https://www.bbc.co.uk/news/world-us-canada-43337951>.
- 224 Rosa Balfour and Lizza Bomassi, “EU and China Seal a Deal Behind Biden’s Back,” Chatham House, June 10, 2021, <https://www.chathamhouse.org/publications/the-world-today/2021-02/eu-and-china-seal-deal-behind-bidens-back>.
- 225 Kelly Ng and Yi Ma, “How Is China Supporting Russia After It Was Sanctioned for Ukraine War?,” BBC News, May 17, 2024, <https://www.bbc.co.uk/news/60571253>.
- 226 “Is There Risk in ‘De-Risking’?,” Economist Intelligence Unit, <https://www.eiu.com/n/campaigns/eu-de-risking-from-china/>.
- 227 Thomas Moller-Nielsen, “EU-China Trade Slips as Beijing ‘De-Risks’ From the West,” Euractiv, March 4, 2024, <https://www.euractiv.com/section/economy-jobs/news/eu-china-trade-slips-as-beijing-de-risks-from-the-west/>.
- 228 Richard Baldwin, “How Asymmetric Is the G7’s Reliance on Chinese Supply Chains?,” LinkedIn, January 5, 2024, <https://www.linkedin.com/pulse/how-asymmetric-g7s-reliance-chinese-supply-chains-richard-baldwin-rcofe/>.
- 229 European Raw Materials Alliance, <https://erma.eu/>.
- 230 “The Supply Chain Resilience Platform Is Now Live!,” Enterprise Europe Network, September 12, 2022, <https://een.ec.europa.eu/news/supply-chain-resilience-platform-now-live>.
- 231 Deborah James, “Trade and Development Backstory: The Struggle Over the UNCTAD 15 Mandate,” Institute for New Economic Thinking, November 10, 2021, <https://www.ineteconomics.org/perspectives/blog/trade-and-development-backstory-the-struggle-over-the-unctad-15-mandate>.
- 232 “The European Online Hub for Industry Clusters,” European Cluster Collaboration Platform, <https://clustercollaboration.eu/>.
- 233 “SMEI / IMERA: Council and Parliament Strike a Provisional Deal on Crisis Preparedness,” Council of the European Union, February 16, 2024, <https://www.consilium.europa.eu/en/press/press-releases/2024/02/01/single-market-emergency-instrument-council-and-parliament-strike-a-provisional-deal-on-crisis-preparedness/>; and “Internal Market Emergency and Resilience Act,” European Parliament, <https://www.europarl.europa.eu/committees/en/internal-market-emergency-and-resilience/product-details/20221121CDT10668>.
- 234 Henrik Hvid Jensen, “For Manufacturers, the Circular Economy Strengthens Supply Chains. Here’s How,” World Economic Forum, February 27, 2024, <https://www.weforum.org/agenda/2024/02/how-manufacturers-could-lead-the-way-in-building-the-circular-economy/>.
- 235 “The Circular Economy in Cities and Regions: Synthesis Report,” Organisation for Economic Co-operation and Development, October 28, 2020, <https://doi.org/10.1787/10ac6ae4-en>.

- 236 “Greenlab: Sustainable Startup Accelerator,” hub.brussels, <https://hub.brussels/en/services/greenlab-sustainable-accelerator-brussels/>.
- 237 The term “clean transition materials” comprises minerals and metals needed for manufacturing technologies that are central to the clean-energy transition. They are also referred to as critical raw materials, critical minerals, strategic raw materials, or clean transition metals. While acknowledging that there are differences in the use and policy salience of these terms, this chapter uses them synonymously. For a 2023 list of critical raw materials as defined by the EU, see Milan Grohol and Constanze Veeh, “Study on the Critical Raw Materials for the EU 2023: Final Report,” Publications Office of the European Union, 2023, <https://op.europa.eu/en/publication-detail/-/publication/57318397-fdd4-11ed-a05c-01aa75ed71a1>.
- 238 Silvia Bobba et al., “Critical Raw Materials for Strategic Technologies and Sectors in the EU: A Foresight Study,” Publications Office of the European Union, 2020, <https://data.europa.eu/doi/10.2873/58081>.
- 239 “Critical Raw Materials Resilience: Charting a Path Towards Greater Security and Sustainability,” European Commission, September 3, 2020, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0474>.
- 240 “The Role of Critical Minerals in Clean Energy Transitions,” International Energy Agency, May 2021, <https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions>.
- 241 “The Role of Critical Minerals,” International Energy Agency.
- 242 Tilmann Galler, “A New Supercycle – the Clean Tech Transition and Implications for Global Commodities,” J.P. Morgan Asset Management, February 27, 2024, <https://am.jpmorgan.com/lu/en/asset-management/per/insights/market-insights/market-updates/on-the-minds-of-investors/clean-energy-investment/>.
- 243 Lukas Boer, Andrea Pescatori, and Martin Stuermer, “Energy Transition Metals,” International Monetary Fund, October 12, 2021, <https://doi.org/10.5089/9781513599373.001>.
- 244 “Net-Zero Industry Act,” European Commission, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan/net-zero-industry-act_en.
- 245 Andrea Prontera, *Beyond the EU Regulatory State: Energy Security and the Eurasian Gas Market* (Lanham: ECPR Press, 2019).
- 246 Nicolò Campagnol, Alexander Pfeiffer, and Christer Tryggestad, “Capturing the Battery Value-Chain Opportunity,” McKinsey & Company, January 7, 2022, <https://www.mckinsey.com/industries/electric-power-and-natural-gas/our-insights/capturing-the-battery-value-chain-opportunity>.
- 247 “Global Supply Chains of EV Batteries,” International Energy Agency, July 2022, <https://www.iea.org/reports/global-supply-chains-of-ev-batteries>; and “European Battery Alliance,” European Commission, accessed November 25, 2022, https://single-market-economy.ec.europa.eu/industry/strategy/industrial-alliances/european-battery-alliance_fi.
- 248 Bruno Venditti, “The Top 10 EV Battery Manufacturers in 2022,” Visual Capitalist, October 5, 2022, <https://www.visualcapitalist.com/the-top-10-ev-battery-manufacturers-in-2022/>; and “Global Supply Chains,” International Energy Agency.
- 249 “Global EV Outlook 2023,” International Energy Agency, April 2023, <https://www.iea.org/reports/global-ev-outlook-2023>.
- 250 Bobba et al., “Critical Raw Materials.”
- 251 “The Role of Critical Minerals,” International Energy Agency.
- 252 “The Role of Critical Minerals,” International Energy Agency; and “Critical Mineral Development Will Need to Balance Environmental and Social Risks,” Sustainable Fitch, July 20, 2023, <https://www.sustainablefitch.com/corporate-finance/critical-mineral-development-will-need-to-balance-environmental-social-risks-20-07-2023>.
- 253 “Brazil: UN Experts Deplore Attacks by Illegal Miners on Indigenous Peoples; Alarmed by Mercury Levels,” Office of the United Nations High Commissioner for Human Rights, June 2, 2021, <https://www.ohchr.org/en/press-releases/2021/06/brazil-un-experts-deplore-attacks-illegal-miners-indigenous-peoples-alarmed>; and Nicole Greenfield, “Lithium Mining Is Leaving Chile’s Indigenous Communities High and Dry (Literally),” Natural Resources Defense Council, April 26, 2022, <https://www.nrdc.org/stories/lithium-mining-leaving-chiles-indigenous-communities-high-and-dry-literally>.

- 254 Benjamin K. Sovacool et al., “The Decarbonisation Divide: Contextualizing Landscapes of Low-Carbon Exploitation and Toxicity in Africa,” *Global Environmental Change* 60 (2020): 102028, <https://doi.org/10.1016/j.gloenvcha.2019.102028>.
- 255 “The Raw Materials Initiative — Meeting Our Critical Needs for Growth and Jobs in Europe,” European Commission, November 4, 2008, <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0699:FIN:en:PDF>.
- 256 “The European Innovation Partnership (EIP) on Raw Materials,” European Commission, https://single-market-economy.ec.europa.eu/sectors/raw-materials/eip_en.
- 257 “European Raw Materials Alliance,” International Energy Agency, December 12, 2023, <https://www.iea.org/policies/14268-european-raw-materials-alliance>.
- 258 “Europe on the Move. Sustainable Mobility for Europe: Safe, Connected, and Clean,” European Commission, May 17, 2018, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018DC0293>.
- 259 “Regulation (EU) 2024/1252 of the European Parliament and of the Council,” Official Journal of the European Union, May 3, 2024, <http://data.europa.eu/eli/reg/2024/1252/oj>.
- 260 Clare Connellan et al., “New EU Batteries Regulation: Introducing Enhanced Sustainability, Recycling and Safety Requirements,” White & Case, August 2, 2023, <https://www.whitecase.com/insight-alert/new-eu-batteries-regulation-introducing-enhanced-sustainability-recycling-and-safety#:~:text=The%20new%20regulation%20has%20three,functioning%20of%20the%20internal%20market>.
- 261 “France 2030 Investment Plan’ - Critical Minerals Investment,” International Energy Agency, April 26, 2023, <https://www.iea.org/policies/15026-france-2030-investment-plan-critical-minerals-investment>.
- 262 “Speech by President von der Leyen on EU-China Relations to the Mercator Institute for China Studies and the European Policy Centre,” European Commission, March 30, 2023, https://ec.europa.eu/commission/presscorner/detail/en/speech_23_2063; Werner Hoyer, “Europe Must Get Serious About Critical Minerals,” Project Syndicate, September 14, 2023, <https://www.project-syndicate.org/commentary/europe-critical-minerals-rare-earth-supply-chain-risk-by-werner-hoyer-2023-09>; and Fatih Birol and Pascal Canfin, “Why the European Union Needs Bold and Broad Strategies for Critical Minerals,” Euractiv, March 6, 2023, <https://www.euractiv.com/section/energy-environment/opinion/why-the-eu-needs-bold-and-broad-strategies-for-critical-minerals/>.
- 263 James Eddy, Alexander Pfeiffer, and Jasper van de Staaij, “Recharging Economies: The EV-Battery Manufacturing Outlook for Europe,” McKinsey & Company, June 3, 2019, <https://www.mckinsey.com/industries/oil-and-gas/our-insights/recharging-economies-the-ev-battery-manufacturing-outlook-for-europe>.
- 264 Carole Mathieu, “The European Battery Alliance Is Moving Up a Gear,” *Édito Énergie*, French Institute of International Relations, May 2, 2019, <https://www.ifri.org/en/edito/european-battery-alliance-moving-gear>.
- 265 Bryan R. Early and Keith Preble, “Grand Strategy and the Tools of Economic Statecraft,” in *The Oxford Handbook of Grand Strategy*, eds. Thierry Balzacq and Ronald R. Krebs (Oxford: Oxford University Press, 2021), 369–388; and Nikhil Kalyanpur and Abraham L. Newman, “Mobilizing Market Power: Jurisdictional Expansion as Economic Statecraft,” *International Organization* 73, no. 1 (2019): 1–34, <https://doi.org/10.1017/S0020818318000334>.
- 266 Noor Alam et al., “Critical Minerals. Options for Diversifying German Raw Material Supplies,” Willy Brandt School of Public Policy, University of Erfurt, January 2023, <http://dx.doi.org/10.13140/RG.2.2.10167.80805>.
- 267 Harry Dempsey, “Lithium Price Plunges on Slowing Chinese Demand for Electric Vehicles,” *Financial Times*, January 25, 2024, <https://www.ft.com/content/0fb27a1a-d149-4d66-87cf-a1e3feecb5e5>.
- 268 Raluca Csernaton, “Disruption Ahead? European Strategic Autonomy and Future Technology,” in *Beyond Autonomy: Rethinking Europe as a Strategic Actor*, LSE IDEAS and Friedrich Naumann Foundation, February 7, 2022, <https://www.lse.ac.uk/ideas/publications/Old-reports/beyond-autonomy>.
- 269 “EU Actorness - A Conceptual Model,” Trends in Global Governance and Europe’s Role, 2021, <https://trigger.eui.eu/eu-actorness-a-conceptual-model/all/countryNotes>.

- 270 “Industry 5.0: A Transformative Vision for Europe,” European Commission, December 2021, <https://www.horizon-europe.gouv.fr/sites/default/files/2022-01/industry-5-0-pdf-5324.pdf>.
- 271 Raluca Csernaton, “The EU’s Hegemonic Imaginaries: From European Strategic Autonomy in Defence to Technological Sovereignty,” *European Security* 31, no. 3 (2022): 395–414, <https://www.tandfonline.com/doi/full/10.1080/09662839.2022.2103370>.
- 272 “Commissioners-designate (2024-2029),” European Commission, https://commission.europa.eu/about-european-commission/towards-new-commission-2024-2029/commissioners-designate-2024-2029_en.
- 273 Henry Farrell and Abraham L. Newman, “Weaponized Interdependence: How Global Economic Networks Shape State Coercion,” *International Security* 44, no. 1 (2019): 42–79, https://doi.org/10.1162/isec_a_00351.
- 274 Raluca Csernaton, “Charting the Geopolitics and European Governance of Artificial Intelligence,” Carnegie Europe, March 6, 2024, <https://carnegieendowment.org/research/2024/03/charting-the-geopolitics-and-european-governance-of-artificial-intelligence?lang=en¢er=europe>.
- 275 “SMEs and Open Strategic Autonomy: Final Report,” European Commission, July 3, 2024, https://single-market-economy.ec.europa.eu/document/download/27773867-479e-464e-af2f-b548b76ffb13_en?filename=D5.%20SMEs%20and%20OSA%20-%20Final%20report_rev.pdf.
- 276 “Statement on Technological Sovereignty,” European Innovation Council, March 18, 2021, https://eic.ec.europa.eu/system/files/2021-03/EIC%20Advisory%20Board%20statement%20at%20launch%20of%20EIC_1.pdf.
- 277 “Belt and Road Initiative (BRI),” European Bank for Reconstruction and Development, 2024, <https://www.ebrd.com/what-we-do/belt-and-road/overview.html>; and Tim Rühlig, “The Geopolitics of Technical Standardization: Comparing US and EU Approaches,” German Council on Foreign Relations, May 8, 2023, <https://dgap.org/en/research/publications/geopolitics-technical-standardization>.
- 278 Csernaton, “The EU’s Hegemonic Imaginaries”; and Raluca Csernaton, “The EU’s Rise as a Defense Technological Power: From Strategic Autonomy to Technological Sovereignty,” Carnegie Europe, August 12, 2021, <https://carnegieeurope.eu/2021/08/12/eu-s-rise-as-defense-technological-power-from-strategic-autonomy-to-technological-sovereignty-pub-85134>.
- 279 Csernaton, “Disruption Ahead?”
- 280 Csernaton, “Charting the Geopolitics.”
- 281 “Leading the Way in European Supercomputing,” The European High Performance Computing Joint Undertaking (EuroHPC JU), 2024, https://eurohpc-ju.europa.eu/index_en; and Antonio Calcara and Raluca Csernaton, “From Ambition to Action in Europe: Chips, the Smaller, the Better,” in *The Comeback of Industrial Policy. The Next Geopolitical Great Game*, edited by Alessandro Gili and Davide Tentori, Italian Institute for International Political Studies, December 6, 2023, <https://www.ispionline.it/en/publication/the-comeback-of-industrial-policy-the-next-geopolitical-great-game-145627>.
- 282 “Communication From the Commission: Artificial Intelligence for Europe,” European Commission, April 25, 2018, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2018:237:FIN>; “The Digital Europe Programme,” European Commission, 2024, <https://digital-strategy.ec.europa.eu/en/activities/digital-programme>; and “Commission Launches AI Innovation Package to Support Artificial Intelligence Startups and SMEs,” European Commission, January 24, 2024, https://ec.europa.eu/commission/presscorner/detail/en/ip_24_383.
- 283 Linda Monsees and Daniel Lambach, “Digital Sovereignty, Geopolitical Imaginaries, and the Reproduction of European Identity,” *European Security* 31, no. 3 (2022): 377–394, <https://doi.org/10.1080/09662839.2022.2101883>.
- 284 Raluca Csernaton and Fer Avar, “Navigating the Future: The EU’s Blueprint for the Innovation and Governance of Emerging and Disruptive Technologies,” EU Cyber Direct Digital Dialogue, November 13, 2023, <https://eucyberdirect.eu/research/navigating-the-future-the-eu-s-blueprint-for-the-innovation-and-governance-of-emerging-and-disruptive-technologies>.
- 285 Raluca Csernaton, “Chips Geopolitics and EU’s New Semiconductors Sovereignty Agenda,” Euractiv, October 29, 2021, <https://www.euractiv.com/section/industrial-strategy/opinion/chips-geopolitics-and-eus-new-semiconductors-sovereignty-agenda/>.

- 286 “Governing Missions in the European Union,” European Commission, July 19, 2019, https://research-and-innovation.ec.europa.eu/knowledge-publications-tools-and-data/publications/all-publications/governing-missions-governing-missions-european-union_en.
- 287 Csernatoni, “The EU’s Hegemonic Imaginaries.”
- 288 Christopher Hill, “The Capability-Expectations Gap, or Conceptualizing Europe’s International Role,” *Journal of Common Market Studies* 31, no. 3 (1993): 305–328, <https://onlinelibrary.wiley.com/doi/10.1111/j.1468-5965.1993.tb00466.x>.
- 289 “Governing Missions,” European Commission.
- 290 “Europe’s Digital Decade: Digital Targets for 2030,” European Commission, 2024, https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en.
- 291 “Horizon Europe,” European Commission, 2024, https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en.
- 292 “Responsible Research and Innovation in the EU,” European Parliamentary Research Service, September 8, 2021, <https://sciencemediahub.eu/2021/09/08/responsible-research-and-innovation-in-the-eu/>.
- 293 “Horizon 2020,” European Commission, 2024, https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-2020_en.
- 294 “Strategic Foresight,” European Commission, 2024, https://ec.europa.eu/info/strategy/strategic-planning/strategic-foresight_en.
- 295 “Strategic Foresight,” European Commission.
- 296 “Statement on Technological Sovereignty,” European Innovation Council.
- 297 “A Strategic Compass for Security and Defence: For a European Union That Protects Its Citizens, Values and Interests and Contributes to International Peace and Security,” European External Action Service, November 9, 2021, https://www.eeas.europa.eu/sites/default/files/documents/strategic_compass_en3_web.pdf.
- 298 “An EU Approach to Enhance Economic Security,” European Commission, June 20, 2023, https://ec.europa.eu/commission/presscorner/detail/en/IP_23_3358.
- 299 “Commission Recommendation of 03 October 2023 on Critical Technology Areas for the EU’s Economic Security for Further Risk Assessment With Member States,” European Commission, October 3, 2023, https://defence-industry-space.ec.europa.eu/commission-recommendation-03-october-2023-critical-technology-areas-eus-economic-security-further_en.
- 300 “Strategic Technologies for Europe Platform (STEP),” European Parliament, February 15, 2024, [https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI\(2023\)754547](https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2023)754547).
- 301 Péter Harasztosi, Désirée Rückert, and Christoph Weiss, “Enablers for Firms’ Use of Digital Technologies: Technological Innovation and Digital Infrastructures,” VoxEU, March 3, 2023, <https://cepr.org/voxeu/columns/enablers-firms-use-digital-technologies-technological-innovation-and-digital>.
- 302 “2022 Strategic Foresight Report: Twinning the Green and Digital Transitional in the New Geopolitical Context,” European Commission, June 29, 2022, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022DC0289>.
- 303 Sven Smit et al., “Securing Europe’s Future Beyond Energy: Addressing Its Corporate and Technology Gap,” McKinsey Global Institute, May 2022, <https://www.mckinsey.com/-/media/mckinsey/business%20functions/strategy%20and%20corporate%20finance/our%20insights/securing%20europes%20competitiveness%20addressing%20its%20technology%20gap/securing-europes-future-beyond-energy-addressing-its-corporate-and-technology-gap-may-2022.pdf>.
- 304 “Action Plan on Synergies Between Civil, Defence and Space Industries,” European Commission, February 15, 2021, https://commission.europa.eu/document/2353ded9-0e39-4d35-a46c-67c62779afe1_en.
- 305 “Action Plan on Synergies,” European Commission.
- 306 “Horizon Europe,” European Commission; and “EDF | Developing Tomorrow’s Defence Capabilities,” European Commission, 2024, https://defence-industry-space.ec.europa.eu/eu-defence-industry/european-defence-fund-edf_en.

- 307 “European Defence Fund: Start of 37 New Defence R&P Projects,” European Commission, December 19, 2023, https://defence-industry-space.ec.europa.eu/european-defence-fund-start-37-new-defence-rd-projects-2023-12-19_en.
- 308 “Action Plan on Synergies,” European Commission.
- 309 “Europe’s Digital Decade,” European Commission.
- 310 “European Chips Act,” European Commission, 2024, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-chips-act_en.
- 311 “The Semiconductor Ecosystem, Global Features and Europe’s Position,” Council of the European Union, July 12, 2022, <https://www.consilium.europa.eu/media/58112/220712-the-semiconductor-ecosystem-global-features-and-europe-s-position.pdf>.
- 312 “IMEC Offers Neutral Ground Amid Chip Rivalries,” *Economist*, September 22, 2021, <https://www.economist.com/business/imec-offers-neutral-ground-amid-chip-rivalries/21804980>.
- 313 “The Semiconductor Ecosystem,” Council of the European Union.
- 314 “European Approach to Artificial Intelligence,” European Commission, 2024, <https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence>.
- 315 “AI Act,” European Commission, 2024, <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai>.
- 316 “EU AI Act: First Regulation on Artificial Intelligence,” European Parliament, June 8, 2023, <https://www.europarl.europa.eu/news/en/headlines/society/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence>.
- 317 Raluca Csernaton, “Weaponizing Innovation? Mapping Artificial Intelligence-Enabled Security and Defence in the EU,” Stockholm International Peace Research Institute, July 2023, https://www.sipri.org/sites/default/files/2023-07/eunpdc_no_84_0.pdf.
- 318 “Coordinated Plan on Artificial Intelligence,” European Commission, 2024, <https://digital-strategy.ec.europa.eu/en/policies/plan-ai>.
- 319 “Horizon Europe,” European Commission; and “The Digital Europe Programme,” European Commission.
- 320 Nestor Maslej et al., “Chapter 4: The Economy,” in *Artificial Intelligence Index Report 2023*, Institute for Human-Centered AI, Stanford University, April 2023, https://aiindex.stanford.edu/wp-content/uploads/2023/04/HAI_AI-Index-Report-2023_CHAPTER_4.pdf.
- 321 “Commission Launches AI Innovation Package,” European Commission.
- 322 Csernaton, “The EU’s Rise”; and “Quantum,” European Commission, 2024, <https://digital-strategy.ec.europa.eu/en/policies/quantum>.
- 323 Michael Bogobowicz et al., “Quantum Technology Sees Record Investments, Progress on Talent Gap,” McKinsey Digital, April 24, 2023, <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/quantum-technology-sees-record-investments-progress-on-talent-gap>.
- 324 “Quantum Computing Market Size, Share, and Trends 2024 to 2034,” Precedence Research, July 2024, https://www.globenewswire.com/Tracker?data=fbY7vLrVJqrKyQogP_kUM10TRlshHby9iw2yG8H4ay0v-AB7FEYhYUfTbouLfV9KVJfyuBlHqgHLPR4FHDO98n0LZBW2Uk9tvO26ko5L1RL7N_XTgY1Gj2MhOqUXo8HiOCAJ9BWgrKMWw73jpPSd0Rw==.
- 325 “Quantum Computing Market Size to Hit Around USD 125 BN by 2030,” Precedence Research, January 6, 2023, <https://www.globenewswire.com/en/news-release/2023/01/06/2584209/0/en/Quantum-Computing-Market-Size-to-Hit-Around-USD-125-BN-by-2030.html#:~:text=Precedence%20Research%20predicts%2C%20the%20global,36.89%25%20from%202022%20to%202030>.
- 326 “Quantum,” European Commission.
- 327 Anika Pflanzner, Wolf Richter, and Henning Soller, “A Quantum Wake-up Call for European CEOs,” McKinsey, December 20, 2021, <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/a-quantum-wake-up-call-for-european-ceos>.

- 328 “Quantum Technologies Flagship,” European Commission, 2024, <https://digital-strategy.ec.europa.eu/en/policies/quantum-technologies-flagship>.
- 329 “Horizon Europe,” European Commission.
- 330 “The Digital Europe Programme,” European Commission.
- 331 Antonio Acín et al., “The European Quantum Technologies Roadmap,” [arXiv.org](https://arxiv.org/abs/1712.03773), December 11, 2017, <https://arxiv.org/abs/1712.03773>.
- 332 “2023 Report on the State of the Digital Decade,” European Commission, September 27, 2023, <https://digital-strategy.ec.europa.eu/en/library/2023-report-state-digital-decade>.
- 333 “Call to Host New Quantum Computers,” The European High Performance Computing Joint Undertaking (EuroHPC JU), December 19, 2023, https://eurohpc-ju.europa.eu/call-host-new-quantum-computers-2023-12-19_en.
- 334 Henry Farrell and Abraham Newman, *Underground Empire: How America Weaponized the World Economy* (New York: Henry Holt and Company, 2023); and Matthias Matthijs and Sophie Meunier, “Europe’s Geoeconomic Revolution: How the EU Learned to Wield Its Real Power,” *Foreign Affairs*, August 22, 2023, <https://www.foreignaffairs.com/europe/european-union-geoeconomic-revolution>.
- 335 Nan Tian et al., “Trends in World Military Expenditure, 2023,” Stockholm International Peace Research Institute, April 2024, https://www.sipri.org/sites/default/files/2024-04/2404_fs_milex_2023.pdf.
- 336 Catherine Hoeffler, “Arming Fortress Europe? Spaces and Instruments of Economic Patriotism in EU Armament Policy,” *Politics and Governance* 11, no. 4 (2023): 154–164, <https://doi.org/10.17645/pag.v11i4.7231>; and Scott Lavery, “Rebuilding the Fortress? Europe in a Changing World Economy,” *Review of International Political Economy* 31, no. 1 (2023): 330–353, <https://doi.org/10.1080/09692290.2023.2211281>.
- 337 Vinod K. Aggarwal and Andrew W. Reddie, “New Economic Statecraft: Industrial Policy in an Era of Strategic Competition,” *Issues & Studies* 56, no. 2 (2020), <https://doi.org/10.1142/S1013251120400068>.
- 338 Matthijs and Meunier, “Europe’s Geoeconomic Revolution.”
- 339 Philipp Genschel and Frank Schimmelfennig, “War, Political Development, and European Integration: A Debate on Kelemen and McNamara’s ‘State-Building and the European Union,’” *Journal of European Public Policy* 29, no. 12 (2022): 1867–1870, <https://doi.org/10.1080/13501763.2022.2141824>; R. Daniel Kelemen and Kathleen R. McNamara, “State-Building and the European Union: Markets, War, and Europe’s Uneven Political Development,” *Comparative Political Studies* 55, no. 6 (2022): 963–991, <https://doi.org/10.1177/00104140211047393>; and Kathleen R. McNamara, “Transforming Europe? The EU’s Industrial Policy and Geopolitical Turn,” *Journal of European Public Policy* 31, no. 9 (2023): 2371–2396, <https://doi.org/10.1080/13501763.2023.2230247>.
- 340 Marc R. Devore, “Defying Convergence: Globalisation and Varieties of Defence-Industrial Capitalism,” *New Political Economy* 20, no. 4 (2015): 569–593, <https://doi.org/10.1080/13563467.2014.951612>.
- 341 “SIPRI Arms Industry Database,” Stockholm International Peace Research Institute, <https://www.sipri.org/databases/armsindustry>.
- 342 Mitja Kleczka et al., “The Spectrum of Strategic Autonomy in EU Defence Supply Chains,” *Defence and Peace Economics* 35, no. 4 (2023): 427–447, <https://doi.org/10.1080/10242694.2023.2180588>.
- 343 Katherine Walla, “Europe ‘Must Get Its Act Together’ on Defense, Says Dutch Defense Minister,” *The Atlanticist* (blog), Atlantic Council, July 15, 2022. <https://www.atlanticcouncil.org/blogs/new-atlanticist/europe-must-get-its-act-together-on-defense-says-dutch-defense-minister/>; “A Stronger Netherlands, A Safer Europe. Investing in a Robust NATO and EU,” Dutch Ministry of Defence, white paper, Amsterdam, 2022; and Lally Weymouth, “Sweden’s Prime Minister: Europe Must Step up to Defend Itself,” *Washington Post*, July 9, 2024, <https://www.washingtonpost.com/opinions/2024/07/09/europe-nato-spending-sweden-kristersson/>.
- 344 Henry Foy and Sylvia Pfeifer, “Europe’s Defence Sector: Will War in Ukraine Transform Its Fortunes?,” *Financial Times*, July 18, 2022, <https://www.ft.com/content/0a917386-7a62-4e4a-9b89-123933f750a6>.
- 345 “EDF | Developing Tomorrow’s Defence Capabilities,” European Commission, https://defence-industry-space.ec.europa.eu/eu-defence-industry/european-defence-fund-edf-official-webpage-european-commission_en.

- 346 “Defence Data 2019-2020: Key Findings and Analysis,” European Defense Agency, 2021, <https://eda.europa.eu/docs/default-source/brochures/eda---defence-data-report-2019-2020.pdf>.
- 347 “Speech by President von der Leyen at the European Parliament Plenary on Strengthening European Defence in a Volatile Geopolitical Landscape,” European Commission, February 28, 2024, https://neighbourhood-enlargement.ec.europa.eu/news/speech-president-von-der-leyen-european-parliament-plenary-strengthening-european-defence-volatile-2024-02-28_en.
- 348 “A New European Defence Industrial Strategy: Achieving EU Readiness Through a Responsive and Resilient European Defence Industry,” European Commission, March 5, 2024, <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=JOIN%3A2024%3A10%3AFIN>.
- 349 “Strategic Technologies for Europe Platform,” European Union, https://strategic-technologies.europa.eu/about_en#press-and-media.
- 350 Aurélie Pugnet, “Breton Pitches €100 Billion Fund for Defence Industry Cooperation,” Euractiv, January 10, 2024, <https://www.euractiv.com/section/defence-and-security/news/breton-pitches-e100-billion-fund-for-defence-industry-cooperation/>.
- 351 Yoruk Bahceli and Dhara Ranasinghe, “Explainer: Why Germany’s Stance on Joint EU Debt Matters to Investors,” Reuters, October 11, 2022, sec. European Markets, <https://www.reuters.com/markets/europe/why-germanys-stance-joint-eu-debt-matters-investors-2022-10-11/>; and Johanna Treeck, Carlo Martuscelli, and Carlo Boffa, “Germany Torpedoes EU Dreams of Being a Financial Superpower,” *Politico*, September 25, 2024, <https://www.politico.eu/article/europe-financial-ambition-slam-germany-opposition-olaf-scholz-commerzbank/>.
- 352 “The European Commission and the European Investment Fund Join Forces to Boost Investment in Defence Innovation Through the Defence Equity Facility,” European Commission, January 12, 2024, https://ec.europa.eu/commission/presscorner/detail/en/ip_24_145.
- 353 “EU Finance Ministers Set in Motion EIB Group Action Plan to Further Step-up Support for Europe’s Security and Defence Industry,” EIB, press release, April 12, 2024.
- 354 Henry Foy et al., “Brussels Power Grab on Defence Irks Industry and EU Capitals,” *Financial Times*, February 21, 2024, <https://www.ft.com/content/20099233-e8e7-480f-b559-80bca89500d8>.
- 355 Thomas Gutschker, “Scholz sagt Nein zu EU-finanzierten Waffen” [Scholz Says No to EU-Funded Arms], *Frankfurter Allgemeine Zeitung*, June 28, 2024, <https://www.faz.net/aktuell/politik/ausland/eu-gipfel-in-bruessel-olaf-scholz-sagt-nein-zu-eu-finanzierten-waffen-19821498.html>.
- 356 Nikou Asgari, “French Capital Markets Union Plan Gets Backing From European Funds Body,” *Financial Times*, April 30, 2024, <https://www.ft.com/content/f177a670-b1ab-4bf8-8bd6-acf5adaa4efe>.
- 357 Henry Foy, “Why EU Leaders Reached a Stalemate on Joint Defence Bonds,” *Financial Times*, March 22, 2024, <https://www.ft.com/content/b73b8100-075b-471b-b2f8-f0d5d86c2196>.
- 358 “EDIRPA: Council Greenlights the New Rules to Boost Common Procurement in the EU Defence Industry,” Council of the European Union, October 9, 2023, <https://www.consilium.europa.eu/en/press/press-releases/2023/10/09/edirpa-council-greenlights-the-new-rules-to-boost-common-procurement-in-the-eu-defence-industry/>.
- 359 Jean-Pierre Maulny, “The Impact of the War in Ukraine on the European Defence Market,” Institute of International and Strategic Relations, September 2023, https://www.iris-france.org/wp-content/uploads/2023/09/19_ProgEuropeIndusDef_JPMaulny.pdf.
- 360 Rosa Balfour in this compilation.
- 361 Antonio Gramsci, *Selections From the Prison Notebooks of Antonio Gramsci* (New York: International Publishers, 1971).
- 362 Henry Farrell and Abraham L. Newman, “Weaponized Interdependence: How Global Economic Networks Shape State Coercion,” *International Security* 44, no. 1 (2019): 42–79, https://doi.org/10.1162/isec_a_00351; Richard Higgott and Simon Reich, “The Age of Fuzzy Bifurcation: Lessons From the Pandemic and the Ukraine War,” *Global Policy* 13, no. 5 (2022): 627–639, <https://doi.org/10.1111/1758-5899.13141>; Dani Rodrik, *The Globalization Paradox: Democracy and the Future of the World Economy* (New York and London: W. W. Norton, 2011); Gary Gerstle, *The Rise and Fall of the Neoliberal Order: America and*

- the World in the Free Market Era* (New York: Oxford University Press, 2022); Rana Foroohar, *Homecoming: The Path to Prosperity in a Post-Global World* (New York: Crown Publishing Group, 2022); and David Harvey, *A Brief History of Neoliberalism* (Oxford: Oxford University Press, 2005).
- 363 “Remarks by National Security Advisor Jake Sullivan on Renewing American Economic Leadership at the Brookings Institution,” The White House, April 27, 2023, <https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/04/27/remarks-by-national-security-advisor-jake-sullivan-on-renewing-american-economic-leadership-at-the-brookings-institution>.
- 364 Gerstle, *The Rise and Fall*; Helen Thompson, *Disorder: Hard Times in the 21st Century* (Oxford: Oxford University Press, 2022); Martin Wolf, *The Crisis of Democratic Capitalism* (London: Allen Lane, 2023); and Foroohar, *Homecoming*.
- 365 Gerstle, *The Rise and Fall*.
- 366 Fritz W. Scharpf, “Legitimacy in the Multilevel European Polity,” *European Political Science Review* 1, no. 2 (2009): 173–204, <https://doi.org/10.1017/S1755773909000204>.
- 367 David Beetham and Christopher Lord, *Legitimacy and the European Union* (Abingdon: Routledge, 1998), <https://doi.org/10.4324/9781315840949>.
- 368 Vivien A. Schmidt, *Europe’s Crisis of Legitimacy: Governing by Rules and Ruling by Numbers in the Eurozone* (Oxford: Oxford University Press, 2020).
- 369 Scharpf, “Legitimacy.”
- 370 Andrew Moravcsik, “Reassessing Legitimacy in the European Union,” *Journal of Common Market Studies* 40, no. 4 (2002): 603–624, <https://doi.org/10.1111/1468-5965.00390>; and Andreas Follesdal and Simon Hix, “Why There Is a Democratic Deficit in the EU: A Response to Majone and Moravcsik,” *Journal of Common Market Studies* 44, no. 3 (2006): 533–562, <https://doi.org/10.1111/j.1468-5965.2006.00650.x>.
- 371 Anand Menon and Stephen Weatherill, “Transnational Legitimacy in a Globalising World: How the European Union Rescues Its States,” *West European Politics* 31, no. 3 (2008): 397–416, <https://doi.org/10.1080/01402380801939610>
- 372 John G. Ruggie, “International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order,” *International Organization* 36, no. 2 (1982): 1–37. I am grateful to Erik Jones for reminding me of “generative grammar.”
- 373 Martha Finnemore, “Legitimacy, Hypocrisy, and the Social Structure of Unipolarity. Why Being a Unipole Isn’t All It’s Cracked Up to Be,” *World Politics* 61, no. 1 (2009): 58–85, <https://doi.org/10.1017/S0043887109000082>.
- 374 Erik Jones, “The JCMS Annual Review Lecture,” *Journal of Common Market Studies* 50, no. s2 (2012): 53–67, <https://doi.org/10.1111/j.1468-5965.2012.02272.x>.
- 375 Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (New York: Rinehart, 1944).
- 376 Menon and Weatherill, “Transnational Legitimacy.”
- 377 Fabienne Ilzkovitz et al., “Steps Towards a Deeper Economic Integration: The Internal Market in the 21st Century,” European Commission, January 2007, https://ec.europa.eu/economy_finance/publications/pages/publication784_en.pdf; and “The Lime Assessment Framework (LAF),” European Commission, October 2008, https://ec.europa.eu/economy_finance/publications/pages/publication13275_en.pdf.
- 378 Liesbet Hooghe and Gary Marks, “A Postfunctionalist Theory of European Integration: From Permissive Consensus to Constraining Dissensus,” *British Journal of Political Science* 39, no. 1 (2009): 1–23, <https://doi.org/10.1017/S0007123408000409>.
- 379 Helene Sjursen, “The Legitimacy of European Union Foreign Policy,” *Global Affairs* 4, no. 2–3 (2018): 253–264, <https://doi.org/10.1080/23340460.2018.1532308>.
- 380 Adam Tooze, *Crashed: How a Decade of Financial Crises Changed the World* (New York: Viking, 2018).
- 381 Anthony Giddens, *The Third Way: The Renewal of Social Democracy* (Malden, Massachusetts: Polity Press, 2000).

- 382 Sheri Berman, “The Social Democratic Order and the Rise and Decay of Democracy in Western Europe,” in *The Downfall of the American Order?*, ed. Peter J. Katzenstein and Jonathan Kirshner (New York: Cornell University Press, 2022), 70–85.
- 383 “Consolidated Version of the Treaty on European Union,” article 21, Official Journal of the European Union, October 26, 2012, https://eur-lex.europa.eu/resource.html?uri=cellar:2bf140bf-a3f8-4ab2-b506-fd71826e6da6.0023.02/DOC_1&format=PDF.
- 384 François Duchêne, “Europe’s Role in World Peace,” in *Europe Tomorrow: Sixteen Europeans Look Ahead*, ed. Richard J. Mayne (London: Fontana, 1972), 32–47; Karen E. Smith, “The End of Civilian Power EU: A Welcome Demise or a Cause for Concern?,” *International Spectator* 23, no. 2 (2000): 11–28; and Mario Telò, *Europe: A Civilian Power? European Union, Global Governance, World Order* (Basingstoke: Palgrave, 2006).
- 385 Ian Manners, “Normative Power Europe: A Contradiction in Terms?,” *Journal of Common Market Studies* 40, no. 2 (2002), <https://doi.org/10.1111/1468-5965.00353>.
- 386 Anu Bradford, *The Brussels Effect: How the European Union Rules the World* (New York: Oxford University Press, 2020).
- 387 Wolf, *The Crisis*.
- 388 Peter Mair, *Ruling the Void: The Hollowing of Western Democracy* (London and New York: Verso, 2013), <https://hdl.handle.net/1814/28077>.
- 389 Rosa Balfour, “Brexit, the Democratic Question in Europe, and the Future of the EU,” German Marshall Fund of the United States, December 9, 2019, <https://www.gmfus.org/news/brexit-democratic-question-europe-and-future-eu>.
- 390 Adam Tooze, “Welcome to the World of the Polycrisis,” *Financial Times*, October 28, 2022, <https://www.ft.com/content/498398e7-11b1-494b-9cd3-6d669dc3de33>.
- 391 Giovanni Grevi, “Fostering Europe’s Strategic Autonomy: A Question of Purpose and Action,” European Policy Centre, December 2020, https://www.epc.eu/content/PDF/2020/Final_Paper_Purpose_and_Action_Layout_JF_II_1_.pdf; and Niklas Helwig and Ville Sinkkonen, “Strategic Autonomy and the EU as Global Actor: The Evolution, Debate and Theory of a Contested Term,” *European Foreign Affairs Review* 27 (2022): 1–20, <https://doi.org/10.54648/eerr2022009>.
- 392 Enrico Letta, “Much More Than a Market,” Council of the European Union, April 2024, <https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf>.
- 393 “European Council Meeting (27 June 2024) – Conclusions,” European Council, June 27, 2024, <https://www.consilium.europa.eu/media/qa3lbg/a/euco-conclusions-27062024-en.pdf>.
- 394 Mario Draghi, “The Future of European Competitiveness: Part A | A Competitiveness Strategy for Europe,” European Commission, September 2024, https://commission.europa.eu/document/download/97e481fd-2dc3-412d-be4c-f152a8232961_en?filename=The%20future%20of%20European%20competitiveness%20-%20A%20competitiveness%20strategy%20for%20Europe.pdf.
- 395 Nicolai von Ondarza, “The Crisis Governance of the European Union,” German Institute for International and Security Affairs, September 10, 2023, https://www.swp-berlin.org/publications/products/research_papers/2023RP10_EU_crisis-governance.pdf.
- 396 Stefan Lehne, “The Comeback of the European Commission,” Carnegie Europe, April 24, 2023, <https://carnegieendowment.org/research/2023/04/the-comeback-of-the-european-commission?lang=en¢er=europe>.
- 397 Marco Buti, “When Will the European Union Finally Get the Budget It Needs?,” Bruegel, December 7, 2023, <https://www.bruegel.org/analysis/when-will-european-union-finally-get-budget-it-needs>.
- 398 Philip Blenkinsop, “Draghi Urges EU to Catch Up Rivals [*sic*] or Face ‘Slow Agony,’” Reuters, September 9, 2024, <https://www.reuters.com/markets/europe/draghi-urges-reform-massive-investment-revive-lagging-eu-economy-2024-09-09/>; and Carlo Martuscelli, “Mario Draghi’s Plan to Fix a Broken Europe Already Looks Impossible,” *Politico*, September 9, 2024, <https://www.politico.eu/article/mario-draghi-report-europe-finances-invest-energy-work/>.

- 399 “Completing the Internal Market: White Paper From the Commission to the European Council (Milan, 28-29 June 1985),” Commission of the European Communities, June 14, 1985, <https://op.europa.eu/en/publication-detail/-/publication/4ff490f3-dbb6-4331-a2ea-a3ca59f974a8/language-en>.
- 400 Henry Foy and Ian Johnston, “The EU’s Plan to Regain Its Competitive Edge,” *Financial Times*, November 4, 2023, <https://www.ft.com/content/124b4cdb-deb9-49a0-b28d-d97838606661>.
- 401 “Daily Morning News Briefing,” EuroIntelligence Professional, January 11, 2024.
- 402 Jan Strupczewski, “EU Leaders to Back More EIB Financing of Defence Projects - Draft,” Reuters, March 12, 2024, <https://www.reuters.com/world/europe/eu-leaders-back-eib-financing-defence-projects-draft-conclusions-2024-03-12/>.
- 403 “Speech by Federal Chancellor Olaf Scholz at the Charles University in Prague on Monday, 29 August 2022,” German Federal Government, August 29, 2022, <https://www.bundesregierung.de/breg-en/federal-government/scholz-speech-prague-charles-university-2080752>.
- 404 “Official Speeches and Statements - April 18, 2023,” Embassy of France in Washington, D.C., April 18, 2023, <https://franceintheus.org/spip.php?article11269#1>.
- 405 “Spain-Netherlands Non-paper on Strategic Autonomy While Preserving an Open Economy,” Rijksoverheid, March 25, 2021, <https://open.overheid.nl/documenten/ronl-fd3bbc94-f598-45b3-abbd-75bfd5b18b97/pdf>.
- 406 “Trade Policy Review - An Open, Sustainable and Assertive Trade Policy,” European Commission, Directorate-General for Trade, February 18, 2021, <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:52021DC0066>.
- 407 “Official Speeches,” Embassy of France.
- 408 Rosa Balfour and Stefan Lehne (eds.), “Charting the Radical Right’s Influence on EU Foreign Policy,” Carnegie Europe, April 18, 2024, <https://carnegieendowment.org/research/2024/04/charting-the-radical-rights-influence-on-eu-foreign-policy?lang=en¢er=europe>.
- 409 Olivia Lazard and Richard Youngs (eds.), “The EU and Climate Security: Toward Ecological Diplomacy,” Carnegie Europe, July 12, 2021, <https://carnegieendowment.org/research/2021/07/the-eu-and-climate-security-toward-ecological-diplomacy?lang=en¢er=europe>.
- 410 Eugenia Baroncelli and Sinan Ülgen in this compilation.
- 411 Joan Robinson, *Essays in the Theory of Employment* (Oxford: Basil Blackwell, 1947). I am grateful to Michael Pettis for bringing this reference to my attention.
- 412 Anna Ilyina, Ceyla Pazarbasioglu, and Michele Ruta, “Industrial Policy Is Back but the Bar to Get It Right Is High,” International Monetary Fund, April 12, 2024, <https://www.imf.org/en/Blogs/Articles/2024/04/12/industrial-policy-is-back-but-the-bar-to-get-it-right-is-high>.
- 413 Enrico Letta, “Much More Than a Market,” European Council, April 2024, <https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf>.
- 414 See, for example, “Discours du Président de la République sur l’Europe à la Sorbonne” [Speech by the President of the Republic on Europe at the Sorbonne], Élysée Palace, April 25, 2024, <https://www.elysee.fr/front/pdf/elysee-module-22625-fr.pdf>; and Philip Blenkinsop, “Draghi Urges EU to Catch Up Rivals or Face ‘Slow Agony,’” Reuters, September 9, 2024, <https://www.reuters.com/markets/europe/draghi-urges-reform-massive-investment-revive-lagging-eu-economy-2024-09-09/>.
- 415 Joan Robinson, *Essays in the Theory of Employment* (Oxford: Basil Blackwell, 1947).
- 416 Interestingly, the International Monetary Fund has already launched an initiative on this theme, through which it is collaborating with the World Trade Organization to promote a multilateral dialogue on trade and industrial policy.
- 417 See, for instance, Jennifer Hillman and Inu Manak, “Rethinking International Rules on Subsidies,” Council on Foreign Relations, September 2023, <https://www.cfr.org/report/rethinking-international-rules-subsidies>.



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