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Abstract

We review the literature on geoeconomics, defined as the field of study that links economics and geopolitics (in particular, in terms of power rivalry). We describe what geoeconomics is and which questions it addresses, focusing on five main subfields: (a) the use of geoeconomic policy tools such as sanctions and embargoes; (b) the geopolitics of international trade, especially work on coercion and fragmentation; (c) the geopolitics of international finance, which focuses on currency dominance and state-directed capital flows; (d) the literature on geopolitical risk and its spillovers to the domestic economy, for example, on investments, credit, and inflation; and (e) the economics of war, in particular research on trade and war and on military production. As geopolitical tensions grow, we expect the field to grow substantially in the coming years.

1. INTRODUCTION

We are witnessing a major transformation of the international political and economic order, with the weakening of US hegemony, the emergence of new powers in Asia, and new external wars, such as Russia's attack on Ukraine. These developments raise challenging questions for the discipline of economics. What do rising geopolitical tensions imply for growth, investments, or inflation? Will China's rise lead to further economic integration or rather to a fragmentation of global finance and trade into competing blocks? What are the economic costs of great power rivalry, rearmament, and war? And what are the drivers and consequences of using economic weapons such as sanctions and embargoes? This article reviews the rapidly growing body of research that addresses these and related questions.

A central aim of this survey is to describe what geoeconomics is, both as a concept and as a field of research. We take a broad view and define geoeconomics as the study of the interlinkages between geopolitics and economics. We then frame what we consider to be the major subfields of the broader field of geoeconomics. We begin with geoeconomic policy tools, like sanctions, given that most research in the past years has focused on this area. We then review the literature linking (a) geopolitics and international trade, and (b) geopolitics and international finance. Another growing body of work examines geopolitical risks and their spillovers to the domestic economy. Finally, we cover the economic literature on security and war, in particular the trade and war debate, as well as studies on the economic costs of war, war finance, and military procurement. Each of these subfields links economics closely to issues of power rivalry and security.

It is difficult to survey a field of research that is only beginning to emerge and consolidate. However, recent conferences give indication of where the field is heading, as shown by the list of papers presented at, for example, the Kiel-CEPR Annual Geoeconomics Conference (starting in 2022) and the NBER Summer Institute Session on International Economics and Geopolitics (starting in 2024). Main themes include the link between international trade and power (e.g., Clayton et al. 2023, Broner et al. 2024, Kleinman et al. 2024, Liu & Yang 2024, Mayer et al. 2024, Thoenig 2024), the use of embargoes and sanctions (e.g., Itskhoki & Mukhin 2022, Clayton et al. 2024), the domestic spillovers of geopolitical risk (e.g., Caldara & Iacoviello 2022), the geopolitics of currencies and capital flows (e.g., Eichengreen et al. 2018; Horn et al. 2021, 2024), and the economics of war and military spending (e.g., Federle et al. 2024a, Pflueger & Yared 2024). These papers demonstrate that current research integrates theoretical and empirical contributions, which mutually influence one another. In addition, we often refer to older literature on the subject, including from the interwar years or the Cold War.

The research we cover builds on a long history of thought. Many past thinkers have spent their lives studying economic warfare, the politics of economic interdependence, or the causes and consequences of geopolitical shocks. This is also true for economic scholars.

Leading economists such as John Hicks, Albert Hirschmann, Leonid Kantorovich, John Maynard Keynes, Wassily Leontief, Joan Robinson, Thomas Schelling, and John von Neumann all made important contributions to what we would now call geoeconomics.¹ Between the 1920s and 1970s, they studied questions of economic coercion, optimal deterrence, war finance, arms races, or critical bottlenecks in supply chains and industrial production [see the overviews by Bollard (2020, 2023) and Guglielmo (2008)].² Their contributions on these topics have often

¹For some examples, we refer readers to Keynes (1940), von Neumann & Morgenstern (1944), Hirschman (1945, 1958), and Schelling (1960).

²Paul Samuelson emphasized the crucial role that economists played in the wars of the twentieth-century, going as far as calling World War II an "economists' war" (cited in Guglielmo 2008, p. 111).

been forgotten, overshadowed by the more famous work on peacetime issues; but given the world around us today, it is time to unearth their insights.

In the international trade and international finance literatures, too, there is a long tradition of considering geopolitics and the role of international power. The link between trade and power was explored in classic works such as Hirschman's (1945) and then, among others, in works by Mansfield (1995), Martin et al. (2008), or Jackson & Nei (2015). In international finance, pioneering work has studied hegemony in the international financial and monetary system as well as the rise and fall of global reserve currencies, with a particular focus on the US dollar and its "exorbitant privilege." The long list includes classic works such as those by Nurske (1944), Kenen (1983), and Krugman (1984) as well as Portes & Rey (1998), Chinn & Frankel (2007), Gourinchas & Rey (2007a,b, 2022), Farhi & Maggiori (2018), and Ilzetzki et al. (2019), in addition to a whole series of contributions on the topic by Barry Eichengreen and coauthors (e.g., Eichengreen 1996, 2011; Eichengreen et al. 2019).

We also emphasize that geoeconomics is by definition cross-disciplinary. Thus far, economists working on questions related to geopolitics have often remained siloed in their respective research area, be it international trade, political economy, finance, economic history, defense economics, or development. The newly forming field of geoeconomics, therefore, has the potential to act as a bridge between various disciplines and fields of specialization, combining a broad mix of theories, methods, and data.

Given the broad scope of geoeconomics, this review is far from complete. There are many relevant papers and books, old and new, that we could not cover in these few pages, including great work from other disciplines. We have chosen to focus on important contributions in economics while recognizing that there is a large and influential qualitative literature in political science and international relations on geoeconomic questions, for example, on how globalization is being "weaponized" (see, e.g., Luttwak 1990, Blackwill & Harris 2016, Farrell & Newman 2019, Drezner et al. 2021).

We write this review with one primary audience in mind: those interested in studying geoeconomic questions, especially graduate students and younger scholars. Most economists today (including ourselves) have only limited training or expertise on questions of security, war, or international political tensions. However, given the growing security concerns, this is likely to change, just as it did during the turbulent decades of the twentieth century, when a generation of economists turned to these issues. Looking ahead, we therefore expect the field of geoeconomics to grow considerably—and this review is an attempt to make sense of it.

The remainder of this article is structured as follows. In Section 2, we start with a discussion of definitions and concepts, such as geoeconomics, geopolitical risk, and geoeconomic fragmentation. Section 3 focuses on policy tools like sanctions and embargoes. Sections 4 and 5 focus on the geopolitics of international trade and international finance, respectively. Section 6 is on geopolitical risk, while Section 7 focuses on the economics of war and the military. Section 8 concludes with an outlook on future research.

2. WHAT IS GEOECONOMICS?

We define geoeconomics as the field of study that examines the links between geopolitics and economics. Geopolitics, in turn, can be understood in the context of international power rivalry, with a classic definition being "the study of rivalries for power or influence over territories and the people who inhabit them" (Lacoste 2006, p. 9). Geoeconomics is thus concerned with how international political rivalry (including war) shapes economic policies and outcomes—and vice versa.

Our definition overlaps with that of Thoenig (2024, p. 326), who defines geoeconomics as "the study of the interaction between trade, diplomacy, and geopolitics," but ours is broader in

that it also includes international finance and other arenas beyond trade. Our definition thereby resembles more closely that of Chatham House, which describes geoeconomics “as the interplay of international economics, geopolitics and strategy” (Schneider-Petsinger 2020).

Our definition is broader than that of Clayton et al. (2023), who define geoeconomics as a strategy in which “governments use their countries’ economic strength from financial and trade relationships to achieve geopolitical and economic goals.” Their framework focuses primarily on economic power and economic warfare, while ours deliberately extends to issues of actual warfare as well—including military finance, arms production, or the economic drivers and consequences of external wars. Our definition is also broader than that of Blackwill & Harris (2016, p. 20), who define geoeconomics as “the use of economic instruments to promote and defend national interests, and to produce beneficial geopolitical results.” They mainly focus on geoeconomic policy tools such as sanctions, which we see as a very important, but not the only, subfield of geoeconomics. In fact, their definition is similar to what political scientists used to call economic statecraft, which based on the classic book by Baldwin (1985) is defined by the Encyclopedia Britannica as “the use of economic means to pursue foreign policy goals” (Baldwin 2016). We see geoeconomics not simply as a reincarnation of the older concept of economic statecraft, but rather as a new, broad field that combines questions of geopolitics and war with questions of international economics.

In the bigger picture, geoeconomics is an emerging subfield of political economy. While political economy studies the relationship between politics and economic outcomes in general, geoeconomics focuses mainly on the international dimension.³ In fact, many geoeconomic studies focus on how international economic exchange interacts with international politics, in particular with conflict risks and the global balance of power. Crucial subquestions in the field of geoeconomics include how geopolitical considerations influence economic policy-making and how international geopolitical risks affect the domestic economy as well as cross-border trade in goods and assets.

The concept of geopolitical risk has been defined by Caldara & Iacoviello (2022, p. 1197) as “the threat, realization, and escalation of adverse events associated with wars, terrorism, and any tensions among states and political actors that affect the peaceful course of international relations.” Geopolitical risk thus captures the potential and realized shocks to the military and diplomatic relations between countries.

Another concept frequently found in this literature is that of great powers, which political scientists and historians have defined as countries that extend their influence far beyond their own borders, be it through military, trade, or finance (e.g., Kennedy 1987). In this body of research, the list of great powers since 1800 typically includes Austria-Hungary, China, France, Great Britain, Prussia/Germany, Russia, Italy, Japan, and the United States (see, e.g., Waltz 1979).

In addition, there is the increasingly used term of geoeconomic fragmentation, which Aiyar et al. (2023a) define as a “policy-driven reversal of global economic integration often guided by strategic considerations.” Geoeconomic fragmentation can thus be understood as a form of strategic disintegration out of geopolitical motives.

3. GEOECONOMIC POLICY TOOLS

Countries can employ a large variety of economic policy tools to advance their geopolitical objectives. While some of these instruments are openly labeled and widely considered as geopolitical,

³Geoeconomics as it is defined here is thus closely related to international political economy, which can be defined as “politics of international economic exchange” (Lake 2009, p. 221).

the link to geopolitical objectives is less obvious for others. Blackwill & Harris (2016, p. 10), for example, not only list “trade policy, investment policy, [and] economic sanctions” as geopolitical policy tools but also add “the cybersphere, aid, monetary policy, and energy and commodity policies.” What is common to all these instruments is that states use their economic capacity to achieve geopolitical goals.

In the rest of this section, we introduce key policy tools and their treatment in the geoeconomics literature.

3.1. Sanctions

Sanctions are the best-known geoeconomic policy tool and also the best-understood, thanks to a large and rapidly growing literature (for excellent reviews, see Felbermayr et al. 2021, van Bergeijk 2021, Morgan et al. 2023).

Sanctions can be defined as “restrictive policy measures that one or more countries take to limit their relations with a target country in order to persuade that country to change its policies or to address potential violations of international norms and conventions” (Morgan et al. 2023, p. 3). They include (a) trade sanctions limiting the trade of certain goods; (b) financial sanctions limiting the flow of financial assets or the usage of certain currencies, such as the US dollar; (c) military sanctions limiting military procurement and arms trade; and (d) individual sanctions such as travel restrictions or asset freezes for a list of persons.

The idea to use sanctions to achieve geopolitical goals can be traced through history and geography: The Athenian Empire imposed economic sanctions upon its rival Megara in the fifth century BC, the Byzantine Empire enforced a trade embargo on Egypt and Syria in 692, and Napoleon put an embargo on the British Empire into effect in 1806 (Juhász 2018). In the wake of World War I, the use of sanctions increased considerably—as an economic weapon to be used during war but also as an alternative to war that could potentially deter future conflict (Mulder 2022).

Building on classic models of sanctions (Kaempfer & Lowenberg 1988, Eaton & Engers 1992), the theoretical literature examines the costs associated with sanctions for both the sender and target countries, and it offers guidance on how to implement them effectively (Clayton et al. 2023, Becko 2024, de Souza et al. 2024, Itskhoki & Ribakova 2024, Johnson et al. 2025).

The empirical research on sanctions started in earnest with the seminal work on sanction effects by Hufbauer et al. (1990). Since then a large literature has emerged on the determinants and effects of sanctions, supported by new comprehensive sanctions data, such as the Global Sanctions Database by Felbermayr et al. (2020).⁴ The overwhelming majority of papers study the effects of sanctions on the target country—in particular, the effects of trade sanctions (Felbermayr et al. 2020, Dai et al. 2021, Kohl 2021), financial sanctions (Cipriani et al. 2023, Drott et al. 2024), sanctions on central bank assets (Krahnke et al. 2024), smart sanctions targeted at individual firms or persons (Ahn & Ludema 2020, Draca et al. 2022, Nigmatulina 2023), or the interaction of several types of sanctions (Bayer et al. 2024). A more recent strand of research also considers the effect of sanctions on the sending country (Crozet & Hinz 2020, Besedeš et al. 2021) as well as how third countries adjust to sanctions (Corsetti et al. 2024).

The recent literature on sanctions uses increasingly rich, granular data, for example, at the level of individual firms or bank accounts (for a particularly comprehensive analysis on sanctions effects in Russia, see Egorov et al. 2024). Granular data also allow to evaluate new types of smart sanctions targeted at specific companies or persons (Ahn & Ludema 2020, Draca et al. 2022,

⁴For an overview and discussion of this and other data sets, readers are referred to Portela & Charron (2023).

Nigmatulina 2023). This trend toward micro-level analyses deepens our understanding of the losers and winners of sanctions and of their differential effects within countries, and it facilitates the identification of causal effects.

Overall, the empirical literature on sanctions shows that sanctions, by and large, tend to achieve their stated economic objective, in particular by hampering trade flows and access to the international financial system. However, there is disagreement on how large the effects are, and more work needs to be done with regard to financial sanctions, which are only starting to be explored in depth. The evidence also shows that the governments of targeted countries can effectively take measures to shield certain industries or firms from the effects of sanctions, but this is costly and increases the overall cost of sanctions within the country. It is not entirely clear yet what drives whether countries are able to shield their industries and what the long-term effects of this are.

More research is also needed on smart sanctions, that is, on the drivers and effectiveness of tailored sanctions on individuals who belong to the economic and political elite of the targeted country [see the survey by Drezner (2011) and the recent theory paper by Baliga & Sjöström (2025)].

In addition, there is a growing body of work on financial sanctions (e.g., Cipriani et al. 2023, Drott et al. 2024, Krahnke et al. 2024) as well as on the effects of sanctions on currency markets and the exchange rate, partly motivated by the G7 sanctions against Russia after February 2022. Itskhoki & Mukhin (2022), for example, show that the impact on the exchange rate depends on the type of sanctions imposed, with asset freezes and export sanctions resulting in depreciation and sanctions on imports resulting in appreciation. Eichengreen et al. (2023) show evidence consistent with this theory, not only for Russia today but also in a broader historical context.

Sanctions may also undermine the position of the US dollar as a trade invoicing currency, as shown by Berthou (2023), Bianchi & Sosa-Padilla (2023), Chupilkin et al. (2023), and McDowell (2023), and as a reserve currency in targeted countries, although the aggregate effect of this seems to be limited (Goldberg & Hannaoui 2024). This relates to the broader literature on financial hegemony and dollar dominance covered in Section 5.1 (see also Steil & Litan 2008).

3.2. Embargoes and Blockades

Russia's full-scale invasion of Ukraine in 2022 brought embargoes back to the forefront of public debate in Europe. Embargoes and blockades, during which the sender completely halts economic exchange with the target, can be seen as a particularly drastic form of sanctions that mainly occurs during wars and armed conflicts. Their economic effects have been studied by Irwin (2005), Lambert (2012), Etkes & Zimring (2015), Juhász (2018), Mulder (2022), and Fetzer et al. (2024), among others.

The literature suggests that embargoes and blockades, especially drastic ones such as those imposed during the world wars, can have a major economic impact and cause much suffering to the civilian population in the targeted countries, sometimes causing more deaths than the actual war. At the same time, the evidence shows that embargoes frequently trigger adjustment processes to replace previously imported goods or to procure inputs from other countries. The adoption process in response to embargoes can be surprisingly quick and effective, with high elasticities of substitution.

This, arguably, is also the main takeaway from the so-called Great German Gas debate of 2022, in which economists focused on the cost consequences of imposing a full embargo on Russian gas imports (for a discussion, see Moll et al. 2023). For Germany, some economists predicted a GDP decline of up to 12% (e.g., Krebs 2022), while others, in particular Bachmann et al. (2022), pointed to the power of substitution effects and predicted only a mild recession. Eventually Bachmann and

colleagues were proven right, as German GDP barely shrunk after Russia (not Germany) imposed a unilateral gas embargo.

3.3. Tariffs and Trade Agreements

Tariffs and trade agreements are additional instruments in the geoeconomic tool kit of governments. Both Hufbauer et al. (1990) and Felbermayr et al. (2020) see tariffs as being a distinct category from sanctions. This is because classic trade policy measures such as tariffs or antidumping are regarded as primarily protectionist and targeted at audiences at home, while sanctions primarily aim to punish foreign countries. Felbermayr et al. (2020) recognize, however, that in an era of increasingly weaponized trade policies, the line between the two policy tools is becoming increasingly blurry.

The US–China trade war of the past decade offers new lessons on the (geo)political use of tariffs (for an overview, see Fajgelbaum & Khandelwal 2022). Fetzner & Schwarz (2020), for example, show that Chinese tariffs were targeted to hurt US regions with high voting shares for Donald Trump, while Fajgelbaum et al. (2019) show that US import tariffs were higher for products made in politically contested counties in the United States, suggesting tailored protectionism.

Geopolitical considerations also drive the design of trade agreements (Eichengreen et al. 2021). At the same time, there is evidence that trade agreements increase geopolitical alignment between countries (Vicard 2012).

3.4. Export and Investment Controls

Export controls give governments the right to limit exports of certain goods or technologies to other countries. These controls are often motivated by national security interests, but they are also believed to have negative side effects on innovation, competitiveness, investment, and trade. There is little research focusing specifically on export controls, so many open questions remain. Crosignani et al. (2024) show that US-imposed export controls successfully disrupted the supply of goods to Chinese firms, but at the cost of major collateral damage. Affected firms in the United States lost revenues, profitability, and stock market capitalization, with little evidence for reshoring. On the other hand, Chinese-imposed export controls of rare earth elements led to innovation and long-term productivity growth in downstream sectors abroad (Alfaro et al. 2024).

A related tool is investment screening. Over the past decade, many countries have introduced mechanisms to monitor and restrict investments. These new policies were often motivated by the growing number of foreign takeovers in critical sectors, in particular by Chinese state-controlled firms. The literature on this topic remains limited, but recent evidence shows that these restrictions have negative effects on inward investment flows (e.g., Eichenauer & Wang 2024) as well as on the probability of foreign takeovers and shareholder value (Frattaroli 2020).

3.5. Sabotage, Espionage, and Cyberattacks

A particular aggressive geoeconomic tool is sabotage. It can range from purely economic forms of sabotage targeting specific foreign firms through sanctions that reduce their productivity (e.g., Liu et al. 2024b) to industrial espionage (Glitz & Meyersson 2020, Glitz et al. 2023) or even to military sabotage—for example, through the destruction of critical infrastructure, such as the destruction of the gas pipeline North Stream 2, or through targeted bombings. While there is some research on the economic effects of targeted bombings during war (which we discuss in Section 7.2), the economic and geopolitical consequences of sabotage more broadly are not understood yet.

Cyberattacks and hacking can also be regarded as geoeconomic tools of states and quasi-state actors. A small but growing literature shows the large economic damage of these activities. Firms

exposed to cyberattacks experience declines in stock returns and profits (Jamilov et al. 2023). Cyberattacks can also have large spillover effects across industries (Jamilov et al. 2023) and even across countries through multinational firms (Crosignani et al. 2023).

3.6. Foreign Aid

Foreign aid can take many forms, such as humanitarian aid, disaster relief, development assistance, military aid, export credit subsidies, or grants and loans. In contrast to sanctions, states seldom declare their geopolitical goals when sending humanitarian aid to other countries. Empirical analyses, however, indicate that geopolitical considerations shape both the direction and the timing of foreign aid and lending flows (Alesina & Dollar 2000, Kuziemko & Werker 2006, Faye & Niehaus 2012, Dreher et al. 2022). While foreign aid can help countries achieve their geopolitical goals, it can also have unintended geopolitical consequences, such as increasing the risk of conflict in recipient countries (Nunn & Qian 2014).

4. GEOPOLITICS AND TRADE

4.1. International Power and Trade: From Mercantilism to Hirschman's Economic Coercion

Many influential thinkers, including Kautilya, Niccolò Machiavelli, Adam Smith, David Ricardo, John Stuart Mill, and Susan Strange, have studied the relationship between international trade and power. The central trade-off has remained the same through the ages: Economic integration can strengthen national power, but it also exposes a country to new dependencies and risks.

In his seminal book on power and trade, Hirschman (1945) provides a sweeping history of economic thought on the topic. He starts with mercantilist ideas, according to which more wealth always translates to more national power—typically at the expense of rival powers. Leading mercantilists like Jean Baptiste Colbert in the seventeenth century saw international trade as a zero-sum game and therefore favored heavy government intervention to avoid trade deficits and dependency. Over the course of the eighteenth century, this mercantilist worldview gave way to the liberal school of thought, led by Adam Smith and Hume, which emphasized the large gains from trade in both economic and political terms.⁵ Hirschman (1945) emphasizes that, despite the rise of liberalism, some core ideas of mercantilism resurfaced again and again, especially in times of geopolitical upheaval.

One recurring mercantilist idea is that larger, militarily stronger, or more competitive countries can extract gains from trade from comparatively weaker powers. Late-nineteenth-century thinkers like Sering emphasized that “there exist between national economies relations of exploitation and of subjugation” (Sering 1900, p. 31). This is consistent with work by Findlay & O'Rourke (2007), who offer a broad historical account of such dependencies and the fight over resources and trade rents during the past 1,000 years.

Hirschman's (1945) book, written under the impression of Nazi Germany's ruthless foreign aggression, is centered on this view. It offers an in-depth analysis of the mechanisms of international economic coercion and rent extraction, particularly through threats to disrupt trade or financial relations with another country. The core themes of this book and Hirschman's ideas on trade policy as an alternative to war have returned to the forefront of public debate today, motivated in large part by China's increasing assertiveness, Donald Trump's transactional America First trade

⁵A central idea of liberal thinkers is that economic integration can help promote peace, as mutual dependencies and commercial ties increase the opportunity cost of war (see Section 7.1 for a more detailed discussion of the relationship between trade and war).

policy, and the large-scale sanctions against Russia since 2022. It is therefore not surprising that many of the influential recent contributions in geoeconomics build on Hirschman's work.

Clayton et al. (2023) present "a framework for geoeconomics." In their model, a large, hegemonic country overcomes the notorious problem of limited enforceability of international contracts. The key mechanism is to coordinate joint threats with other countries, also by leveraging the amplification of shocks through input-output networks. The hegemon uses these coordinated sanctions to act as a global enforcer—for example, by threatening to cut off access to global payment systems or critical technology. In this world, a hegemon has a dual role. It uses its power to extract global rents that make smaller countries worse off, but it also provides a global public good by facilitating the enforcement of cross-border contracts, which helps to expand global production and welfare.

Clayton et al. (2024) build on this framework, focusing in particular on the response of countries that seek to preempt coercion and rent extraction by the hegemon. They emphasize a trade-off. Individually, small countries can gain security by decoupling their economies from the hegemon's trade and financial networks. However, if many countries do this in an uncoordinated fashion, this can set off what the authors call a fragmentation doom loop, which shrinks the global gains from trade.

Becko & O'Connor (2024) and Kooi (2024) have a similar focus on how countries react when faced with increased risk of geoeconomic coercion and conflict. In both papers, countries strategically use financial subsidies and trade policies at home to be better prepared for future conflict abroad. These models help rationalize why governments choose to support certain domestic industries out of forward-looking geopolitical motives, even though such support may seem inefficient during peacetime.

The notion of economic coercion also plays a central role in a paper by Liu & Yang (2024) that combines theory with a comprehensive empirical effort to measure international power and bilateral political linkages. A key finding in this paper is that rising geopolitical tensions can motivate countries to strategically expand their international power through trade networks.

4.2. Hegemony, Alignment, and Globalization

Another reviving debate is that on hegemony and globalization: How do superpowers shape the global trading system? And what are the economic implications of a shift from a hegemonic to a more multipolar world? During the Cold War era of the 1970s and 1980s, these questions were studied extensively, with research spanning economic history (e.g., Kindleberger 1973, 1986), political science (e.g., Gilpin 1981), and the world system school of sociology (e.g., Braudel 1984, Wallerstein 1989).

Kindleberger (1973), in particular, developed the concept of hegemonic stability, according to which an integrated global economic system requires a hegemon to underpin it. Gilpin (1975) and Krasner (1976) further developed this idea, stressing that hegemons favor integration out of self-interest rather than out of altruism. A hegemonic power with a large, efficient economy is bound to benefit from integration, which then leads it to uphold integration through the use of military and political power blocs. Recent work takes up these ideas and formalizes them.

Broner et al. (2024) present a model of hegemonic globalization in which trade increases with political alignment. The presence of a large hegemonic country prompts alignment around the hegemon, thereby supporting global trade and welfare. The rise of a second large power, however, may cause globalization to unravel. Empirically, they test their theory using a newly compiled data set of bilateral and multilateral treaties across 200 years. They find that hegemons drive treaty-signing and that countries that sign treaties with a hegemon trade more not only with the

hegemon but also with other countries that are aligned with the hegemon. A world with a single large hegemon is likely to experience deeper globalization.

The link between political alignment and trade is also explored by Kleinman et al. (2024). They show that countries that trade extensively with each other are also more likely to be politically aligned with each other. Empirically, they measure economic exposure using detailed trade data and exploit China's entry into the global trading system to show a causal effect of economic exposure on (re-)alignment. In related work, Hinz (2023) shows that geopolitical considerations can drive a country's decision to integrate economically with another country.

4.3. Fragmentation, Decoupling, and Supply Chain Risks

The current debate on trade fragmentation has its roots in the deglobalization discussion of the late 2010s and early 2020s. Researchers like Colantone et al. (2022) speak of a global backlash against globalization, while Irwin (2020) sees globalization in retreat for the first time in decades. Based on detailed data, however, Antràs (2020) and Goldberg & Reed (2023) both refute the idea that the world economy has entered a phase of deglobalization. Instead, they point to the surprising resilience of global trade and rather see a pattern of "slowbalization," meaning a slowdown in the growth of global trade after two decades of rapid expansion.⁶

At the same time, both Antràs (2023) and Goldberg & Reed (2023) point to Russia's attack on Ukraine as the start of a new era of geopolitical turmoil, with heightened risks to globalization and free trade. Goldberg & Reed (2023), for example, emphasize that "national security is the most powerful argument against unconstrained, market-driven globalization to date." As Irwin points out, this statement resonates with the argument of Adam Smith, who famously wrote that "defence, however, is of much more importance than opulence" (cited in Irwin 2023, p. 412).

In line with this, there is now a rapidly growing body of empirical papers studying signs of geoeconomic fragmentation, decoupling, or friendshoring (for a survey see Aiyar et al. 2023b).⁷ To study geopolitical fragmentation the literature uses various measures of geopolitical distance between countries. A common approach has been to use differences in countries' voting patterns in the United Nations General Assembly—for example, using votes on the Russian war against Ukraine (e.g., Bolhuis et al. 2023, IMF 2023, Gopinath et al. 2024). The paper by Fernández-Villaverde et al. (2024) constructs a more comprehensive fragmentation index by combining a broad range of subindicators such as trade openness, trade restrictions and sanctions, and geopolitical risk or conflicts. Based on this indicator, they find that geopolitical fragmentation has negative effects on GDP, industrial production, investment, and asset markets, with particularly severe impacts on emerging economies.

The overall takeaway from this small but growing literature is that trade flows are increasingly being redirected along geopolitical lines, although there is disagreement on how large this divergence really is. Moreover, fragmentation is found to be economically costly (e.g., Attinasi et al. 2023, Góes & Bekkers 2023, Hakobyan et al. 2023, Javorcik et al. 2024). Another strand of literature focuses on connector countries, which cultivate links with partners from different geopolitical blocs (see, for example, Aiyar & Ohnsorge 2024).

A related and influential literature focuses specifically on global value chains, which are at the core of today's globalized economy (for excellent surveys, see Antràs & Chor 2022, Baldwin &

⁶Others paint a more pessimistic picture, pointing to the rapid rise in global trade restrictions (Aiyar et al. 2023a) and to the political backlash against globalization.

⁷Aiyar et al. (2023a) define geoeconomic fragmentation as "a policy-driven reversal of global economic integration often guided by strategic considerations."

Freeman 2022). In recent years the positive view on global value chains has been overshadowed by concerns about supply chain risks, including geopolitical risks.

Researchers are therefore increasingly focusing on supply chain vulnerabilities, be it in conflict regions such as Ukraine (Korovkin et al. 2024) or in the context of the US–China trade war (e.g., Antràs & Staiger 2012, Grossman et al. 2024, Blanchard et al. 2025). Alfaro & Chor (2023), among others, show evidence for a great reallocation of US supply chains, with a shift away from China and toward closer allies such as Mexico and Vietnam. A key strength of this line of work is the accessibility of rich and representative micro data. Smirnyagin & Tsyvinski (2022) and Liu et al. (2024a), for example, study supply chain disruptions based on the universe of US seaborne imports, with more than 200 million shipment-level observations. It is only a matter of time before this type of data is used to better understand the role of geopolitical risk shocks in global trade.

5. THE GEOPOLITICS OF INTERNATIONAL FINANCE: CURRENCIES AND CAPITAL FLOWS

The link between international finance and power has fascinated scholars for a long time. As mentioned in the introduction, classic and recent work by economists has studied, in particular, the dominance and exorbitant privilege of the US dollar as well as the role of reserve currencies (for an overview, see Gourinchas et al. 2019). Political scientists, sociologists, and historians have also repeatedly returned to the question of structural power in the international financial system (see, e.g., Kennedy 1987, Tilly 1975, Helleiner 1994, Strange 1996, Hardt & Negri 2000, Frieden 2006). Here we focus on two main branches of the recent literature that link geopolitics and international finance: (a) currency dominance and (b) state-driven capital flows. This literature was pioneered by Barry Eichengreen, among others, and is now gaining broader traction.

5.1. Currency Dominance and Financial Hegemony

The questions of financial hegemony and currency dominance are seeing a notable revival, mostly with a view to the US dollar's dominant role in global trade and finance. Classics in this field include works by Eichengreen (1996, 2011) and Ilzetzki et al. (2019) (for an excellent recent survey, see Gopinath & Itskhoki 2022). Many recent contributions study the drivers and consequences of US dollar usage in trade invoicing and currency markets, partly motivated by the seminal work of Gopinath et al. (2020) and Gopinath & Stein (2021). Other influential work focuses on the role of the US dollar as an issuance currency in debt markets (e.g., Maggiori et al. 2019) as well as on the unique ability of the United States to produce safe assets (e.g., Farhi & Maggiori 2018).

Several recent papers turn to history to learn about currency dominance and hegemony. The recent paper by Coppola et al. (2023), for example, looks back four centuries and shows that, both then and now, investors seek deep, liquid asset markets. This liquidity channel helps to explain the long spells of dominance by the Dutch florin, the British pound, and the US dollar over the course of history (see also Eichengreen 1996, Ilzetzki et al. 2019, Vicquéry 2022).

The surprising persistence of global anchor currencies is also explored by Goldberg & Tille (2008), who focus on industry features and country size; by Chahrour & Valchev (2022), who emphasize the role of trade collateral; and by Mukhin (2022), who highlight complementarities in price setting and input–output linkages. These papers are in line with work by Kennedy (1987), who argues that currency dominance is surprisingly resilient and often is the last of the great power privileges to fall. The British pound, for example, still dominated global trade and finance in the early 1920s, although the United Kingdom's military and economic dominance had long waned.

Looking ahead, the big question lurking behind much of this work is whether and when the hegemony of the US dollar will come to an end (Rey 2019). The decline of US hegemony has

been wrongly predicted many times before (e.g., Kennedy 1987, Wallerstein 2003), and for the time being, the US dollar continues to be preeminent. However, given historical experience and the ongoing rise of Asian economic powers, it may only be a question of time. Eichengreen (2011), Gourinchas (2019), and Mukhin (2022) all agree that the current US-dominated system will ultimately give way to a new global equilibrium, and they see the most likely outcome as being a multipolar order of regional currencies.

If history is any lesson, geopolitical forces will play a central role in a transition away from the US dollar (Eichengreen et al. 2018, Ikenberry 2001, Doshi 2021). Early signs of such a shift are already apparent, as China has strategically expanded its footprint in the global financial system. Over the past 15 years, China has launched a global network of currency swap lines that offer access to liquidity to other central banks (Bahaj & Reis 2022). China has opened its government bond market to foreign investors (Clayton et al. 2025). Unnoticed by many, China has also become an international lender of last resort to countries in financial distress, providing more than US\$150 billion in bailout loans over the past decade (or about 20% of International Monetary Fund lending in the same period) (Horn et al. 2023). In addition, the Chinese state has also become the largest official lender around the world through its Belt and Road Initiative, surpassing the loan portfolio of all Western governments combined (Horn et al. 2021). We turn to the issue of government-directed capital flows in the next section.

5.2. Geopolitics and Capital Flows

The link between geopolitics and the international allocation of capital is underexplored, both theoretically and empirically.

One emerging literature examines state-directed capital flows, particularly government-to-government lending, which is inherently (geo)political. Alfaro et al. (2014) pioneered the literature on sovereign-to-sovereign capital flows by showing how large and countercyclical these flows have been since the 1970s. Horn et al. (2021) document the large rise in Chinese official international lending (see also Dreher et al. 2022). They show that China's overseas lending to developing countries is almost entirely state controlled, is much larger than previously thought, and has terms that resemble those of international private lending rather than those of other official creditors. Gelpert et al. (2023) and Franz et al. (2024) follow up on this work to show that Chinese state banks include (geo)political clauses in their international lending contracts and that Chinese banks offer preferential lending terms for strategic projects abroad, such as for infrastructure that enables trade with China or for military or political prestige projects.

Horn et al. (2024) provide a big picture view on state-directed capital flows across 200 years, based on a newly compiled global database of loans, grants, and central bank credits going back to 1790. They show that the rising hegemon of their time were also the dominant official lenders of their time: European nations in the nineteenth century, the United States in the decades after World War II, and today, increasingly, China. Then and now, state-driven capital flows are strongly countercyclical. They rise precisely when private capital flows recede, in particular in periods of turmoil, such as during major wars and financial crises. These findings are in line with Kindleberger's (1981) description of a hegemonic stabilizer that provides "a steady if not countercyclical flow of capital."

These papers offer broader historical lessons for today. In a more multipolar world with growing geopolitical tensions, states are likely to become (again) very dominant in global finance, while private capital flows may play a lesser role, possibly due to capital controls. In this view, it is no coincidence that most of today's rising powers, such as China, India, or Saudi Arabia, are prone to use state banks and government-controlled financial vehicles when investing or lending abroad. Global capital markets are likely to become more (geo)political in the coming decades.

The first signs of geopolitical fragmentation in global finance are becoming visible, at least according to several studies that use current data. Kempf et al. (2023), for example, show that the ideological distance between countries shapes the size and direction of capital flows, while Aiyar et al. (2024) and Gopinath et al. (2024) find that foreign direct investment flows increasingly correlate with geopolitical tensions and (re-)alignment in recent years. More work is needed on the role of geopolitics and hegemony in the international financial system.

6. GEOPOLITICAL RISK AND THE DOMESTIC ECONOMY

A growing literature examines the economic cost of geopolitical risk. In their influential paper, Caldara & Iacoviello (2022, p. 1195) define geopolitical risk as “the threat, realization, and escalation of adverse events associated with wars, terrorism, and any tensions among states and political actors that affect the peaceful course of international relations.” Based on this definition, they developed a set of novel geopolitical risk indices at the global, country, and sectoral level, using textual analysis of modern and historical newspapers. This approach builds on that of Baker et al. (2016), who first showed how to use newspaper coverage to capture economic uncertainty shocks across countries and time.

Using their indices, Caldara & Iacoviello (2022) show that geopolitical risk shocks are associated with a decline in investments, employment, and stock markets as well as a higher risk of economic disasters. Their paper and data also motivated a large body of empirical literature on the spillovers of geopolitical risks on asset markets, inflation, and bank lending. Good examples of this literature include the works of Caldara et al. (2024a), Niepmann & Shen (2024) and di Giovanni et al. (2024) (for a survey, see Hodula et al. 2024).

Other authors have refined their measurement approach. Hassan et al. (2019), in particular, use a large database of earning call texts to measure firm-level risks, including geopolitical risks. Bondarenko et al. (2024) move beyond English-language newspapers and show that risk indices based on Russian-language newspapers are much better suited to trace geopolitical shocks impacting the Russian economy.

7. THE ECONOMICS OF (EXTERNAL) WARS

War is the most destructive outcome of international power rivalry, with major (geo)economic implications. Here, we review economic research on external rather than internal wars, because geoeconomics is by definition international and focuses on questions of cross-border rivalry.⁸

We focus, in particular, on three branches of research that are particularly relevant for geoeconomics: (a) the longstanding debate on trade and war, (b) the literature on the cost of (external) wars, and (c) economic research on war finance and military production. For an excellent overview on the broader economic literature on wars and conflict, readers are referred to the new handbook by Dube et al. (2024). There is also an important literature based on game theoretic models of war and (nuclear) deterrence that has been highly influential during the Cold War and is seeing a revival today (for seminal contributions, refer to Schelling 1960, Fearon 1995, and Powell 2006).

7.1. Trade and War: Does Globalization Bring Peace?

Montesquieu, Kant, and John Stuart Mill all wrote about the relationship between trade and war. Then as now, one of the central questions is whether economic integration brings peace or rather the opposite [see the superb summary by Thoenig (2024)].

⁸The rich economic literature on civil war and intrastate conflict is surveyed, for example, by Blattman & Miguel (2010) and Garfinkel & Skaperdas (2012).

In the liberal view, trade reduces the likelihood of war between states, because economic interdependence and commercial linkages raise the opportunity cost of conflict. A famous proponent of this view was Angell (1909), who argued in his bestselling book of 1909 that the economic costs of war had become so high as to outweigh any possible gains. He therefore predicted that a war between European powers was highly unlikely, only to be proven fundamentally wrong five years later.

The realist view, on the other hand, suggests that trade increases the rivalries between states. War becomes more likely with economic integration, as countries become more concerned about dependencies and compete more intensely for strategic goods and the gains from trade (see, for example, Waltz 1979, Findlay & O'Rourke 2007).

Early empirical work on war and trade examined either the effect of trade integration on the probability of war (e.g., Polachek 1980, Mansfield 1995, Barbieri 2002) or the opposite, that is, the effect of conflicts on bilateral trade (Blomberg & Hess 2006, Glick & Taylor 2010).

The seminal paper by Martin et al. (2008) combines the liberal and realist view and shows that globalization has a two-sided impact on the risks of war and the opportunity cost of war. Bilateral trade decreases the probability of war, because two countries become economically more dependent on each other. Global trade, on the other hand, can increase war risks, because in a multilateral, highly integrated world, countries can easily switch trading partners and overcome the dependency from any given opponent. They show supporting evidence that globalization has lowered the probability of large-scale global conflict since World War II, but it has also increased the likelihood of smaller bilateral wars. As a result, conflicts have become more localized over time, with the average distance between war parties halving between 1950 and 2000.⁹

Thoenig (2024) generalizes and adapts this model to study geoeconomic mechanisms and in particular the role of trade policy “in the shadow of war.” He highlights a security dilemma, whereby reliance on imports from a geopolitical rival raises the cost of bilateral war but also creates incentives to reduce this dependence by diversifying imports. This diversification, in turn, lowers the cost of conflict with each individual nation. As a result, there can be a reinforcing feedback loop between de-risking and the global risk of war. The model is useful to evaluate current policy dilemmas, such as US–China decoupling or Ukraine–EU relations. Initially, an increase in trade costs between the United States and China results in geoeconomic welfare gains for the United States. However, if trade costs grow too large, conflict risks escalate, leading to a collapse in US welfare. Similarly, Ukraine’s accession to the European Union increases welfare and consumption but it also results in fewer incentives for deescalation. A related ongoing project on the benefits and costs of de-risking is by Mayer et al. (2024).

7.2. The Economic Costs of War

What are the economic costs of war? The first estimates date back to at least World War I (see, for example, Clark 1916, 1931; Rossiter 1916). Since then, researchers have examined the effects of war on a broad range of outcomes (for a recent survey see Munroe et al. 2023).

Barro (2006) and Barro & Ursúa (2008) show that major wars are among the most disastrous macroeconomic shocks, which can result in unparalleled collapses in consumption, GDP, and asset prices in belligerent countries. Recent research further shows the large cross-country spillovers of war, with the economic costs increasing in the vicinity of the fighting (Federle et al. 2024a,b). This

⁹Jackson & Nei (2015) empirically examine the relationship between trade, military alliances, and war and show that increased trade fosters the formation of military alliances, which in turn reduce incentives to wage wars.

is in line with the work of Davis & Weinstein (2002) and Miguel & Roland (2011), who document the large and long-lasting destructive impact of bombing campaigns on economic activity in the affected areas. Using a novel measure of shortages, Caldara et al. (2024b) show that international wars are associated with shortages in the US economy.

Other literature has looked beyond macro aggregates. War exposure increases outgroup hostility and lowers civic engagement, which might explain the persistent effect of war on economic activity and trade (Rohner et al. 2013, Dell & Querubin 2017).¹⁰ This is in line with the transaction-level analysis by Korovkin & Makarin (2023), who show that after Russia's attack on Ukraine in 2014, trade decreased more for firms in areas with fewer ethnic Russians, that is, in areas where the erosion of trust due to the war was larger. Furthermore, wars can force a substitution of local inputs to imported ones (or vice versa), with large adverse effects on firms (e.g., Amodio & Di Maio 2017), and affect supply chains more generally (Korovkin et al. 2024).

7.3. War Finance and Military Production

War financing is a crucial factor in determining the success of war, as pointed out by Niccolò Machiavelli centuries ago. Over time, the methods to finance wars have evolved significantly. Tilly (1975, p. 42) famously noted that “war made states and states made war,” emphasizing how warfare compelled states to develop better institutions in order to raise sufficient funds, which in turn enabled them to engage in further conflicts (Gennaioli & Voth 2015, Cantoni et al. 2024). As wars grew in scale and complexity, so did the challenges of financing them, often forcing entire economies to adapt to the demands of the war effort. However, effective war financing is not simply about maximizing funds available to warfare but also requires balancing a number of (conflicting) additional objectives—in particular, economic stability and political cohesion (Zielinski 2016).

The debate on war finance often revolves around the source of funding. In the eighteenth century, economists like Adam Smith and David Ricardo advocated for financing wars through taxation rather than excessive borrowing. Similarly, during World War II, Keynes (1940) famously proposed tax increases rather than debt or money printing.

The modern literature on war finance is small and underdeveloped. The first quantitative evidence was provided by Ohanian (1997), who runs counterfactual exercises for the United States and finds that shifting from debt to tax-financing considerably reduces the economic costs of war. Additionally, there has been research on how the method of war financing can impact the reputation of a nation's currency (Hall & Sargent 2014). Scheve & Stasavage (2016) show that the world wars saw major increases in tax rates and tax revenues, especially in belligerent countries, while Mitchener & Trebesch (2023) show that a massive increase in the ratio of government debt to GDP occurred during both World War I and World War II. Governments at war also have a history of introducing new types of taxes, such as excess profit taxes (Hicks et al. 1941).

Recent work also studies the link between hegemony and war finance. Pflueger & Yared (2024), in particular, show that militarily dominant countries benefit from a funding advantage in the form of lower government bond yields, which helps those hegemonic countries sustain their power advantage and win wars. In the authors' model, it is the size of a country's military capital that explains the exorbitant privilege enjoyed by hegemons like the United States.

Lastly, there is the long-standing debate on guns versus butter, that is, the trade-off between military and social spending. The early literature is inconclusive on whether such a trade-off exists (see, e.g., Russett 1982, Mintz 1989). Recent work by Marzian & Trebesch (2024) studies war

¹⁰Other research shows that individuals who were exposed to war violence exhibit higher levels of local cooperation and civic engagement (Bauer et al. 2016).

finance and military spending booms over the past 150 years and finds that cuts in social spending are the rare exception. Most wars and military booms were financed through debt and, to a lesser degree, through taxes.

A second main factor for the success of war is effective military production, that is, how the money for armament and warfare is best spent. One strand of research focuses on the efficiency of military procurement and production. As wars require a sudden, massive ramp-up in weapons production, economists have long studied how to increase productivity, for example, via learning-by-doing mechanisms. Examples of this approach include works by Thompson (2001), Thornton & Thompson (2001), and Ilzetzki (2024), all of which examine the striking success of US aircraft and warship production increases during World War II. Others study peacetime procurement processes, which have a reputation of being slow, wasteful, and inefficient (for a survey, see Uttley 2018). The paper by Bhattacharya (2021), for example, studies how small changes in R&D contests by the US military can significantly increase the effectiveness of procurement. More recently, Alekseev & Lin (2024) examine the production and trade of dual-use goods, which have come under increased scrutiny also due to China's new military-civil fusion policy.

Another strand of research focuses on the spillover effects of military production and military R&D. The received literature on military spending and growth mostly used aggregate data and delivered mixed, often contradicting results [see the survey by Yesilyurt & Yesilyurt (2019)]. Recent work, in contrast, uses rich micro data. Gross & Sampat (2023) and Kantor & Whalley (2023), for example, find that the US government's large-scale military R&D investment programs during World War II and during the space race of the Cold War had substantial positive long-run effects on the US economy and innovation. Using more recent data, Moretti et al. (2025) give support for this positive view, showing that public R&D investments increase private investments, especially for defense-related R&D.

8. THE FUTURE OF THE FIELD

The field of geoeconomics, in its modern incarnation, is still in its early stages. Many open questions and research challenges remain. In the following, we summarize what we see as some of the key opportunities for future work.

One of the central opportunities in this emerging literature is a better measurement and conceptualization of geopolitical and geoeconomic phenomena. There has been important progress in capturing geopolitical risk at the country level (Caldara et al. 2020), but much remains to be done to measure these risks at a more granular level and at higher frequencies. Similarly, we see much potential for developing better measures of bilateral alliances, rivalries, and spheres of influence (for recent contributions on these topics see, e.g., Broner et al. 2024, Camboni & Porcellacchia 2024, Liu & Yang 2024). The same is true for a conceptualization of economic coercion or for the quantification of geoeconomic rents and their extraction. Better measurement will also allow the rich new theoretical work on geoeconomics to be brought to the data.

Second, we see considerable potential in the use of history. The Cold War era between the 1950s and the 1980s, for example, has not been studied much by economists in recent decades, but it offers many opportunities to learn about geoeconomic weapons, arms races, and deterrence. The same is true of the Anglo-German rivalry after the 1880s as well as the disastrous decades between 1900 and 1945. Rapid advances in machine learning and image recognition now make it possible to extract large amounts of historical data and text quickly and efficiently, offering many research opportunities to draw lessons for the future.

Third, we expect to see much more research on economic weapons and geoeconomic policy instruments. The empirical literature on sanctions has grown considerably, but it has only begun to

take advantage of rich micro data and state-of-the-art methods for causal identification. Moreover, the theoretical literature on sanctions has been lagging behind. Future work should build on recent advances to better understand the costs, trade-offs, and effectiveness of sanctions and other tools such as export and investment controls. Moreover, the literature would benefit from a more holistic view that examines not just one tool, but rather the entire “poison cabinet” of geoeconomic policy instruments. Which tools are most effective and which ones cause the least collateral damage? How do the various coercive tools interact? More theory and evidence on these questions would be valuable for policymakers.

Fifth, we see the need for a new wave of research on military economics and the economics of external wars (e.g., on actual weapons). Research in recent decades has focused heavily on civil wars and armed insurgencies in the developing world. The drivers and characteristics of great power wars and interstate wars have received much less attention. Given the massive costs of external wars, it seems crucial to go back and study them in depth using modern methods and data. Similarly, there has been comparatively little work on military procurement and the military-industrial complex in the G20 countries. For example, we know little about China's and Russia's large-scale military buildups of recent decades. In Western countries, there has been limited progress in understanding how efficient procurement works. We also have a limited understanding of military supply chains or the industrial organization of arms production. Given ongoing concerns about conflict and war, it seems important to study this industry and better understand its vulnerabilities. More generally, we see a need to study the choke points of industrial production and infrastructure in the potential event of war.

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