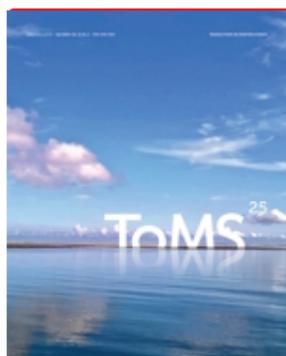


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BRI Project: Are There Alternatives?

Aleksander Sładkowski¹, Rino Bošnjak², Danko Kezić², Srećko Krile³

This paper discusses the problems associated with the implementation of the Belt and Road Initiative (BRI) project. The investments of the Chinese government and individual companies in project implementation have been analyzed, and alternatives, namely TRACECA, IMEC, and the Trans-Saharan Road Corridor routes, studied.

KEY WORDS

- ~ Belt and Road Initiative (BRI),
- ~ TRACECA,
- ~ IMEC,
- ~ Trans-Saharan Road Corridor,
- ~ Cargo delivery,
- ~ Route Asia – Europe

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1. INTRODUCTION

The BRI (Belt and Road Initiative) project turned 10 this year. In the fall of 2013, Chinese President Xi Jinping announced the initiative as a massive infrastructure project that China had developed to boost trade and connections between Asia, Europe and Africa, which has now taken the crown from the United States interstate highway system as the most expensive infrastructure project in human history. The American project exceeded its initial cost estimate many times over, ultimately costing the USA \$459 billion (Top 10 most expensive...). Taking into account dollar price fluctuations, the project would now cost approx. \$550 billion.

According to various sources, the cost of the BRI project is currently approaching or has already exceeded one trillion US dollars (China's Belt and Road...). Let us delve a little deeper into the background of the announcement and implementation of this initiative. For much of the 20th century, China was one of the poorest countries in the world in terms of per capita income. Accordingly, the level of wages in the country was much lower than in Western Europe or the USA. Paper (Vertinskaya, 2011) notes that the share of wages in production costs was 20-25% in Russia, 50-60% in Europe, and 75-78% in the USA. The situation in China was even worse for the population, but attracted industrial production investments. As a result, the most famous brands set up production facilities in China and other countries in Southwest Asia.

The delivery of goods manufactured in the region to Europe, the USA and other industrialized countries became a burning issue. The main delivery route was maritime transportation - a relatively cheap, albeit a very slow delivery method. The average delivery time for goods from Chinese ports to the end consumer in Europe was 45-50 days. Railway connection could serve as an alternative, and the tested accelerated trains could deliver containers to Central Europe in 15-17 days. However, a regular multimodal connection could not be established due to a number of obstacles, the main being the relatively high delivery costs, almost double the cost of delivery by sea. But there have also been other obstacles that were described in the section of the monograph (Sladkowski, 2011) which have yet to be overcome.

The aim of this research is to study the current global logistics projects for the delivery of goods to Europe to assess the possibility of implementing alternative projects alongside them, which is especially important in view of the changing political situation in various countries located on current routes.

2. THE MAIN GOAL AND IMPLEMENTATION OF THE BRI PROJECT

The One Belt One Road initiative was originally intended to improve the delivery of goods from China and Southeast Asia to European countries. At the same time, both sea and rail delivery options were considered. For example, if goods are delivered to southern, rather than northern European ports, i.e. to Trieste or Piraeus, rather than Hamburg or Antwerp, container delivery time can be reduced by 10 or more days. Despite of the very specific goal of the project, apart from the countries that were directly on its routes or nearby, interest was also shown by those that simply needed investment in their transport infrastructure. Fig. 1 gives a map of the countries participating in the project in 2019 (Saez, 2019). Note that in this paper, the author from the University of Havana (Cuba) expressed hope that this investment project will be extended to the countries of Latin America and the Caribbean.



Figure 1. BRI project participants who signed the MoU (Saez, 2019) (status in 2019)

Thus an initially economic project gained a very significant political dimension. Though numerous maps that describe the project are available on the Internet, the comparison of these maps is of very significant interest. For example, the map shown on website (Nair, 2017), published in early 2017, indicates four main routes for the delivery of goods from China and Southeast Asia to Europe (Fig. 2), which is the main goal of the project. As can be seen, one sea route is being considered (blue line), which runs through the Indian Ocean, and the Red Sea, through the Suez Canal to the Mediterranean Sea, where goods are delivered to southern European ports. The additional sea route linking Indonesia and the Philippines to Chinese ports (blue line) can be considered an additional part of that route.

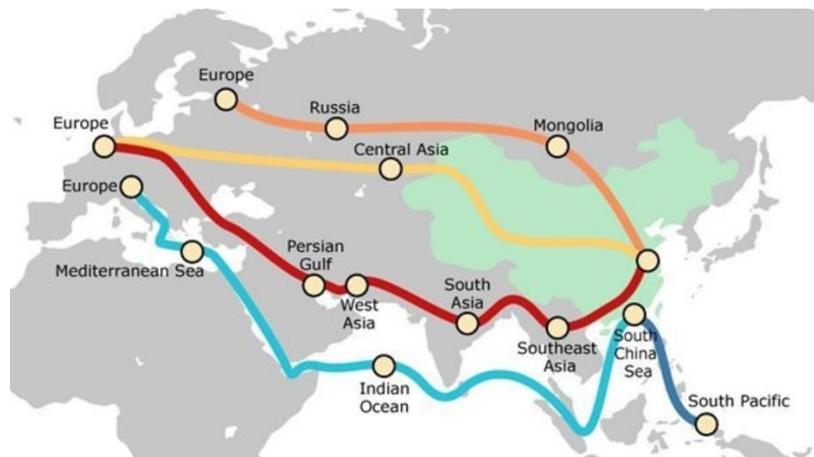


Figure 2. 2017 BRI project map (Reka, 2018)

The remaining three routes are overland. Transportation will most likely be carried out mainly by rail, with the simultaneous construction of parallel highways. The orange, northern route was supposed to go from China through Mongolia, and then through the territory of the Russian Federation to Northern Europe (Finland). The Central Asian route (yellow line) would pass through the territories of China, Kazakhstan, and Central Russia to Eastern Europe through Ukraine or Belarus. The most “exotic” is the southern route, which would pass through Indochina, Hindustan, Persian Gulf countries and, finally, Turkey to Southern Europe.

As for the sea route, it was and continues to be quite real and is currently the main route for the delivery of goods to Europe. Its expansion requires the further development of port infrastructure, as well as of local and global transportation networks that must be linked to such ports. Investments in the development of port infrastructure alone are not enough as containers delivered to a particular port must be transported to their destination by railroads. First, a modernized, developed railway network must be available, and second, destinations must be equipped with infrastructure that allows the immediate processing, and reloading of the delivered containers to road transportation or their temporary storage. Arrangements should also be made for the immediate return, and repair of empty containers where necessary. This is largely due to the issues in connection with automated unloading and loading operations at railway stations and ports.

For example, cargo could be delivered to the Balkan Peninsula either by sea, as described above, by ferry from Georgia along the Black Sea (TRACECA project), or by rail through Turkey. There are a number of transit ports in the region, such as Constanta, Burgas, Piraeus, Varna and a number of others, where China is upgrading terminals, and investing heavily in infrastructure projects (see, for example, Fig. 3).



Figure 3. Transport infrastructure of the Balkan Peninsula and Chinese investments within the framework of the BRI project (Reka, 2017)

However, it is clear that Chinese investments in the region are not sufficient to ensure the smooth operation of the regional freight transportation network. The EU, recognizing the complexity of the situation in the region where the transportation network is very outdated, is planning significant investments in the near future. In particular, information (High speed railways...) indicates that there is currently a European plan to invest 1.5 billion euros in railway development in the region, which includes the modernization of transport corridors shown in Fig. 3.

3. WHAT HAS CHANGED RECENTLY?

The original objective of the project has expanded significantly over the past years. As a result, investments began to be directed not only to countries located directly along the sea or railway routes, but also to countries quite far from these routes. The fact that many countries would like to participate in the project is evidenced by the map (Fig. 4), which shows 151 countries that have signed a Memorandum of Understanding (MoU) on participation in the project, with 9 more envisaging such participation in the future or planning to serve as observers. This is the situation today.

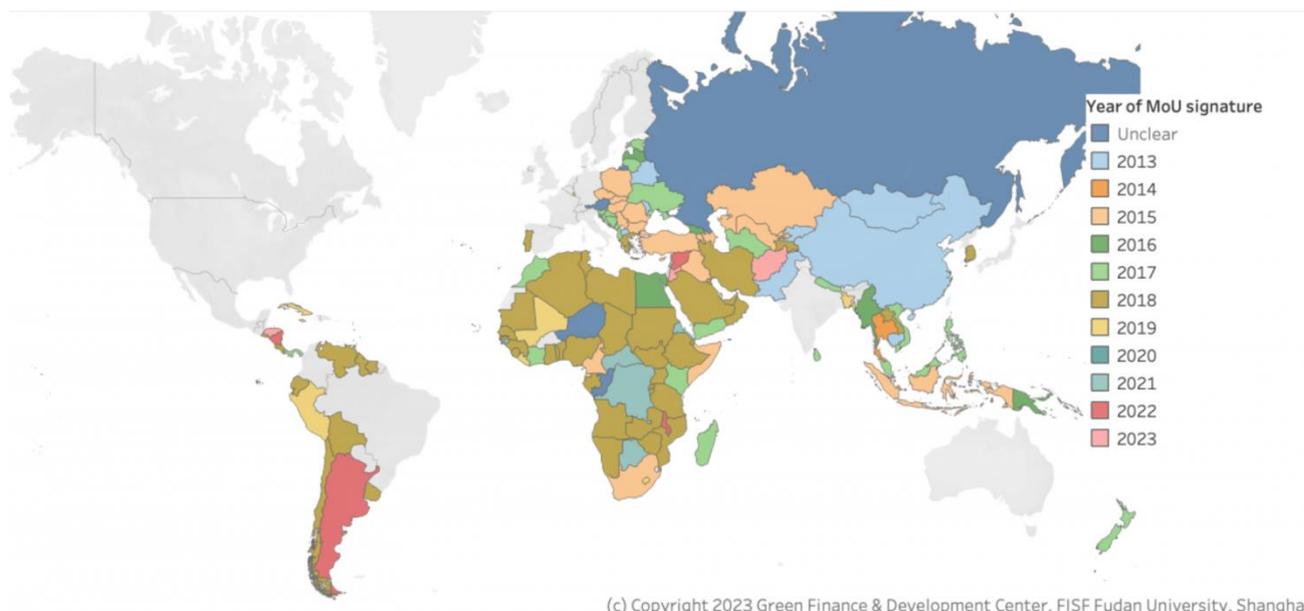


Figure 4. BRI project participants who signed the MoU (Countries of Belt and Road...) (status in 2023)

The previous BRI project map (Fig. 2) significantly differs from the new one published in 2022 by Chinese scientists (Fig. 5) (Huang et al., 2022). Transport corridors passing through Russia are not shown here, as the map reflects the current political situation in the world. The transit of goods to Europe through Russia or Belarus is currently either severely limited or non-existent. Unfortunately, there is no reason to assume the situation will improve in the near future. Given that the transit of goods through Ukraine is currently limited (for example, the export of Ukrainian grain through Black Sea ports) due to military activities (shelling, minefields, etc.), the route shown on the map for the delivery of goods to Moscow through Ukrainian territory is only the wishful thinking of the authors.

The route that was previously called “exotic” also disappeared from the map (Fig. 5). Instead, a land route was created through the Central Asian republics, Iran and Turkey. The authors named this route the Silk Road. Although this route is much more realistic, the political factor is again critical. Iran continues to be under international sanctions (Ryabova et al., 2022) which have been in effect for 40 years. There was an attempt to lift them in 2015-2016, when an agreement was reached acceptable to all the parties, only to be thwarted in 2018. Thus, until the sanctions are actually lifted, discussing organizing regular supplies of goods to Europe through Iran is not realistic. Recent events in Israel and Iran's support to Hamas militants do not leave much hope for the speedy implementation of plans for this route.



Figure 5. 2022 BRI project map (Huang et al., 2022). Yellow dots on the map indicate existing investment projects in China. The red line shows regions interested in project development

The sea route on the map, called by the authors (Huang et al., 2022) the Maritime Silk Road, is highly conditional; for example, in order to deliver goods from China to Europe, there is no need for ships to call at Calcutta or sail to the shores of Africa. And, in addition to Venice or Athens, there are many alternative ports in the Mediterranean or on the Black Sea. Clearly, this route reflects the current trend of Chinese investment in African countries where large mineral reserves are found. On the other hand, ignoring the production capabilities of another potential stop on the route to Europe, India, would mean downplaying the significance of the BRI project.

It should be noted that although Chinese investment projects increased after the announcement of the BRI initiative, they did exist before that. For example, paper (Gemueva, 2019) discusses investments in the European transportation system. The author, based on open Internet sources, counted significant financial injections into a number of European ports in 2004-2018, including the following where Chinese financial capital made up the majority of the investment: Gdynia Container Terminal (Poland) with 99.1% share of Chinese capital; Barcelona Europe South Terminal (Spain) – 100%; Container Terminal Frihamnen, Norvik Port (Sweden) – 100% and others. Overall, Chinese investments came to 18 European ports. Obviously, when investing in a particular enterprise or industry, the key question is whether the investment will be economically profitable? How long will it take to expect a return on the funds spent and what will be the growth of capital?

In most cases, Chinese investments generated significant returns, like the successful investment of the Chinese company COSCO in the reconstruction and expansion of the port of Piraeus (Greece) (Kidera, 2021). Despite the fact that this investment began in 2008, i.e. before the official announcement of the BRI project, it is closely related to the said project. Owing to this investment, the volume of container transshipment in the port increased 7-fold. As a result, the port took first place in the world rankings in 2016, as the fastest growing infrastructure facility of this type.

Let us now consider China's overall investment activity under the BRI project. The annual report (Wang, 2023) for 2023 provides information on how Chinese investments were distributed by world regions (Fig. 6), as well as the corresponding map Fig. 7. As can be seen from the above chart, Chinese investment activity in

Europe (shown in red), which peaked in 2015, has now been reduced to a minimum. At the same time, significant funds have been invested in Middle Eastern countries (blue) and the Sub-Saharan region (yellow) in recent years.

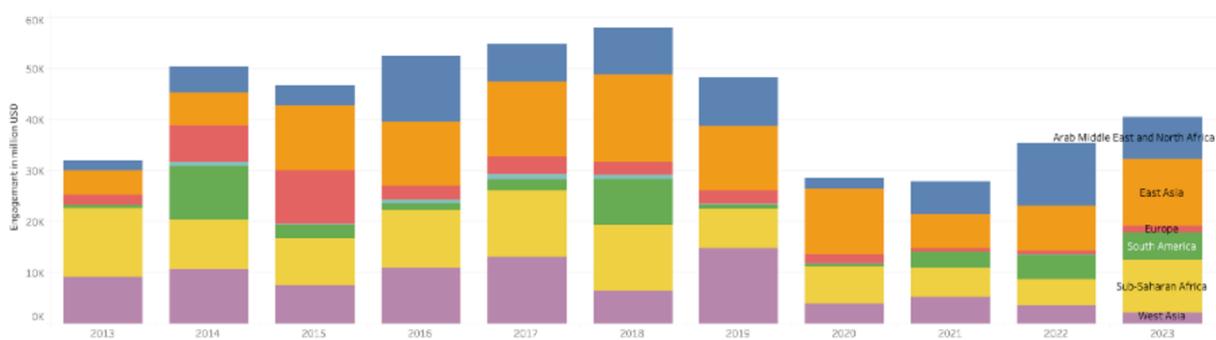


Figure 6. China's investment activity in various regions of the world over the 10 years of the BRI project (Wang, 2023)

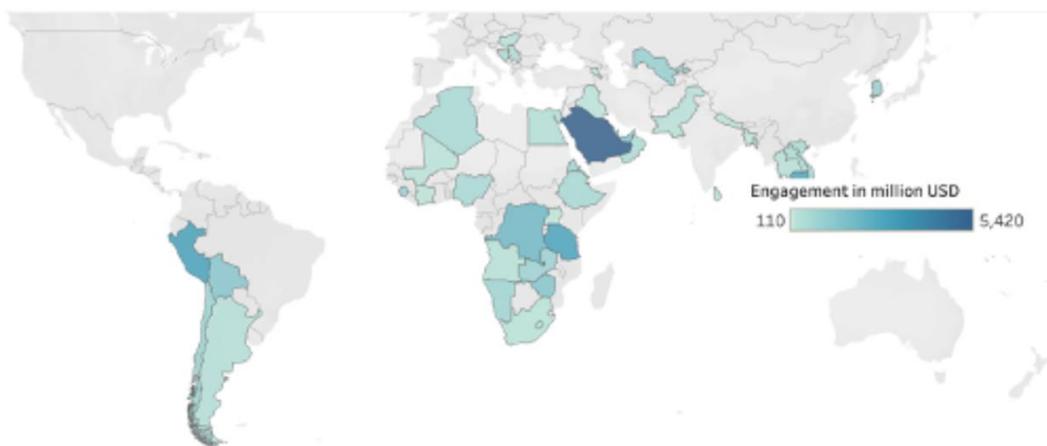


Figure 7. China's investments in various countries under the BRI project (Wang, 2023) in 2023

The information provided open more questions than they answer. Although the author of the report claims that these data are consistent with the BRI project, it is questionable how investments in Latin America, South and West Africa tie in with the main goals of the BRI project. The data could indeed be correct, but not all Chinese investments can be classified as related to the project concerned.

But if the report really takes into account all Chinese investments, where are the investments in Russia or Kazakhstan which exist, and are not small ones at all. For example, paper reports that “Russia and China plan to invest another \$1.3 billion in joint projects.” Maybe the author of the report, taking into account the current political situation, decided to simply not take these investments into account separately? In any case, investment policies of a state can reflect not only economic, but also far-reaching political goals.

4. ALTERNATIVE PROJECT TRACECA

As discussed above, a purely land route through Central Asia, Iran and Turkey is problematic. However, it can be modified in a way that will allow its full implementation. A project for such a route has been around for quite some time – TRACECA (acronym: **T**ransport **C**orridor **E**urope-**C**aucasus-**A**sia). The EU and 12 countries of the Caucasus and Central Asia signed an agreement on its implementation in Brussels in 1993. Unfortunately,

over the past 30 years the project has been implemented at a very slow pace for several reasons. First, purely technical. The project involves the use of two ferry crossings across the Caspian and Black Seas. In most countries in these regions, railway communications were at the level that existed in the USSR, and containers needed to be reloaded twice (on the borders of China-Kazakhstan and Georgia-Turkey) due to the difference in the width of the railway gauge. And, finally, the completely undeveloped infrastructure of the railway network.

The second group of obstacles is political. The Caucasus region is not free from military conflicts. Political differences between Georgia and Russia led to the separation of several Georgian regions, and in 2008 there was a local war between these countries. The development of this project was also not facilitated by the conflict between Azerbaijan and Armenia over Nagorno-Karabakh, which lasted for more than 30 years, moving from the acute phase to its latent form. However, Fig. 8 shows a map of the TRACECA project, indicatively taken from the Armenian website (Russia and China plan...). This site contained statements by EU diplomat Josep Borrell, in which he noted that the development of transport links in the region was important for the EU. Of course, there are also organizational problems, particularly the lack of a unified transportation tariff. And, of course, not the least reason for the slowdown of the project concerned was the availability of alternative cargo delivery methods, discussed above, which are currently not relevant. But for a long time, this project was perceived by the Russian Federation as an undesirable alternative to existing cargo delivery methods, and it used all its influence to slow down the TRACECA project.

Note that on the map below (Fig. 8) only one route through the territory of Central Asian republics is considered. However, given that both Uzbekistan and Turkmenistan are project participants, this route can be shortened if trains go through the territory of these states, and a ferry service is organized between Turkmenbashi (formerly Krasnovodsk) and Baku. It should also be noted that pilot transportation was carried out along the route Lithuania - Poland - Slovakia - Hungary - Romania - Bulgaria - Black Sea - Georgia - Azerbaijan - Caspian Sea - Kazakhstan in 2023 which took 16 days to complete.

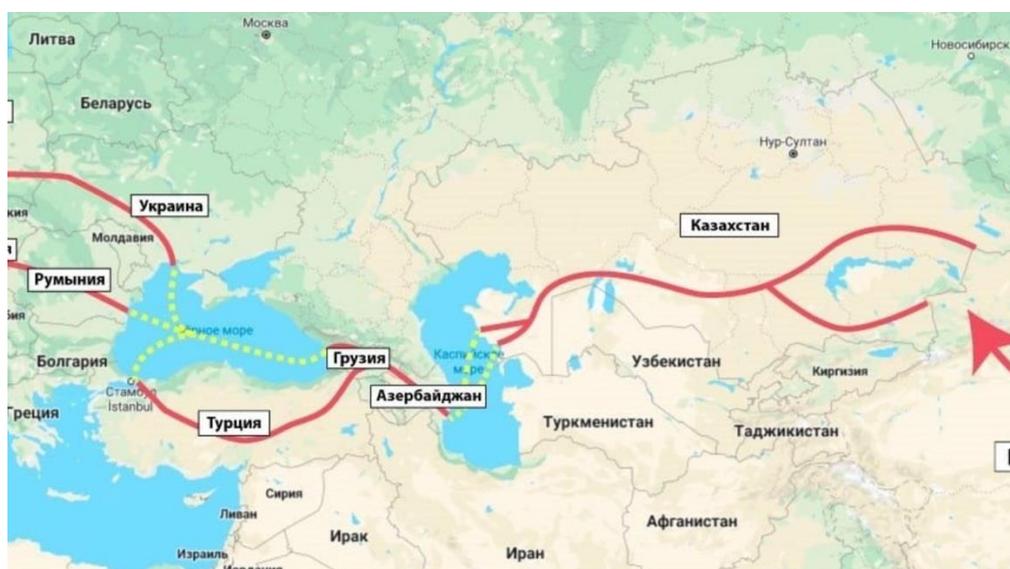


Figure 8. TRACECA project map (Gemueva, 2019). The green dotted line indicates ferry crossings

5. OTHER GLOBAL TRANSPORT PROJECTS

It should be emphasized that the TRACECA project described above does not contradict the ideology of China's BRI initiative, but can rather be considered its very necessary addition. This does not mean that there are no other projects that run counter to the BRI project to some extent. One such project that has been around

for quite some time is the Trans-Saharan Road Corridor, which is shown on the map (Fig. 9). The authors of this project considered this corridor an integral part of the Trans-African Highway Network.

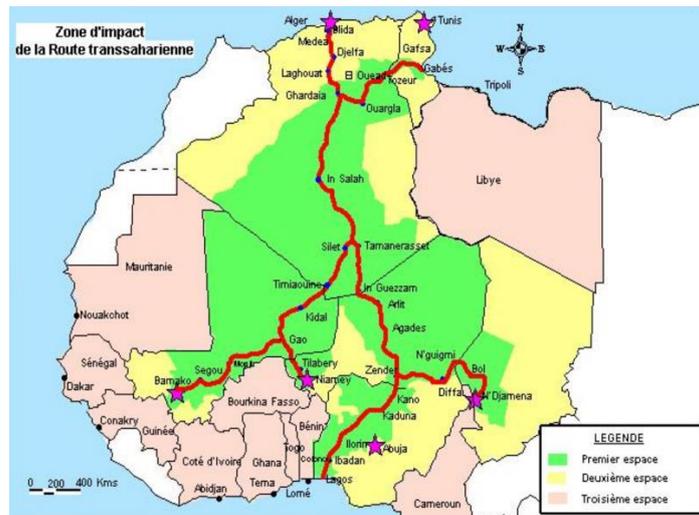


Figure 9. Trans-Saharan Road Corridor Project (Study of Identification...)

Note that the development of this project is currently frozen due to the unstable political situation in the region and, accordingly, insufficient funding for the project. However, the comparison of the above with the previous map of China's investments in 2023 (Fig. 7), suggests that the project might continue.

The India-Middle East-Europe (IMEC) corridor project is causing much more debate. Fig. 10 shows a map of this corridor (Gilani, 2023). The project was announced recently at the G20 summit in New Delhi, where a memorandum of understanding was signed between the European Union, India, the United States, Saudi Arabia, the United Arab Emirates, France, Germany and Italy. Despite the fact that this route does not significantly overlap with the BRI project, critics believe its authors are opposed to these projects.

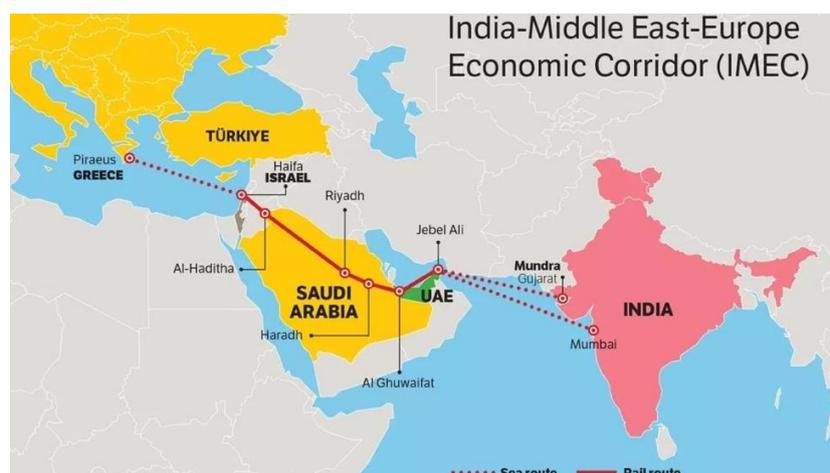


Figure 10. IMEC Project (Gilani, 2023)

There are currently serious political obstacles to the implementation of this project. One of the main obstacles is the conflict between Arab countries and Israel in connection with the events in the Gaza Strip. Although this conflict is local, its significance is much broader. And, accordingly, a rapid resolution of this issue will largely determine whether the IMEC project will be implemented or not.

But the IMEC project also has an economic aspect. That is why it is considered a counterweight to the BRI project. The author of the paper quoted above included the phrase “Salaries should be small” in the title. China's economy has been growing in recent years, causing the growth of wages in China and, accordingly, the growth of the general well-being of the country's population. However, on the other hand, wage, healthcare, social expense, etc. costs kept increasing, affecting production costs and leading a number of researchers to see similarities between the economic development of Japan in the 20th century and the rapid growth of the Chinese economy, with the subsequent slowdown of such growth (China Economic Outlook). They even introduced a new term – “Japanization” of the Chinese economy.

Such studies were based on serious analytical assessments. For example, in (Is Chinese economy headed...; Overholt, 2023; Rahat et al., 2020), the authors refer to a World Bank forecast which decreased China's projected economic growth rate in 2024 to 4.4 percent, compared to its previous forecast of 4.8 percent. Unfortunately, this is the lowest level of economic growth in China since the 1960s.

These factors contribute to the growing trend of transferring mass production from China to India, where the percentage of wages and other expenses in the cost of production is lower than in China (China finally has ...; Nambiar, 2023). In addition, the political situation in the world, the well-known confrontation between China and the United States, also does not contribute to maintaining the high image of China as a potential investor and an attractive region for foreign investment in the Chinese economy. Economic and political factors in this case work together to create a positive or negative image of a particular country. For example, the Russian Federation recently experienced a mass exodus of foreign investors, which has brought the country's economy to a critical state.

6. CONCLUSIONS AND RECOMMENDATIONS

The author of the paper did not set out to draw global conclusions or make recommendations to governments or investment companies. However, a number of conclusions can be drawn from the above analytical review:

1. In the future, the emphasis of investment activities from the scope of the BRI project should be shifted to investments that would guarantee economic success, which would result in politically positive assessments of the activities. On the other hand, investments in unstable enterprises or countries might cause a loss of confidence in the project itself.
2. It is necessary to promote the implementation and development of projects that help speed up the delivery of goods from China and Southeast Asian countries to Europe, including investments in the development of the transport infrastructure of the countries participating in the project. TRACECA can be considered such a project.
3. Investing in African transport projects, such as the Trans-Saharan Road Corridor, may be economically interesting, but the instability of the political situation in the region brings into question the feasibility of such investments.
4. One should not be afraid of alternative projects for the delivery of goods from Asia to Europe, for example, the IMEC. This means that if some European countries or the United States decide to invest in the transport infrastructure of, for example, Saudi Arabia, this will only facilitate the transportation of goods manufactured in China along this route, thus contributing to the development of BRI. The main issue here is keeping the products themselves competitive. How can one not recall the famous phrase of Chairman Deng Xiaoping: “It doesn't matter what color the cat is. A good cat is one that catches mice.”

CONFLICT OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship and publication of this article.

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