CIVIL DEFENCE RESEARCH PROGRAMME: ECONOMIC SECURITY

The China Challenge: The Inherent Difficulty in Balancing Security Concerns against Economic Interests

Karl Lallerstedt

This paper seeks to explain how the West has ended up in the seemingly counterintuitive situation of continued growing economic exposure towards China despite serious and growing security concerns. The paper proposes that a core reason behind this apparent paradox is that most Western interactions with China are driven by commercial actors, operating with a very different understanding of risk as compared to state actors. It further seeks to contextualise the West's economic exposure towards China, highlighting some of the risks that arise from such exposure. Thirdly, the paper provides examples of China's alarming behaviour in the last few years, and draws a parallel to Russian actions preceding the 2022 invasion of Ukraine. By comparing Western reactions to Russian and Chinese actions, the paper suggests that a robust policy response to limit broad economic exposure to China is unlikely unless Chinese behaviour reaches similar levels of aggression as Russia. Finally, the paper draws some policy-related reflections relating to the aforementioned three points.

1) THE CENTRAL ISSUE: MARKET LOGIC IN THE DRIVER'S SEAT

Despite escalating security concerns in Washington D.C. and several other Western capitals, trade with China has continued to grow for the past decade, with both U.S. and European Union (EU) trade with China reaching all-time highs in 2022. The main reason for this development, seemingly out of tune with the wishes of the national security establishments, is that market

EU imports from China in billions of Euro per year

700
600
500
400
200
100
0
Imports, Bn EUR
2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

Figure 1. The EU's main sources of imports in 2022. **Source:** Eurostat

forces are driving the extent of Western interactions with China. It is therefore important to recognise that governments and private sector actors view risk differently. Whereas governments view risk through a national security perspective, the private sector tends to view risk from an economic perspective.

Risk is a term with multiple definitions. Michael Mazarr at RAND has summarised one such definition in the following way: "...risk is the threat of harm or loss that may adversely affect the ability of the organization to accomplish its mission." This definition emphasises that an organisation's understanding of risk depends on what it defines as its core mission. Given that commercial actors and governments have different missions, it is expected that they would have distinctly different understandings of risk

More specifically, there is a "profit and loss" understanding of risk that dominates in the commercial sector. This fact, in combination with the changes in global trade that have occurred since the end of the Cold War, have helped position China as a unique strategic challenger to the West. China has repeatedly illustrated its hostility to the global international rules-based order, but the West has shied away from full-scale economic

FOI Memo: 8440 Project no: A124303 Approved by: Anders Noren



confrontation. This is arguably because Chinese actions have so far remained below the kind of critical threshold that Russia passed after the full-scale invasion of Ukraine, and because such economic confrontation would be costly.

An effective Western strategy to deal with China needs to balance economic interests against the long-term security consequences of economic exchange with a rival. To formulate such a strategy, policy-makers must have an understanding of what drives commercial decision-making. Such understanding is necessary to be able to align the behaviour of commercial actors with Western governments' broader strategic priorities.

Liberals and realists differ in their view of economic interdependence, with liberals seeing it as a factor that contributes to a reduced risk of conflict between states, whereas realists believe that such interdependence creates vulnerabilities.³ If Western states, in a more realist vein, wish to decrease their economic dependence upon China, then they will need to consider further regulation or restriction of economic interactions. For such measures to be as effective as possible, the West would need to coordinate its approach to ensure a common line.

This is hard, not only because it requires policy coordination between several states, but also because firms would be the target of this policy. The state regulates the private sector but does not have direct control over it, the way that it does over its government authorities. Meanwhile, the guiding principle of most free enterprise is profit maximisation within the confines of the law. This means that companies are unlikely to take account of national security concerns unless it happens to align with their business interests, or unless there are regulatory requirements (or government pressure) that require them to do so. In addition to their overriding focus on profit maximisation, with the objective of delivering shareholder value, firms are also different from the public sector in the sense that many of the largest firms are global as opposed to national actors - with commercial interests and regulatory requirements bound to several jurisdictions. Most leading multinational firms have significantly larger economic exposure to the global markets than to their home jurisdictions.

States tend to have more of a domestic focus than certain firms do. Furthermore, the state's prime focus is not commercial. The legitimacy of the democratic state stems rather from its ability to serve the broad public interest, of which ensuring national security is one component.

Risk assessment and management is important in business. Paying for insurance as a risk management

strategy has been in use since Babylonian times at least. Apart from insurance, there are various other ways that business can manage certain risks. These measures include control measures within the corporate entity itself, such as quality standards, compliance requirements, or corporate governance codes.⁴ Deloitte's latest annual risk management survey indicated that all responding firms had Chief Risk Officers, and 72 percent of respondents at the board of directors' level stated that there was at least one board committee responsible for risk oversight.⁵ The problem, from a national security perspective, is not that businesses fail to take risk seriously, but rather what risk means from a business perspective.

A business decision is ultimately about the bottom line for the company, not about the broader implications of the decision for society. The worst thing that can happen with investment decisions from a purely commercial perspective is that they fail to generate the expected returns. Yet a degree of risk-taking is necessary to generate returns. Thousands of companies file for bankruptcy each year in Sweden, despite it being a relatively small country. These bankruptcies, although negative for the affected employees and investors, are not *per se* a failure of the market economy. Rather, the risk appetite driving this creative destruction is a necessary component of a functioning economy. Hence the saying, "No risk, no return."

The problem from a broader societal perspective is therefore not that companies ignore risks and vulnerabilities. Indeed, some companies are quite sophisticated at carrying out analyses of their risks and vulnerabilities. The problem is rather that firms focus on the risks posed to their own organisations, rather than the risks their actions may imply for broader society. Consequently, the necessary risk appetite of the commercial sector — with its singular focus on delivering economic returns — is fundamentally different to how the state approaches risk. The state must factor in a broader array of concerns, including long-term national security objectives.

A company bears responsibility for miscalculating, or handling, risk in the sense that it may lose money, or go bankrupt. However, firms do not face similar economic consequences for how their actions may affect the geoeconomic balance of power between the West and China. If a company concerned itself with geoeconomics, it would most likely concern potential risks posed to the company itself. If it wishes to mitigate the risk of operating in certain countries, it could purchase political risk insurance. Investopedia describes the benefits of political risk insurance as follows: "If a

business knows that it will be insured against political risks for years regardless of what happens, it can confidently proceed with activities that might otherwise be too risky to pursue." In reality, political risk insurance might not always be that straightforward nor is it possible to insure against all risks. Furthermore, insurance costs money. The state cannot insure against risks to its core mission in the same way that a company can, and the state's mission is much broader in scope than that of a company.

Although the state bears the responsibility for internal and external security in a modern, deregulated and globalised economy, companies control economic output. These firms also control the vast majority of critical societal services and carry out most applied research and development (R&D). Given the central role of firms in countries' international competiveness, firms constitute an important factor in the balance of power between states. In a non-adversarial environment, this would be less problematic, but in an environment where certain

states seek to reshape the global order to their advantage, commercial actors have become involuntary yet critical pieces in the broader geopolitical game.

To summarise, the key point is that most Western interactions with China in the past decades were commercially driven, and as such did not factor in national security concerns unless law stipulated it or there were clear commercial reasons for so doing. Thus, the current economic exposure to China is a logical outcome, despite its potentially concerning security implications.

The EU has become increasingly mindful of the economic security implications of private sector decisions, particularly relating to critical infrastructure, data, and cybersecurity. For example, the Directive on Security of Network and Information Systems and Critical Infrastructure Directives, being replaced by the NIS2 and CER-Directives, are examples of regulatory requirements that seek to bolster security levels in the private sector.⁸ The Foreign Direct Investment (FDI) Screening regulation, the upcoming European Chips Act, the proposed

CHINA'S SHARE OF GLOBAL GDP (PPP, CURRENT DOLLARS) VS. THE UNITED STATES AND THE EU

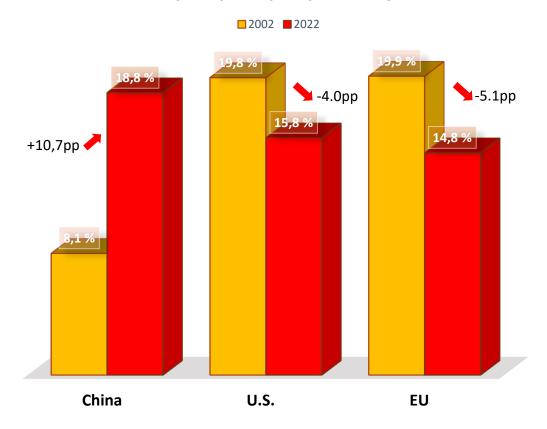


Figure 2. China's share of global GDP (PPP, current dollars) vs. the United States and the EU.

Source: STATISTA/IMF

Critical Raw Materials Act and the Net-Zero Industry Act all aim at reducing economic vulnerabilities.

The European Commission's "European Economic Security Strategy" outlines three priorities: 1) promoting European competitiveness by making the economy and supply-chains more resilient, bolstering innovation and industrial capacity, 2) protection against economic security risks, and 3) partnering with countries with shared economic security concerns. The document identifies the following types of risks faced by European economies: a) risks to resilience of supply chains, b) risks to the physical and cyber-security of critical infrastructure, and 3) risks related to others improperly obtaining European technology (including through espionage).9 It remains to be seen whether the strategy will be effective as a tool for addressing the identified risks. Meanwhile, there are risks not addressed in the strategy, including broad economic exposure to China, a country that the EU has identified as a systemic rival.

2) IMPLICATIONS OF UNPRECEDENTED ECONOMIC EXPOSURE TOWARDS AN AUTHORITARIAN SUPERPOWER

During the Cold War, the communist opponents of the "Free World" were command economies¹⁰, and there was limited commercial interaction between the competing ideological blocks. The end of the Cold War initiated a period of global deregulation and trade liberalisation, institutionally manifested by the establishment of the World Trade Organization (WTO) in

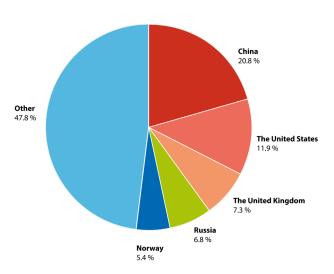


Figure 3. The EU's main sources of imports in 2022.

Source: Eurostat

1995. China joined the WTO in 2001. The new era was characterised by broad support for reducing barriers to trade, seen not only as a way of promoting economic growth, but also as a way to promote peaceful relations through increased economic interdependence. China subsequently grew into the largest economy in the world in terms of purchasing power parity. Today, Chinese companies are deeply intertwined with the commercial activities of the rest of the world.

States established the trading and investment frameworks that enabled the West's economic interdependence with China, but the players conducting the actual business were firms. For Western firms the drivers to do business in China, or with Chinese firms abroad, have been squarely commercial. In the last few years, the restrictions on certain international transactions with China have grown however. For example, the United States recently imposed restrictions on semiconductor exports to China. Prior to this though, almost everything barring weapons exports or certain dual use items was fair commercial game. Globalisation increased the West's economic interdependence with China. The potential consequences of this growing exposure have become more serious due to recent technological developments and increased market efficiency.

The global concentration of productive capacity in China has resulted in a broad strategic dependence

In addition to increased global trade and investment flows, the globalisation era also saw significant increases in efficiency. A global marketplace allowed for even greater economies of scale, which is positive from the perspective of global economic efficiency – but has also resulted in the concentration of nearly a third of global manufacturing output in China (30 percent), 1112 which is significantly higher than their share of global GDP, which was 18 percent in 2021. This suggests that the global economy is even more dependent on China as a supplier of manufactured goods than its economic size alone would suggest.

The oil crisis of 1973 illustrated that dependence upon a limited number of suppliers could have severe consequences. The Organization of Arab Petroleum Exporting Countries (OAPEC)¹⁴ triggered the crisis by initiating an oil embargo targeting nations that had supported Israel during the Yom Kippur War, resulting in a quadrupling of the global oil price. In response, several states imposed severe restrictions on oil product use. The sharp price increases, and the fact that higher oil prices lingered on long after the embargo ended,

had significant macroeconomic effects, ushering in an era of high inflation and low economic growth. The term "oil weapon" was born, to describe supply restriction as a coercive tool. More recently, Russia's status as Europe's dominant gas supplier has been similarly been described as Putin's "Gas Weapon." Russia's invasion of Ukraine in 2022 resulted in increased energy prices and broader inflationary pressures throughout the EU. In fact, EU inflation more than tripled in 2022, reaching the highest levels ever recorded.¹⁵

Strategic dependence is of course not limited to energy goods. The fact that China has become the leading exporter in the world – including to the EU, USA and Japan – implies that broad trade exposure to China is enormous. ¹⁶ ¹⁷ By contrast, during the Cold War, Western economic exchange with the Soviet Union was far more limited. For example, U.S.-Soviet trade averaged at around one percent of total trade for both countries during the 70s and 80s. ¹⁸

Not only does China export vast quantities of goods to the West, but it is also a manufacturing hub for exports to third countries, a leading supplier of components necessary for Western production, as well as the dominant supplier of rare earth minerals. Since the COVID-19 pandemic, Chinese export disruptions have had an inflationary effect. This was due to supply-side contractions caused by lockdowns that affected price developments internationally. China manufactures the majority of overseas demand for a range of products including containers¹⁹, ships²⁰, rare earths²¹, solar modules²², batteries²³, mobile phones²⁴ and personal computers.25 The fact that China is a significant manufacturer of components also means that access to Chinese output affects the end price of finished goods from other countries. Although deliberate Chinese exports restrictions would be costly for China itself, it would also have an extreme effect on the global economy. Being the "workshop of the World" China possesses a potential "Manufacturing Weapon" far more powerful than the "Oil Weapon" of the 70s.

Just-in-time deliveries

By adopting lean production techniques and increasing efficiencies throughout the entire supply chain, companies have managed to reduce stockpiles. Although this is positive and reduces costs, it also increases vulnerabilities to disruptions. This vulnerability might be exacerbated by increased dependence upon the aforementioned global concentration in productive capacity. Concerns over the vulnerability of global supply chains increasingly entered the public discourse following disruptions

during the COVID-19 pandemic. Combined with the increased geopolitical uncertainty that resulted from Russia's full-scale invasion of Ukraine in 2022, there has been a renewed policy debate regarding reshoring and "friend-shoring" of production.

Digitalisation

Digitalisation, and the fact that computers control ever-growing proportions of our infrastructure, implies new vulnerabilities. With "dumb" analogue products there are rarely any concerns about an opponent somehow manipulating the product to eavesdrop on its operator, or altering the product's functionality. In an increasingly digitalised and interconnected world, there is a need to develop safeguards to ensure the trustworthiness of the components and software in our digital ecosystems. The wisdom of permitting products developed by China in sensitive systems can therefore be questioned.²⁶

Cybersecurity risks arise whenever a person or organisation uses digital equipment. However, these risks are exacerbated when foreign companies supply the equipment as it may contain backdoor vulnerabilities planted on behalf of foreign governments. Such vulnerabilities could facilitate intrusions for the purpose of espionage or manipulation of digital systems. The more sensitive the equipment and the less reliable the jurisdiction of the supplier, the greater the need for caution. The most high profile example of governments beginning to take such caution is the fact that several countries have excluded Chinese firms from developing their 5G networks. Yet Chinese equipment and components continue to be almost omnipresent in our contemporary digital world, suggesting that governments have so far not fully implemented this cautionary approach. This is despite the fact that digitalisation has enabled large-scale industrial espionage,²⁷ and that cyberattacks can disrupt critical services. These are both novel threats that did not exist a few decades back.

Limited security mindset

The post-Cold War period was until quite recently characterised by limited government (and broader societal) concerns about great power aggression. There was an assumption that states would broadly respect the rules-based international order, while the threats posed by terrorism and smaller rogue states preoccupied much of the Western security community. With hindsight, one could say that this was naïve, and it is possible to argue that the West was slow to treat China and Russia as serious threats. For example, the EU officially recognised

China as a systemic rival as late as 2019, yet still officially continued to strive for deepened trade relations after this point. In 2023, European Commission President Ursula von der Leyen stated that "...we do not want to cut economic, societal, political or scientific ties... and that, "...most of our trade in goods and services remains mutually beneficial and 'un-risky." The danger of developing an economic dependence upon an authoritarian regime was clearly illustrated by the EU's continued reliance on Russian gas supplies until 2022, despite Russia's invasion of Georgia in 2008 and Ukraine in 2014, as well as assassinations conducted on EU territory using radioactive and chemical weapons. Is the West making the same mistake again, but this time regarding China?

Economic development leads to military development

From a purely economic perspective, trade with China has been beneficial for global consumers. The increase in Chinese global output has increased the availability of goods, resulting in lower prices than would otherwise have been the case. The import of Chinese goods, foreign investment in production capacity in China, and provision of foreign components and know-how to Chinese enterprises has been profitable for Western firms. At the same time, this economic exchange has boosted China's economic base. Considering that longterm military power is largely dependent upon economic power to sustain it, and that an industrial and technological base is needed to develop weapons systems, it is arguable that China's military rise was largely enabled by Western trade policy since the end of the Cold War. On the twentieth anniversary of China's WTO accession - which would not have been possible without Western consent - China's WTO ambassador declared, "Over the past 20 years, China grew from the sixth to the second largest economy of the world, with its GDP increasing 11-fold to almost USD 15 trillion."30

Strategic technology can be bought as well as stolen

The former NSA Chief General Keith Alexander famously described the loss of industrial information and intellectual property through cyberespionage as "the greatest transfer of wealth in history." However, there is an alternative to gaining information through espionage, namely to buy the companies with the relevant knowledge. Chinese firms have for example acquired a world-leading industrial robot manufacturer, German

KUKA, and the world's largest agrochemical producer, Swiss Syngenta.

Chinese acquisitions can also be seen in Sweden. The Swedish Defence Research Agency recently published a report identifying 90 Chinese commercial acquisitions in Sweden from 2019 to February 2023.32 The list is probably not exhaustive, but it identified 70 cases where Chinese majority control had been achieved, resulting in the total control of even more subsidiary companies. The Chinese acquisitions were especially prevalent within certain sectors, such as information and communication technology (ICT), consumer products, industrial products and machinery, health, and biotechnology. Around 59 percent of the acquisitions were areas of focus for the Made in China 2025 initiative, the purpose of which is to upgrade Chinese industry. Concerns over foreign control of sensitive companies has led to numerous countries enacting legislation requiring the screening and approval of foreign acquisitions, such as the EU's Foreign Direct Investment (FDI) regulation.

A non-level playing field: China a unique challenge

According to economic theory, competition is essential for boosting overall economic effectiveness. In reality, this is contingent on all the players respecting the rules of the game. There are various ways that states can artificially boost the market positions of certain companies. In addition to legislation and trade policies, which may gain more attention due to their formal nature, there are also informal methods of disrupting free and fair competition. For example, states can provide covert funding to selected firms, assist in industrial espionage, provide selected firms with information on competitors' bids, pressure key decision-makers to ensure that certain firms win tenders, provide privileged access to large home markets, amongst other things. Such practices come at a cost to other companies, and the underlying economic and technological base of the states that are the home markets of the disadvantaged companies. Due to its economic size and the fact that it is a one-party state with structures to coordinate and steer all of society, including firms, China poses a unique challenge when it comes to maintaining a level playing field.

China poses a unique challenge when it comes to vulnerabilities created by digitalisation. China is a key player in global digital infrastructure, at the same time as its legislation stipulates that Chinese companies and citizens must cooperate with the country's security and intelligence services. One of the largest uncovered cyberespionage operations, dubbed Cloudhopper, has been

attributed to China. The attack targeted managed IT service providers, and through them accessed their clients' networks. The IT systems of companies and governments around the world were compromised, and it is assumed that enormous amounts of data, including corporate assets and trade secrets were accessed, likely over a long period.³³ This suggests that the Chinese state is open to using unconventional and covert means of supporting its commercial or research ambitions – distorting free and fair competition in the process.

In the early post-Cold War period, Western governments hoped that China would gradually evolve in a more liberal direction once it became integrated into the global economy. However, the factors listed above have contributed to Western states seeing exposure to China as increasingly problematic. Various Western governments have taken a number of actions to limit exposure – not always targeting China explicitly, but doing so in practice.

Investment screening is an example of a tool intended to manage the risks that could arise from foreign acquisitions. This tool is already in place in several jurisdictions. Certain states have also begun addressing supply chain security concerns. This is not surprising, considering that China is the largest exporter in the world, with annual exports exceeding 3 trillion USD dollars. A noteworthy example is the Japanese Economic Security Promotion Act of 2022, which goes quite far and will force firms in certain sectors to consider economic security above market efficiency. For example, by securing supply chains from disruption by moving production to Japan or friendly states.

3) AUTHORITARIAN ACTION AND WESTERN INACTION: DRAWING PARALLELS BETWEEN CHINA AND RUSSIA

Despite the fact that Russia invaded Georgia in 2008, the members of the WTO allowed Russia to join the organisation a few years later, in 2012. When "little green men" invaded Ukraine in 2014 and Russia subsequently annexed Crimea, Western countries implemented targeted sanctions against a few Russian individuals and entities, but the economic effect on Russia was minor compared to the impact of the global financial crisis of 2007-2008, following the collapse of Lehman Brothers. As Emma Ashford at the Stimson Center has argued, these sanctions were a failure.³⁴ According to Ashford, Western sanctions did not constitute a particularly robust response to the first territorial annexation in Europe since the Second World War.

There were several indicators that Russia remained a threat to the rules based international order after 2014. These indicators include continued Russian aggression against Ukraine after 2014, the use of a chemical weapon in an assassination attempt in the UK, election interference during the US presidential election of 2016, as well as likely interference in the Brexit referendum in the UK. Yet despite these clear indications of hostile intent, the Western response remained restrained. None of these Russian actions caused as robust of a Western response as Russia's full-scale invasion of Ukraine finally did in 2022. The breach of international law was so flagrant and the crimes against humanity on such a grand scale that a robust response was unavoidable. The consequence, in economic terms, has been a drastic reduction in economic interaction between the West and Russia across a wide range of areas.

The lesson is that it would have been wise to act more robustly at an earlier stage, which could potentially have deterred Russia from such extreme steps. This lesson may also be applicable to other actors intent on reshaping the global system in their interest. In particular, if one studies Chinese actions, one can see a concerning set of developments that suggest that it too is set on a course of conflict with the international rules-based system. China's actions indicate that it opposes the Western interpretation of the rules-based international order and has a distinctly different interpretation of human rights. Yet so far Chinese actions have not, driven the West to mobilise a response anywhere near its reaction to Russia's full-scale invasion.

Chinese provocations

The number of PLA Air Force incursions into the Taiwanese Air Defence Identification Zone have escalated the last few years. Following the U.S. Speaker of the House of Representatives Nancy Pelosi's visit to Taiwan in 2022, China launched historically large military exercises around the island. In 2023, China launched operation "Stern Warning," which entailed three days of military drills rehearsing the encirclement of Taiwan. The exercise took place after the return of Taiwanese President Tsai Ing-wen from a trip to the United States. Based on spurious claims that about 90 percent of the South China Sea constitute Chinese territorial waters, China has also become increasingly assertive in the maritime domain during the past decade. China has harassed ships from other states with its military, coast guard and maritime militia, explored and begun extracting resources in disputed waters, and is constructing and militarising artificial islands.

China's Cold War legacy of military confrontation with its neighbours appears not to be completely abandoned. The China-India border conflict has remained active the last few years, with deadly skirmishes between the two sides as late as 2020. Chinese claims in the South China Sea have also resulted in overt aggression. As late as 2023 Chinese vessels rammed a Philippine Coast Guard ship and military-run supply boat.

Chinese repression³⁵ in Xinjiang has escalated over a number of years, with over a million Uyghurs detained in "re-education" camps since 2017. China subjects those Uyghurs not detained to intense surveillance, religious restrictions, forced labour and sterilisation. A UN report³⁶ confirms evidence of mass arbitrary detentions, family separations, torture and religious persecutions. The UN deems that these actions could amount to crimes against humanity.

Several Western governments have condemned China's imposition of the Hong Kong national security law in 2020, stating that it is a breach of the Sino-British Joint Declaration. This declaration guaranteed autonomy for the Hong Kong Special Administrative Region until 2047. The law's applicability outside Hong Kong, interpreted by some to apply to every individual in the world, makes it even more controversial.

China has repeatedly shown that it is willing to arbitrarily detain and accuse foreign citizens of crime. One example of this is China's reaction to the detention of Meng Wanzhou (the Chief Financial Officer of Huawei, and daughter of its founder) in Canada following a U.S. extradition request. Following the detention of Wanzhou, China accused two Canadian citizens of espionage, and held them for almost two years without any evidence presented, whilst appropriate consular access was denied. Another example is the apparent abduction of Gui Minhai, a Swedish citizen who had published books critical of the Chinese Communist Party leadership, in 2015. Minhai was abducted from Thailand to China and his subsequent treatment contributed to a protracted crisis in Swedish-Sino relations.³⁷

China is consistently flagged by Western intelligence agencies as a leading cyberespionage threat. Operation Cloud Hopper is just one example of this. The FBI states that:

"The counterintelligence and economic espionage efforts emanating from the government of China and the Chinese Communist Party are a grave threat to the economic well-being and democratic values of the United States.

Confronting this threat is the FBI's top counterintelligence priority." ³⁸ (italics added) China controls the vast majority of rare earth metals supplied to the world market. This is concerning, as China has previously made clear that it is willing to "weaponise" other countries' dependence upon it. For example, China threated to embargo³⁹ U.S. defence firm Lockheed Martin in 2020. In 2010, China blocked rare earths shipments to Japan following the apprehension of a Chinese fishing captain in Japanese territorial waters (which China claims as its own).

Using rare earths as a trade weapon is one thing, but China has used trade as a policy weapon to punish states on numerous occasions. Norway faced Chinese wrath when the 2010 Nobel Peace Prize was awarded to Chinese dissident Liu Xiaobo. Diplomatic relations were under strain for six years, with bilateral free trade discussions put on ice, and measures taken to restrict salmon imports from Norway. Tensions were relieved only once the Norwegian Government cowed to China by formally reiterating their adherence to the One China Policy, and rejecting a meeting with Dalai Lama during a visit to Norway.

There are several other examples of China using diplomatic and trade relations as a way to exert pressure on states. The list of events that have triggered such a response include South Korea's decision to acquire THAAD anti-ballistic missile defence systems, Canada's detention of Huawei's Chief Financial Officer, Australia's call for an inquiry into the origins and handling of the Covid-19 outbreak, and the opening of the Taiwanese Representative Office in Lithuania. There are also examples of China exerting pressure on companies that have expressed negative views on Chinese policy, such as treatment of the Uyghurs. It is also significant that there are likely to be several companies that self-censure and adjust their policies to avoid repercussions and/or to curry favour with the regime.

Learning from past mistakes: the inherent difficulty in balancing security concerns against economic interests

The West's handling of Russia demonstrates that democratic states' threshold for a robust response to aggressive behaviour is very high. Even Ukraine waited until after the invasion on February 24th to implement a number of defensive measures, despite there being clear indications of Russia's intentions prior to that.⁴⁰ More broadly, Europe allowed economic dependencies upon Russia to develop over time.

For example, the economic dependencies were set to increase with the construction of Nord Stream 2, with half the financing coming from Western (German, Austrian, French and Anglo-Dutch) companies. The pipeline was built despite the aforementioned history of Russian aggression and Poland withholding approval. With the benefit of hindsight, it is clear that this was a mistake.

So why was Nord Stream 2 construction given the go-ahead? The German and other EU member state governments must have considered multiple factors before took such a strategically significant decision. There are for example economic, environmental, diplomatic, and security aspects that would have entered the equation. On top of this, politicians must also have weighed in how the electorate would judge their decisions.

The perceived economic and diplomatic benefits, coupled with broad popular support in Germany, meant that the security aspects did not weigh heavily enough to prevent the Nord Stream 2 project from taking place. Under peacetime conditions in the post-Cold War world, political decision-makers appear to have relegated certain security concerns relating to great powers to second tier considerations. Meanwhile, the likelihood of a large-scale security crisis actually manifesting was perceived as (or hoped to be) very low, despite the historical record suggesting that such crises are recurring phenomena.

Russia has maintained high levels of military spending as a proportion of its GDP, engaged in military aggression abroad, carried out flagrant human rights abuses and disseminates hostile and provocative regime rhetoric. Still, Russia's actions remained below the threshold required for the West to coherently treat Putin's regime as the threat it showed itself to be.⁴¹ It required the egregious aggression launched on February 24th 2022 to pass the threshold required for the West to act robustly and truly treat Russia as a systemic challenger.

The Western reluctance to act forcefully against Russia until 2022 appears to have some parallels with the West's response to Chinese provocations. China, with Xi Jinping at its helm, has made it clear through a range of actions that it is hostile towards several of its neighbours and towards the West. China has also demonstrated ambivalence towards the values enshrined in the Universal Declaration of Human Rights. Unlike Russia, it has not yet committed an act of international aggression that would place it in the true pariah category - like North Korea, Iran, and more recently Russia. However, recent Chinese government statements raise concerns about Chinese intentions. The expression of "no limit" friendship between Presidents Xi and Putin shortly ahead of the February 24 invasion of Ukraine,⁴² and statement made by Chinese Foreign Minister Qin

in March 2023 emphasising the importance of strengthening Sino-Russian relations⁴³ signal not only a desire to collaborate more with Russia, but also China's explicit hostility towards the West.

China and the West: deeper engagement despite growing security concerns

The illegal annexation of Crimea in 2014 resulted in the imposition of limited sanctions against Russia, and an increase in Western defence expenditure. However, broadly speaking, Western policy towards Russia up until early 2022 can be characterised as "business as usual." Similarly, when it comes to China, President Xi's shift towards a more domestically repressive and internationally aggressive regime has only prompted limited countermeasures from Western governments. Moreover, the Western business as usual approach still dominates in commercial circles. Even if an increasing number of policy-makers refer to China as a strategic rival- sometimes in quite bellicose terms - the broader business community has not adopted the same rhetoric. The business community's attitude towards China is significant, as that is where most of the actual interaction with China takes place.

China remained the largest exporter to both the U.S. and EU in 2022, despite attempts to manage this dependency. This includes legislation to prevent foreign acquisition of strategically important businesses (not officially aimed at China), the exclusion of Chinese firms from participation in the construction of 5G-networks, and the increase in discussions about diversifying supply-chains. None of these measures have changed the fact that American and European imports from China have continued to increase over the past few years. In the area of scientific research, the United States and China are also each other's most important international collaborative partners,44 with the number of research collaborations having increased in the last few years. Again, the development appears to be out of sync with the increasingly vocal policy concerns regarding China.

The RAND Report "Exploring Research Engagement with China" highlights that the number of joint Sino-British publications has grown significantly, with China rising from being the UK's ninth most important collaborative partner in terms of co-published academic papers in 2010, to being the second closest collaborative partner in 2019. This is part of a broader trend, as co-publications with China are increasing in European countries such as Germany and Sweden as well. Scientific output is the main driving force in academia, just

as money is the driving force in business. This explains why exposure and engagement with China continues to grow, despite political concerns. Unless these forces are mitigated by government policy, the current trends will only continue. Trade data from 2023 indicate that US imports from China declined. Yet, re-routing of Chinese exports and under-invoicing to reduce tariff hits, probably imply that official data significantly overstate this decline. 46

CONCLUDING REFLECTIONS

Businesses are run to deliver value to their shareholders – that is their primary motivational force. They should, according to economic theory, adapt and adjust to do so in the most effective way. This had limited geoeconomic consequences during the Cold War because economic exchange between the East and the West was so limited, and the fact that the communist states at that point were centralised command economies that did not operate on market principles.

The economic liberalisation of the East and the deregulation of global trade enabled the current mutual economic interdependence between China and the West to develop. The opening up of the Chinese economy in combination with its rapid economic growth⁴⁷, made increased economic exposure inevitable – as long as there were no measures in place to prevent it. If Western governments believe that economic exposure to China is a security problem then the only way to address it is by changing the incentives and regulations that businesses are subjected to. A similar logic applies to research in academia. There are a handful of significant examples of measures intended to curb the West's growing exposure to China. The U.S. has prohibited exports of advanced semiconductor technology to China, for example. It has also created economic incentives to manufacture at home, as opposed to in China. The question now is how the US will build on these prohibitions and incentives, and whether they are successful in coordinating these policies with allies.

Tackling the China Challenge

The West's economic relationship with China appears paradoxical from a national security perspective, with economic exposure having increased in parallel to growing and serious security concerns. Yet from a commercial perspective, the West's deepened economic interdependence with China is a logical consequence of the country's rise as a central player in the world economy.

Western states, and foremost the United States, have begun to take measures to reduce their economic

exposure towards China, for example by restricting the availability of certain strategic technologies that could further accelerate China's rise towards economic and scientific dominance. Whether Western actions taken so far have been sufficient depends upon Chinese intentions. Judging by Chinese actions the last few years, and the fact that China has chosen to express solidarity with Russia following its full-scale invasion of Ukraine, it would appear that China is set on a course of conflict with the West.

The growing and significant mismatch between Western national security concerns and economic interdependence with China likely the West's increasing economic exposure to China therefore needs to be addressed by further restricting commercial interactions. It is unlikely that firms will restrain themselves, meaning that there is a need for further government regulation. There are recent examples of such regulations, including the U.S. government's restrictions of Chinese access to semiconductors and the Japanese government's strive for supply chain diversification within certain sectors. It remains to be seen how far such "de-risking" will go.

In the long term, it is possible that China and the West will engage in a strategic race for economic and technological leadership. If that is the case, then the Wests' success will be contingent on its ability to coordinate its restrictive policies towards China as well as its broader trade policies. China is already the world's largest economy in purchasing power parity terms and it has a larger population than the EU, US, Japan, UK, South Korea, Canada, and Australia combined. To maintain Western economic and technological dominance, Western countries must uphold and if possible develop a collective economic ecosystem based on as open and fair trade as possible. If the West manages to do this while at the same time enforcing collective restrictions on its commercial interactions with China, then the prospects of maintaining an economic and technological lead would appear good.

Thus, from the Chinese perspective one would assume that there are two clear interests. Firstly, China has an interest in ensuring that Western firms continue to act as enablers of development in key areas of the Chinese economy. China may therefore try to influence individual states to prevent the West from imposing collective restrictions. One way of doing this might be to offer "privileged" access to Chinese domestic markets, or to threaten to deny market access. It is also possible that China will try to further its own interests by offering significant procurement contracts, playing individual Western state interests off each other. China's second

interest would be to prevent the West from further economic integration, and if possible to reverse this trend. This trend is perhaps harder for China to influence, as it is largely dependent upon Western internal dynamics.

The West lacks a standing institutional framework for regulating the firms' interactions with China and for achieving collective economic action. NATO is primarily a military alliance, and not all Western powers are members of NATO. The EU is a common market, and although it has a common external trade framework, it has a geographic focus on the European continent and even fewer members than NATO. Neither of these institutions are therefore have the potential to limit the West's economic exposure to China to sufficient extent on their own. What is lacking is something akin to an "economic NATO," but with an even broader membership base, that has the power to coordinate Western economic policy in line with strategic objectives. However, in the absence of such an institution, it is possible that the West can address trade policy concerns towards China through *ad hoc* initiatives. Still, any attempts to create such initiatives are likely to be fraught with challenges and require persistent political will and diplomatic skills. These challenges are compounded by the fact that it is not state behaviour per se that needs to be coordinated, but rather the behaviour of international corporations that may be subject to multiple jurisdictions.

With the benefit of hindsight, it appears that the West committed a strategic mistake in permitting economic exposure to China to grow to present levels in spite of growing security concerns. What has perhaps been surprising in this context is how slowly the West has adjusted to the fact that China appears to have quite a different vision of what constitutes a desirable international rules-based order. This slow reaction can partially

be explained by two key factors addressed in this paper. Firstly, there is a disconnect between security and economic interests due to the fact that it has primarily been firms' actions driving interaction with China. Secondly, the Western response to Russia's aggression prior to February 24th 2022 suggests that authoritarian states need to cross a rather high threshold before robust policy restrictions on economic interactions are imposed.

A key question is whether the West will manage to learn from what went wrong in its handling of Russia, and adapt its economic policies in time to deal with the threat posed by China. Unfortunately, this looks unlikely, given that the levels of Western exposure to China are so great and that it requires significant political will to alter the current trajectory. The fact that the West is not a unitary actor further speaks against a reversal of current trends. However, there is some hope, given that there are historical examples of major crises leading to rapidly changing perspectives and the creation of regulation to mitigate future risks.⁴⁸ ⁴⁹ These examples include the Three Mile Island nuclear accident in 1979 and the Subprime mortgage financial crash in 2008. Russia's full-scale invasion of Ukraine in 2022 was unprecedented in the post-Cold War security order, and could possibly catalyse similar change.

European states and Japan have responded to Russia's shocking aggression against Ukraine by increasing their military expenditure and by launching security strategies that also address the economic dimensions of security policy. Noteworthy examples are the new National Security Strategy of Japan and the EUs European Economic Security Strategy." 50 51 Whether these are early indicators of a paradigm shift in economic security awareness, triggered by fear of great-power aggression, is perhaps premature to judge at this stage.

Endnotes

- 1 Although US imports from China are at historical highs in 2022 it is also possible to argue that the effects of "decoupling" take time to reach effect, as investment and business decisions that influence trade flows are long term in nature and thus are not immediately visible. It is also possible to argue that rather than focusing on simple trade volumes, the trade volume as a percentage of GDP is a more relevant measure, as has been proposed by Witt et al. According to their analysis US exposure to Chinese imports in relation to GDP saw a visible decline 2019, which continued into 2020 (first year of COVID-19 disruptions to global trade). Their analysis did cover 2021 and 2022, and did not look at EU-China trade. Considering the rapid growth of Chinese exports to the EU, having more than doubled the last decade with particularly sharp increases in 2021 and 2022, it would appear likely that Chinese imports to the EU have grown even as a percentage of GDP the last couple of years. It should also be noted that monthly data for 2023 indicate a decline in Sino-US trade. Office of Technology Evaluation, "U.S. Trade with China" Bureau of Industry and Security, US Department of Commerce, 2022. Accessed 31 October 2023: https://www.bis.doc.gov/index.php/countrypapers/3268-2022-statistical-analysis-of-u-s-trade-with-china/file Michael A. Witt et al. Decoupling in international business: Evidence, drivers, impact, and implications for IB research. Journal of World Business, Volume 58, Issue 1, January 2023. Accessed 25 October 2023: https://www.sciencedirect.com/science/ article/pii/S1090951622000906
- 2 Mazarr, Michael. Rethinking Risk in National Security. Palgrave Macmillan. 2016. Page 22.
- 3 Dale Copeland has pointed out that war has occurred between states with high levels of dependence, and argues that with high levels of economic dependence war is possible if future expectations of trade are negative if leaders fear being cut off from vital goods or that current restrictions will not be relaxed. Dale C. Copeland, Economic Interdependence and War, International Security, Volume 20, number 4, Spring 1996.
- 4 Kit Sadgrove, The Complete Guide to Business Risk Management, Routledge, 2016. Pages 1-2. Accessed 25 October 2023: https://books.google.se/books?hl=sv&lr=&id=jfiqCwAAQBAJ&oi=fnd&pg=PP 1&dq=risk+assessment+in+business&ots=HXMOCaDeKc&sig=q8p0s 8q2RWb0eU_QBxNn24WSnfY&redir_esc=y#v=onepage&q=risk%20 assessment%20in%20business&f=false
- 5 J. H. Caldwell, A moving target: Refocusing risk and resiliency amidst continued uncertainty Findings from the global risk management survey, 12th edition, Deloitte Insights, 1 February 2021, accessed 25 October 2023: https://www2.deloitte.com/us/en/insights/ industry/financial-services/global-risk-management-survey-financialservices.html
- 6 Yossi Sheffi, The Resilient Enterprise, MIT Press, 2005
- 7 Julia Kagan, Political Risk Insurance: What it Means, Examples, Investopedia, 29 September 2023. Accessed 25 October 2023: https://www.investopedia.com/terms/p/political-risk-insurance.asp
- 8 European Commission, "New stronger rules start to apply for the cyber and physical resilience of critical entities and networks", 16 January 2023, European Commission. Accessed 12 January 2024 at: https://digital-strategy.ec.europa.eu/en/news/newstronger-rules-start-apply-cyber-and-physical-resilience-critical-entitiesand-networks#:-:text=The%20NIS2%20Directive%20replaces%20 the%20rules%20on%20the,replaces%20the%20European%20 Critical%20Infrastructure%20Directive%20of%202008.

- 9 High Representative of the Union for Foreign Affairs and Security Policy, "Joint Communication to the European Parliament, The European Council and The Council on "European Economic Security Strategy"", June 20 2023, European Commission. Accessed on 30 November 2023 at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52023JC0020
- 10 The communist Cold War command economies were largely characterised by political systems in which most industry was publicly owned, and central governmental authorities dictated the levels of production and prices
- 11 "Quarterly Report on Manufacturing," UNIDO, accessed 27 March 2023: https://www.unido.org/resources-statistics/quarterly-report-manufacturing.
- 12 The State Council Information Office The People's Republic of China, China accounts for 30% of global manufacturing output in 2021, 15 June 2022, accessed 25 October 2023: http://english.scio.gov.cn/pressroom/2022-06/15/content_78271432.htm
- 13 World Bank, GDP (current USGDP (current US\$) China, World.

 Accessed 25 October 2023 https://data.worldbank.org/indicator/
 NY.GDP.MKTP.CD?locations=CN-1WGDP (current US\$) China,
 World | Data (worldbank.org)
- 14 OAPEC was the precursor to OPEC
- 15 Eurostat, Annual Inflation more than tripled in the EU in 2022, 9
 March 2022. Accessed 25 October 2023: https://ec.europa.eu/eurostat/
 web/products-eurostat-news/w/ddn-20230309-2#:-:text=In%20
 2022%2C%20EU%20annual%20inflation%20reached%20the%20
 highest,the%20EU%20during%20the%20period%202013-2022%20
 was%202.1%25.
- 16 China Exports to United States was US\$577.13 Billion during 2021, according to the United Nations COMTRADE database on international trade. This was the largest figure to date and reflects an over 100 percent nominal increase over the past decade, with US imports from China in 2010 at US\$283.78 Billion. "Download Trade Data | UN COMTRADE: International Trade Statistics." United Nations. United Nations. Accessed 27 March 2023:. https://comtrade.un.org/data/.
- 17 COMTRADE did not have 2022 data at this point, but Import data from the US Census Bureau show that US imports from China continued to increase in 2022. United States Census Bureau, "International Trade." United States Census Bureau, accessed 27 March 2023: https://www.census.gov/foreign-trade/balance/c5700. html.
- 18 Raymond E. Zickel, Soviet Union: a country study, Library of Congress (Federal Research Division), 1991 Page 607 Accessed 27 October 2023: https://www.loc.gov/item/90025756/
- 19 Maritime Gateway, "CIMC Emerges World's Largest Container Producer" Maritime Gateway, 1 October 2021. Accessed 27 March 2023: https://www.maritimegateway.com/cimc-emerges-worlds-largest-container-producer/#:~:text=CIMC%20has%20a%20global%20 market%20share%20of%2042%25, CXIC%2C%20have%20a%20 combined%20market%20share%20of%2082%25.
- 20 Matthew P. Funaiole, "Joseph S. Bermudez Jr., and Brian Hart. "China's Opaque Shipyards Should Raise Red Flags for Foreign Companies." CSIS. Accessed 27 March 27 2023: https://www.csis.org/analysis/ chinas-opaque-shipyards-should-raise-red-flags-foreign-companies.
- 21 Statista. "Rare Earths: Production Share by Country 2022." Statista, February 22, 2023. Accessed 27 March 27 2023: https://www.statista.com/statistics/270277/mining-of-rare-earths-by-country/.

- 22 Katharina Buchholz, and Felix Richter. "Infographic: China Dominates All Steps of Solar Panel Production." Statista Infographics, April 21, 2021. Accessed 27 March 2023: https://www.statista.com/ chart/24687/solar-panel-global-market-shares-by-production-steps/.
- 23 Govind Bhutada, "Visualizing China's Dominance in Battery Manufacturing (2022-2027P)." Visual Capitalist, 19 January 2023. Accessed 27 March 2023: https://www.visualcapitalist.com/ chinas-dominance-in-battery-manufacturing/.
- 24 Matthew Fulco, "Smartphone Dominance", CKGSB Knowledge, 16 November 2020. Accessed 27 March 2023:. https://english.ckgsb.edu.cn/knowledges/china-dominates-global-smartphone-market/#:-:text=Worldwide%20smartphone%20vendors%20shipped%20a%20total%20of%20275.1,49%20million%20and%20Apple%20third%20with%2040%20million.
- 25 Daniel Workman, "Computer Device Exports by Country", World's Top Exports. Accessed 27 March 2023 on: https://www. worldstopexports.com/computer-device-exports-country/.
- 26 Jordan Robertson and Michael Riley. "Supermicro Hack: How China Exploited a U.S. Tech Supplier over Years.", Bloomberg, 12 February 2021. Accessed 27 March 2023: https://www.bloomberg. com/features/2021-supermicro/?leadSource=uverify%2Bwall.
- 27 The OPM hack and Operation Cloud Hopper were two high profile incidents that illustrate the potential consequences of large scale and long term cyberespionage operations in the digital era
- 28 European Commission, "EU-China Strategic Outlook: Commission and HR/VP Contribution to the European Council (21-22 March 2019)" European Commission, 12 March 2019. Accessed 28 April 2023: https://commission.europa.eu/publications/eu-china-strategicoutlook-commission-and-hrvp-contribution-european-council-21-22march-2019_en
- 29 Ursula von der Leyen, "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. Accessed 30 November 2023: https://ec.europa.eu/ commission/presscorner/detaillen/speech_23_2063
- 30 WTO, "High-level forum marks 20 years of China's WTO membership" WTO (no date). Accessed April 2023: https://www.wto.org/english/news_e/news21_e/acc_10dec21_e.htm
- 31 Josh Rogin, "NSA chief: Cybercrime constitutes the "greatest transfer of wealth in history", Foreign Policy, July 9, 2023. Accessed on April 28, 2023 at: https://foreignpolicy.com/2012/07/09/nsa-chief-cybercrime-constitutes-the-greatest-transfer-of-wealth-in-history/.
- 32 Oscar Almén, "Kinesiska investeringar i Sverige: en kartläggning", Swedish Defence Research Agency (FOI), June 12, 2023. Accessed on November 30 2023 at: https://www.foi.se/rapportsammanfattning?reportNo=FOI-R--5474--SE
- 33 PricewaterhouseCoopers. "Operation Cloud Hopper." PwC, April 2017. Accessed on November 30 2023 at: https://www.pwc.co.uk/ cyber-security/pdf/pwc-uk-operation-cloud-hopper-report-april-2017.pdf
- 34 Emma Ashford, Not-so-smart sanctions, Foreign Affairs, December 14 2015. Accessed April 28 2023: https://www.foreignaffairs.com/ russian-federation/not-so-smart-sanctions
- 35 Lindsay Maizland, "China's Repression of Uyghurs in Xinjiang", September 22, 2022, Council on Foreign Relations. Accessed on March 27 2023 at: https://www.cfr.org/backgrounder/ china-xinjiang-uyghurs-muslims-repression-genocide-human-rights.

- 36 OHCHR, "OHCHR Assessment of Human Rights Concerns in the Xinjiang Uyghur Autonomous Region, People's Republic of China." OHCHR. Accessed March 27, 2023: https://www.ohchr.org/en/documents/country-reports/ohchr-assessment-human-rights-concerns-xinjiang-uyghur-autonomous-region.
- 37 In 2015 Swedish citizen Gui Minhai, who had renounced his former Chinese citizenship, disappeared from Thailand, in what appears to be a forced abduction. The following year Chinese state media stated that a Gui Minhai had been detained relating to a fatal traffic accident that had occurred in 2003, in which a school girl had died. In a TV appearance, Gui Minhai confessed and stated that his return to China had been his personal choice. Considering that Gui Minhai had been held nearly three months incommunicado, in a secret location, and without access to a lawyer, his TV confession was not taken at face value outside the country, and contributed to high profile tensions with Sweden. However, China claims he had renounced his Swedish citizenship, and consequently denies consular access, claiming he is a Chinese citizen. In 2020 he was tried and sentenced to 10 years imprisonment for "illegally providing intelligence overseas".
- 38 FBI, "The China Threat.". FBI, July 10, 2020. Accessed on March 27, 2023: https://www.fbi.gov/investigate/counterintelligence/ the-china-threat.
- 39 Tim Treadgold, "China's Rare Earth Threat Sparks an International Backlash.", Forbes Magazine, 7 August 2020. Accessed 27 March 2023: https://www.forbes.com/sites/timtreadgold/2020/08/07/ chinas-rare-earth-threat-sparks-an-international-backlash/.
- 40 Shaun Walker, "As War Drags on, Ukrainians Start to Ask: Could We Have Prepared Better?" The Guardian. Guardian News and Media, June 3, 2022. Accessed on 27 March 2023: https://www.theguardian.com/world/2022/jun/03/ ukraine-russia-war-ukrainians-question-mistakes-preparations-buildup
- 41 Limited Western economic sanctions were implemented against Russia following the 2014 invasion of Ukrainian territory by Russian "Green Men", but these were relatively mild considering that Russia had de facto invaded another country and illegally annexed parts of its territory. European defence expenditure also reversed its previously declining trend following the invasion
- 42 Reuters, "Moscow-Beijing Partnership Has 'No Limits'." Reuters. February 4, 2022. Accessed on 27 March, 2023 at: https://www.reuters. com/world/china/moscow-beijing-partnership-has-no-limits-2022-02-04/.
- 43 Shaun Walker, "As War Drags on, Ukrainians Start to Ask: Could We Have Prepared Better?" The Guardian. Guardian News and Media, June 3, 2022. Accessed on 27 March 2023: https://www.theguardian.com/world/2022/jun/03/ukraine-russia-war-ukrainians-question-mistakes-preparations-buildup
- 44 James Mitchell Crow, "US-China Partnerships Bring Strength in Numbers to Big Science Projects." Nature, March 9, 2022. Accessed 30 November 2023: https://www.nature.com/articles/d41586-022-00570-0.
- 45 Fiona Quimbre et al, Exploring Research Engagement with China , Rand Corporation, 2022. Accesses on November 30 2023 at: https://www.rand.org/pubs/research_reports/RRA1839-1.html
- 46 Thomas Gatley, "The Truth About Trade Decoupling", Gavekal Dragonomics, 12 October 2023, accessed om 30 October 2030: https://research.gavekal.com/article/the-truth-about-trade-decoupling/
- 47 China's share of global GDP has expanded more than fourfold since 1990.

- 48 Office of Nuclear Regulatory Research, "Three Mile Island Accident of 1979 Knowledge Management Digest", December 2012, United States Nuclear Regulatory Commission. Accessed 30 November 2023: https://www.nrc.gov/docs/ML1234/ML12340A344.pdf
- 49 Randall D. Guynn, "The Financial Panic of 2008 and Financial Regulatory Reform", 20 November 2010, Harvard Law School Forum on Corporate Governance. Accessed 30 November 2023: https://corpgov.law.harvard.edu/2010/11/20/the-financial-panic-of-2008-and-financial-regulatory-reform/
- 50 National Security Council, "National Security Strategy of Japan", December 2022, Ministry of Foreign Affairs of Japan. Accessed on November 30 2023: https://www.mofa.go.jp/fp/nsp/page1we_000081.html
- 51 High Representative of the Union for Foreign Affairs and Security Policy, "Joint Communication to the European Parliament, The European Council and The Council on "European Economic Security Strategy"", 20 June 2023, European Commission. Accessed on 30 November 2023: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52023JC0020