

The influence of nuclear weapons on the intensity of World War II in Scandinavia

In this paper I argue that nuclear weapons would have decreased the intensity of World War II in Scandinavia. The British government would have protected Norway with nuclear weapons and allowed the Soviet government to invade Finland. The Soviet government would have intimidated the Finnish government to expand Soviet territory and used a conventional military force against the Finnish defensive line at the Soviet-Finnish border. By allowing the Soviet government to expand its territory into Finland, the British government would have refrained from giving material support to the Finnish military. In addition, the British protection of Norway with nuclear weapons would have deterred a German conventional military invasion in Norway. We base these conclusions on the assumption that Germany, Britain, France, the Soviet Union, and the United States have second strike countervalue nuclear capability. Therefore, we should first understand the world in which nuclear weapons would change the intensity of World War II in Scandinavia.

A World of Mutually Assured Destruction

We need two conditions in order to understand the how nuclear weapons could have influenced World War II. First, we assume that each country has second-strike countervalue capabilities. Second, we assume “flat of the curve” dynamics regarding changes in nuclear stockpiles between countries.

First, let us assume that Germany, Britain, France, the Soviet Union, and the United States have large nuclear second-strike countervalue capabilities, by which each country has the

ability to absorb a full scale attack on its nuclear arsenal and to launch a full scale counterforce on the attacker. However, this comes at a cost of destroying unguarded cities, the “values” of the respective country. Specifically, assume that each country contains its nuclear arsenal in the form of inter-continental ballistic missiles hidden and protected inside missile silos, so that each country can protect its nuclear arsenal from a full scale nuclear attack and then launch a large counter-attack anywhere in the world. In other words, let us assume that each country does not have the capability to protect its cities from a large nuclear attack. In short, every country can absorb a large nuclear attack from any country on its nuclear arsenal and launch a large counter nuclear attack on any country; but, no country can protect its cities.

Second, let us assume “flat of the curve” dynamics, explained with a simple example. Consider country A and country B that have hostile relations. Let country A build up its nuclear stockpile with the goal of destroying country B’s cities. If we plot the number of nuclear missiles added to country A’s arsenal with the percentage of cities that country A can destroy in country B, the graph increases sharply from its starting point, then begins to level off asymptotically to a specific percentage. This implies that if country A keeps building up its nuclear arsenal, eventually its capacity to destroy country B’s cities reaches a threshold. This occurs because cities in country B center around major metropolises, then scatter out as we move further from a metropolis.

These two conditions present a world of Mutually Assured Destruction (MAD), in which Germany, Britain, France, the Soviet Union, and the United States have the capacity to absorb large attacks on their nuclear arsenals and destroy designated cities anywhere in the world. If a government of one of these countries planned to attack another country with nuclear weapons, that government would attack with a nuclear force large enough to decimate the threshold

population, governed by “flat of the curve” dynamics. However, the government cannot destroy the other country’s nuclear force. Therefore, if a nuclear power can decimate a large portion of a country’s cities, that government would fear a similar attack on its cities. Extending this dynamic across each nuclear power implies that a MAD world prevents preventive war.

A MAD world prevents preventive war for two reasons, explained with a simple example. First, if the government of country A declares war with the government of country B, then the government of country A would launch a large nuclear attack on the military force of country B in an attempt to end the war quickly. The government of country A would call the skirmish a “preventive war”, by which the government of country A prevents the military of country B from attacking country A. However, a large portion of country B’s military power lies in the form of nuclear weapons, hidden and protected inside missile silos. Therefore, the government of country A cannot destroy country B’s nuclear weapons, and the plan of preventive war fails. Second, if the government of country A decides to launch a nuclear attack on cities inside country B, the government of country A should fear a retaliatory nuclear attack on its cities from the military of country B. This second reason is more conditional than the first because the second reason depends on whether the government of either country cares for its population, as opposed to only caring for its nuclear weapons stockpile. In other words, if a government cared for its population in a MAD world, it would not start a nuclear war with another power. If the government did not care for its nuclear weapons stockpile, it would remain defenseless. Thus, the second reason depends more on the civility of the government than the first reason. Therefore a MAD world prevents preventive war, at least on the safety of a country’s nuclear stockpile and conditioned on the government’s concern for the safety of its population.

The same dynamic applies to the use of nonnuclear weapons, which I describe as conventional military. If the government of country A launches a conventional military attack on country B for preventive war reasons, the government of country A cannot expect the government of country B to defend itself with similar weapons. The government of country B could find nuclear weapons cheaper and more effective than a conventional military attack. In other words, the government of country B would decimate the conventional military attack force of country A with nuclear weapons, without the expense of country B's conventional military. Furthermore, country B may retaliate on country A with a disproportionate use of force, most likely in the form of nuclear weapons. Thus, a MAD world not only prevents a preventive war, but eliminates the rationale for starting a preventive war.

If we list all of the major battle theaters in World War II in order of the number of nuclear powers involved, the Western Front involving Germany, France, and Britain and the Eastern Front involving Germany, Britain, and the Soviet Union would top the list. The two cases are of equal importance to study but differ in the types of government involved. In the Western Front, two republics, in France and Britain, formed allies and fought a dictatorship in Germany. In the Eastern Front, two dictatorships, Germany and the Soviet Union, formed a nonaggression treaty. Both governments had goals of territorial expansion, and one of them directly fought the republican government in Britain. In this paper, we will study the Eastern Front, because two nuclear powers sought to expand their territories into the same region, and the British government sought to end the war by manipulating its relations with the German and Soviet governments. Specifically, we will study the events in Scandinavia, specifically Finland, where the British government faced the threat of German expansion into Norway and Soviet expansion into Finland and prevented the Soviet government from allying with the German

government. To understand the dynamics between these countries, we should first understand the events that happened in Finland.

Finland

In 1939, Soviet forces fought a Finnish defensive line on the Soviet-Finland border in an attempt to expand Soviet territory into Finland. The British government did not want Finland to fall under Soviet territory, but failed to provide military support to the Finnish troops for reasons involving a potential collusion between Germany and the Soviet Union, a fear of Soviet expansion into the Norwegian peninsula, and a trade deal with the Soviet Union. When we introduce nuclear weapons into this event, we have an interesting case involving three nuclear powers, Germany, Britain, and the Soviet Union, and one nonnuclear power, Finland, that deserves considerable analysis. But before we understand the relations between these four countries in a MAD world, we should understand their relations in the world without nuclear weapons.

Relations between Germany, the Soviet Union, Britain, and Finland

To understand the relations between Germany, the Soviet Union, Britain, and Finland, we should understand the national strategies of each government regarding Scandinavia. First, we should understand the British government's relation with the Soviet government. Second, we should understand the British government's fear of German and Soviet expansion into Scandinavia. Third, we should understand the Finnish government's fear of invasion from Germany and the Soviet Union and its relations with the British government.

First, we should understand the British government's relations with the Soviet Union. Doerr describes relations between the two countries as "marred by mutual mistrust and

suspicion”.¹ In short, Doerr describes the tense atmosphere inside the British government leading up to the war,

“British policy-makers were driven by a profound ambivalence. On the one hand, a deep and abiding mistrust of the Soviets is easy to find. On the other, the British remained acutely aware of the grave strategic situation they faced and of the overriding need to retain a connection to Moscow”.²

The British government’s mistrust of the Soviet Union first developed most notably when the British government suspected that the German and Soviet government secretly partitioned Poland, and that they would do the same in Romania. The British government did not have confirmation, but suspected that the German and Soviet governments secretly arranged the partition in a meeting in Moscow in August 1939.³ The secret partition of Poland, known as the Molotov-Ribbentrop Pact, was a secret agreement to invade and partition Poland under the appearance of a nonaggression treaty in a meeting with foreign minister Vyacheslav Molotov of the Soviet Union and foreign minister Joachim von Ribbentrop of Germany. Despite the plan to simultaneously invade Poland, Soviet forces invaded much earlier than expected by the German government. This example serves to illustrate the British government’s mistrust of the Soviet Union and the deviousness of the Soviet government. If these governments had nuclear weapons, the British government might have improved relations with the Soviet government and change its policy on Soviet expansion into Scandinavia.

Second, we should understand the British government’s fear of German and Soviet expansion into Scandinavia. Inside the British government, two confounding fears occupied British-Soviet relations. First and most significantly, the Chiefs of Staff of the British military

¹ Paul W. Doerr, “‘Frigid but Unprovocative’: British Policy towards the USSR from the Nazi-Soviet Pact to the Winter War, 1939.” *Journal of Contemporary History*, Vol. 36, No. 3, (July 2001), 423.

² *Ibid.*, 423-424.

³ *Ibid.*, 424-425.

did not want to drive the Soviet government towards allying with the German government if the British government took any action against the Soviet aggression in Finland. This would add to the burden of defending Britain from German aggression across the English Channel.⁴ Second, the British government did not want to allow the Soviet government to conquer Finland because this would allow the Soviet Union to expand its territory further into the Norwegian peninsula. This would present Britain with two aggressors across English Channel and the North Sea. With nuclear weapons, the British government could have secured Norway and allow the Soviet military to invade Finland.

Third, we should understand the Finnish government's fear of German and Soviet invasion and its relation with the British government. First, the Soviet government invited the Finnish ambassador, J.K. Paasikivi, to Moscow to negotiate territory on the Finnish-Soviet border, implicitly revealing the Soviet threat to Finland. Specifically, the Soviet and Finnish governments discussed the expansion of Soviet territory near Leningrad and to islands in the Gulf of Finland in exchange for the Karelia territory in the Soviet Union⁵. Second, the ambassador thought that a German interest in Finland would stop Soviet aggression in Finland. However, the German government publicly stated that it was not interested in expanding German territory into Finland.⁶ Given the Finnish government's relations with the Soviet Union, the Finnish government sought to strengthen its relation with the British government by requesting torpedo boats, airplane engines, and artillery tractors from the British government in preparation for war with the Soviet Union.⁷ However, Britain could not supply Finland with substantial

⁴ Ibid., 435.

⁵ Ibid., 433.

⁶ Ibid., 430-431.

⁷ Ibid., 432.

material support⁸, in part due to the British war efforts against the German military in the Western Front. In addition, the British government assured the Swedish and Norwegian governments that the British military would protect Sweden and Norway from a German attack. Ultimately, the British government's strategy was to prevent the Soviet government from allying with German government. With nuclear weapons, the British government could have deterred a German conventional military invasion of Norway. Additionally, if the British government used a British-Soviet trade deal to improve relations with the Soviet government, the British government could have solved its two conflicting national security problems.

The British and Soviet trade deal

After Soviet forces invaded Poland, the British government drafted a trade deal with the Soviet Union to exchange machinery for timber. Before the Soviet Union forces fought the Finnish defensive line, the British government did not directly approach the Soviet Union with the deal, but stopped communicating with the Soviet government after the fighting began. The British government might have planned to use the deal to improve relations with the Soviet government and reduce the chances of the Soviet government forming allies with German government.

Analysis

If we introduce nuclear weapons into the situation, Britain, Germany, and the Soviet Union have second strike countervalue nuclear capabilities. First, we should understand the relations between these countries regarding Finland in a world without nuclear weapons. Second, we should understand how their relations change in a MAD world.

Historically, the Soviet government sought territorial expansion into parts of Finland, and the German government sought territorial expansion into Norway as a place to launch an attack

⁸ Ibid., 426.

against Britain. The British government had already attempted to defend Belgium with conventional forces. Allowing the German military to conquer Norway would only add to the burden of defending Britain. However, the British government's primary motive was to prevent the Soviet Union from allying with Germany. In reality, the German military conquered Norway. Therefore, the British government would have secured Norway with nuclear weapons to deter a German conventional military invasion. However, if the German and Soviet governments also possessed second-strike countervalue nuclear capability, the international relations between these countries would change significantly. In this regard, nuclear weapons would have changed the intensity of World War II in Scandinavia.

The British government would address its two conflicting interests in Europe more effectively with nuclear weapons than with a conventional military. First, the British government would allow the Soviet government to intimidate the Finnish government to expand Soviet territory into Finland. With this appeasement strategy towards the Soviet government and a trade deal beneficial to the British and Soviet governments, the British government would improve relations with the Soviet government. Second, the British government would protect Norway with nuclear weapons. This would send a message, primarily to the German government, and secondarily to the Soviet government, that the British government would defend Norway with nuclear weapons. Furthermore, the British government did not have substantial conventional military resources to support the Finnish resistance to Soviet invasion. Thus, the British government would restrain from sending supplies to support the Finnish defensive line, and the Finnish military would have a smaller chance of defending Finland against the Soviet military. Therefore, nuclear weapons would have made the fighting less intense because the Finnish military would not have British supplies.

In response to the British defense of Norway, the German government would lose interest in expanding its territory to Norway, according to the dynamics of a MAD world. However, we should note that the German government sought territorial expansion into France, which also has nuclear weapons. Though not the focus of this paper, the Western Front of German expansion would certainly factor into how the German government would frame its strategy towards the British government's protection of Norway with nuclear weapons.

If we analyzed how the German government would frame its policy towards Norway in a MAD world, we could predict if the British government would successfully deter the German aggression in Norway, or if the German government would bolster its aggression in Norway with nuclear weapons. In the previous case, the nuclear weapons would have prevented the German conventional military force from fighting the British or Norwegian military forces. In the latter case, nuclear weapons would have escalated the conflict of German and British interests in Norway to the level of nuclear war.

With nuclear weapons, the Soviet government would have intimidated the Finnish government to expand Soviet territory near Leningrad and to islands in the Gulf of Finland⁹. However, the Soviet government would not use nuclear weapons on the Finnish defensive line in order to avoid bringing nuclear weapons to the world stage, which would incite other governments to become more lax about the use of nuclear weapons. If the Soviet government used a conventional military to conquer Finland and Sweden, the moving Soviet army would stop at the Norwegian border, protected by British nuclear weapons; the Soviet government would then consider reframing its strategy in Norway.

If we analyze how the Soviet government would frame its policy on Scandinavia, we could predict if the Soviet government would offer the Karelia region to the Finnish government

⁹ Ibid., 433.

or if the Soviet government would intimidate and use force against the Swedish government. In addition, we could predict if the British government would successfully deter the Soviet aggression into Norway or if the Soviet government would use nuclear weapons against Britain and Norway. However, if the Soviet government accepted the trade deal from the British government, we can predict that the Soviet government would not likely threaten British interests in Norway. Thus, we can predict that the Soviet government would use conventional military to invade Finland and possibly invade Sweden. Therefore, nuclear weapons would have at least no effect on the war in Finland and possibly increase the intensity of war in Sweden.

We can draw two conclusions on how nuclear weapons would affect the events in Finland and Norway. First, we can conclude that nuclear weapons would have no effect on the intensity of war in Finland because the Soviet government would not use them in Finland. However, if the British government did not give material support to the Finnish defensive line, military analysts would determine the intensity of a war between the Finnish and Soviet conventional militaries. Second, we can conclude that nuclear weapons would have eliminated war in Norway by deterring a conventional military invasion. However, without an analysis on the German government's international policies in a MAD world, we cannot predict if the German government would have escalated its aggression against the British and Norwegian governments to the level of a nuclear war. But if we assume that the British, Soviet and German governments make decisions rationally in a MAD world, we can conclude that nuclear weapons would have decreased the intensity of war in Scandinavia.

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