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INNOVATION LETTER

THE IMPACT OF INNOVATION AND TECHNOLOGY ON RESTRICTIVE MEASURES TARGETING THE RUSSIAN FEDERATION

Abstract

Since 2014, several countries imposed economic sanctions on Russia, including restrictions on technology exports to Russia's energy and defence sectors. However, these sanctions were not effective due to their vagueness and loopholes. In 2022-2023, to further restrict trade with Russia, new export controls and restrictions on dual-use goods and technology were introduced in the 9th and 10th packages of EU sanctions. The ban on the export of goods and technology relating to the aviation and space industry was expanded, and new items were included in the list of restricted items that could potentially enhance Russia's defence and security sector. Technology can play a crucial role in enhancing the effectiveness and efficiency of restrictive measures, as well as creating new ways for sanctions to be circumvented. However, technology can also be used to improve intelligence-sharing and data analysis related to suspected violations of sanctions, thereby enabling authorities to better identify and target violators.

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SUMMARY

1 Autonomous coordinated sanctions against the Russian Federation - 2 Investment restrictions and export ban of technology - 3 The implementation of sanctions: technology and info-sharing and new proposals

1 Autonomous coordinated sanctions against the Russian federation

Due to the destabilisation and invasion of Ukraine, economic and financial sanctions have been imposed on the Russian Federation, reflecting some of the most extensive and coordinated actions ever undertaken against a State of its prominence. The Russian Federation, a powerful military nation with nuclear capabilities, is characterised by one

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of the world's largest economies by GDP and serves as a significant exporter of raw materials, energy, and agricultural products. Since 2014, restrictive measures against Russia have been gradually implemented as a response to the country's violation of Ukraine's sovereignty and the annexation of Crimea. The legal framework of the sanctions so introduced remained largely unaltered until 2021. Although there have been some changes to the framework of the sanctions over the years, such as the inclusion of new individuals and entities, the overall structure and intent of the sanctions has remained the same.¹

In February 2022, following the Russian military intervention in Ukraine, the EU, the US, and other countries intensified their efforts by significantly increasing sanctions and coordinating their actions to enhance the effectiveness of the measures taken against Russia.² These measures were adopted in collaboration with G7 countries and other partners, such as Australia, South Korea, Norway and Switzerland, among others. Despite the selective nature of these sanctions, they may have a significant impact on Russia's economy, leading to economic weakening of the targeted country. Nevertheless, the objective of discouraging Russia from pursuing additional destabilising actions or stopping its aggression towards Ukraine has not yet been accomplished. As underlined by the Court of Justice of the European Union in *Rosneft*, the restrictive measures adopted against the Russian economy «plainly contributes to achieving the objective of increasing the costs of the Russian Federation's actions to undermine Ukraine's territorial integrity, sovereignty and independence, and of promoting a peaceful settlement of the crisis».³

2 Investment restrictions and export ban of technology

Technology and innovation, as well as foreign direct investment (FDI), play crucial roles in driving economic growth and development. Innovation is a driver of GDP growth because of increased productivity, enhanced competitiveness, creation of new industries and markets and, finally, spillover effects (innovations in one industry or sector can have effect on others).

It is, therefore, unsurprising that sanctions are utilised as a tool for political and economic leverage. The impact of sanctions on capital flows to and from Ukraine and Russia has been swift and substantial. The involvement of the business community in Russia-related trade has significantly decreased, with a substantial portion of this decrease being voluntary.⁴ This deliberate choice by commercial actors to de-couple from

¹ The EU's measures that restrict certain activities or trade are established on the basis of two provisions, namely Article 29 of the Treaty on European Union and Article 215 of the Treaty on the Functioning of the European Union.

² For a general overview see Anna Caprile, Angelos Delivorias, 'EU sanctions on Russia: Overview, impact, challenges', European Parliamentary Research Service (EPRS), PE 739.366 - March 2023.

³ Case C-732/18 P, *PAO Rosneft Oil Company and Others v Council of the European Union* [2020] [92].

⁴ See Richard L Kilpatrick Jr, 'Self-sanctioning Russia' (EJIL: Talk!, Blog of the European Journal of International Law, 11 May 2002) <<https://www.ejiltalk.org/self-sanctioning-russia/>> accessed 29 March 2023.

Russia-linked transactions, in addition to the rapid and comprehensive economic sanctions imposed by major powers such as the EU, UK, US, and Japan, has considerably strengthened the collective response against Russia's actions. Additionally, divestments resulting from these sanctions are expected to exacerbate the decade-long trend of declining investment in Russia.⁵

Technology and innovation play several key roles in the strategies used to weaken the economy of the Russian Federation (“economic warfare”). One of the most notable examples occurred when major Russian banks were disconnected from specialized financial messaging services, such as SWIFT (Society for Worldwide Interbank Financial Telecommunication), during the enforcement of the third package of EU sanctions (28 February 2022).⁶ Technology can pave the way for innovative economic instruments, such as cryptocurrencies, which can be utilised to bypass sanctions and enable international financial transactions through non-traditional channels. The EU’s eighth package (6 October 2022) imposed a complete prohibition on crypto-asset wallets and sanctions on the provision of information technology (IT) and IT consultancy services. At the same time, it is worth noting that cryptocurrencies have been used as a useful tool for transferring money to Ukraine.⁷

Extensive economic sanctions can result in adverse consequences for technological progress and ability to compete at global level. In the case of Russia, the primary objective of these restrictions was to limit its technological development and ability to use technology for harmful purposes, particularly in the context of the conflict in Ukraine. Such sanctions can also contribute to restricting the spread of weapons and impeding the advancement of sophisticated military capabilities by the Russian Federation. Arms embargoes and restrictions on other trade, such as exporting technology required for oil exploration, were also imposed on Russia to disrupt its trade and economic activities. These measures were intended to limit Russia's ability to build up its military capabilities and exploit its natural resources.

In response to Russia's annexation of Crimea and the subsequent military conflict in eastern Ukraine from 2014, various countries, such as the United States, the European Union (EU), and Canada, imposed unilateral economic sanctions that restricted the export and re-export of technology to the Russian energy sector (prohibiting exports to Russia of goods and technologies in the oil-refining sector and prohibiting new investments in the

⁵ OECD, *International investment implications of Russia's war against Ukraine* (OECD Publishing, 4 May 2022) 13-14 <<https://doi.org/10.1787/a24af3d7-en>> accessed 29 March 2023. In these circumstances, Russia may try to invest in education and workforce skills, stimulate innovation and technological progress, diversify the economy, and develop the domestic market, promote trade with countries which are not applying sanctions, implement structural reforms.

⁶ The Society for Worldwide Interbank Financial Telecommunication (SWIFT) serves as an international provider of secure financial messaging services, connecting over 11,000 banks across the globe. As a cooperative society governed by Belgian law, it is owned by its member institutions and maintains its headquarters in Belgium.

⁷ Cristina Criddle and Joshua Oliver, ‘How Ukraine embraced cryptocurrencies in response to war’, *Financial Times* (London, 19 March 2022) <<https://www.ft.com/content/f3778d00-4c9b-40bb-b91c-84b60dd09698>> accessed 29 March 2023.

Russian energy and mining sector) and defence sector (prohibiting export to Russia of dual-use goods/technology, arms, civilian firearms, ammunition, military vehicles, paramilitary equipment and banning certain exports in the aviation, maritime, and technology sectors). However, the formulation of these sanctions was vague, and they contained loopholes that were exploited.⁸

The EU's 9th (16 December 2022) and 10th (25 February 2023) packages of sanctions introduced and expanded new export controls and restrictions on dual-use goods and technology.⁹ In order to restrict trade with Russia, specific measures were implemented, including restrictions on the export of crucial technologies and components to key technological sectors. The EU has taken significant measures to restrict trade with Russia by expanding the list of entities connected to Russia's military and industrial complex and imposing further export bans on critical technology and industrial goods (electronics, telecommunications, and aerospace). The export ban on aviation- and space-industry-related goods and technology has been extended to include aircraft engines and their parts, which applies to both manned and unmanned aircraft.¹⁰ Additionally, new electronic components, rare earth materials, electronic integrated circuits, and thermal cameras that can be used in Russian weapons systems have been added to the list of restricted items that could contribute to the technological enhancement of Russia's defence and security sector.

3 The implementation of sanctions: technology and info-sharing and new proposals

The implementation of sanctions by EU Member States can vary, leading to inconsistency in their application. The EU sanctions are adopted by the EU Council through decisions and regulations that are directly applicable. However, Member States are responsible for implementing the sanctions, enforcing them in case of violation, and designating competent authorities. When appropriate, States can establish regulations to

⁸ See Irina Bogdanova, 'The Role of Technology Sanctions in Crippling Russia's War Machine' (IISD, 26 September 2022) <<https://www.iisd.org/articles/policy-analysis/technology-sanctions-russia-war>> accessed 29 March 2023 and James Byrne and others, 'Silicon Lifeline: Western Electronics at the Heart of Russia's War Machine' (RUSI, 2022), <<https://static.rusi.org/RUSI-Silicon-Lifeline-final-web.pdf>> accessed 29 March 2023; Michael Adam and Sanne Keijer, 'Sanctions on the Russian digital sector: How effective are they?' (European Parliamentary Research Service (EPRS), PE 739.320, February 2023); Andrei Panibratov, 'Sanctions, cooperation, and innovation: Insights into Russian economy and implications for Russian firms' (2021) 2(3) BRICS Journal of Economics 4.

⁹ Council of the EU, 'One year of Russia's full-scale invasion and war of aggression against Ukraine, EU adopts its 10th package of economic and individual sanctions' (25 February 2023) <<https://www.consilium.europa.eu/en/press/press-releases/2022/12/16/russia-s-war-of-aggression-against-ukraine-eu-adopts-9th-package-of-economic-and-individual-sanctions/>> accessed 29 March 2023 and Council of the EU, 'Russia's war of aggression against Ukraine: EU adopts 9th package of economic and individual sanctions' (16 December 2022) <<https://www.consilium.europa.eu/en/press/press-releases/2023/02/25/one-year-of-russia-s-full-scale-invasion-and-war-of-aggression-against-ukraine-eu-adopts-its-10th-package-of-economic-and-individual-sanctions/>> accessed 29 March 2023.

¹⁰ The EU imposed sanctions on Iranian arms manufacturers and individuals for providing drones to Russia in the 10th package.

suspend the financial operations and economic assets of persons and organizations subject to restrictive actions at a national level. This can be carried out through administrative freezing measures, judicial freezing measures, or equivalent methods.

Technology can assist governments in enforcing sanctions by providing innovative ways for information sharing and cooperation. Governments can leverage several technological tools to share information and coordinate actions more efficiently and effectively. Information sharing between countries is also critical to ensure that sanctions are applied in a uniform way.¹¹

The European Commission oversees the implementation and enforcement of EU sanctions in the Member States. Given the complexity and variety of sanctions adopted against Russia within such a short period of time, it is perhaps not surprising that the Commission has set up a website for anonymous reporting of suspected violations of the sanctions (EU Sanctions Whistleblower Tool).¹²

To ensure effective implementation of sanctions, coordination bodies have been established. One such example is the European Commission's "Freeze and Seize" Task Force, which was created to facilitate EU-level coordination in implementing sanctions against listed Russian and Belarusian oligarchs.¹³ The task force is working alongside the newly established 'Russian Elites, Proxies, and Oligarchs (REPO)' Task Force, under which the EU operates together with the G7 countries, i.e. Canada, France, Germany, Italy, Japan, the United Kingdom and the United States, as well as Australia.¹⁴

To streamline and simplify the implementation of financial sanctions relating to the Common Foreign and Security Policy (CFSP), various banking organisations within the European Union recognised the need for a consolidated list of individuals, groups, and entities subject to these sanctions. This list could help facilitate compliance with financial sanctions and reduce the risk of inadvertently facilitating prohibited financial transactions.¹⁵ The European Banking Federation, the European Savings Banks Group, the

¹¹ The EU-US Trade and Technology Council functions as a platform for the United States and European Union to harmonise their approaches to crucial global trade, economic, and technology matters. It was established during the EU-US Summit on June 15, 2021 in Brussels, cf <https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/stronger-europe-world/eu-us-trade-and-technology-council_en> accessed 29 March 2023.

¹² Cf <<https://eusanctions.integrityline.com>> accessed 29 March 2023.

¹³ See the Ministerial Joint Statement of 17 March 2022 on the Russian Elites, Proxies, and Oligarchs Task Force by the European Commission, the United States, Australia, Canada, France, Germany, Italy, Japan and the United Kingdom <https://ec.europa.eu/commission/presscorner/detail/en/statement_22_1850> accessed 29 March 2023. The 'Freeze and Seize' Task Force is comprised of the European Commission, national contact points from each EU member state, as well as various other EU agencies and bodies as necessary, including Eurojust and Europol. Its main objective is to coordinate actions by EU member states, Europol, Eurojust, and other relevant agencies in order to seize and potentially confiscate assets of Russian and Belarusian oligarchs. The European Commission provides strategic coordination, the operational coordination is of Europol and Eurojust.

¹⁴ Russian Elites, Proxies, and Oligarchs Task Force Joint Statement (US Department of the treasury, 29 June 2022) <<https://home.treasury.gov/news/press-releases/jy0839>> accessed 29 March 2023.

¹⁵ <<https://www.eeas.europa.eu/eeas/european-union-sanctions>> The U.S. Treasury Department's Office of Foreign Assets Control (OFAC) has developed a system called "OFAC Online" that allows individuals and businesses to search a consolidated database of sanctioned individuals and entities, making it easier to comply with sanctions regulations (<<https://sanctionssearch.ofac.treas.gov/>> accessed 29 March 2023).

European Association of Co-operative Banks, and the European Association of Public Banks, commonly referred to as the EU Credit Sector Federations, collaborated with the Commission to establish this consolidated list. The Commission is responsible for hosting, maintaining, and regularly updating the database containing such list (Financial Sanctions Database - FSF platform).¹⁶ The primary aim of the consolidated list was to assist members of the EU Credit Sector Federations in complying with CFSP-related financial sanctions. Financial institutions can avoid engaging in prohibited transactions and potential penalties for non-compliance by accessing an updated list of individuals, groups, and entities that are subject to sanctions. Additionally, the consolidated list is a valuable resource for governments to monitor and enforce financial sanctions against targeted individuals and entities. Overall, the creation of a consolidated list of those subject to CFSP-related financial sanctions is a vital measure in implementing and enforcing sanctions. This effort provides more clarity and guidance to credit and financial institutions in their compliance efforts and strengthens the ability of governments to prevent illicit activities from being funded.

Just recently, it has been reported that the G7 countries have decided to develop a new mechanism called the "Enforcement Coordination Mechanism" to improve the enforcement of existing sanctions on Russia. This tool can be seen as a means to enhance coordination and collaboration in the realm of sanctions by exchanging intelligence and information pertaining to suspected sanction violations. This is essential in building a stronger case against the individuals involved and can help refine the process of acting against violators, ultimately increasing the effectiveness and efficiency of the measures in the long run.¹⁷

Furthermore, the European Commission has proposed to harmonise criminal offences and penalties for violating EU restrictive measures to ensure their full implementation. The harmonisation of EU rules will make it easier to investigate, prosecute and punish violations of restrictive measures across all Member States. The European Commission has proposed a list of criminal offenses that violate EU sanctions. These measures include various actions such as making funds available to designated entities, failing to freeze these funds, allowing designated individuals to enter or transit through EU Member States, engaging in prohibited transactions with third countries, trading in restricted goods or services (such as technology), and providing financial or other services that are prohibited or restricted. The offenses also cover attempts to circumvent restrictive measures by concealing funds or ownership.¹⁸ Additionally, the Commission is proposing stricter

¹⁶ DG FISMA, 'Financial Sanctions Database - FSF platform'.

¹⁷ Alberto Nardelli and Jennifer Jacobs, 'G-7 Set to Create New Tool to Bolster Enforcement of Russia Sanctions' (*Bloomberg*, 22 February 2023) <<https://www.bloomberg.com/news/articles/2023-02-22/g-7-readies-new-tool-to-bolster-enforcement-of-russia-sanctions>> accessed 29 March 2023.

¹⁸ See the Proposal for a Directive of the European Parliament and of the Council on the definition of criminal offences and penalties for the violation of Union restrictive measures, COM (2022) 684 final [2022].

regulations on asset recovery and confiscation, which will aid in enforcing EU restrictive measures and will guarantee the efficient tracking, freezing, handling, and seizure of profits obtained from breaking such measures.¹⁹

¹⁹ See Proposal for a Directive of the European Parliament and of the Council on asset recovery and confiscation, COM(2022) 245 final [2022].