

The Game Stop controversy and its lessons for NATO Cognitive Warfare.

By Hillman Norberg, University of Maine

Executive Summary

One of the aims of cognitive warfare could be to achieve economic disruption.¹ Economic coercion, statecraft (including sanctions) and cognitive warfare are some of the many challenges that governments face in today's complex and unpredictable world. *Casino Capitalism* and the obsession with capital flows by individuals across the world dominate the way in which governments dedicate their resources and time to making sure their governments help with making sure individuals live a comfortable life economically. However, with a strong emphasis on international financial markets and the benefits that can be reaped by participating in the stock market and expanding upon individuals' portfolios, a sense of paranoia and fear will emerge if there is the slightest disruption to the economic comfort of people. Social media's enormous, worldwide popularity offers new ways to manipulate the general public that can also put pressure on democratic institutions, including financial ones. The recent GameStop and RobinHood controversy (GameStop which is a popular videogame store and RobinHood is a popular app for investments that propped GameStop stocks and created immense excitement for investors) solidified the overwhelming magnitude of financial harm that can occur from market manipulation and the infiltration by foreign adversaries into financial markets generally. An adversary, for instance, can wreak havoc and put the nation and its citizens into a state of panic

¹ Du Cluzel, Francois. "Cognitive Warfare." *INNOVATION HUB*, www.innovationhub-act.org/content/cognitive-warfare.

over a financial collapse. Adversaries of NATO-member nations can use hacking and other technological means to cause a massive disruption to the market that can have a lasting impact similar to an actual war. Cognitive warfare, as well, can severely impact the mental health of individuals as well as the cognitive abilities of soldiers of allied nations as well as ordinary citizens. This, versus an actual bomb that would be used to destroy a physical structure, is another tactic not only used against a NATO member-state army but also the general public of NATO states and their way of life. In today's complicated world, cyber hackers, economic coercion (including the disruption of financial markets) and cognitive warfare are some of NATO's modern-day threats which can affect people directly, not just armies or military personnel. NATO should and must heavily invest into technologies or systems strategically in order to fend off these threats posed by adversaries of the world's largest security network. By investing into these resources, NATO will be one step closer to keeping the allied nations safe and secure. It is of the utmost importance for NATO to rise to the occasion and invest into these technologies: cyber and cognitive warfare which are the threats of the future and that NATO members must be prepared to combat.

Introduction

Economic cooperation and the stability of nations' economies is at the forefront of many governments' agendas across the world. Economic cooperation through trade agreements, blocs and an emphasis on Foreign Direct Investment (FDI) help create jobs, keep economies stable and help to provide (or maintain) a better living standard and livelihood for citizens of nations participating in free, fair trade with other countries. Overall, economic cooperation and the forging of trading alliances has spurred economic growth and created world peace and political

stability across the globe. This has been the case in several continents around the world and the target of leaders hoping to disrupt the NATO alliance.

With the recent news in the financial world regarding GameStop and RobinHood, this had a foreshadowing effect on what could happen if adversarial governments infiltrated into financial systems. The case with RobinHood, especially, where a 20-year-old took his own life as he believed he owed nearly \$750,000 in debts due to his investments, can be more frightening on a much larger scale. If governments can tap into financial networks and instill fear into the general population, then this will adversely affect the economy and the trust of individuals participating in the stock market as financial markets serve as one of the backbones of the world. As mentioned in François du Cluzel's *Cognitive Warfare* piece for the NATO Innovation Hub, du Cluzel states that "Cognitive warfare pursues the objective of undermining trust (public trust in electoral processes, trust in institutions, allies, politician...therefore the individual becomes the weapon, while the goal is not to attack what individuals think but rather the way they think."² This element of the loss of trust by individuals in their economy or political system is one of the key worries that could stem from cognitive warfare. This is the modern-day type of warfare that can affect countries and individuals across the globe and play into the hands of adversarial nations.

NATO-rivals such as China and Russia and the aforementioned topics in this introductory section can, and have, direct correlation with the interests of these world powers. China, particularly, is presently a growing threat. A disruption of the global financial system is not out of the realm of possibility for China's leadership. China's vast technological advancements can

² Ibid.

severely discombobulate the banking systems and stock markets while causing harm to computer systems that handle the movement of aircrafts, ships among other things on the logistical side. The fracturing of the financial system via cognitive warfare is a stealthy but also a malicious way to bring down states. The collapse of an economy can be a more lasting impact than the direct intervention or war between nations. Cognitive warfare can also contribute to this by durably undermining trust in economic institutions. Investments into technology in order to combat cognitive warfare must be the top priority in order to meet the needs set to address these issues.

This report on cognitive warfare which includes elements of economic coercion and statecraft hopes to address these challenges:

- The importance of regional trading relationships and the share of intel in order to prevent cognitive warfare attacks
- Assert the pressing economic challenges and repercussions posed by the GameStop case and its meaning for possible future threats that involve cognitive warfare tactics that can result in economic disruption

The Importance of Economic Cooperation

Economic cooperation has proven to be one of the most important pillars to establishing and maintaining world peace. The European Union, for instance, is a prime example of an economic and political alliance that has sustained peace in a part of the world that was turbulent and ripe for conflict during and before the World Wars. The North American Free Trade Agreement (NAFTA), since its inception in 1994, has exponentially grown the economies of Canada, Mexico and the United States and has made these three large North American economies more intertwined than ever before. Mercosur, in South America, has also served as a

regional trading network that has some of its benefits as well. However, while all of these economic alliances have generally created world peace in these parts of the world, cognitive warfare and its potential implications on the economic sector should be taken seriously. The forging of economic reliance can be instrumental in promoting peace across the world, but it does not stop there. NATO members with strong economic ties should devote their attention to preventing infiltration by adversarial regimes in order to deter attacks that could lead to the complete or partial collapse of the financial system, putting nations safety and security in peril.

While NATO primarily focuses on the strengthening of the security alliance amongst its member nations, NATO should also devote its attention to encourage member states to build upon economic alliances and invest in programs to combat cognitive warfare. As seen with the EU example, when countries are economically interdependent and capital, labor and goods are flowing between nations, historically, and looking at it presently, these countries thrive. When nations thrive economically and politically then conflicts wither away. Conflict mainly erupts from economic and political instability within states and between states. As mentioned by *The Economist*, “In the 1990s America and Europe had a trade dispute over bananas. No one worried that tanks might soon roll as a result. But trade is about more than economics. The European Union, the world’s most ambitious free-trade area, was founded on the idea that trade integration would make war between members ‘not merely unthinkable, but materially impossible.’”³ As displayed by the remarkable turnaround for Europe during the aftermath of World War Two, it clearly became apparent that trading relations between European and non-European allied

³ “Sino-American Interdependence Has Been a Force for Geopolitical Stability.” *The Economist*, The Economist Newspaper, www.economist.com/finance-and-economics/2018/06/23/sino-american-interdependence-has-been-a-force-for-geopolitical-stability.

countries were critical to maintaining peace. What also came from these trading relationships were investments into security, specifically NATO, which has had a profound impact on promoting peace across (and outside of) Europe. By investing into programs committed to strengthening economic integration and development, this would alleviate the pressures placed on NATO members' security teams as it would make the member-states more resilient against threats, including cognitive warfare. This would help mitigate the risks from exploiting economic inequalities between people and the *Casino Capitalism* model of some countries. Security and military alliances are hugely important in today's world, but these pressures can be reduced if investments are made to incentivize countries to collaborate, exchange capital, ideas, goods, labor and people.

The Internet's Adverse Effects on the Security of Private Citizens

While financial resources and the accumulation of wealth is critically important to the majority of individuals, *Casino Capitalism* as highlighted by Susan Strange in her 1986 book highlighted the obsession with taking massive risks and making as much money as possible in a short period of time.⁴ The obsession with capital and enriching oneself are all cause for concern for individuals entangled in not only the accumulation of wealth but the amassing of wealth on a large scale. Any disruption to the financial situation of large corporations can have disastrous effects on the domestic economy which can trickle down to allied nations. This plays into the hands of adversarial nations who want to economically destabilize their rivals.

⁴ Strange, Susan, and Matthew Watson. *Casino Capitalism*. Manchester University Press, 2016.

Another way to create instability in the marketplace is the manipulation of the public through the internet. Surveillance capitalism makes individuals personal information and behavior a target that can be used and exploited by foreign actors in cognitive warfare campaigns. Shoshana Zuboff, an outspoken and fierce critic of the major internet companies' privacy policies highlights the fact that no one's personal information, ranging from your ordinary citizen to a prominent political figure, is safe on the web. Zuboff, a well-known Harvard professor, notes that internet giants use their platforms to collect information on you in order to "...improve their service." However, what is alarming about this is the fact that the collection of personal information is used primarily for ad targeting in order to cater to what the internet companies would like to about you in order to base their ads to your interests. Zuboff also alludes to the "behavioral surpluses" these companies would like to learn about their product users in order to plan ahead for the next steps of the individual using the platform.⁵ By doing this, they are able to understand one's behavioral intentions and use this information to target their spending habits or interests where they would likely spend money.

For instance, Russian meddling in Western elections as of late has been a constant battle in Europe and North America. The manipulation of the general public through internet trolls and "alternative facts" can cause reprehensible harm to countries' political systems. Similar to economic coercion used by adversarial governments, political manipulation over the internet is of the utmost importance to an organization such as NATO. Non-NATO, rival countries would be eager to see instability within NATO. The use of internet trolls to fracture the alliance would

⁵ Zuboff, Shoshana. *The Age of Surveillance Capitalism: The Fight for the Human Future at the New Frontier of Power*. Public Affairs, 2019.

pose a serious challenge for NATO and its member states around the world that are heavily dependent on NATO for their security and stability. These trolls can also play a part in cognitive warfare by having the public believe that certain economic outcomes can occur. This can, similarly to the RobinHood case, lead to potential economic collapse and fragmentation of the markets.

GameStop and RobinHood Cases

The recent GameStop and RobinHood cases allude to a possible security threat when it comes to financial meddling in NATO member countries and social media has played a critical role in this. GameStop, as mentioned earlier, is a popular videogame store and RobinHood is a popular stock market application. The two companies received bad publicity recently as Reddit users coordinated actions to manipulate RobinHood users of higher stock prices for GameStop. This led to investors hopping on an opportunity to buy stocks in the company for what they thought would be a lucrative, short-term gain but ended up being a major loss and a huge source of panic for users of the app that bought the GameStop stock. The newly popular RobinHood trading app “...was one of the primary tools for individual investors who jumped on the GameStop roller coaster, which sent stocks up by more than 14,300% last week but has since plummeted to less than \$53.50 as of (the) closing bell.”⁶ One must take into account the fact that this type of market manipulation by means of using cognitive warfare could be used by belligerent nations opposed to NATO’s initiatives and NATO member-states. For example, and in a hypothetical situation, the infiltration of stock markets in order to manipulate stock prices can

⁶ Gonzalez, Oscar. “Robinhood Backlash: Here's What You Should Know about the GameStop Stock Controversy.” *CNET*, www.cnet.com/personal-finance/robinhood-backlash-heres-what-you-should-know-about-the-gamestop-stock-controversy/.

have severe repercussions as individuals will quickly jump on any opportunity for their own financial gain if it appears to be as lucrative as the RobinHood case appeared to be. The events unfolding from the RobinHood controversy unfortunately resulted in the death by suicide of a young individual who came to believe that he had lost all of his savings and owed nearly one million dollars to creditors.⁷ Adversarial nations, using their sophisticated cognitive warfare techniques, can penetrate into marketplaces such as stock markets and stir a frenzy among jubilant investors and corporations hoping to finish their day with an enormous financial gain. This would, however, result in the financial collapse of individuals and corporations thus leading to financial ruin potentially in an entire country. A hypothetical scenario where an adversary uses cognitive warfare, and eerily similar to the RobinHood case, could be a situation where sophisticated hackers infiltrate into an app using social media similar to RobinHood to purposefully induce emotions of the app users in order to cause serious harm to the economy. In particular, this form of cognitive warfare could be used similarly to RobinHood as it would create excitement among greedy investors hoping to make fast cash but would eventually result in their financial ruin causing harm to the economy and the mental health of individuals in a member-state. NATO priorities should be concentrated on preventing possible stealthy attacks on financial institutions. This type of attack would be a complete distraction for a nation to fend itself off from other potential threats as the top priority will be to regain the health of the financial system. The RobinHood case, even though it spiraled out of control due to Reddit posters that saw an opportunity to make money while also jabbing straight into the heart of Wall

⁷ Egan, Matt. "He Died by Suicide Thinking He Owed \$730,000. Now His Family Is Suing Robinhood." *CNN*, Cable News Network, 9 Feb. 2021, www.cnn.com/2021/02/09/investing/robinhood-lawsuit-suicide/index.html.

Street and other influential players in financial services such as hedge funds, is a warning sign of future attacks that use cognitive warfare to achieve economic warfare. An attack of this magnitude could have larger implications than the engagement of a few countries in a conflict with armed forces. This type of warfare on a country, strategically targeting financial institutions, can be seen as a means towards economic coercion in order to apply pressure on governments and destabilize their economies. It is a potential scenario that NATO should devote its resources to prevent this from occurring.

As mentioned earlier, economic stability is one of the key factors in promoting peace within or outside a country. Cognitive warfare techniques can be used to disrupt economies of NATO member-states as trading relationships help promote peace. NATO should begin by allocating resources into combating these threats on the internet whether it be hackers or trolls who seek to harm the financial system as well as dictate the outcome of elections. This new type of warfare is what NATO should prepare to defend the organization against now and into the future.

Foreign Threats

There are a multitude of threats in today's complicated world by malicious actors and growing superpowers. However, today's threats posed particularly by China and Russia trump the dangers of the past decade. Economic coercion, especially with the manipulation of financial markets, is an enormous weapon the Chinese can use if their expansionist agenda is under threat. As seen with the GameStop case, the penetration into financial markets can cause irreparable harm to corporations, individuals and nations. This new, strategic approach of warfare can pierce into governments in ways that were unimaginable prior to recent technological advances across

the globe. In a hypothetical scenario, if the Chinese have a reason to believe that NATO members will impede on their expansionary ambitions in the South China Sea, particularly in the Taiwan Straits, then the Chinese government can send a warning signal to NATO officials using cognitive warfare (such as deception, disinformation and manipulation) to cause a disruption.

The Brookings Institute states that “...China tends to employ inducements in ways that undermine political processes and institutions...” This may work in low accountability countries such as Cambodia, which as ASEAN Chair in 2012 infamously blocked a joint communiqué mentioning the South China Sea disputes...Scandals over corrupt Chinese-funded infrastructure projects in the Philippines in the mid-2000s—in which local politicians received kickbacks while pushing through an agreement that undermined Philippine territorial sovereignty—led to cancelation of these projects.”⁸ This type of economic coercion and statecraft is prevalent in today’s Xi-led China, however, this NATO adversary has the potential to unleash other forms of economic coercion comparable, and potentially worse, than what was seen in the recent GameStop case that dominated the recent headlines and put financial services and the political economy into a state of panic. NATO must take into account China’s rapidly growing cognitive warfare investments and focus on areas in order to fend off China from wreaking a similar type of havoc as seen with GameStop.

While China has become a major force in warfare related to economic statecraft, Russia has dominated election meddling and creating “fake news” websites on social media and across the internet. On Facebook, for example, and other major social media platforms, Russia has been

⁸ Wong, Audrye. “China's Economic Statecraft under Xi Jinping.” *Brookings*, Brookings, 4 Oct. 2019, www.brookings.edu/articles/chinas-economic-statecraft-under-xi-jinping/.

known for creating real web pages with fake information in an effort to manipulate the general public. The use of trolls that can manipulate social media users to disrupt the stock market should be also a key concern for NATO member-states. Because of this, attention must be paid to both trolls and information campaigns which is a form of cognitive warfare that can have a lasting impact on a member-state. While political meddling should not be discredited, there are other forms of attacks that are not outside of the realm of possibility for Russia and economic meddling can certainly be possible.

Conclusion

With the growing threat of hacking and cognitive manipulations into financial systems, governments must allocate resources into technological advancements in order to keep up with today's cognitive warfare challenges. Cognitive warfare, for example, can be problematic to armies that would otherwise prepare for much different forms of attacks in a militaristic setting. Now, however, the psychological implications from neurological warfare can have a lasting impact on the way in which military personnel conduct their missions and approach hostile actors. Furthermore, cyber warfare has become modern-day warfare: the disruption of financial markets and government-owned technologies, where the role of social media can easily target large numbers of people, lead to a complete and total collapse of a country's economy and cause panic within society which could potentially lead to undermining the durability of trust in financial institutions. As seen with the RobinHood and GameStop cases, these types of attacks or disruptions on a larger scale can severely impact consumer confidence and lead to a decrease in economic activity due to fear of a market collapse. Individuals are willing to take massive

financial risks in the stock markets also known as *Casino Capitalism* highlighted by Susan Strange. Adversaries can take advantage of these vulnerabilities by using cognitive warfare as the financial system is an integral part of the global economy. To conclude, the severity of meddling in financial markets via cognitive warfare, coupled with hacking into technological systems, is one of the gravest possible threats that NATO should be prepared for in the future. A NATO-led investment into combatting this potential risk is vital for the security of the member countries' future as these new threats have assumed the role of today's modern warfare.

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