

Conference Paper

The Effect of Russia--Ukraine War on International Aviation Sectors

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Abstract.

The Russian invasion of Ukraine has already killed hundreds, sent thousands of refugees fleeing, and sent ripples throughout the entire world. With closed airspaces in and around the conflict leaving some stranded and flights rerouted, impending fuel price jumps, airlines and countries cutting off Russia and its national airline. The European Union's potentially impactful sanctions on aircraft parts. The airline industry has faced 2 years of significant challenges, and it is unfortunate that as the pandemic begins to wane, they get no respite before dealing with more triage. This research focused on studies: (1) How is the impact of Russia v. Ukraine in several sectors of civil aviation? (2) How the international law regulated civil aviation during an armed conflict situation, also strategies and response for far away from worse impact Russia v. Ukraine conflict in civil aviation sectors. The research method used in this research focused on the traditional regulatory approach and a comparative approach to discuss the invasion of Russia v. Ukraine, this research also focuses on the several impacts on international aviation during wartime Russia v. Ukraine following legal, and regulatory standards regarding international aviation law. The results of this study show, several impacts in the international aviation sectors, such as in air passenger traffic, air cargo traffic, jet fuel prices, and airfares, also on the development of a broader economy. Strategies and Response for far away from worse impact Russia v. Ukraine conflict in civil aviation sectors, accelerate peace agreement. Compliance with international law regarding security and safety for international civil aviation. Recovery of the several impacts in aviation sectors during wartime, and strengthening the aviation industry to survive during crises as an impact of war.

Keywords: invasion, Russia vs. Ukraine, international aviation

1. INTRODUCTION

The invasion carried out by Russia that occurred in Ukraine not only caused problems related to the lives of many innocent civilians who became victims but also caused refugees fleeing from Ukraine to find safe areas scattered around the world. The concern of the armed conflict was because of the international aviation sector, how the armed conflict became a

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problem in the context of changing flight routes, increasing operational costs, flight tickets, airplane fuel, and aviation fuel which soars due to armed conflict. [1]. Furthermore, the most

important was the number of airlines that closed access to international flights to and from Russia [2].

The impact occurred in the armed conflict between Russia v Ukraine was European Union (EU), as a regional international organization, imposed various kinds of sanctions applied to Russia as the country that started the armed conflict. The EU, as a supranational organization, imposed sanctions on Russia. [3]. The Russian government under Vladimir Putin took action against it through energy supply blockades, one of which was fuel for aircraft, which also depends on Russian supplies. It also impacted other factors such as economic and trade crises in the European Region and even in the world. [4].

The impact of the armed conflict between Russia and Ukraine, in addition to causing economic effects, another impact that occurs was a humanitarian crisis, the impact of this armed conflict was the deprivation of independence and public peace between the two countries which were very dependent on the aviation sector. These implications had an impact on the non-fulfillment of the free flow of human beings who were the spirit for the life of the global community. [5]

The flight path from Ukraine was also closed, causing disruption of human movement in Europe as much as 3.3%, and 0.8% of the total global international air traffic as of 2021. [6] Belarus was also affected by the armed conflict between Russia v Ukraine, because considered to support the invasion by Russia, including the country of Moldova which was considered to have helped the Russian invasion, the impact of sanctions against the two countries affected the international aviation sector [7].

As of March 2022, 36 countries, including members of the European Union, as well as the UK and the United States, had closed international flight routes to Russia. Several countries had also imposed similar sanctions on Russia, such as North Korea and Japan. This impact directly had an extraordinary effect on global aviation traffic, the international data showed that there was a loss of 5.2% of international air traffic. [6],

Most of the economic conditions in Europe were affected by the armed conflict between Russia and Ukraine. Cyprus, Turkey, Poland, and Bulgaria were the countries that had contributed to the number of airplane passengers originating from Russia and Ukraine in 2021 (5%-12%). Since Turkey had reopened access to international flights to Russia, Russia took an advantage to use it for the flight path of Russian citizens who were going on vacation to Turkey [8].

The magnitude of the impact of the armed conflict between Russia and Ukraine, especially on the international aviation sector, was a particular concern to be explained in this study. Thus, it could describe the impacts that occur in the aviation sector, strategies that could be applied in the political economy of law approach, as well as international legal mechanisms related to international aviation that occurred during wartime.

This research focused on studies: (1). How the Impact of Russia v Ukraine in several sectors of civil aviation? (2). How the international law regulated civil aviation during an armed conflict situation, also strategies and response which was the worst impact in Russia v Ukraine conflict at the civil aviation sectors.

2. METHODOLOGY/ MATERIALS

The research method used in this research focused on the conceptual approach and a comparative approach to discuss the invasion of Russia v Ukraine. It also found how the impact of the invasion between Russia v Ukraine, and analyze the correlation with focused on international aviation using several methods, including analysis of existing information into credible sources. [9][1].

This research also focused on the several impacts on international aviation during wartime Russia v Ukraine following legal, and regulatory standards and respecting human rights. It focused on electronic data collection to show how several impacts of this invasion on international aviation. Thus, the research topic on international civil aviation was focused on research with an approach to literature. Conceptually, a comprehensive picture could be found in overcoming international aviation law into international law mechanisms [10].

3. RESULTS AND DISCUSSIONS

3.1. Several Impacts on International Aviation During Wartime Russia v Ukraine

Some of the countries most affected by the war between Russia and Ukraine in terms of the number of passengers on airplanes, most of them are neighbors between Russia and Ukraine. Some of these neighboring countries were unlikely to do a blockade because the level of dependence was very high. Some countries such as Tajikistan and Kyrgyzstan are countries that are very dependent on Russia, with almost 86% and 73% of

their total passengers will come from Russia throughout 2021. RPKs (revenue passenger kilometers) account for about 4.5% of the total global RPKs, which is a contribution from the cargo sector in Russia. Russian airplane passengers and the cargo sector had been hit by sanctions from the international community. The impact of war affected the cost of cargo, maintenance, and cargo services. It also had an impact on the international aviation sector, which will continue to decline in 2022 [11].

The disruption of the cargo sector to the conflict between Russia and Ukraine had a tremendous impact, as the two countries contributed about 0.9% of the total global cargo traffic, Russia accounted about 2.5%. The large role of the two countries in the cargo sector had a significant impact on the international cargo business sector, and it was very difficult to replace, because of the track records of international trade carried out by the two countries. [8].

Regarding the circulation of cargo across the European-Asian airspace, about 20.6% of the international cargo volume (cargo tonne-kilometres/ CTKs), thus the large contribution of the cargo sector in driving the wheels of the global economy [12], then when the situation of armed conflict between Russia and Ukraine occurs, of course, it became an obstacle to realize more competitive international trade liberalization, especially in the cargo sector in international flights. [13].

The issue of Jet fuel prices was an important issue that needs attention rose sharply since the start of the conflict. They were at USD 150 per barrel on 21 March (daily closing prices), up 39% on the month and 121% year-on-year [8]. Various pressures on Russia were certainly a problem that could not be simplified, moreover, the impact on the supply of global fuel jets was hampered, so strategy with the cooperation of the international community was necessary, especially jet fuel producers to increase supply, to make emergency tankers, and to solve these problems during the war [14]

The impact of the Covid-19 Pandemic which had brought down the global aviation sector, around 25% of the total on a global scale, international flights operating, around 2020-2021 were hampered due to the pandemic. The impact of the Russia v Ukraine war had become a new problem that created complex problems in the international aviation sector [15].

The increase in jet fuel prices coupled with the loss of cargo capacity on international flights rose various serious problems in the context of international aviation, including changes in routes in the delivery of goods and services due to the space blockade that occurred during wartime causing losses, both for cargo service providers, business actors, and industry and consumers [16]. The impact on the global economy, including air cargo, trade in goods, and transportation that connects them was very hampered.

Air transportation routes connecting Asia and Europe that cross Russia's skies were increasingly being reduced, and important trade routes in the Black Sea were also closed in the context of territorial security and ongoing international trade. [17].

Armed conflict and the imposition of sanctions had a serious impact on global trade, investment, and overall global economic activity. If this armed conflict would not end, the potential for global GDP growth was lost by 2022 [18].

Both Russia and Ukraine were important countries in the context of the global economy, both in the energy sector, and metals, including the aircraft industry, of which both countries account for at least 2% of the total global GDP. The allocation of the state budget for around 2 Trillion USD in defense equipment spending [19], Of course, it would be a global economic contraction and would not only harm both countries, but also the global community as a whole. There needs to be a political, economic, and legal approach to resolving the armed conflict, as well as providing opportunities for peaceful reconciliation, and concerning global economic recovery.

3.2. Political-Economy of Law to Solve Russia v Ukraine Invasion and it's Implication for International Civil Aviation

The state must be present to save, by making various kinds of subsidy schemes, within the framework of international trade law with the aim that the aviation industry affected by the armed conflict between Russia v Ukraine can be resolved immediately [20]. In addition, there were various strategies to resolve the Russia v Ukraine conflict, which had an impact on international flights, and of course, in this context, the safety of the global economy from adversity was at stake in its resolution, which can be explained as follows:

The Chicago Convention 1944, Concerning international civil aviation, which sets the tone of the Convention, resonates with a message of peace and harmony Among nations of the world through aviation. [22] The aims and objectives of the Convention under Article 44, are to ensure the safe and orderly growth and development of international civil aviation around the world; Encourage the art of aircraft design and operation for peaceful

purposes; Encourage the development of air ducts, airports, and air navigation facilities for

international civil aviation; Meeting the needs of the peoples of the world for safe, orderly, efficient, and economical air transportation; Prevent economic waste caused by unfair competition; Ensure that the rights of contracting States are fully respected

TABLE 1

Strategy	Measures
Rising Fuel Prices Means Increasing Airfare Prices	Through the supply of Russia and the imposition of sanctions in the context of international law, which had an impact on the high price of airline tickets, the market becomes uncertain. Speeding up peace negotiations must be accepted by Russia, or oil-producing countries (OPEC) must make policies to respond to jet fuel prices in war, so that Russia has no bargaining power, and international flight stability will be realized.
Forbidding Russian Aircraft to Fly and Implementing a Peaceful Blockade	The imposition of sanctions from the European Union, followed by several other major countries, one of which was the U.K. and the United States was a strategic step, to accelerate peace negotiations in realizing international peace and security
Reducing Global Dependence on Russian Titanium Products	Titanium is needed in the manufacture and assembly of aircraft because the largest component of aircraft is titanium. Russia is a large and important exporter of titanium, this requires the global community to develop other resources to replace titanium, for the benefit of aircraft, including the cut-off of all things related to Russian titanium.
International Aircraft Alliance needs to restructure the global aircraft industry	Two of the three international civil aircraft alliances have Russian airlines as partners. Skyteam, anchored by Delta and Air France/KLM, needs a restructuring strategy for the aircraft industry, particularly regarding flight routes, ticket availability, and passenger access. As long as peace talks are not held, Russia will still be excluded from the international civil aviation alliance.

and that every contracting State has a fair opportunity to operate an international airline; Avoid discrimination between Contracting Countries; Promoting aviation safety in international air navigation; Promote in general the development of all aspects of international civil aeronautics [23]. Thus, the intent and purpose of the article are to give responsibility to all countries, including Russia and Ukraine to jointly create conditions of security and peace for international flights.

Article 9 of the Chicago Convention of 1944 alludes to (a) Any contracting State may, for reasons of military necessity or public welfare, restrict or consistently prohibit the aircraft of a different state from flying over a certain territory of its domain, given that no qualification in this regard is made between the aircraft of the State whose territory is involved, participate in the planned administration of global airlines, and aircraft from other Countries contracted in the same way locked down. Such prohibited areas shall be of reasonable extent and location so as not to interfere unnecessarily with air navigation. An explanation of such restricted area in the territory of the contracting State, as well as any subsequent changes thereto, shall be communicated as soon as possible to the other contracting States and the International Civil Aviation Organization; (b). Each contracting State reserves also the right, in exceptional circumstances or while in

an emergency, or in the interest of public safety, and immediately, it may temporarily restrict or prohibit flying over all or part of its territory, provided that such restriction or prohibition shall apply without distinction of nationality for aircraft from all other States;(c). Any contracting State, under the regulations that may be prescribed, may require any aircraft entering the area referred to in subparagraphs (a) or (b) above to make a landing as soon as possible, thereafter at some designated airport within its territory.

The meaning of the article relates to the obligation of warring states to comply with international humanitarian law and not to make civilian aircraft objects of attack. This mechanism must run in parallel with the 1949 Geneva Conventions and Additional Protocol 1 and Additional Protocol 2 jo. 1998 Rome Statute to prevent both Russia and Ukraine from being subject to violation of international law [24].

Security arrangement under article 66 of the 1944 Chicago Convention The Organization may, for air matters within its competence directly affecting world security, by a vote of the Assembly enter into appropriate arrangements with any general organization set up by the nations of the world to preserve peace [23]. In this context, the international security mechanism through the voting of the United Nations General Assembly needs to immediately decide on sanctions for Russia as a country that started an armed conflict, to accelerate international peace and security following the mandate of the establishment of the United Nations.

Article 24 of the convention calls on all member states to refrain in their international relations from the threat or use of force against the security integrity or political independence of other states, or in any other way that is not in line with the objectives of the United Nations [25]. Also in article 51, the right of individual or collective self-defense if an armed attack occurs against a member of the United Nations, notwithstanding any right granted by the Charter that would preclude any member State from interfering in the affairs of another Member State, particularly concerning matters of state sovereignty. Maintaining and respecting state sovereignty is the basis of the most appropriate argument, as a message that the war between Russia and Ukraine is irrelevant and necessary to be resolved immediately. [26].

Also in conditions of war and a state of emergency regarding in article 89 of the convention, In the event of a war, the provisions of the Convention cannot affect the freedom of action of any of the affected contracting States, either as fighters or as neutrals. The same principle shall apply in the case of a contracting State declaring a national emergency and notifying the facts to the Council. Ensuring civilian protection, there was a mandatory obligation implied in article 55 of the Charter that the United

Nations "shall promote respect for, and observance of, human rights and fundamental freedoms"; or, in terms of article 13, that the Assembly shall make recommendations to assist in the realization of human rights and freedoms [27].

An armed attack against an aircraft was a special kind of aggression and protected by the right of self-defence which is recognized against an such an attack, by Article 51 of the Charter [28]. So that there is a right for Ukraine to take countermeasures as long as it is in the context of self-defense, speeding up peace, and ensuring that various sectors, including the international aviation industry, can recover quickly.

4. CONCLUSION AND RECOMMENDATION

Several impacts in international aviation sectors, such as air passenger traffic, air cargo traffic, jet fuel prices, and airfares, also on the development of the broader economy. Strategies and Responses for were far away from worse impact Russia v Ukraine conflict in civil aviation sectors, Accelerate peace agreement. Compliance with international law regarding security and safety for international civil aviation. Recovery of the several impacts in aviation sectors during wartime, and strengthening the aviation industry to survive during crises as an impact of war.

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