

Abstract

This research paper focused on the correlation between Chinese economy and Russian-Ukrainian crisis. Foreign trade between China and Europe escalated rapidly as result number of the trains from China to Europe have increased by twice.

After Russian soldiers invaded since March of 2022, it has decreased and USA, Western countries and several other countries have targeted Russia's foreign trade. It can be effect into China's foreign trade negatively. Eventually, bilateral trade between China-Russia has expanded by more than 50 percent.

According to data released by China's General Administration of Customs, China-Russia bilateral trade stood at \$65.81 billion in the first five months, up to 28.9 percent on yearly basis.

Introduction

There are about 140 countries joined the BRI, China's foreign policy expanding its neighbor and through the world. After the Winter Olympic of Beijing, President Vladimir Putin' policy to invade to Ukraine, USA, Western countries have targeted the Russian economy. That is the main reason for China and Russia to get closer foreign relations. The purpose of the research paper to optimize the correlation between Chinese economy and Russian-Ukrainian crisis.

Russia-Ukrainian crisis makes worse the global economy and foreign trade while every country is fighting against the Covid-19 pandemic.

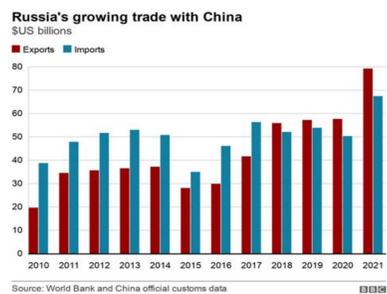


Figure 1. Foreign trade between Russia and China



Figure 2. Keywords of the research

Methods and Materials

We use some of the popular Natural Language Processing (NLP) Python libraries for pre-processing texts,

The following steps were taken in order to pre-process the tweets:

- (i) tokenization to split tweets into discrete words;
- (ii) removal of numbers, punctuation marks, emojis, URL paths, symbols, non-alphabetical words, English stop words, and tokens with Appl. Sci. 2021, 11, 10169 4 of 18 less than one character;
- (iii) text lemmatization including Part-Of-Speech (POS) Tagging to reduce the dimensionality of the corpus into only nouns, verbs, adverbs, and adjectives;
- (iv) elimination of tokens with low frequency on the corpus; stemming of words

weighting scheme	tf weight
binary	0, 1
raw count	$f_{i,d}$
term frequency	$f_{i,d} / \sum_{e,d} f_{e,d}$
log normalization	$\log(1 + f_{i,d})$
double normalization 0.5	$0.5 + 0.5 \cdot \frac{f_{i,d}}{\max_{(e,d)} f_{e,d}}$
double normalization K	$K + (1 - K) \cdot \frac{f_{i,d}}{\max_{(e,d)} f_{e,d}}$

tf-idf weighing

Results

Russia is the world's largest oil exporter, while China is quite advanced in terms of mechanical and electrical products with outstanding manufacturing strength. While China and Russia are having rough time against the USA and Western countries sanctions, their foreign relations are getting closer. It shows that it will be good partner to each other in the international relations and geopolitics. Otherwise, in geopolitics play, there won't be any winner in this crisis.

Table 1. Case study of the research. Concept correction by frequency.

Concept	Relevancy	Frequency
bilateral trade	97%	4
russian gas	96%	2
chinese custom data	96%	2
electrical products	95%	2
economic sanctions	94%	1
russian gas pipelines	93%	1

Discussion

China's trade with Russia saw faster growth in the first five months of 2022, according to Chinese customs data on Thursday, as Russia accelerated the shift of its supply chain to Asia amid US-led Western economic sanctions. Russia's "turn to the East" has been underway for around a decade and accelerated due to the Western sanctions, Li Xin, director of the Institute for Eurasian Studies at the Shanghai University of Political Science and Law, told the Global Times on Thursday. Faced with Western sanctions, Russia has turned to the Asia-Pacific region, in this process, China might be its main target due to China's massive market, Li said, noting that the products traded between China and Russia have become increasingly diverse and complementary. Total trade between China and Russia jumped 35.9% in 2021 last year to a record US\$147.9 billion, according to Chinese customs data, with Russia serving as a major source of oil, gas, coal and agriculture commodities, and running a trade surplus with China.

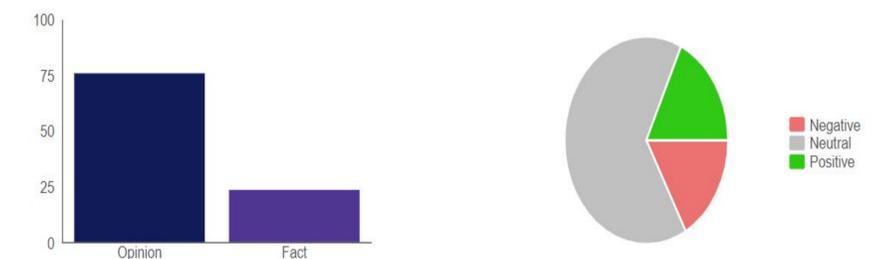


Figure 3. Research sentiment analysis

Conclusions

Since sanctions were imposed in 2014 after Russia annexed Ukraine's Crimea, bilateral trade between Russia and China has expanded by more than 50% and China has become Russia's biggest export destination. The two were aiming to boost total trade to US\$200 billion by 2024, but according to a new target unveiled last month during Russian President Vladimir Putin's visit to Beijing for the Winter Olympics, the two sides want bilateral trade to grow to US\$250 billion. World geopolitics is going to divide into two groups such as USA and Western countries and other one is Russian-China partner.

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References

- Understanding The China-Russia Trade, investment & Economic relationship in the context of the Ukraine Conflict. (May 10, 2022) <https://www.silkroadbriefing.com/news/2022/05/10/understanding-the-china-russia-trade-investment-economic-relationship-in-the-context-of-the-ukraine-conflict/>
- China-Russia trade up 28.9% in Jan-May; further growth expected. (Jun 9, 2022) <https://www.globaltimes.cn/page/202206/1287753.shtml>
- World bank foreign trade statistics 2021
- China's Belt and Road Initiative in the Global Trade, Investment and Finance Landscape. (2018) OECD
- China massive Belt and Road Initiative. (Jan 18, 2020) Council on Foreign relations.