

Sayaka Yamato<sup>1</sup>

---

## Energy trade relations between Russia and China

### Introduction

Economic relations between Russia and China have been growing over the years. Of particular importance in Russia-China economic relations is the gas and oil trade. Russia has the world's largest natural resources, while China is the world's largest energy consumer. In 2014, an agreement was reached to build a new gas pipeline and increase gas exports to China. If the planned volume of gas can be exported to China on a stable basis, Russia will be able to supplement some of the economic sanctions imposed by the West. However, there is much uncertainty as to whether China can be a stable export destination for Russia. There is a significant gap in the trade scale between Russia and China and asymmetrical dependence in the relationship between them. In addition, international pipeline projects have substantial financial and time costs, and the two countries' intentions sometimes differ. The purpose of this research is to clarify the current state of trade interdependence between Russia and China and to study whether China can be a stable economic partner for Russia. This paper consists of three main parts, with an introduction and conclusions. The first part explains an overview of trade and asymmetric interdependence between Russia and China. It then analyses the anticipated benefits and vulnerabilities of increased Russian gas exports to China. The third section investigates the uncertainties of China as a gas importer in terms of China's dependence on Russia.

---

<sup>1</sup> Jagiellonian University in Cracow; saya08.yamato@student.uj.edu.pl.

## Literature review

Russia has the world's largest natural gas reserves, and natural gas exports have long been a significant driver of the Russian economy<sup>2</sup>. Mineral products in 2020 accounted for 50% of Russia's total export revenues<sup>3</sup>. For Russia, the EU was its largest trading partner. However, the stagnation of the European economy since 2008 and economic sanctions following the annexation of Crimea in 2014 have hurt the Russian economy<sup>4</sup>. With the Russian economy in the doldrums, China's financial resources are more attractive to Russia and economic relations between China and Russia are expected to deepen<sup>5</sup>. However, the economies of China and Russia are very different in size. As the share of energy and raw materials in Russia's exports to China is increasing, the importance of high-tech products in Russia's imports from China is also growing. On the other hand, Russia's role in the Chinese economy remains marginal, except for energy and some raw materials such as logs<sup>6</sup>. Also, Covi<sup>7</sup> states that countries like Russia, which rely exclusively on exports of certain commodities, are more susceptible to external shocks. Nelson<sup>8</sup> notes that new sanctions in response to Russian aggression could have a lasting impact on the structure of the global economy. The integration

---

<sup>2</sup> W.H. Cooper, Library of Congress, *Russia's economic performance and policies and their implications for the United States*, Congressional Research Service 2008, <http://www.fas.org/sgp/crs/row/RL34512.pdf> (access: 18.02.2023), p. 15.

<sup>3</sup> OEC (2020), *Russia exports, imports, and trade partners*, from <https://oec.world/en/profile/country/rus#latest-data-subnational> (access: 17.02.2023).

<sup>4</sup> J. Henderson, T. Mitrova, *The Political and Commercial Dynamics of Russia's Gas Export Strategy*, The Oxford Institute for Energy Studies, 2015, p. 2.

<sup>5</sup> A.G. Herrero, J. Xu, *The China-Russia trade relationship and its impact on Europe*, "Working Paper" 2016, 4, [http://aei.pitt.edu/77821/1/WP-2016\\_04-180716.pdf](http://aei.pitt.edu/77821/1/WP-2016_04-180716.pdf), p. 2.

<sup>6</sup> J. Rautava, *Russia's economic policy and Russia-China economic relations*, [in:] A. Moshes, M. Nojonen (eds.), *Russia-China relations. Current state, alternative futures, and implications for the West*, The Finnish Institute of International Affairs, Helsinki 2011, pp. 45–46.

<sup>7</sup> G. Covi, *Dutch disease and sustainability of the Russian political economy*, "Economics and Policy of Energy and the Environment" 2014, 2, p. 5.

<sup>8</sup> R.M. Nelson, *The economic impact of Russia sanctions - Congress*, Congressional Research Service, <https://crsreports.congress.gov/product/pdf/IF/IF12092> (access: 16.02.2023), p. 1.

nature of Russia in the global economy makes it impossible to isolate Russia completely, and economic sanctions have already had numerous impacts worldwide.

Where there are mutual cost effects from transactions, interdependence arises regardless of symmetry. However, less dependent actors benefit less from cooperation when interdependence is asymmetric. They tend to force the other party to make more concessions because they are less concerned about the failure of negotiations<sup>9</sup>. It is also argued that power asymmetries intensify conflict, making reaching cooperation more difficult<sup>10</sup>. On the other hand, Pfetsch and Landau<sup>11</sup> state that symmetry on both sides contributes to successful negotiations but that symmetry alone is not a sufficient condition for success; the critical thing is whether the parties are satisfied with the negotiation outcome. Negotiations are initiated to generate some benefits for both parties. Therefore, even in asymmetric economic interdependence, the weaker party does not necessarily have to be at the mercy of the stronger party<sup>12</sup>. Finally, the vulnerability of interdependence hinges on the relative availability and cost of alternatives that the various actors have<sup>13</sup>. In light of the above, this report uses the literature to analyse the fragility of economic relations between Russia and China from the perspectives of Russia and China, respectively, as well as the dependencies and advantages of both sides.

---

<sup>9</sup> R. Keohane, J. Nye, *Power and interdependence*, Longman, <https://is.cuni.cz/studium/predmety/index.php?do=download&did=231748&kod=JPM033> (access: 18.02.2023), pp. 8–9.

<sup>10</sup> H. Janusch, *The interaction effects of bargaining power: The interplay between veto power, asymmetric interdependence, reputation, and audience costs*, "Negotiation Journal" 2018, 34(3), p. 224.

<sup>11</sup> F.R. Pfetsch, A. Landau, *Symmetry and Asymmetry in International Negotiations*, "International Negotiation" 2000, 5(1), p. 40.

<sup>12</sup> R. Wagner, *Economic interdependence, bargaining power, and political influence*, "International Organization" 1988, 42(3), [https://www.jstor.org/stable/pdf/2706786.pdf?casa\\_token=ZkjkxQO3od5gAAAAA:QFLzFtc\\_X8NEJv2Ac6YvZOflVtHhEV5Wqe8fi-ugkRWdKyMpK7xv1fY3ul6ifWJX9fVOtjHOoHXtDzl6q7lGtcdyFbKwFl6jJb3Mpd\\_fm1s6n-CiCw](https://www.jstor.org/stable/pdf/2706786.pdf?casa_token=ZkjkxQO3od5gAAAAA:QFLzFtc_X8NEJv2Ac6YvZOflVtHhEV5Wqe8fi-ugkRWdKyMpK7xv1fY3ul6ifWJX9fVOtjHOoHXtDzl6q7lGtcdyFbKwFl6jJb3Mpd_fm1s6n-CiCw) (access: 16.02.2023), p. 481.

<sup>13</sup> R. Keohane, J. Nye, op. cit., p. 11.

## Russian Gas Exports to China

In Russia, the importance of diversifying gas export destinations and moving away from dependence on Europe has increased<sup>14</sup>. As part of this policy, contracts were signed in 2014 by Gazprom to build and sell gas from Eastern Siberia to north-eastern China and a gas pipeline from Western Siberia to north-western China<sup>15</sup>. Henderson and Mitrova<sup>16</sup> state that the Power of Siberia 2 pipeline could be an alternative export route that would not only compensate for the decline in Russian sales to Europe but could also be used as a threat in negotiations with Western countries. The construction of international pipelines has significant geopolitical implications. Russia's richest natural gas reserves are in Western Siberia, and natural gas is sent from this region to the European direction by several pipelines. Currently, there is no gas pipeline connecting Western Siberia with China. The gas that is no longer exported due to European economic sanctions cannot be sold directly to China. Therefore, completing the pipeline to China would not only simply increase the volume of exports to China. It will make negotiations with Europe more favourable because of the reduced dependence on them.

In addition, Rautava<sup>17</sup> states that Russia needs to review its current policy stance, not only about China but as a whole. Besides China, Russian gas exports to Brazil, India and Turkey have increased by at least 50% year-on-year since the war began in 2022<sup>18</sup>. Expanding markets to these countries would help to move away from a one-sided dependence on Europe and China. Furthermore, it has been noted that Russia's growing dependence on exports of energy resources and raw materials has made its trade more vulnerable to fluctuations in international commodity prices<sup>19</sup>. Even if Russia succeeds in moving away from its asymmet-

<sup>14</sup> J. Henderson, T. Mitrova, op. cit., p. 14.

<sup>15</sup> A. Gabuev, *Friends with benefits? Russian-Chinese relations after the Ukraine Crisis*, Carnegie Endowment for International Peace, [https://carnegieendowment.org/files/CEIP\\_CP278\\_Gabuev\\_revised\\_FINAL.pdf](https://carnegieendowment.org/files/CEIP_CP278_Gabuev_revised_FINAL.pdf) (access: 18.02.2023), pp. 12–13.

<sup>16</sup> J. Henderson, T. Mitrova, op. cit., p. 18.

<sup>17</sup> J. Rautava, op. cit., p. 54.

<sup>18</sup> R.M. Nelson, op. cit., p. 2.

<sup>19</sup> W.H. Cooper, Library of Congress, op. cit., p. 16–17.

ric dependence on Europe and diversifying its export destinations, its economy will be vulnerable to external shocks if it remains dependent on gas exports. Russia must bear in mind that the overexploitation of natural resources as a relatively easy source of budgetary revenue will risk the decline of the rest of the economy<sup>20</sup>.

## Uncertainty Over China's Gas Imports

China overtook Japan to become the world's largest LNG importer in 2021. The rapid increase in China's natural gas production and imports is mainly driven by government policies to promote switching from coal to natural gas to reduce air pollution and meet emissions targets<sup>21</sup>. However, China's growing demand for energy does not naturally contribute to a steady increase in imports from Russia. Essential aspects are China's dependence on other trading partners, the feasibility of alternative energy production methods to replace imported energy, and the costs of pursuing these options. Concerning gas imports, China has a wide variety of options and is not as dependent on Russia. China has already made faster progress in cooperation with Central Asian countries than Russia on essential energy issues<sup>22</sup>. China's current primary source of pipeline imports is in Central Asia. The largest source is Turkmenistan, which connects to China's domestic pipelines via Uzbekistan and Kazakhstan. A pipeline from Myanmar supplies gas from the Bay of Bengal to the south of China. Furthermore, several LNG regasification facilities on China's eastern coast import gas by sea from several countries<sup>23</sup>. On the other hand, if both Power of Siberia1 and Power of Siberia2 proceed as planned, Russia's share of China's total gas imports is expected to exceed 35% between 2020 and 2030<sup>24</sup>. This would mean going in the opposite direction to the Western countries that impose economic

---

<sup>20</sup> K. Falkowski, *Trade interdependence between Russia vs. the European Union and China within the context of the competitiveness of the Russian economy*, "Equilibrium. Quarterly Journal of Economics and Economic Policy" 2018, 13(4), p. 678.

<sup>21</sup> Natural Gas Weekly Update (2022), *U.S. Energy Information Administration*, [https://www.eia.gov/naturalgas/weekly/archivenew\\_ngwu/2022/04\\_07/](https://www.eia.gov/naturalgas/weekly/archivenew_ngwu/2022/04_07/) (access: 12.02.2023).

<sup>22</sup> J. Rautava, *op. cit.*, p. 56.

<sup>23</sup> J. Henderson, T. Mitrova, *op. cit.*, p. 12.

<sup>24</sup> *Ibidem*, p. 17.

sanctions and would also increase the risk to China of deepening its dependence on Russia.

In addition, China's gas supply and demand problems have led to uncertain import demand for Russia. In June 2014, in a speech to Communist Party officials, President Xi Jinping emphasised the energy revolution and stressed his determination to diversify into non-coal energy resources, led by gas, renewable energy and nuclear power<sup>25</sup>. In the first eight months of 2022, China's spot LNG imports were 59% lower than in the same period last year. This is because of a warm winter, weak economic activity, the lockdown caused by COVID-19 and strong growth in electricity generation from renewable sources, which has reduced gas consumption<sup>26</sup>. Further contributing to the uncertainty in energy import volumes is unconventional gas, particularly shale gas. China has the world's most enormous shale gas resources. However, current projections conclude that a shale gas revolution in China by 2020 is unlikely due to geology, water scarcity, land access and service industry limitations. On the other hand, it is also reported that 110 bcm of Chinese shale production is expected by 2040<sup>27</sup>. While much remains very uncertain about shale gas, this uncertainty further complicates China's supply-demand balance and the potential for future gas imports. In turn, this uncertainty in demand for China's gas imports will be a barrier to completing the pipeline's construction. Pipelines are built at huge expense to build facilities for specific export destinations. Once completed, it can only be sold to that country. The implication is that the destination of valuable resources is fixed for a long period. As a result, construction can only be undertaken if there is confidence in future supply and demand trends and the reliability of the buyers. Therefore, it is vital to keep abreast of developments in China, where the construction of pipelines has strategic implications.

---

<sup>25</sup> S. Cornot-Gandolphe, *China's Coal Market: Can Beijing Tame "King Coal"?*, "Working Paper CL-1" 2014, Oxford Institute for Energy Studies, p. 12.

<sup>26</sup> IEA (2022), *Gas Market Report, Q4-2022*, Paris, <https://www.iea.org/reports/gas-market-report-q4-2022>, p. 25.

<sup>27</sup> J. Henderson, T. Mitrova, op. cit., p. 11.

## Conclusion

Russia and China are moving closer to each other in expanding economic relations, including agreements to build pipelines and increase gas exports. This will help Russia, which relies on European exports, diversifies its export destinations and risks. On the other hand, the question remains as to whether China can be a convenient trading partner for Russia on an ongoing basis. Although China is the world's largest consumer and gas purchaser, Central Asia is its main trading partner, and Russia's importance to China is relatively low. China also has alternatives such as CNG purchases, renewable energy development and shale energy. The actual costs and feasibility of moving to these alternatives are unknown, but there is no guarantee that China will purchase a stable volume of gas. Because of the above, in gas trade between Russia and China, pipeline construction, cost negotiations and economic relations, China, which is less dependent on gas imports from Russia, would have the advantage. However, Russia is not entirely dependent on China and Europe. Greater cooperation with countries such as India and Brazil, which have increased their imports from Russia since before the war in 2022, would help to improve their asymmetrical dependence on China and, to a lesser extent, Europe<sup>28</sup>.

There are many uncertainties in economic relations with China. However, it is clear that there are some benefits, at least for both sides, and it is expected that the two countries will continue to have certain economic relations. The structure of economic relations, such as the degree of dependence and dominance, changes not only according to the share of the other country in one's economy and the size of the deficit but also according to relations with third countries and policy alternatives. In further analysing relations with China, it is necessary to consider the

---

<sup>28</sup> More on China's geopolitical situation, also in relation to Russia, see: J. Marszałek-Kawa (red.), *The Multidimensional Aspect of Asian Politics From History through the Present to the Future*, Wydawnictwo Adam Marszałek, Toruń 2018; J. Marszałek-Kawa, T. Dmochowski (red.), *Selected Socio-Economic and International Relations Issues in Contemporary Asian States*, Wydawnictwo Adam Marszałek, Toruń 2021; M. Dahl et al., *Balancing Changes. Seventy Years of People's Republic of China*, The Nicolaus Copernicus University Press, Toruń 2022.

domestic policies of Russia and China and trade relations with other countries surrounding both sides and world affairs.

## References

- Cornot-Gandolphe S., *China's Coal Market: Can Beijing Tame "King Coal"?*, "Working Paper CL-1" 2014, Oxford Institute for Energy Studies.
- Cooper W.H., Library of Congress, *Russia's economic performance and policies and their implications for the United States*, Congressional Research Service 2008, <http://www.fas.org/sgp/crs/row/RL34512.pdf>.
- Covi G., *Dutch disease and sustainability of the Russian political economy*, "Economics and Policy of Energy and the Environment" 2014, 2.
- Dahl M., Kupś H., Rogacz D., Szatkowski M., *Balancing Changes. Seventy Years of People's Republic of China*, The Nicolaus Copernicus University Press, Toruń 2022.
- Falkowski K., *Trade interdependence between Russia vs. the European Union and China within the context of the competitiveness of the Russian economy*, "Equilibrium. Quarterly Journal of Economics and Economic Policy" 2018, 13 (4).
- Gabuev A., *Friends with benefits? Russian-Chinese relations after the Ukraine Crisis*, Carnegie Endowment for International Peace, [https://carnegieendowment.org/files/CEIP\\_CP278\\_Gabuev\\_revised\\_FINAL.pdf](https://carnegieendowment.org/files/CEIP_CP278_Gabuev_revised_FINAL.pdf).
- Henderson J., Mitrova T., *The Political and Commercial Dynamics of Russia's Gas Export Strategy*, The Oxford Institute for Energy Studies, 2015.
- Herrero A.G., Xu J., *The China-Russia trade relationship and its impact on Europe*, "Working Paper" 2016, 4, [http://aei.pitt.edu/77821/1/WP-2016\\_04-180716.pdf](http://aei.pitt.edu/77821/1/WP-2016_04-180716.pdf).
- IEA (2022), *Gas Market Report, Q4-2022*, Paris, <https://www.iea.org/reports/gas-market-report-q4-2022>.
- Janusch H., *The interaction effects of bargaining power: The interplay between veto power, asymmetric interdependence, reputation, and audience costs*, "Negotiation Journal" 2018, 34(3).
- Keohane R., Nye J., *Power and interdependence*, Longman, <https://is.cuni.cz/studium/predmety/index.php?do=download&did=231748&kod=JPM033>.



- Marszałek-Kawa J. (red.), *The Multidimensional Aspect of Asian Politics From History through the Present to the Future*, Wydawnictwo Adam Marszałek, Toruń 2018.
- Marszałek-Kawa J., Dmochowski T. (eds.), *Selected Socio-Economic and International Relations Issues in Contemporary Asian States*, Wydawnictwo Adam Marszałek, Toruń 2021.
- Natural Gas Weekly Update (2022), *U.S. Energy Information Administration*, [https://www.eia.gov/naturalgas/weekly/archivenew\\_ngwu/2022/04\\_07/](https://www.eia.gov/naturalgas/weekly/archivenew_ngwu/2022/04_07/).
- Nelson R.M., *The economic impact of Russia sanctions – Congress*, Congressional Research Service, <https://crsreports.congress.gov/product/pdf/IF/IF12092>.
- Nojonen (eds.), *Russia-China relations. Current state, alternative futures, and implications for the West*, The Finnish Institute of International Affairs, Helsinki 2011.
- OEC (2020), *Russia exports, imports, and trade partners*, from <https://oec.world/en/profile/country/rus#latest-data-subnational>.
- Pfetsch F.R., Landau A., *Symmetry and Asymmetry in International Negotiations*, "International Negotiation" 2000, 5(1), p. 40.
- Rautava J., *Russia's economic policy and Russia-China economic relations*, [in:] A. Moshes, M.
- Wagner R., *Economic interdependence, bargaining power, and political influence*, "International Organization" 1988, 42 (3), [https://www.jstor.org/stable/pdf/2706786.pdf?casa\\_token=ZkixQO3od5gAAAAA:QFLzFtc\\_X8NEJv2Ac6YvZOflVtHhEV5Wqe8fugkRWd-kyMpK7xv1fY3ul6ifWJX9fVOtjHOoHXtDzl6q7IGtcdyFbKwFl6jJ-b3Mpd\\_fjm1s6n-CiCw](https://www.jstor.org/stable/pdf/2706786.pdf?casa_token=ZkixQO3od5gAAAAA:QFLzFtc_X8NEJv2Ac6YvZOflVtHhEV5Wqe8fugkRWd-kyMpK7xv1fY3ul6ifWJX9fVOtjHOoHXtDzl6q7IGtcdyFbKwFl6jJ-b3Mpd_fjm1s6n-CiCw).

## Summary

Economic relations between Russia and China have been growing over the years. Of particular importance in Russia-China economic relations is the gas and oil trade. Russia has the world's largest natural resources, while China is the world's largest energy consumer. In 2014, an agreement was reached to build a new gas pipeline and increase gas exports to China. If the planned volume of gas can be exported to China on a stable basis, Russia will be able to supple-

ment some of the economic sanctions imposed by the West. However, there is much uncertainty as to whether China can be a stable export destination for Russia. There is a significant gap in the trade scale between Russia and China and asymmetrical dependence in the relationship between them. In addition, international pipeline projects have substantial financial and time costs, and the two countries' intentions sometimes differ. The purpose of this research is to clarify the current state of trade interdependence between Russia and China and to study whether China can be a stable economic partner for Russia. This paper consists of three main parts, with an introduction and conclusions. The first part explains an overview of trade and asymmetric interdependence between Russia and China. It then analyses the anticipated benefits and vulnerabilities of increased Russian gas exports to China. The third section investigates the uncertainties of China as a gas importer in terms of China's dependence on Russia.

**Keywords:** China, Russia, economic relations, energy policy