

Russia-Ukraine balance of military power

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Abstract. The Russia-Ukraine conflict is the most serious test of European security in the 21st century and the forgone conclusion is that Russia can easily prevail in the conflict, but this has not been the case. This article uses balance of military power analysis to report findings on the plausible outcome of a war between Ukraine and Russia. I report findings based on realist theoretical perspectives that indicate Russian victory is unlikely because of relative balance of power where Russia has to face multiple threats diverting its military power while Ukraine can concentrate its military power for a single purpose. The findings suggest implication for policy in Russia, Ukraine, EU and the United States of America.

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INTRODUCTION

President Putin allegedly stated '*If I wanted, Russian troops could not only be in Kiev in two days, but in Riga, Vilnius, Tallinn, Warsaw or Bucharest, too,*' (Huggler, 2014). So, the big question is why isn't he? The discussion in the media and popular perception is that a total war between Ukraine and Russia would result in an easy and quick Russian victory. However, a total war with direct Russian Army involvement and large scale invasion of Ukraine in style similar to that of the Warsaw Pact invasion of Czechoslovakia in 1968 is no easy endeavor. Some may consider it a forgone conclusion that the largest country on earth with the second largest nuclear weapons stockpile could easily defeat a country the size of Madagascar and a population similar to Argentina's. Indeed, on paper at the least, there are great differences in the absolute power of the two countries (Clowes & Choros-Mrozowska, 2015).

However, I present several arguments against Russia's overwhelming superiority. First, Russia can not commit all its military forces to a war with Ukraine because of multiple military threats from virtually all

directions whereas Ukraine can commit all its forces to a war with Russia. Second, Ukraine has resources that act as game changers, which could change the outcome of a war in Ukraine's favor. The purpose of this article is to understand the current behavior of the actors involved and make recommendations on future courses of action based on an assessment of the strategic situation. Certainly, there are many other issues that could have been addressed. The ones I have chosen offer a different perspective from that of previously published works.

The paper is organized into four main parts: first, there is a review of the theoretical approach and related propositions as well as an explanation of the research methodology; second, the evidence of the balance of military power between Russia & Ukraine is presented; third Ukraine's present and potential military power is analyzed; finally, conclusions are drawn and implication for policy makers in Russia and Ukraine are discussed.

THEORETICAL APPROACH & METHODOLOGY

Classic balance of power theory has been a focus of much attention among international relations scientists for more than a century (Hume, 1965; Waltz, 1979; Wohlforth, Little, & Kaufman, et al. 2007). Levy (2008:1) considers "The central proposition of balance-of-power theory (albeit one that has never been tested systematically) is that great powers balance against hegemonic threats." Others have focused on power as relationships (Lasswell and Kaplan, 1950), power as multidimensional (Waltz, 1979), and power as military force (Art, 1980; Baldwin, 2012). Within this stream of literature, I focus on military power that lends itself to quantification in line with the classic power school (Lasswell and Kaplan, 1950; Mearsheimer, 2001) and focus on the military power of Russia relative to Ukraine and Ukraine's game changers. I argue that Russia faces multiple threats from powerful adversaries; thus, it cannot apply all its military force to a war with Ukraine which results in a shift of the balance of power in Ukraine's favor. Hence, the following proposition is postulated:

Proposition: Multiple threats to Russia's security limit the Russian military forces available for deployment in Ukraine.

METHODOLOGY

An explanatory qualitative case study methodology is used in this study where the researcher departs from realist balance of power literature (Yin, 1981, p. 61). The balance of power theory is used to guide the collection of secondary information, which is then analyzed by categorization and comparison among the relevant stakeholders as recommended in the research methodology literature (Yin, 2013). As sources for evidence, I used open source articles, reports and websites. Additional insight was developed by observation during frequent visits to Ukraine. Cross referencing and multiple sources of evidence were used to validate claims where plausible. To control for plausible biases in the data collection, analysis and findings, two peers reviewed earlier drafts of this article and offer critical reviews. As a result, new sources of data were used, the analysis was improved and the discussion, implication and conclusion sections were improved.

EVIDENCE OF THE BALANCE OF MILITARY POWER BETWEEN RUSSIA & UKRAINE

As stated above, President Putin allegedly stated '*If I wanted, Russian troops could not only be in Kiev in two days, but in Riga, Vilnius, Tallinn, Warsaw or Bucharest, too,*' (Huggler, 2014). However the statement does not

survive close scrutiny and begs the question why Russia has not done that? The answer is that all the 172 brigades of the Russian army cannot be committed to the war with Ukraine which can, in comparison, commit all its army. A large portion of the Russian brigades will be needed to defend the long border with NATO against plausible retaliatory attack. Although, President Obama statement about the current military conflict in Donbass excludes military conflict: *"I've been very clear that it would not be effective for us to engage in a military conflict with Russia on this issue,"* (Obama, Jan 25, 2015), his successor's opinion may be different. If the Russian Army gains control over significant portion of Ukraine and battles for major cities outside Donbass erupts and if images of mass casualties and atrocities are circulate on social media then NATO leaders may take action. Nervous leaders of neighboring countries such as Lithuania and Poland would add additional pressure on NATO to take some action against Russia. At first, non-military measures are likely. For example, sever economic sanctions could be put in place. Russia could be sanctioned through the banking system by cutting Russia off from the SWIFT system which would severely damage the Russian economy. NATO could provide up to date intelligence, advanced artillery detection radars, anti-aircraft defence systems and munitions to Ukraine. Also, the newly formed Lithuania, Poland, Ukraine Joint Brigade of 4,000 could be deployed in West Ukraine as deterrent. Although, full scale NATO retaliatory attack on Russia is unlikely, the perception of the Russian leaders is engraved by fear of Nazi style surprise attack. So, in their final calculations, Russia leaders are likely to take into consideration an actual confrontation with NATO and take the necessary precautions by positioning of troops. Therefore, the need to plan for these contingencies lessens the number of Russian army units available to attack Ukraine.

Notwithstanding President Putin's brusque statement above, he is fully aware of the danger of direct confrontation with the NATO Alliance's 3.3 million strong armed forces. The Russian army of one million does not compare favorably. The overwhelming numerical superiority of NATO's forces is accompanied with much better trained and equipped professional armies, defence spending of \$1.023 trillion in comparison to Russia's \$120 billion and economic power and defence industries dwarfing those of Russia (Defence Committee: Third Report, 2014). In order to counter the great threat from the NATO forces, the Russian Army has stationed one division, 32 brigades and three regiments in the Western Military District (Global Security, 2015).

Additionally, China is a constant threat to eastern Russia, so a significant Russian Army force needs to be stationed on the boarders. Despite warming relations between Russia and China, one should not forget the Sino-Soviet conflict of 1969 which was not declared as resolved until 2008 (Weitz, 2008) with Russia making considerable concessions to China. The war was fought over territorial disputes between the two nations and caused deep wounds in relations for decades. However, the agreement was little but a whitewash over profound territorial disputes dating back to the mid nineteenth century when Russia forced China to surrender over a million square kilometers of land in Manchuria. At best, the current spirit of co-operation between the two nations is likely to be inspired by a need to counter the threat of US expansion towards Russia's western borders and may flare up again, which results in both nations stationing large military forces along the border.

The deployment of Chinese military forces at Russia's border is difficult to determine but a report by the Federation of American Scientist (FAS), in 2000, gives some indication of the military threat posed by the Chinese Army at Russia's border. FAS estimated that the Chinese Army had deployed seven group armies with their supporting units in Jilin, Liaoning and Gansu provinces neighboring Russia, this represents at least 28 divisions plus supporting units which is roughly equivalent to 40% of the Russian Army. No small threat to Russia, which has only recently resumed growing in strength and advancing technologically.

In order counter the threat from the Chinese Army, Russia has stationed 41 brigades and seven regiments in the Eastern Military District (Global Security, 2015).

Moreover the great Siberian landmass with its ample space and natural resources is a great temptation to the Chinese people short of land and resources across the 4,300 km border (Marshall, 2014). According to Jashua Kucera (2010), the Chinese invasion of Siberia is already underway in the form of mass legal and illegal immigration of Chinese nationals. We may recall that Siberia was originally occupied by the Xibe people, now predominately living in the adjacent Jilin province in China, and that Russian did not dominate Siberia until the early 18th century (Crossley, 2002). So, China may make claims to Siberia on historic grounds and may attempt to use this to legitimize an invasion and occupation. Consequently, the Chinese threat of an invasion results in a significant reduction in the number of Russian Army brigades available for a war with Ukraine.

If the potential threats from the NATO Alliance and China is not enough to worry President Putin and his generals, there are additional two threats Russia must defend against on its southern flank and the Arctic. Russia's continued troubles with terrorists and revolutionaries in Central Asia, especially the North Caucasus, forces the Russian Army to deploy 25 brigades there and additional 27 brigades on its southern flank. The recent development and discoveries of oil and resources in the Arctic demands the formation of specialized brigades for its defence (Global Security, 2015).

Additionally, Russia's involvement in the Syria conflict drains deployable forces and logistical capabilities. To say that the Russia Army is overstretched would be an understatement in time of war. In response to the demand of the war in Donbass, the Russian Army has drawn units from all areas of Russia to the Ukrainian front, leaving dangerous shortages in the regions where the units are permanently based. All tallied the Russian Army commitments to the defence of Russia and the Syria conflict severely limits the number of units available for a total war with Ukraine.

UKRAINE'S PRESENT AND POTENTIAL MILITARY POWER

Ukraine has strategic game changers that can alter a war with Russia in its favor. Ukraine became the dumping ground for Soviet Union's conventional weapons withdrawn from Eastern Europe and this titanic hoard of conventional weapons included 7 million small arms, millions of tons of small arms ammunition, thousands of tanks and armored vehicles, aircraft, missile launchers and large and small conventional weapons and equipment of all sorts (Luger, 2005). Much of these weapons were of very high quality. Although much has been sold, looted or destroyed, Ukraine conventional weapons stockpile is a gigantic treasure in times of war. In 2014, the GlobalSecurity organization estimated that Ukraine had 4,100 serviceable tanks in comparison the British Army's 156 tanks. RUSI, a foreign policy think tank, estimates Ukraine's current stockpile of Kalashnikov assault rifles and other small arms to be the millions (GlobalSecurity, 2014; Sutyagin & Clark, 2014; Simpson, 2015). As an indication of the weapons stockpile in Ukraine, former Ukrainian ex-defense chief, Valeriy Heletey reported that 14,000 armored vehicles had been sent to the Donbass combat zone (KyivPost, 2014) and much of the fierce fighting for the small town of Slavyansk in Donetsk region is because of the huge small arms depot located nearby (Sutyagin, Clarke, & Eyal, 2014). This weapons cache of five million small arms was established during the cold war as a part of a USSR contingency plan to arm the population in the case of foreign invasion (Jones, 2014). Another underground weapons depot near the village of Paraskoviyevka, where a million weapons and millions of rounds of ammunitions were stored in a salt mine, was captured by pro-Russian separatists in May 2014. Ukraine's enormous conventional weapon arsenal can be used to support insurgency to undermine political

stability and cohesion in areas controlled by Russian- or pro-Russian forces by leaving weapons caches like the pro-Russian separatists have done on their retreat from the Ukrainian army. This tactic would force Russia to deploy large number of occupation units.

Ukraine could implement a program of gas infrastructure disruption or destruction which would be very damaging to Russia. In 2013, UKRTRANSGAZ transported 132 billion cubic meters (bcm) of gas for Russia, of which 86 bcm were destined to Europe, with the rest for the Ukrainian market. This is about a third of GAZPROM's total exports of natural gas with a market value of USD26 billion. GAZPROM and indeed Russia would likely experience severe financial problems if this export is disrupted (GAZPROM, 2015 and UKRTRANSGAZ 2015). Critics would argue that Ukraine would be alienating its allies in Europe by such a move. In the fall of 2016, Ukraine had less than three month supply of gas in storage with little hope for further supply. If the people in Ukraine stay in the freezing cold without any heat or electricity they are unlikely to have much sympathy for the people in Europe and may therefore support such a move. There are no rational political reasons that support Ukraine continuing to provide gas transit for Russia in times of war.

Ukraine had a large chemical and biological weapons industry during Soviet times and inherited a big stockpile of chemical and biological weapons from the USSR. The details as to their disposal are sketchy. Ukrainian scientists have the technical knowhow to make such weapons. The Ukrainian chemical industry can manufacture them and the Ukrainian army has missiles that can deliver them. Already, the Ukrainian army and the Pro-Russian separatist have traded allegations of chemical weapons use in Donetsk (Kyiv Post 24/1 2015; Malm and Steward, 2014).

During the Soviet era, Ukraine had very large biological weapons establishment. Consequently Russian leaders' perceptions of Ukraine's bioweapon potential are likely to cause significant worry as expressed by Nikolai Patrushev, Secretary of the Russian Security Council (RT, 2015). These concerns over Ukraine's biological weapons potential may have some foundations in reality as Savin (2014) alleges that Pentagon supports dual use bio-laboratories in several cities including: Vinnytsia, Ternopil, Uzhhorod, Kiev, Dnepropetrovsk, Simferopol, Kherson, and Lviv. It does not take much to convert laboratories designed to develop anti-pathogens for biological weapons to the development of weaponized pathogens. The Russian leadership perception and worry about bioweapons was demonstrated in President Putin's Executive Order to approve the updated Russian Federation National Security Strategy (2016) which includes a section on dual use bio-laboratories in neighboring states.

In addition to the bio-laboratories allegedly supported by Pentagon, there are more than 4,000 registered microbiological laboratories in Ukraine (Kysil & Komisarenko, 2012). Many of the pathogens produced and used in these laboratories have potential for dual use as biological weapons. Ukraine's great biological science industry is supported by 25 state or national universities, 7 technological universities, and 20 pedagogical universities all specializing in biology. Moreover the biological industry is supported by 15 universities in medical sciences and 20 in veterinary medicine (Kysil & Komisarenko, 2010). Hence Ukraine has the scientific base to produce biological weapons and the threat of their use must be taken into the calculation by the Russian army.

The *Budapest Memorandums on Security Assurances*, 1994 gave Ukraine security guarantees from the USA, UK and Russian Federation in exchange for the disposal of its nuclear weapons and Ukraine joining the Treaty on the Non-Proliferation of Nuclear Weapons as non-nuclear state. On December 5th 1994, Ukraine's President, Leonid D. Kuchma, signed the Memorandums on Ukraine's behalf which must be recorded as the most reckless strategic act in history, only to be compared to Chamberlain's folly in Munich in September 1938. The Memorandum stipulated that Ukraine would hand over to Russia more than 2000

strategic nuclear weapons and more than 3000 tactical nuclear weapons; all tallied over 5000 nuclear weapons. The question remains if President Kuchma acted legally because, his decision to have Ukraine joining the Treaty as non-nuclear state is in conflict with the law passed by the Ukraine Supreme Soviet passed on November 16th 1994 which clearly state: "Ukraine is the owner of the nuclear weapons which it has inherited from the ex-U.S.S.R." (Yuri, 2004), this clause is effectively a declaration that Ukraine will be joining the Treaty on the Non-Proliferation of Nuclear Weapons as a nuclear state. Consequently one can argue that President Kuchma acted illegally and Ukraine is a member of the Treaty on the Non-Proliferation of Nuclear Weapons as a nuclear state and has the legal right to acquire and own nuclear weapons.

Regardless of the *Budapest Memorandums on Security Assurances*, Russia must consider the fact that Ukraine has the potential to manufacture nuclear weapons. Ukraine manufactures missiles and key components for Russia's strategic ballistic missiles, Ukraine has uranium mines in the Kirovograd Region and processing facilities at the Zholotiye Vody and Dniprodzerzhynsk mills, Ukrainian scientists have the skill and technical facilities to revitalize the manufacture of nuclear weapons as called for by some key military and political figures in Kiev (Heletay, 2014; Dorell, 2014).

If nuclear weapons are out of the reach of the Kiev government as some scholars argue (Ruble, 2015), radiological weapons capability is certainly available. One half of Ukraine's electricity is produced by nuclear power plants, which generate the associated nuclear waste ideal for radiological weapons. The Guardian newspaper reports 3000 fuel rods in storage at the Zaporizhzhia nuclear power plant (Neslen, 2015) and the potential havoc caused by an accidental or willful release of this waste is mind-boggling.

Finally, the ultimate game changer would be a deliberate release of radioactive plumb from one of Ukraine's four working nuclear power stations. Take Zaporizhzhia nuclear power plant as an example, it is located 200 km south west of Donetsk and has six VVER 1000 MWe reactors making it the largest nuclear power plant in Europe. A deliberate release of radiation would be easy. The resulting catastrophe would be six times larger than the Chernobyl disaster and the prevailing south westerly winds would blanket much of Russia with radiation and render its prime industrial- and agricultural areas useless for decades. The catastrophe could be blamed on pro-Russian agitators that have been operating in the plant (Miller, 2014). Certainly, this will have catastrophic effect on the rest of Europe. However, as leaders of nations reserve the right to use all available means for the defence it is not so inconceivable to contemplate that the Ukrainian leaders will use this option when faced with Russian annihilation. Keeping in mind that, President Putin has made it clear that he will use nuclear weapons to defend Russians and his ambassador in Denmark threaten the Danish navy with nuclear strikes (Isherwood, 2015). As the Ukrainian Defense Minister Heletay (2014) stated:

I am drawing attention to Russia's threatening of Ukraine with the use of tactical nuclear weapons, if we fail to defend Ukraine today, if the world does not help us, we will have to get back to the creation of such weapons, which will defend us from Russia.

Years have passed since this statement was made and no evidence is forthcoming that Ukraine has developed these options. However, Russian analysis much be considering the plausibility of these scenarios and take them into consideration for plans of total war with Ukraine.

The prospects of Ukraine developing weapons of mass destruction (WMD) or using the alternatives discussed above are indeed frightening and the Ukrainian leaders must weigh them up against the alternative of developing conventional defence means only. There are, however, sound reasons for Ukraine to go this route. First, Russia may decide to take the chance of leaving some of its flanks exposed and concentrate its

armed forces on a total war with the Ukraine army and defeat it. There is precedence for this since the WW2 when Stalin moved 50 divisions from east Siberia to Moscow and left the Siberian flank exposed to a plausible Japanese invasion. Alternatively, analysts may conclude that the NATO alliance will lack the means or will to join a total war between Russia and Ukraine.

Second, Russia has greater staying power in a prolonged conventional conflict as its economic resources and the political stability are greater than those of Ukraine.

Third, Russia has been accused of threatening Ukraine with the use of WMD and reports circle on social media that Russia used a nuclear device on a chemical plant in Donetsk.

Fourth, the more radical sections of the Ukrainian political and military landscape may be willing to produce and use WMD. If they did, then this will allow them to outshine and take control from the elected Ukrainian government.

Critics of the above will point to the fact that Ukraine signed all of the major nonproliferation treaties and regimes, such as: the Treaty on the Non-Proliferation of Nuclear Weapons, the Comprehensive Nuclear Test Ban Treaty, the Biological and Toxin Weapons Convention, the Chemical Weapons Convention, the Nuclear Suppliers Group, the Missile Technology Control Regime, and the Hague Code of Conduct Against Ballistic Missiles. However Ukraine cannot be expected to honor any of them when the most important treaty to its survival, the *Budapest Memorandums on Security Assurances*, has been grossly violated.

CONCLUSION

The proposition is supported by the evidence. Russia does not have the military forces to invade Ukraine without seriously endangering the defence of Russian border areas. If Russia does take the risk of a full scale military attack on Ukraine, then Russia does not have the military forces necessary to hold and control Ukraine. Ukraine has at its disposal and/or can put into service on short notice strategic game changers that would make Russian invasion unsuccessful or too costly for the Russian Federation. Therefore a full scale Russian invasion of Ukraine is not likely to occur and Russia has to resort to alternative strategy and tactics to gain influence in Ukraine.

IMPLICATIONS FOR RUSSIA AND UKRAINE

The implications for Russia are the need to avoid full scale military assault on Ukraine because the opportunity to do so is lost. In March, 2014, the new Ukrainian government lacked legitimacy, it was not functioning effectively, the Ukrainian military was in disarray and large portion of the Ukrainian population had a favorable perception of Russia. The EU and the NATO Alliance were confused and lacked a response policy. So, had the Russian forces rolled up the road from Crimea to Kiev or come down from the north, little will or force was there to stop them. Today, the situation is different. There is an elected functional government, the military has been reorganized and reinforced, it is battle hardened and deployed for defence. The EU and the Alliance have recognized the Russian threat and some policy analysis and response have been implemented such as the deployment of additional equipment to Poland. Most importantly, the Ukrainian population has suffered years of economic hardship and the blame appears to be placed on Russia's actions. Russia's alternative is to utilize hybrid tactics such as: economic-, diplomatic-, information- and cyber warfare and proxy pro-Russian military forces and that is seemingly what Russia has been doing. (Berzins, 2014) suggest that Russia has chosen these hybrid tactics but it is not commonly understood that Russia uses these hybrid tactics because of a lack of conventional military resources and because of the game changers possessed by Ukraine. However, the fact remains: Russia's years of effort has resulted in a

stalemate. Perhaps, moving forward, one option for Russia is to continue its hybrid warfare with the objective to slowly drain Ukraine of resources and the will to fight resulting in the collapse of the pro-western governments. This strategy coupled with a naval blockade of Ukraine from Crimea or Zmiiny Island would drastically worsen the situation for Ukraine. Just the placement of anti-ship missiles on the Zmiiny Island would drive the insurance rates on ships heading toward Ukrainian ports so high that it could become uneconomical to do the business.

Alternatively, Russia could step up cyber-attacks on Ukraine using proxies to claim plausible deniability. Allegations have been made of successful Russian cyber-attacks on Ukrtelecom, Ukrainian parliamentarians, government websites, the Central Election Commission, and electric infrastructure (Maurer, 2015; Limnell, 2015). However, such cyber-attacks have the disadvantage of divulging Russia's cyber warfare capabilities, processes and techniques. Thus, allowing Russia's principle enemies to develop defenses against those cyber-attacks with the overall consequences of effectively disarming Russia's cyber-warfare forces in a total war.

In comparison, Ukraine is not restricted by such concerns about revealing strategic cyber-warfare capabilities and should mobilize fully its public and private, including criminal, entities having cyber capabilities useful in the battle against the greatly superior Russian cyber-warfare forces. The Ukraine government should seek to organize and support private Ukrainian hacker groups such as the Cyber Hundred, Null Sector and the Ukrainian Cyber Forces, commanded by Eugene Dokukin, as well as capabilities of alleged cybercrime bosses like Dmitry Ivanovich Golubov, who leads the Ukrainian Internet Party. There is no moral reason why a nation under attack should not use the services of all its citizens to fight for its survival and sovereignty. Financial rewards, honor and pardon for crime or prosecution are some of the incentives the Ukrainian government can use to encourage people to participate in the Ukrainian cyber-warfare forces.

Finally, another option for Russia is to take a page out of Chinese PLA's notebook on the Sino-Vietnamese War of 1979 and declare a victory and go home. This option takes the pressure of Russia, is likely to result in the lifting of the sanctions imposed and the pro-western Ukraine governments may ultimately collapse on their own.

The implications for Ukraine are many. First is the obvious fact that the security assurances provided by the USA, UK and Russia Federation in *Budapest Memorandums on Security Assurances* are worthless, none of the countries making the assurances has lived up to its commitments. Consequently, Ukraine has to rely on its own ability to defend its sovereignty.

Ukrainian leaders need to make it crystal clear to the leaders in Moscow that Ukraine will use all available means to defend Ukraine sovereignty: including weapons of mass destruction and measure need to be taken to develop them; that Ukraine will be defended in depth; cities will be fortified; scorched earth orders will be issued in critical sectors, threatened territories will be evacuated of people and industry and that Ukraine will retaliate with attacks on targets in Russia. The defence of the strategically important Mariupol is a good example of how the determination to defend a Ukrainian city works. In August 2014 Mariupol residents rallied for the City's defence and dug trenches and build fortifications (Olearchyk, 2014). While it was shortly under the control of the pro-Russian forces, Ukraine forces quickly recaptured Mariupol and have defended it against repeated attacks. The Ukrainian War Cabinet's determination to defend the city was further demonstrated in statement on 13/7 2015: "As for Mariupol, the situation is exactly opposite, relevant measures are planned to be implemented to strengthen the defence of the city as well as the planned rotation of units... (War Cabinet, 2015)" and this is exactly what needs to be communicated to the Russian government: an absolute determination to defend Ukrainian territory and sovereignty. The heroic

determined defence of Donetsk airport for 242 days is another example and an indication of the difficulties Russia will have in a total war with Ukraine.

The Russian information warfare tactics needs to be explained to the Ukrainian public and measures need to be taken to combat it by electronic means and restriction on pro-Russian propaganda. Furthermore the best defence against pro-Russian propaganda is the full implementation of the social and political objectives and agreements the government has committed to. The most important agreement is the EU-Ukraine Association Agreement entered into in June 2014 which needs to be fully implemented. President Yanukovich's refusal to sign the EU-Ukraine Association Agreement was the fundamental cause for the Euro-Maidan revolution and his overthrow. Moreover the Ukraine public wants to see an end to widespread corruption and the Poroshenko Government needs to give its full support to judicial reforms and the newly established National Anti-Corruption Bureau and the National Agency for Prevention of Corruption. However economic reforms are a key to the continued public support for the defence of Ukraine from pro-Russian forces. People must have basic necessities and a hope of future economic prosperity. The full and rapid implementation of the Coalition Agreement: the Program of the Cabinet of Ministers and Strategy 2020 and the IMF-Ukraine Memorandum of Economic and Financial Policies are critical for the economic progress the public want and provide a basis for increased foreign investment leading to economic prosperity.

In terms of the implications on the diplomatic front, Ukraine needs to take a much firmer stand towards Russia and make it clear that further attacks on Ukraine sovereignty will be too costly for Russia. Additionally, Ukraine needs to take stronger stance towards its allies and make it clear that a much greater military and economic support is needed so Ukraine does not have to resort to using the game changers at its disposal.

REFERENCES

- Art, R. J. (1980). To what ends military power?. *International Security*, 4(4), 3-35. Retrieved from: <http://www.jstor.org/stable/2626666> [Accessed 20 October 2015].
- Baldwin, D.A. (2012). Power and International Relations. *Handbook of international relations*. London: Sage.
- Bērziņš, J. (2014). Russia's new generation warfare in Ukraine: Implications for Latvian Defense Policy. *Policy Paper*, 2. Retrieved from: <http://www.naa.mil.lv/~media/NAA/AZPC/Publikacijas/PP%2002-2014.ashx> [Accessed 18 September 2015].
- Clowes, D., & Choroś-Mrozowska, D. (2015). Aspects of global security – the measurement of power & its projection. *Journal of International Studies*, 8(1), 53-66.
- Crossley, P.K. (2002). *The Manchus. (Peoples of Asia)* (paperback edition). Oxford: Blackwell Publishers.
- Defence Committee - Third Report: Towards the next Defence and Security Review: Part Two-NATO. 22 July 2014. Parliament: House of Commons. Retrieved from: <http://www.publications.parliament.uk/pa/cm201415/cmselect/cmdfence/358/35802.htm> [Accessed 15 September 2014].
- Dorell, O. (2014). Ukraine may have to go nuclear, says Kiev lawmaker. *USA Today*, 11. Retrieved from: <http://www.usatoday.com/story/news/world/2014/03/10/ukraine-nuclear/6250815/> [Accessed 9 February 2015].
- Dubinin, Y. (2004). Ukraine's Nuclear Ambitions: Reminiscences of the Past. *Russia in Global Affairs*, April, 13. Retrieved from: http://eng.globalaffairs.ru/number/n_2913.
- Gazprom. (2015). *Marketing*. Retrieved from: <http://www.gazprom.com/about/marketing/> [Accessed 20 August 2015].

- Global Security Organization. (2014). *Ukraine Crisis- Russian Military Intervention*. Retrieved from: www.globalsecurity.org/military/world/Ukraine/politics-2014.htm [Accessed 4 August 2014].
- Global Security Organization. (2015). *Russian Order of Battle*. Retrieved from: <http://www.globalsecurity.org/military/world/russia/army-orbat.htm> [Accessed 15 September 2015].
- Heletey, V. (2014). *Ukraine's Defense Minister confirms new arms being provided by NATO*. 14 September 2014. Cited by Telesur. Retrieved from: <http://www.telesurtv.net/english/news/Ukraine-Threatens-to-Restart-Nuclear-Weapons-Program-20140915-0006.html> [Accessed 26 January, 2015].
- Huggler, J. (2014). Putin Privately Threatened to Invade Poland, Romania and the Baltic States. *Daily Telegraph*, 19. 18 September, 2014. Retrieved from: <http://www.telegraph.co.uk/news/worldnews/europe/russia/11106195/Putin-privately-threatened-to-invade-Poland-Romania-and-the-Baltic-states.html> [Accessed 9 February 2014].
- Hume, D. (1965). Of the Balance of Power. In: Seabury, P., ed. *Balance of Power*. San Francisco: Chandler Publishing Company.
- Jones, S. (2014). The arms cache that makes Slavyansk key. *Financial Times*. (May 2, 2014). Retrieved from: <http://www.ft.com/cms/s/0/9e422a76-d212-11e3-97a6-00144feabdc0.html#axzz47rmDBLcO> [Accessed 6 Mai 2016].
- Kaplan, A. (1950). *Power and Society: A Framework for Political Inquiry*. New Haven: Yale University Press.
- Kucera, J. (2010). China's Russian Invasion. *The Diplomat*. 19 February 2010. Retrieved from: <http://thediplomat.com/2010/02/chinas-russian-invasion/> [Accessed 9 September 2015].
- KyivPost. (2014). Over 14,000 armored vehicles sent to military war-torn zone – Heletey. October 13, 2014, *Interfax-Ukraine*. Retrieved from: <http://www.kyivpost.com/content/ukraine/over-14000-armored-vehicles-sent-to-military-war-torn-zone-heletey-367844.html> [Accessed 11 December 2014].
- KyivPost. (2015). Kyiv verifying reports that militants used chemical weapons at Donetsk airport. 23 January 2015. Retrieved from: <http://www.kyivpost.com/content/ukraine/kyiv-verifying-reports-that-militants-used-chemical-weapons-at-donetsk-airport-378241.html> [Accessed 10 February 2015].
- Kysial, O., & Komisarenko, S. (2010). The Ukraine survey and follow-up activities. Presented at the Dual-use education for life scientists: mapping the current global landscape and developments. 15-16 July, Bradford, Bradford University. Retrieved from: http://www.brad.ac.uk/acad/sbtwc/dube/resource/ESRC_seminar_web/ppt/Kysilpresent_Bradford.pdf [accessed 20 October 2015].
- Kysil, O., & Komisarenko, S. (2012). High-containment Laboratories in Ukraine: Local resources and regulations. In: Hottes AK et al. eds. *Biosecurity Challenges of the Global Expansion of High-Containment Biological Laboratories*. New York: National Academies Press.
- Levy, J. S. (2008). Case studies: Types, designs, and logics of inference. *Conflict Management and Peace Science*, 25(1), 1-18.
- Limnell, J. (2015). The exploitation of cyber domain as part of warfare: Russo-Ukrainian war. *International Journal of Cyber-Security and Digital Forensics*, 4(4), 521-533. Retrieved from: [file:///filgrms1/u08\\$/jokullj/Desktop/Limnell%20cyber%20warfare.pdf](file:///filgrms1/u08$/jokullj/Desktop/Limnell%20cyber%20warfare.pdf) [Accessed 10 January 13, 2017].
- Lugar, R.G. (2005). *Lugar and Obama Urge Destruction of Conventional Weapons Stockpiles*. Retrieved from: <http://www.fas.org/asmp/campaigns/MANPADS/2005/LugarObama.htm> [Accessed 11 January 2015].
- Malm, S., & Steward, W. (2014). Russia demands investigation into claims chemical weapons were used in Ukraine amid frantic efforts to secure fresh ceasefire. *Daily Mail*. Retrieved from: <http://www.dailymail.co.uk/news/article-2675422/Russia-demands-investigation-claims-chemical-weapons-used-Ukraine-amid-frantic-efforts-secure-fresh-ceasefire.html#ixzz3RKh71kx4> [Accessed 10 February 2015].
- Marshall, J. A. (2014). Russia's Struggle for Military Reform: A Breakdown in Conversion Capabilities. *The Journal of Slavic Military Studies*, 27(2), 189-209.
- Maurer, T. (2015). *Cyber Proxies and the Crisis in Ukraine*. NATO CCD COE Publications, Tallinn, 2015. Retrieved from: https://ccdcoe.org/sites/default/files/multimedia/pdf/CyberWarinPerspective_Maurer_09.pdf [Accessed 10 January 13, 2017].

- Mearsheimer, J. J. (2001). *The tragedy of great power politics*. WW Norton & Company.
- Miller, D. (2014). Ukraine forced to shut down nuclear power station for second time in a month after 'accident'. *Mailonline*, 29 December, 2014. Retrieved from: <http://www.dailymail.co.uk/news/article-2889948/Nuclear-reactor-shutdown-Ukraine-s-biggest-power-station-electrical-malfunction.html> [Accessed 9 February 2015].
- Neslen, A. (2015). Nuclear waste stored in 'shocking' way 120 miles from Ukrainian front line. *The Guardian*, 13th May, 2015. Retrieved from: <http://www.theguardian.com/environment/2015/may/06/nuclear-waste-stored-in-shocking-way-120-miles-from-ukraine-front-line> [Accessed 29 September 2015].
- Obama, B. (2015). *Statements by President Obama and Prime Minister Modi of the Republic of India*. January 25th. Retrieved from: <http://www.whitehouse.gov/the-press-office/2015/01/25/statements-president-obvama-and-prime-minister-modi-republic-india> [Accessed 27 January 2015].
- RT. (2015). US bioweapons labs, billions in research is a 'real problem' – Russian security chief. Published time: 31 Oct, 2015 04:25. Retrieved from: <http://on.rt.com/6v2r> [Accessed 22.4.2016].
- Ruble, M. R. (2015). Fantasy counterfactual: a nuclear-armed Ukraine. *Survival: Global Politics and Strategy*, 57(2), 145-156.
- Savin, L. (2014). On the Pentagon's Biological Laboratories in Ukraine. *Geopolitics*. Retrieved from: <http://www.geopolitica.ru/en/article/pentagons-biological-laboratories-ukraine#.VfGRXxGqpBd> [Accessed 10 September 2015].
- Simpson, J. (2015). British Army reduced to one single tank regiment. *Independent*, 13 January 2015. Retrieved from: <http://www.independent.co.uk/news/uk/home-news/british-army-reduced-to-one-single-tank-regiment-9644238.html> [Accessed 13 January, 2015].
- Sutyagin, I., & Clarke, M. (2014). *Ukraine military dispositions: The military ticks up while the clock ticks down*. Briefing Paper, Royal United Services Institute. April, 2014. Retrieved from: www.rusi.org [Accessed 1 July 2014].
- Sutyagin, I., Clarke, M., & Eyal, J. (2014). *Ukraine Crisis: The Strategic Importance of Slavyansk*. RUSI Analysis. Retrieved from: https://www.rusi.org/go.php?structureID=commentary&ref=C53628C52C2519#.VcCGX_mqpBc [Accessed 2 February 2015].
- UKRTRANSGAZ. (2015). *UKRATRANSGAZ Today*. Retrieved from: <http://uta.ua/en/utg/company/ukratransgaz-today.html> [Accessed 29 September 2015].
- Ulio, J.A., 1941. Military morale. *American Journal of Sociology* 47 (3), 321-330.
- Waltz, K. (1979). *Theory of International Politics*. London: Addison-Wesley.
- Weitz, R. (2008). Russia, China End Decades-Long Border Dispute. *World Politics Review*. 21 August 2008. Retrieved from: <http://www.worldpoliticsreview.com/articles/2517/russia-china-end-decades-long-border-dispute> [Accessed 9 September 2015].
- Wohlforth, W. C., Little, R., Kaufman, S. J., et al. (2007). Testing balance-of-power theory in world history. *European Journal of International Relations*, 13(2), 155-185.
- Yin, R. K. (1981). The case study crisis: Some answers. *Administrative science quarterly*, 26(1), 58-65.
- Yin, R.K. (2013). *Case study research: Design and methods*. London: SAGE Publications.