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Bellaby, R.W. orcid.org/0000-0002-6975-0681 (2024) An ethical framework for economic intelligence. *International Journal of Intelligence and CounterIntelligence*. ISSN 0885-0607

<https://doi.org/10.1080/08850607.2023.2299015>

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International Journal of Intelligence and CounterIntelligence

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/ujic20>

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To cite this article: Ross W. Bellaby (01 Feb 2024): An Ethical Framework for Economic Intelligence, International Journal of Intelligence and CounterIntelligence, DOI: [10.1080/08850607.2023.2299015](https://doi.org/10.1080/08850607.2023.2299015)

To link to this article: <https://doi.org/10.1080/08850607.2023.2299015>



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Published online: 01 Feb 2024.



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ROSS W. BELLABY

An Ethical Framework for Economic Intelligence

Abstract: It can be argued that intelligence activity has ethical value through its important role in detecting, preventing, and countering threats that would cause harm to the political community and its members. What has been relatively overlooked, however, is the potentially (un)ethical role of intelligence in the economic sphere—that is, whether secret intelligence acts of economic espionage and economic covert action can be used against another (potentially aggressive) state’s economy or economic actors as a means of protecting one’s own economic, social, and military security. Economic intelligence works to create a competitive economic or political advantage, but this can cause harm that is more likely to be disproportionate and inflicted on those who have done nothing to warrant it. The harms caused by economic intelligence can be widely spread across society and against those who are unjustified targets. To account for this, additional care needs to be given to questions of proportionality and discrimination.

Ross W. Bellaby is affiliated with the Department of Politics, University of Sheffield. He holds a PhD from Aberystwyth University. He is the author of The Ethics of Hacking: An Ethical Framework for Political Hackers. The author can be contacted at r.bellaby@sheffield.ac.uk

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The welfare of the political community and its members is significantly intertwined with the overall stability and success of the state's economy and its private economic actors. Indeed, a strong economy is seen as fundamental to both "traditional concepts of national interest and politico-military security,"¹ as well as playing a central role for people being able to actualize their own version of the good life. Protecting and promoting the security of the political community and its members has therefore come to include maintaining economic security.² Moreover, in a competitive world where such economic health is "determined largely by the ability to develop, commercialise, and capture economic benefits from scientific and technological innovations," being able to maintain superiority through accessing secret, proprietary information can represent an important means for furthering a political community's security.³ It should come as no surprise, therefore, that intelligence actors have used their abilities to collect and use economic information to provide an economic advantage to the state and its own economic actors, as well as using intelligence operations to influence or control the economic power of other states. Indeed, as former Director of Central Intelligence Stansfield Turner argued, collecting information as a means of securing the United States' economic advantage is essential, stating that "America would have no compunction about stealing military secrets to help it manufacture better weapons," and that "if economic strength should now be recognised as a vital component of national security, parallel with military power, why should America be concerned about stealing and employing economic secrets."⁴

Broadly speaking, there is an ethical justification for this economic intelligence that is reflective of the general ethical role intelligence can represent as a means of protecting the political community from harm; specifically, in protecting or providing for the vital interest people have in maintaining their physical and psychological integrity, autonomy, liberty, and privacy.⁵ This can include protecting domestic economic interests by gathering economic information to give political and economic actors an edge in competitive relations. For example, by collecting secret information, economic intelligence can be used to give a state's own domestic economic actors a competitive advantage so that they can produce their goods or services at a greater rate, at a higher quality, and/or for a lower cost in order to increase their market share at the expense of these competitors.⁶ This is because investment of time, money, and human resources is vital for companies to gain or maintain their market share, and those who develop a competitive advantage over their rivals stand to make millions as a result.⁷ The implication is that "if companies lose valuable secrets to industrial espionage, they cannot profit by using their competitive advantage," suffering the cost of lost development, while the recipients of the intelligence intervention gain the innovation without any developmental cost. This economic advantage can provide greater economic

security for the political community by providing increased economic opportunities and security for those individuals dependent on these economic actors or the wider economic strength of the state. Economic intelligence can also be used to influence the economic systems of other states through covert economic action as a means of controlling both their economy as well as the overall political landscape. This fits within the broader field of covert action, generally understood as the secret application of national security policy through direct and indirect action, including propaganda, coercive manipulation, paramilitary operations, and targeted killing.⁸ Economic covert action can therefore include utilizing economic pressure, manipulation, or influence to control another state's economy; or utilizing economic pressure, manipulation, or influence to control another state's political behavior. Such action could be argued to provide protection against adversaries without the direct costs associated with military interventions.

The practice of economic intelligence, however, does raise some additional and distinct ethical questions and challenges that mean that the harms caused are not as low as intuitively believed. Indeed, the costs represented by economic intelligence might initially feel low if the analysis is restricted to the initial collection of economic information and its associated privacy violations. However, in practice, economic intelligence can also often involve using that information to give a state's economic actors a benefit, which can promote a loss in another. It will be argued, therefore, that rather than being the more humane form of intelligence activity, the harm it can cause is more likely to be disproportionate and negatively impact those who have not acted in a way as to be justified targets.⁹ This is because the harms associated with economic intelligence are more than just those caused by violating the privacy of some foreign company or trade negotiator, but using that information is a necessary part that relies on causing additional, and potentially uncontrollable, harms to other economic actors. In those instances where economic intelligence uses information as a way of ensuring an economic advantage, this necessarily means causing a loss in another economic actor, which can in turn cause harm to those individuals who are reliant on that target's stability to provide for their welfare.

Moreover, this harm is not confined; it is more likely to be disproportionate and indiscriminate. Due to the complex interlinkages between economic forces and people's lives, the consequences can spread across society as secondary dependents—workers, shareholders, supply chains—also suffer the loss, as do those dependent on these secondary actors. It is these secondary and tertiary actors who have not acted in a way so as to be justifiably harmed by the economic intelligence. The harm that can be inflicted does not diminish as it spreads out across society but can escalate further as more people and those dependent on these people suffer economic

loss. Any advantage provided relies on their competitors losing ground, which can translate into harm for those dependent on them.

To better understand if and when economic intelligence is justified, therefore, a more detailed ethical framework will be outlined. It will argue that a much wider proportionality and discrimination accounting needs to be included. This involves accounting for not only the harm caused by violating the privacy of the target but also the harm caused when using that economic intelligence causes a loss in others, both the target and those dependent on the target. It must be clear that all the harms are accounted for and that the perceived gains are sufficient.

To explore this in practice, distinctions between different economic intelligence operations can be made and ethical judgments can be given in terms of their potential (dis)proportionate harms and against whom they will be inflicted. It will be argued, first, that economic intelligence that is used to simply inform political elites can be justified when there are no additional, wider harms other than the privacy violations caused against legitimate targets. For example, economic intelligence to aid in trade negotiations can be justified, as long as it does not leave the other country in such a disadvantaged position as to cause a significant loss in that opposition's population's welfare. Second, those economic intelligence operations that necessarily rely on causing an economic loss in another need to account for how the damage caused is going to impact not only the target but those dependent on that target, and even those dependent on these dependents. This will be examined in relation to economic intelligence used to provide for both critical and noncritical economic actors to demonstrate how the different benefits and losses can alter the ethical calculation. Finally, that covert economic action cannot be justified if it requires unsettling economic stability as the impact is indiscriminate against nonjustified targets. Overall, this analysis will give a greater understanding of which economic intelligence operations are and are not justified. It will not discount economic intelligence wholly but will argue that it is necessary to raise the bar significantly in comparison to what might be intuitively believed while giving nuance to how economic intelligence should be collected and used.

ECONOMIC INTELLIGENCE

Economic Information: Collection and Use

Economic intelligence can be used as an umbrella term that covers the collection and use of economic information from both open source material as well as the use of illegal, clandestine, coercive, or deceptive means to gather economic information to which targets would not wish others to have access, for the purpose of providing an economic or political advantage to

the state or economic actors that are of importance to the state. This can involve the “act of targeting or acquiring trade secrets from domestic companies or government entities to knowingly benefit a foreign state.”¹⁰ Or “the practice of acquiring secret economic intelligence from private economic actors,” including “the acquisition of secret intelligence about firms’ operations, strategy, and resources.”¹¹ The information taken can include intellectual property, which consists of ideas, concepts, inventions, industry-prevalent recipes or formulas, as well as operation information, such as detailed production and marketing data and strategy-orientated competitive intelligence. The information can also include statistical data on a state’s economic performance, ability, capacity, and potential. In some instances, the collection of economic information to inform political leaders is an end in itself. This includes what Johnson refers to as “macro-economic intelligence,” where states collect economic information to gain an advantage in their relationships with other states, including “developing knowledge about how foreign nationals make economic decisions and what their commercial aims may be,” “analysing patterns of international trade and searching for opportunities,” “watching for unfair trade practices by foreign nationals and companies,” providing negotiators with intelligence on negotiating strategies, verifying compliance with international treaties, and designing and monitoring economic sanctions.¹²

In addition to this informing role, economic intelligence can also involve using that information to provide an economic actor an advantage in a competitive market. In terms of the former, this is what Cecile Fabre refers to as “offensive economic espionage” and Loch K. Johnson as “micro-economic intelligence,” whereby spying on foreign businesses is used “in order to pass on the secret information that they have thereby acquired to domestic businesses, with the view of helping them gain a competitive advantage on open markets.”¹³ As Johnson details, this type of intelligence activity “engages in the collection of information on behalf of society’s business sector” to help in “fortifying home industries with a competitive edge,” and also includes the government helping “thwart foreign espionage against” home corporations. The “hallmark of micro-economic intelligence is the presence of a secret government agency endeavouring to aid a compatriot firm for the latter’s commercial gain in the international marketplace.”¹⁴

Economic Covert Action

Economic covert action, in comparison, can generally include either utilizing economic/political pressure, manipulation, or influence to control another state’s economy; or utilizing economic pressure, manipulation, or influence to control another state’s political behavior.¹⁵ The tools used can mirror those used in other forms of covert action, including disinformation, coercion, and

the funding of politicians and/or trade unions to influence voters and workforces; stock market manipulation; and consumer confidence tampering. For example, using propaganda on supply shortages or the direct destruction of vital crops to promote economic loss or social unrest.¹⁶ Direct assaults, including cyberattacks, on major corporations can be used to obtain information or incapacitate systems to incur substantial financial losses. Price manipulation can be another tool, such as when the U.S. administration “ordered the CIA to manipulate world oil prices in an effort to ratchet up the pain level for the Soviet Union by ruining its lucrative petroleum exports.” The practice of “counterfeiting foreign currencies” can be used in order to create “monetary havoc by sowing inflation in an adversary’s economy.” Clandestine attacks can be used to damage goods, production, or confidence in the market.¹⁷

What these various distinctions demonstrate is that economic intelligence cuts across a range of different areas, varying in aim, target, and purpose. The ethical calculation needs to consider both the manner in which the information is collected (which can include both open and closed sources) as well as how that economic information or action is put into practice. For example, information that was collected ethically but used in a manner that caused unjustifiable harm could mean the overall operation becomes unjust, while harmful collection methods could be justified by the ethical importance of the application. To aid in the ethical evaluation, therefore, four different economic intelligence case types can be discussed to demonstrate how the calculation can change. First, the collection of economic information when it is being used as the direct end with the aim of better informing or reassuring political leaders, including supporting trade negotiations. Second, collecting and then using the economic information as a means of securing a state’s critical infrastructures. Third, the same collection and use of economic information, but providing it to private companies who, while important, are not at the same level of security importance as critical infrastructures. Finally, using economic covert action to control the economic or political landscape of another state. Across these cases, it will be argued that, as the harms inflicted become more widespread across society, they become less controllable, unable to discriminate against whom they harm, and thus raise the bar on the threat needed to justify such activity.

AN ETHICAL FRAMEWORK FOR ECONOMIC INTELLIGENCE

The Ethical (Dis)Value of Economic Intelligence

At the center of the tension in intelligence ethics is the conflict between there being aspects of the intelligence business that seem “notably disreputable”¹⁸ and the argument that without secret intelligence states cannot “understand sufficiently the nature of some important threats.”¹⁹ Over the last century,

intelligence has become one of the most vital tools that a political community has in providing timely information designed to serve and protect people from harm and, as such, has become central to the ethical good represented by protecting the political community. However, it can also be argued that the damage that intelligence can cause means that there should be limits on its use.²⁰

The negative aspects of intelligence can be best understood as the harm caused when its actions and consequences come into conflict with people's core vital interests. These vital interests are those aspects of the human condition that are so fundamental that without them people are not able to carry out their own version of the good life. That is, regardless of what conception of the good life the individual holds or what their life plans might be in detail, these preconditions must be satisfied first in order to achieve them.²¹ This includes the value that people have in maintaining and protecting their vital interest in their physical and mental integrity, autonomy, liberty, and privacy. If the quality of these interests were to fall below a threshold level, the individual would cease to be considered to be living as "truly human, that is, *worthy* of a human being."²²

In terms of economic intelligence, there is an underlying importance seen in the political community's economic strength, success, and stability broadly conceived. This can include an intrinsic worth as part of an individual's vital interest in their privacy and autonomy as well as instrumental worth in securing the necessary resources for the individual's physical and mental integrity. On one level, this frames economic power as maintaining and furthering the traditional political-military success of the state as a vehicle for providing for these interests. Economic strength is seen as a priority in terms of its ability to provide the necessary resources, systems, and energy for the physical, military, and political security of the state's critical infrastructure, enabling these systems to protect people from physical harm or death. Indeed, "[I]nternational economic issues have become a foremost government concern since the start of the global financial crisis, leaving economic security increasingly linked to more traditional concepts of national security interest and politico-military security."²³ For example, the British government's Strategic Defence and Security Review "tied together intelligence priorities, an adaptable approach to national security and economic prosperity." And, in March 2012, "Parliamentarians criticised the British National Security Strategy for giving insufficient attention to 'the potential risks that future international economic instability might pose for UK security.'"²⁴ As such, "[E]conomic superiority has become as important as military superiority, and the espionage industry has been retooling with this in mind."²⁵

However, the underlying ethical justification goes beyond this political-military success of the state, and for economic intelligence this also involves

the vital interests of privacy, autonomy, and liberty. This includes the instrumental value of economic security in its ability to provide individuals with the necessary resources they need to continue with their own lives, such as food, water, shelter, education, and the capacity to then carry out their own autonomous life. This also comprises protecting people from the “harmful effects of unemployment, disability, and ill-health” as well as the “rights to the resources needed to live as independently as possible (education, retraining).”²⁶ But a stable and successful economy also represents an important inherent value in people’s lives as work, broadly conceived, offers a means for people to explore their own autonomy and agency, fulfilling their creative and social flourishing, and being an active member of their political community.²⁷ As Amartya Sen argues,

There is plenty of evidence that unemployment has many far-reaching effects other than loss of income, including psychological harm, loss of work motivation, skills and self-confidence, increase in ailments and morbidity (and mortality rates), disruption of primary relations and social life, a hardening of social exclusion and accentuation of racial tensions and gender asymmetries.²⁸

The importance of these vital interests therefore serves to demonstrate both the ethical role that intelligence activity can have when it acts to protect such interests in people, as well as the need for some limits on its practice when the operation comes into conflict with these interests in others and causes people harm.

Just Cause

Therefore, while protecting the political community and its members has ethical value, this does not allow for unrestrained intelligence activity and there are important protections that prevent intelligence actors from causing unjustified harm. The principle of just cause highlights the vital interests protected through the intelligence activity, while the subsequent principle of proportionality argues that any vital interests violated directly or indirectly through the intelligence activity should not be excessive in comparison.

In reconciling the conflict caused when an intelligence activity can cause harm to another but is being done in order to protect the political community and its members from harm, using defensive harm frameworks and the right to self-defense are a useful way forward. This is the argument that there are some acts, such as killing someone, that “in the normal context are gravely wrong,” while also recognizing that, in certain circumstances, acting in self-defense against an unjust threat for example, people are justified in causing harm to others.²⁹ It can be argued that, at their core, the individual first and foremost has the right to protect their own life, even at

the expense of another's, and that when an attacker represents a threat they forfeit the usual protections that prevent the victim from killing them.³⁰

Therefore, at its core, economic security, and therefore economic intelligence, can have an ethical just cause when it is used to promote the political community's own economic stability, even if it comes as a cost to others and causes harm, when it is done to protect or further these vital interests. However, what this ethical value of economic security highlights is also the need to limit the degree to which the intelligence activity violates these interests in those either directly or indirectly impacted by the operation, which can be evaluated through the principle of proportionality.

Proportionality

Self-defense is not a catchall justification for all national security activity and there are important limits and licenses that act as a means of ensuring the right actions are carried out for the right ends. The harm caused must also be proportional, bringing about overall more good than the damage it causes, and discriminate so that it only harms justified targets. Evaluations must therefore be made on the type and level of violation represented by the economic intelligence activity in terms of both those it seeks to protect and those attacked.

Making the proportionality calculation means recognizing that these vital interests—whether physical and psychological integrity, privacy, liberty, or autonomy—are important, but not fixed entities and can exist in different forms and with different levels of protection. Depending on which vital interest is violated and the severity of the violation, the level of harm can change. The justification for the use of economic intelligence needs to be able to detail and reconcile both the infringements and benefits it causes.

As a process this means, first, recognizing that while some vital interests such as physical integrity might appear to take precedence over other interests such as autonomy or privacy, this is not necessarily the case, and they should be taken together as a complex matrix that needs to be maintained. Second, the severity of the violation can depend on the longevity of the violation, its level of impact, the number of people it impacts, whether there are secondary or additional side effects or harms caused, if it is systematic or a one-off, and the ability of people to consent. For example, whether the economic benefit brought to a state's own people is likely to secure key resources needed for them to continue to maintain their welfare, versus the same loss in another state's people. Or will people only lose additional rather than fundamental resources or opportunities? Critical questions could therefore include who and how many are likely to suffer the repercussions of the economic loss, how much do they rely on this economic stability to maintain their core or additional welfare needs, how long will the

impact be felt, are there reasonable mechanisms available for compensation, and how will it potentially impact the ability to recover.³¹

For economic intelligence the first harm to be considered is the extent to which a target's privacy is violated in relation to the protections and rights that actors have over their own information.³² For some this can be framed in terms of a right to privacy that creates boundaries and protections over information pertaining to or created by the actor,³³ while for others this is a Lockean property right, where information can be created, sold, bought, or distributed at the will of the owner.³⁴ In both instances, the general right prevents others from accessing information belonging to an actor. The second set of harms are those caused to individuals or society in both economic and political spheres when that information is used. As noted, economic stability has both an intrinsic and instrumental worth in people's lives as it acts as a means for individuals securing their physical and mental well-being as well as representing an important part of an individual maintaining their autonomous life as a means for their intellectual, social, and mental well-being. Therefore, there is a harm that is caused when the intelligence practice causes another economic actor to fail, causing people to be unable to act out their own autonomous life when they lose their livelihoods or have necessary resources limited or destroyed.³⁵

Part of this calculation is determining how far along the rings of impact one should go—whether it is just the harm inflicted on the actor targeted or those who are dependent on them, and then those who are subsequently dependent on those secondary actors. Traditional intelligence operations, for instance, can have the harms caused located relatively tightly to those targeted when targets have their privacy, autonomy, or liberty violated through an intelligence actor's use of surveillance, blackmail, bribery, or manipulation of some form, which is then justified in relation to the security provided by being more informed on a threat demonstrated by a terrorist organization or aggressive state. For economic intelligence, however, given the far-reaching and complex set of impacts it can have, proportionality questions take on a new importance, highlighting the need for the ethical calculation to take greater account of the additional, indirect impacts. Even when targeting specific companies, for example, those who are dependent and/or linked with those companies—stakeholders such as employees, shareholders, and those along the supply chain—can also be negatively impacted, creating additional costs that are not reduced in quantity or quality as they spread out along the causal links but arguably escalate.

This can be a particularly difficult calculation to make because, first, allocating harm is often considered to be diluted the further one goes out in the rings of impact, and, second, it is important to ask how reasonable it is to expect an intelligence actor to really understand the wider implications of

their actions when the economic interactions are particularly complex. Despite this, it is still possible to look at the causal dependency of the harm caused, even when multiple levels away from the first intended target, asking that for those who suffered the harm would they have done so were it not for the intelligence interference. This can include what Rabin, Gardner, and Lombard refer to as counterfactual roles, and Goodin and Lepora refer to as co-principles, which are those cases where the harm would not have occurred without the interference by the intelligence actor.³⁶ In these cases, the harm caused can be more directly allocated to the intelligence actor's interference because, without the operation, those who were harmed would not have been otherwise. For example, operations that aim to cause an impact on one actor but that will necessarily and knowingly result in a second or third actor also suffering a loss.

Part of this proportionality calculation is to consider also those costs caused by the widespread use of economic intelligence that erodes the general competitiveness of a state. Indeed,

[W]hen conducted systematically or on a large scale, it can erode a country's economy by removing the competitive edge of its private companies, undermining the return on those companies' investments in research and development.³⁷

Some of the calculated financial annual costs are reported to be up to \$400 billion, with job losses estimated to be at six million,³⁸ while "the financial drain from such losses is considerable in lost market share, evaporating profits, increased information recovery costs, and continued security overheads."³⁹ This can cause deep-rooted damages to the economic health of a state at both the local and national level that "erode the value of a target state's assets; disrupt trade between target states and potential buyers; discourage innovation; destroy competitive advantage and stifle economic momentum; undermine current business plans and ruin profit projections."⁴⁰

Discrimination

Finally, the requirement that an attack must discriminate between legitimate and illegitimate targets is one of the most important ethical criteria.⁴¹ Traditionally, determining who is a legitimate target to suffer harm comes from the moral prohibition against harming those who are harmless, do not represent a threat, and have done nothing to warrant being targeted. In comparison, legitimate targets are those who have acted in some way or have "something about them" to justify them being targeted.⁴²

This is because the rights that protect our vital interests are not absolute and can be waived, forfeited, or overridden.⁴³ For example, people can waive

their right to their usual protections by either acting carelessly (shouting with a window open), behaving in a threatening manner, or willingly joining a class of people where they knowingly give up such protections by doing so. For example, in terms of intelligence activity, an individual who acts as if they have the potential to be a threat waives their right not to be targeted in return. Or, by holding a certain position, role, job, or by being a member of a particular group, that individual has willingly entered “the game,”⁴⁴ marking themselves as different from a civilian, gaining privileges, responsibilities, and also new vulnerabilities as a result. Taking on a leadership role or command, being a member of a state’s infrastructure, joining a security-related company, or joining a group or organization that is a known threat are all examples of how individuals can join the game and so waive certain rights. Or an individual can forfeit their usual protections when they are “derelict” in their duty not to violate a third party’s fundamental rights, with that derelict individual forfeiting their own rights to information and property protections. Or these protections can be overridden when there is a greater potential threat to third parties’ fundamental rights. In this case of overriding people’s protective rights, the intelligence officers can cause harm when the ends sought are “sufficiently weighty” to act as a justification for causing harm to illegitimate targets.⁴⁵ This sufficient weight means that the quality and/or quantity of what is being threatened must be significantly greater than the harm it would cause to prevent it (e.g., violating an innocent third party’s privacy in order to save someone’s life). This means there is an important proportionality aspect to the calculation of the principle of discrimination, as it must be determined whether there is a greater need in terms of the number of vital interests or a more vital interest that needs protecting.

Importantly, this calculation comes regardless of the nationality of the individual. That is, when compared to the laws of war, civilians outside the state are given equal ethical weight in the moral calculation as one’s own. The principle of discrimination distinguishes between legitimate/illegitimate targets based on threat or involvement, not whether they are inside or outside the political community. Even if the target is not a state’s own citizens, individuals still maintain their protection, and indeed there is a presumption that a state’s security actors will make the extra effort to avoid harm to illegitimate targets even at the expense of state security actors.⁴⁶

APPLICATION OF ETHICAL PRINCIPLES

Informing, Assuring, and Trade Advantage

As noted, economic intelligence can play a key role in informing political leaders on the actions, intentions, and resources of other political actors. For example, for Western states both during and after the Cold War this

information offered an important insight into the ability of other world powers, such as China, North Korea, and Russia, especially in terms of military and nuclear capabilities. Also, economic intelligence can play a key role in supporting state trade and negotiations, even between allies, as the intelligence can “indicate how far the other negotiator can be pushed and the extent to which a position must be modified to be adopted.”⁴⁷ For example, “when the U.S.-Japanese auto negotiations reached a climax in 1994 ... working alongside the American trade negotiators were intelligence officials offering assessments of how far the Japanese side could be pushed.” Or, during the “Uruguay Round trade negotiations, the Central Intelligence Agency (CIA) had provided the Clinton administration with accounts of discussions among key members negotiating the world-wide trade accord—including the French and EU Commission.”⁴⁸ This “helped guide U.S. diplomats in setting their own bargaining positions during the final stages of the talks.”⁴⁹ Or in February 1995, when “the French Government went public with its request that five CIA operatives, allegedly caught stealing economic and political secrets in Paris, leave the country.” It was claimed that they had accessed information on France’s negotiating strategy and its international telecommunications structure.⁵⁰ Or when American intelligence “hacked” into the “European Parliament and EU Commission as part of an international espionage campaign aimed at stealing economic and political secrets.” Security experts at the “EU’s Luxemburg’s office said they found evidence that American agents had penetrated the email that links 5,000 EU elected officials and bureaucrats and used that information during the GATT trade talks.”⁵¹ Or Canada using signals intelligence to discover the U.S. bid on its wheat sale to China.⁵²

In many of these cases, it can be argued that this use of economic intelligence can be justified. While trade negotiations do not immediately represent an imminent threat, being uninformed can cause one side to suffer, especially if they are particularly lacking in their own intelligence. In trade, both sides are acting to bring themselves the greatest benefit at the lowest cost, and it is possible that the uninformed might come out of the negotiation in a detrimental position. There can be a justification, therefore, to seek out enough intelligence to make a sufficiently good deal so as not to cause one’s own detriment in the negotiation and suffer harm as a result. The value that a successful trade deal represents to the economic strength and stability of a state outweighs the relatively low harm of violating the privacy of those political and corporate leaders who are arguably legitimate targets by taking part in the high-level political enterprise involved.

However, there should still be some important limitations on the degree and form of intelligence collection involved, which raises the need to be clear about how the intelligence is ultimately being used. The intelligence gained

should not be used to cause excessive harm by tricking or forcing (e.g., through personal blackmailing) the opposition to take a loss that would degrade their economic health to the point that people would suffer. This would fail the principle of discrimination if the state's superior intelligence position results in excessive harm being caused to innocents. If another state fails to be diligent or competent enough to secure a reasonable deal, that is their failing, whereas using intelligence to actively undermine them makes the manipulating state ethically culpable for the resulting harm caused. Economic intelligence to "level the playing field" can therefore be justified, but using it to cause a significant loss in another's population is unjustified. However, in practice this would be a very rare case, as the level of imbalance would have to be substantial to the point that it is going to cause clearly and directly a significant loss in the other state's population.

Critical Infrastructures

Another key set of cases are those that are concerned with protecting or providing for one's critical infrastructure, where there are high costs in terms of people's lives and general well-being. When economic intelligence is used to inform or reassure political leaders, similar to the previous case, it is likely to be justified given the high-value critical infrastructures at play in people's lives, and that generally the harm will be low and limited to violating the privacy of legitimate targets such as economic (both state and private) actors who have waived their usual protective rights by taking on their leadership position. Fabre argues that using economic espionage to protect critical infrastructures can be justified even during peacetime and while targeting civilian structures, giving the scenario where Green has "good reason to believe that the large multinational, ostensibly private corporation which is entrusted with the maintenance of its civil nuclear reactors—Energy Inc.—has very close ties with the regime of hostile state Blue." In this situation, Green has justification for seeking to obtain detailed operational information about the corporation. The argument is that "given that the health of its nuclear reactors is critical to Green's national security broadly understood, Green's leaders are justified in acquiring it" by stealth.⁵³ The central justification is that critical infrastructures play a pivotal role in people's lives, either by maintaining the state itself or as a direct means for creating the necessary environment or provisions that maintain people's vital interests. Therefore, if the operation is to inform political elites in peacetime, reassuring them on the correct practice of a company that represents a key critical infrastructure agent, there is a clearly justified gain, as the observation itself does not cause any harm outside violating the company's privacy.

The calculation is more difficult when economic intelligence is used to protect a state's own critical infrastructure but when doing so would also

require harming another state's critical infrastructure, especially in instances where the economic relationship is zero-sum, such as in the case of limited resources or quantity-restricted markets. Suppose Blue and Red are both supplied by Oil Inc. from Yellow, and there is a fixed amount of supply that can be provided in any given period. Falling supplies cause an increase in oil prices, threatening both the immediate viability of people's vital interests as well as representing a broader societal-level threat to the political community as multiple systems shut down, resulting in a rise in the cost of living for people in both states and ultimately threatening both states' ability to function and their population's ability to fully flourish. The 2022 Russian invasion of Ukraine, and the sudden and extensive European Union, UK, and U.S. responses, demonstrate the quick and widespread measures states will perform to secure their energy security, while the ensuing cost of living crisis for many demonstrated the sensitivity of multiple systems to a single resource.⁵⁴ The impact of the subsequent fuel poverty can be argued to have very real negative implications for people across a number of societies, including access to resources, health, education, livelihood opportunities, and mental well-being.⁵⁵

In this scenario, Blue, concerned about this threat, acquires secret information—whether operational, technical, or personal—that means it is now able to force Oil Inc. to offer supply at a lower cost than it offers Red. In doing so, Blue ends up taking more of the oil supply, resulting in less for Red, driving up the cost of oil, as supply is limited, and causing even greater economic woes to Red's society.

Such economic coercion could have a justifiable reason in that Blue is facing an economic threat that could cause significant harm to its population. But the people ultimately harmed in the process are the population of Red. Red, and more importantly its people, have not acted in a way to be a threat; they have not acted to waive or forfeit their protective rights.

Given that the impact will be against Red's own critical infrastructure, it is likely to be widely felt and disproportionate as the harms are dealt out across Red's society. This means that both the immediate harms caused by a restriction in an important resource as well as the potential for causing a wider and more long-term economic downturn needs to be taken into account in the ethical calculation. While this does not mean that Yellow necessarily has to offer oil to other states or that there is an expectation to have a certain amount of access to a fundamental resource in the international economic system, it does argue that the actions of Blue are ethically unjustified when it will knowingly and necessarily cause critical harm to Red through its intervention. By intervening, Blue has made it ethically liable for the harm inflicted on Red's population by acting as a direct causal factor in their subsequent economic hardships. If the protection comes at the

loss of another state's critical infrastructures, then the harm is not only likely to be disproportionate but will impact illegitimate targets, failing the principle of proportionality and discrimination and will therefore be unjustified.

Therefore, in order to justify this type of economic intelligence where there will be harm caused to illegitimate targets it must be demonstrated that the gain is of such magnitude as to be "sufficiently weighted" so as to override the normal protections people have not to be harmed and that the harm inflicted must be limited. The threat to a state's own critical infrastructures, and potential subsequent harm to the state's population, must be high and immediate, and the cost to the other state's population must be significantly lower or can be reasonably absorbed by the other state's economy. For example, causing a loss to an economic actor who is not critical to the people of another state in order to offer immediate protection for a state's own critical infrastructures.

Noncritical Companies

This calculation becomes more difficult when examining those economic actors who are not necessarily needed for the critical survival of the state, although they could still be of general or regional importance, or of future potential importance, such as large employers or companies that specialize in advanced technologies. Such actors can vary in size and economic activity, ranging from pioneering research and development companies or start-ups, to research institutes and universities. Those targeted are often private actors in industries such as aerospace, biotechnology, computer software and hardware, transportation, energy research, materials, automotives, and where the information taken can include proprietary and confidential business information, such as "customer lists and information, product development data, pricing data, sales figures, marketing plans, personnel data, bid information... and strategic planning."⁵⁶ These economic actors can represent an important local employer or industrial leader and can have a worldwide distribution, bringing in capital directly and indirectly to the local population and the nation itself, providing important regional stability and education and employment opportunities. The role of economic intelligence in these cases is to provide an economic advantage to those companies that represent a benefit to a state's political community through their continued survival and success, although any competitive advantage provided often relies on their competitors losing ground.

Examples of this type of economic intelligence include when the French Directorate-General for External Security used penetration operations against IBM, Texas Instruments, and Corning Glass on behalf of *Compagnie des Machines Bull*.⁵⁷ Or Japan targeting Silicon Valley in the 1980s looking for information on technological developments. Or Romania targeting

Mercedes Benz in Stuttgart.⁵⁸ In 2014, two cases between the United States and China involved five Chinese military officers being indicted for hacking into the computer systems of U.S. Steel and stealing trade secrets⁵⁹; and Chinese hackers being accused of stealing valuable information from SolarWorld, a U.S. solar panel manufacturer.⁶⁰ Also in 2014, Edward Snowden accused the National Security Agency (NSA) of spying on Brazilian oil company Petrobras,⁶¹ as well as German engineering company Siemens, stating that if the NSA thought it could gain information “beneficial to national interests, not the national security” they would go after it and take it.⁶²

Supporting such companies through economic intelligence is attractive, as they represent an important economic contribution and benefit to society. As employers they provide instrumental support to their workers, who in turn pass on this economic success to other economic actors, as well as the important benefit they represent in individuals fulfilling their own working autonomous life. They provide a wider benefit to society as they bring in capital from foreign economies or offer technological advancements that translate to a more progressive and developed economy overall. There is an argument therefore that supporting and advancing such companies has ethical value.

Because these are noncritical companies, however, their failure does not represent the same magnitude of imminent harm to a state’s population, while damaging a company in another state could cause a subsequent loss that can be quite high and impact illegitimate targets. This makes the proportionality calculation more difficult to satisfy, as the gain is not as high, while the loss to other economic actors can still be significant and can be spread across another political community’s society. In this instance, the likely secondary and tertiary harms need to be detailed and determined as to whether the harm inflicted on these additional actors is more or less than the benefit sought. This calculation is particularly unlikely to succeed if there is a competitive relationship involved, whereby the benefit gained will necessarily come at the loss of some other actor. In practice, this is likely to be the case given that the purpose of the intelligence gathering is to provide an advantage to a domestic company in order for them to gain success over their competitors.

For example, imagine a scenario regarding a state with a private technology company that is an important local employer with capital contributions both directly and indirectly to the local population, and that relies on developing its product to maintain its market share. Suppose a competitor has developed, at great investment cost, a new technology that will make them more efficient. Taking this technological advancement from the competitor without the physical and financial burden of research and

development means that the state's company can bring it to market at a cheaper rate, ultimately undercutting the competitor's ability to sell their stock. The economic intelligence could give a state's company an economic advantage. Failure to excel economically can violate the vital interests of a population, as their livelihoods are threatened and their access to resources is depleted. Indeed, states are often expected to provide financial aid when economic actors face financial difficulty.

Indeed, a state promoting the strength of its own companies through financial support is different from causing harm to a competitor to ensure success, even if the former still causes economic harm to the adversary. This is because there is an ethical distinction between protecting oneself and causing another harm if this harm is foreseen and not intended or necessary, as compared to necessarily causing another harm for one's protection. In acting to bring benefit to oneself, even though the action could cause another harm, means that the harm suffered is not a necessary part of the action. It is foreseen but not required. In comparison, harming another to bring oneself benefit means using that target as a means to one's own end; their harm is a required aspect, and by carrying out the harmful action, the attacker is placed as the direct cause of that harm. This is reflective of the wider debates on the doctrine of double effect, which argues that in national security activities even if an attack involves additional harms that will befall innocent bystanders, then these bystanders can suffer an appropriate level of collateral damage if the intention was not to harm them, and their loss is not a requirement to fulfill the desired end. The example often given is killing innocent bystanders in a blast radius of a justified target versus destroying a school to erode morale. In the blast radius case, the deaths of innocent bystanders are not needed, whereas in the school case the death of the innocents is required. In terms of economic intelligence, given the zero-sum relationship involved, the benefit to the first state must come at a loss to the second. The second state's failure, and the subsequent harms it causes, are required. Causing necessary harm in a target who has done nothing wrong to warrant it, where their suffering is directly needed as a necessary part of securing one's own success, would fail the doctrine of double effect.

Economic Covert Action

Economic covert action is the secret application of state policy, with historical examples of economic intelligence being used to undermine or destroy hostile regimes. For instance, during the Kennedy administration, the CIA concocted a plan to ruin the economy of Cuba by lacing its sugar exports with a "foul-tasting chemical—a scheme the President halted at the last minute." There have been programs for testing biological and chemical substances whose purpose was to destroy livestock and crops.⁶³ Or it can also

include economic attacks to steal information or cause loss for another economic actor, such as the recent Operation Aurora example involving a series of cyberattacks from China that targeted the U.S. private sector that were disclosed by Google in 2010, and resulted in both access to the emails of Chinese human rights activists as well as source code to Google's proprietary systems.⁶⁴

One of the most notable examples was the work of the CIA in Chile between 1963 and 1973, where it consistently funded political parties and private organizations on the right wing of politics to manipulate Chilean elections away from the perceived communist threat. As part of this wider intelligence operation, money was funneled into Chile to distort the economic and political landscape. For example, in the 1964 presidential election, the CIA spent \$2.6 million in support of the Christian Democratic candidate to prevent the accession of the presidency to Marxist Salvador Allende. In the 1965 Chilean congressional elections, the CIA spent up to \$175,000; between 1971 and 1973, \$4 million was given to opposition political parties, again the Christian Democrats as well as the National Party; in 1972, \$24,000 was given to anti-Allende businesses, and \$100,000 to the private sector generally; and \$8 million was spent covertly in the three years between 1970 and the military coup in 1973, providing financial support to political parties and media organizations to counter President Allende. As part of this wider endeavor, \$25,000 was allocated to bribe members of the Chilean congress; multinationals were approached to take such actions as cutting off aid to Chile, stopping shipments of spare parts, and causing a run on financial institutions.⁶⁵ Johnson reports that "the DCI at the time wrote in his notes from a White House meeting that a primary objective of the anti-Allende campaign was to 'make the economy scream.'"⁶⁶ Or, in another example, during the Regan administration, the CIA in Nicaragua gave financial aid for the training and arming of the Contras, followed by a CIA-trained team blowing up two bridges in Nicaragua and the mining of the Corinto harbor in an attempt to disrupt the Nicaraguan economy by closing down the main shipping port.⁶⁷ In these examples, economic interference is being used as a tool to influence the political landscape.

Another important case example is that of Operation Ajax. Although initially British, it became the U.S. response to the nationalization of the Anglo-Iranian Oil Company by Prime Minister Mohammad Mosaddegh in Iran. The UK Secret Intelligence Service brought in the CIA to support the operation, where in 1953 it was decided that Mohammad Mosaddegh's successor would be the royalist General Fazlollah Zahedi. The operation included directing the shah to fire Mohammad Mosaddegh and name General Fazlollah Zahedi as the new prime minister. As the operation unfolded, the shah's representative sent to dismiss Mosaddegh was arrested

and “announced that a foreign-backed coup had been attempted, and his supporters took to the street.” This was followed by some 6,000 pro-shah rioters who were supported by the CIA, resulting in “full-scale rioting” on 18–19 August 1953. After the fighting, in which 300 people were killed, troops loyal to Mohammad Mosaddegh were defeated and his house stormed.⁶⁸ This example demonstrates political interference for an economic objective.

What these examples demonstrate is the important crossover between economic and political intelligence, where each is used as a tool to manipulate or control the other. In some instances, economic power is used to distort the political landscape, while in others covert political action is used to further some economic goal. But, in both cases, the wider harms are distributed across society in ways not seen when looking at traditional forms of intelligence activity, such as targeting a terrorist cell to prevent an attack. Direct action can aim to reshape the political landscape, either at a local or national level, with an impact that is then necessarily felt across society. These much wider impacts would need to be accounted for when carrying out such political and economic manipulations.

It could be argued that overthrowing an unjust, harmful, or authoritarian regime could create a better outcome overall and economic covert action could achieve it in a less destructive manner than military incursion. Toppling a single despot and their government to bring in a regime based on human rights, for example, has the action directed against unjust political elites who are carrying out harm to the general population, with this population subsequently benefiting. However, while this could potentially act as a justification for targeted political intelligence, the use of economic covert action necessarily adds further costs that still need accounting for. Using economic manipulation as a way of facilitating political change directly targets members of society who have not done anything to warrant those harms. The harm to those members of the society is a necessary means of manipulating the political system. In the Chilean case, for example, economic unrest was used as a tool to promote political unrest as the end objective. The justification by the United States was that a communist government represented a threat that needed to be dealt with. While this has arguably been demonstrated to be not historically so, even taking the era-relative perspective, the economic covert action targeted the general population with the explicit aim of manipulating their autonomy through promoting economic disturbances and social upheaval. The impact was wide-ranging across society and intentionally targeted and impacted those who were illegitimate targets, and so it was unjustified. While the Iran case demonstrated the role of the IC in facilitating what was considered by the British to be a key economic

priority in terms of preventing the nationalization of the oil company, the operation took aim at the Iranian population to achieve the end and so was illegitimate.

CONCLUSION

Economic security represents a key part of maintaining the welfare of the political community and those individuals within it, regardless of the type of economic system in which a state engages. The economy and economic actors are key to providing people with their physical welfare needs as well as representing an important avenue for an individual to actualize their own autonomy. For the state, a stable economy is necessary to protect itself and maintain its critical infrastructures. There is an ethical value in protecting the economy, and therefore an ethical value in using intelligence to offer this protection. However, protecting state security is not without its limits, and it should not come at the cost of necessarily inflicting harm on those who have done nothing to warrant it. While the costs represented by economic intelligence might feel low when the analysis is limited to the initial collection of economic information, in practice it also often involves using that information to give a state's economic actors a benefit that will necessarily promote a loss in another. These economic losses are hard to confine in instances where there are multiple economic actors and linkages that can pass on the harms caused to an increasing number of agents. With complex economic systems the harms can therefore increase as they move outward across society rather than diminish. The result is that this raises the ethical bar on many forms of economic intelligence significantly unless there is a much more explicit understanding, and limitation, on who is harmed.

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- ⁶⁴ J. Rosenberg, "Security in Embedded Systems," in *Rugged Embedded Systems*, edited by A. Vega, P. Bose, and A. Buyuktosunoglu (Elsevier, 2017), pp. e1–e74.
- ⁶⁵ Richelson, *The U.S. Intelligence Community*, p. 345.
- ⁶⁶ Johnson, *Secret Agencies*, p. 169.
- ⁶⁷ B. Woodward, *Veil: The Secret Wars of the CIA 1981–1987* (New York: Simon & Schuster Paperbacks, 2005); Johnson, *Secret Agencies*, p. 169.
- ⁶⁸ Richelson, *The U.S. Intelligence Community*, p. 347; C. Andrew, *For the President's Eyes Only: Secret Intelligence and the American Presidency from Washington to Bush* (New York: Harper Perennial, 1996).