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## ARAB COUNTRIES ALONG THE MARITIME SILK ROAD

# Costs and Benefits analysis<sup>1</sup>

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Abstract: This article explores the potential effects of Chinese economic presence in the countries along the routes of the so-called Maritime Silk Road. Four Arab countries on the Maritime Silk Road were selected for analysis: Egypt, Saudi Arabia, Oman and Yemen. Potential and realized costs and benefits are being explored for both China and Arab countries. Two hypotheses are tested. The first is that investments of Chinese companies make it possible for the selected countries to join international trade flows, to diversify income and increase production and expand the range of products at reasonable costs. This is proved by an analysis of the sectoral distribution of current Chinese investment and the trend of investing in certain segments of Arab economies, mostly outside the energy sector. The second one is that some or all Arab countries along the Maritime Silk Road can increase exports to China, despite their low competitiveness, limited volume and range of products and high competitiveness of Chinese products on the other side. The application of the coefficient of conformity between Arab exports and China imports has shown that Arab countries have a chance to increase only exports of oil and organic chemicals to China. However, an analysis of trade statistics shows a dramatic increase in exports of many products that China itself exports at significantly more competitive prices, which is beyond any trade reason. Oriented towards broader and long-term national interests, China makes compromises in certain sectors for greater benefit in another sector or for higher-order benefits, such as geostrategic positions.

Keywords: Maritime Silk Road, Arab countries, FDI, infrastructure, foreign trade.

#### INTRODUCTION

Most Arab countries have oil-based economies, which means they cannot be classified into usual development categories. They are not developing countries

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because they are too rich, but they are not developed because they lack the basic characteristics of developed economies - a high share of services in the economy (except for the UAE). The periods of growth and stagnation are shifting faster in this region than in any other part of the world. The most significant feature of these economies is instability, and it stems from the high dependence of these economies on an exogenous factor - changing oil prices in the world market. The causes of oil price changes are many, varied, and largely beyond the control of individual states. Oil price volatility is the cause of income volatility, and this is a source of many problems for these economies. For example, the implementation of sound fiscal policy becomes impossible due to sudden changes in the volume of income. Furthermore, governments are unable to adopt sustainable investment policies because they cannot count on recurring revenues. The same applies to the spending policy.

Another specific negative phenomenon of dependence on energy exports is a phenomenon called "Dutch disease". In its core, it refers to the failure of a resource-rich economy to establish a competitive manufacturing sector. The share of industrial exports in total exports from Arab countries is lower than in any other region of the world. Discovery of new resources and later, the mere fact that a country has significant energy production, puts pressure on the appreciation of the domestic currency. High currency value makes domestic production relatively expensive, therefore less competitive. Furthermore, the high currency value leads to a higher standard, and this makes import cheaper than production. Thus, in all sectors, except resources, imports rise, while production and exports shrink. This further leads to an outflow of capital and manpower from the manufacturing sector, which eventually collapses and results in growing dependence not only on natural resources but also on the import of all other goods.

The final argument against having an economic development based on the wealth of oil and gas resources is the certainty of the depletion of their reserves.

Several Arab economies, such as Yemen and Egypt, lack abundant energy. These countries have oil in quantities that are not sufficient to keep the economy rich but sufficient to impede the development of other sectors.

A successful development strategy for these economies cannot be based on oil and gas exports.

On the other hand, the main goals of the Chinese Belt and Road Initiative (BRI) were less about export promotion but more about the employment of the growing capacity of the Chinese construction industry and placement of increased financial resources. The Belt and Road Initiative, as a global infrastructure projects include land and maritime roads, railway (standard and fast), airports, infrastructure facilities related to ports, construction of plants,

energy facilities (oil and gas pipelines and electric lines), but also development of industrial parks, economic corridors, and the like. All of these projects simultaneously mobilize China's over-expanded construction capacity and place excess funding, as host countries receive these investments as deferred and long-term loans.

From the stated objectives of Arab countries and China, it follows that these economies can realize significant mutual benefits based on Chinese FDI in non-energy sectors and on increased trade as a result of investments.

What can be an obstacle to this perfect scenario is the fact that the Chinese and Arab economies are also compatible in terms of the oil trade. China is the largest importer and the Arab region is the largest oil exporter in the world. If the economic relations of these regions are reduced to this scenario, Arab countries will not benefit significantly from joining the BRI.

The Belt and Road is made up of two main routes: the *Silk Road Economic Belt*, which connects the inland route from Asia to Europe, and the *21st-century Maritime Silk Road*, which connects the coastal areas of China, Southeast and South Asia, the Middle East and East Africa. According to the project, the Middle East has access to both the land and maritime parts of the BRI. However, due to security-related issues and the complex geopolitical situation in this region, very few routes pass through these countries for the time being.

There are several Arab countries in the Middle East and Africa on the Silk Road. Four Arab countries on the Maritime Silk Road were selected for the analysis: Egypt, Saudi Arabia, Oman and Yemen. These were selected for the case study because they belong to different types of economy, otherwise very similar Arab economies. Saudi Arabia is very rich, the typical oil economy. Oman has significant deposits and production of oil, but as a small country, it does not have funds that can compete with rich oil economies. Egypt has developed a few sectors in addition to the energy sector, while Yemen is the poorest and most underdeveloped country of the region.

All of these countries have untapped port potentials and poor transport and trade links, except Egypt, whose potentials are relatively well utilized, though not close to their own capacity. China's infrastructure projects offer new development concepts and possibility to diversify monolithic economies, of both rich and poor countries, and offer poorer economies a chance for economic development. The common interest field seems to be very broad.

Undoubtedly, the BRI brings significant advantages and benefits to China since the whole project is primarily and foremost tailored to Chinese interests. However, the impact and effects of the investments under this global project on other participant countries must be the subject of deeper research.

The first hypothesis is that Chinese companies' investments in infrastructure projects, as well as the construction of factories and industrial zones, enable less developed economies to become more involved in international trade flows, diversify revenues and increase the range of exported products at acceptable costs. By analysing the sectoral distribution of current Chinese investment, it should be assessed whether China in this region is only trying to pursue its interests in regular and secure oil supply, or whether its strategy, in addition to this primary objective, is to strengthen the economy of the entire region. If all investments are in the oil or the oil transportation sector, then there will be no significant benefit for these countries from Chinese investments. Placement of FDIs outside the energy sector can ensure partial diversification of these economies, increase the volume, quality and export of their products.

The second hypothesis concerns the trade aspects of the BRI. As in the case of FDI, China's interests are expected to be primarily in trade arrangements, given that China is an initiator of the BRI project. However, there are indicators for the opposite hypothesis: Arab countries on the Maritime Silk Road, or at least some of them, can benefit from trade relations with China, despite the low competitiveness, limited scope and a reduced assortment of their products and high competitiveness of Chinese products.

The indicator for this hypothesis is as follows. China, as the biggest proponent of the so-called win-win strategy cooperation with assumed benefits for all sides, supports Arab countries, as partners in the BRI, in their aspirations to diversify their economies.

In its strategy for building relations with Arab countries (China's Arab Policy Paper, Part III, 2.4.), China stated its intention to support the import of more non-oil products from Arab countries, as an integral part of the development of overall economic cooperation. The aim is to balance the import-export relationship between China and these countries by improving the production structure.

Trade benefits will be determined by applying competitiveness indicator, specifically the *coefficient of conformity*, which determines the import-export correlation between the two countries in respect of certain groups of products. The aim is to determine if there is a production (excluding oil) in the countries of the region that would be competitive enough for the Chinese market. The expectations are not too high, given the wide range and productivity of Chinese production, but the assumption is that at least some of the Middle Eastern economies have specific products, which would meet Chinese import demand.

The first chapter gives an overview of theoretical assumptions about the effects of foreign investments and trade, with an emphasis on the potential benefits that China and selected Arab countries may yield from this kind of

international cooperation. These suggestions partly rely on the theoretical assumptions, but more on the acquired knowledge about Chinese development strategies and its way of doing business within the BRI. It is followed by empirical costs and benefits analysis for individual Arab countries on the Maritime Silk Road. The scale and sectors of allocation of Chinese investment, as well as its results, are then analysed. Besides, by application of the coefficient of conformity, a group of products whose export to China is likely to increase is determined for each country.

## THEORETICAL BACKGROUND

# Potential benefits through foreign direct investments

Theoretically, the inflow of new capital has positive implications for the development of all economies involved in the investment project. The most common are: an increase in the total volume of a country's production by setting-up new enterprises, expansion of economic activities, generating new jobs, raising production quality if multinational companies (MNCs), transfer new technologies to their branches in a host country (Romer, 1990, Grossman and Helpman, 1991). MNCs can apply better organizational or management practices, improve productivity (Grossman and Helpman, 1991), gains from increased trade (if FDIs placed in tradable products) and gains from invested capital, although profits do not usually remain in the host country. Indirectly, this would further lead to the improvement of the macroeconomic environment, labour efficiency, and increasing competitiveness in the global market (Stanojević, 2019, p. 65).

Significant positive effects of FDI on economic growth are recorded by Hofmann (2013), Hlavacek and Bal-Domanska (2016) in the analysis of the effects of FDI in the Central European countries. However, most studies in quantitative terms do not result in a significant positive correlation between FDI and economic growth, and some studies have suggested negative effects of FDI on economic growth. The latter are researches of Bandelj and Mahutga (2010), Curwin and Mahutga (2013), Kentor and Boswell (2003) and Firebaugh (1992), who analysed the impact of FDI stock.

The Belt and Road Initiative is an opportunity for China to be one of the world's leading investors and thus achieve or maintain economic growth at a relatively high level. The Chinese government has significantly increased its support not only to state-owned companies, which have so far been the main investors but also to private ones. The administrative procedures for investment placement have been completely changed. The system in which the government needed to approve an investment was abolished and the simple registration of any company wishing to invest abroad was introduced (Global Markets, 2015, p. 1).

The strategy of investing in infrastructure projects has the potential to ensure the growth of the Chinese economy, but also of the countries on the BRI routes.

China's economy is benefiting enormously from the employment of its growing construction facilities and supporting industries, in which China is also a world leader: cement, steel and several mechanical engineering industries. Overseas infrastructure projects will absorb the current over-capacity of the Chinese construction industry and prevent a potential crisis of overproduction in this industry. Investing in infrastructure outside China at the right moment was crucial, as the booming growth would have led to overinvestment, and this to overcapacity (mainly housing), which was the prelude to all major financial crises in recent history.

The recipient countries of China's FDI should theoretically benefit from infrastructure development. An important mechanism of the influence of infrastructure on development is generating a production increase through market expansion (Prud'homme, 2004, pp. 15-16). The volume, state and efficiency of an infrastructure strongly influence the production and distribution of goods and services, as well as the living conditions of the population, i.e., the labour force. Transport infrastructure produces an increase in the commodity market by lowering transport costs and accelerating the delivery of perishable products. Market increase leads to the strengthening of competition, specialization, productivity growth and an increase in the volume of production (Stanojević, 2019, pp. 63-64). Infrastructure projects seize an opportunity directly through construction, which on the other hand create opportunities for an entire system of enterprises, from multinationals to local small and medium-sized businesses, which will benefit from new activities.

# Potential benefits of trade growth

One of China's motives for including the Middle East region in the BRI is a potential increase in exports. The BRI adds to China's exports in two ways. Firstly, new routes, with new arrangements with the countries to which they lead, will enable China to conquer new export markets and maintain or expand the existing ones. Secondly, the new routes will significantly accelerate Chinese goods deliveries and reduce the cost of transport to Europe via the Middle East, but also to the Middle East countries, which will additionally have a positive impact on the increasing export of Chinese goods.

What is more important for this research is to determine whether the trade of Arab countries will suffer costs or gain benefits within the BRI. Arab countries' potential disadvantages of joining the BRI stem from the fact that almost all Chinese products are competitive in the Arab markets. Countries with some

production outside the oil sector should, in theory, collapse in the face of intense competition from Chinese companies.

However, this was also expected for other economies, given that China's industry is the largest, most developed, most competitive in the world. Nevertheless, the research shows the opposite results. Among the authors who have analysed the benefits of trading within the BRI, we will mention Bastian (2017), Zakić (2019), Chen and Yang (2016) who analysed Chinese investments in Central and Southeastern Europe and the Balkan countries. Their results highlight the positive and, in Bastian's research, even exceptional results. Spill-over effects in the macroeconomic sense of this initiative are mostly visible through trade within the 16+1 mechanism. It gives the most obvious results, stating that especially exports from the CEEC to China were increased by 120% during this period (Bastian, 2017, p. 33).

The positive effects of Chinese presence in underdeveloped regions are also analysed for Africa. Almost all of the authors (Alden, 2005; Eisenman, 2012; Zakić, Radišić, 2018) found significant growth in African exports as a result of China's economic activities in the region.

The economies such as African, transitional European, as well as Arab are not competitive with the Chinese economy. So we think we need to statistically explore what kinds of advantages the Arab economies can potentially gain from new export markets, and which sectors are at risk of weakening. The goal is to determine what non-oil products these countries can export to China. A simple and very reliable method is the coefficient of conformity (CC). It is calculated in the following formula:

- The *i* stands for exporter country and *j* for importer partner;
- The subscript p shows different product groups;
- The Xpw stands for share of exports of product *p* in the overall export of country *i*;
- The Mpw is share of imports of product *p* in the overall import of country *j*.

This actually determines the export-import structure of the two countries in terms of one product group. The UN SITC (Standard International Trade Classification) or HS (Harmonised Standard) classification is most commonly used. Given that the SITC basis does not have all the required data for Arab countries, we used HS.

The results of the CC analysis have a value between 0 and 1. Value 1 means perfect complementarity between export of the country i and import of the country j. By contrast, the values closer to 0 refer to a competitive trade structure.

We tested the product groups with the highest share of exports of each analysed country on the Maritime Silk Road. Products with high and relatively high coefficient values are likely to gain market position in the future due to China's growing presence and intensification of bilateral relations, as well as lower transportation costs.

The data obtained in this way represent only a theoretical possibility, that is, a potential, while its realization will depend on current trade arrangements.

## **EGYPT**

Egypt is one of the lower middle-income economies, with a dramatic fall in household income after the Arab Spring, to the level of underdeveloped African countries. Egypt has oil, but energy reserves, production and export volumes are relatively small, so the economy does not have the problem of an overvalued exchange rate. Oil exports account for about 27% of Egypt's total exports, which, even in periods of high oil prices, does not generate significant surpluses to the country.

The second problem of the oil economy, de-industrialization, is not that evident, largely due to the exceptional advantages of its geographic location. Egypt has no developed industry other than the textile, but its economy is much more diverse than other Arab economies.

Except for oil, Egypt traditionally has large agricultural production in the Nile Valley, cotton and textile production, huge revenues from the Suez Canal, and slightly less from tourism.

In terms of trade, the energy sector is of paramount importance to China and accounts for about 70% of China's total imports. Chinese exports to Egypt are, on average, ten times higher than imports from this country, with the Chinese surplus' growing tendency. (Trade map, 2019).

Other products, which are important Egyptian export potential and at the same time show a high CC, are cotton, plastics, fruits and to a lesser extent, sulphur, lime and cement (Table 1).

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Product	CC		
Mineral fuel	0.9969		
Cotton	0.8642		
Plastics and articles thereof	0.9059		
Edible fruit and nuts	0.8927		
Salt; sulphur, lime and cement	0.7552		
	Product  Mineral fuel  Cotton  Plastics and articles thereof  Edible fruit and nuts		

Table 1: Coefficient of conformity of the most important export products of Egypt with import of China

Source: Author's calculation

Much of these Egyptian export potentials to China have been realized. The value of exported fuel has doubled, but a significant increase has been reported in plastic exports, from \$9 million to \$72 million, cotton exports from \$3 million to \$12 million, and fruit exports tripled in 2016-2018, while cement exports generally stagnated.

Egypt's other key export products worldwide (textile fibres, copper and ores) showed a low CC with Chinese imports. Exports of copper and ores to China have indeed been reduced, but exports of fabrics and clothing from Egypt to China have quadrupled. As China is a major exporter of these products, statistics show the CC below 0.4. The growth of textile exports is probably the result of an agreement under another investment or trade arrangement.

Given the exceptional geographic location of the Suez Canal, at the intersection of two oceans and three continents, the Chinese government was very interested in investing, with the aim of accelerating the transport of Chinese goods to Europe, but also securing the access of its commercial ships from the Red Sea to the Mediterranean. This provides China with more favourable conditions for using maritime routes toward Southern Europe. Egypt has a chance to make a major development shift based on large-scale foreign investment.

The largest investor in Egypt is the United Kingdom. Because of this Egypt's "dominant" partner, the penetration of Chinese companies was not welcomed and was preceded by public condemnation, pressure on host countries, and obstruction of Chinese projects.

Chinese companies have been investing heavily in Egypt since 2006, with larger investments coming no sooner than 2013. Egypt, after Saudi Arabia, is the

destination of China's largest investment among Arab countries, with \$25 billion invested in 30 projects (*China World Investment Tracker*, 2019).

Chinese investments placed outside the oil sector are of the greatest significance for the development of the Egyptian economy. Chinese companies have invested about \$7.5 billion, or one-third of the total investment in the energy sector. British investment, by contrast, is mostly made in the oil sector, which does not support economic development, though it does mobilize a significant portion of the workforce.

By 2019, Chinese companies, mostly state-owned, invested nearly \$10 billion in infrastructure projects that facilitate the transportation of Chinese goods to Europe. About \$2.6 billion was invested in the maritime and rail transport infrastructure of the Suez Canal, and \$5.7 billion in the real estate sector, mainly also in the Suez Canal zone. One of China's major projects in the Suez Canal is *China Ocean Shipping's investment* - COSCO, which invested about \$150 million in a joint project to operate and manage one of the Suez Canal terminals. For the construction of the second phase of the same port (Port Said East Port), *China Harbor Engineering* invested \$219 million to build a 1200-meter long pier (Scott, 2014, pp. 10-14). The same company built another port in the port of Al-Adabia, located at the southern entrance to the Suez Canal. The project was worth a billion dollars.

Over time, China has become the largest investor in the Suez Canal Industrial Area, covering six ports and an area of nearly 500 square kilometres. As a result, the Suez Canal has doubled the traffic flow between the Red Sea and the Mediterranean and the port's capacity in terms of the number and size of vessels. Transit times between Asia and Europe are significantly reduced. This main transportation route between Asia and Europe has become even more important.

In the real estate sector, China's largest investment is *Tianjin Development*, which in the Suez Canal area has developed a special economic zone in the suburbs of Cairo - *Tianjin Economic and Technological Development Area* (TEDA). The aim of this project is to enable Egyptian and Chinese companies to conduct trade and manufacturing activities in this area. So far, the Chinese company has invested about \$500 million in this project (China Global Investment Tracker, 2019).

#### SAUDI ARABIA

The discovery of oil in this country in 1936 and the beginning of its production in 1938 completely changed the state of the country and shaped its economy in the coming decades. Oil revenues account for about 90% of budget revenues, 80% of exports (World Trade, 2018) and about 50% of GDP (OPEC, 2019), which makes this country highly dependent on price fluctuations in the

world market. On the other hand, despite its oil wealth, Saudi Arabia is unable to provide enough jobs for its population, which has doubled in the past two decades, to about 33 million. Saudi Arabia's enormous economic and political power is secured by its crucial role in OPEC, through which it exerts a significant influence on world oil price movements.

Saudi Arabia is very important to China because it is its largest supplier of oil. This is one of the few countries that make a trade surplus with China. Total Saudi Arabia exports to China yield about \$45 billion a year to this country, while imports from China are about \$17.5 billion (Trade Map). Around 12% of total Chinese fuel imports come from Saudi Arabia, while oil exports to China account for 15% of total Saudi oil exports (calculation based on Trade map data). Trade with non-oil products between the two countries is also growing.

The coefficient of conformity, as expected, shows an extremely high importexport match in terms of energy, but it is also high in the case of plastics and articles thereof whose main raw material is also oil (Table 2).

Table 2: Coefficient of conformity of the most important export products of Saudi Arabia with import of China

Code	Product	CC
HS 27	Mineral fuels	0.9998
HS 28	Inorganic chemicals	0.8661
HS 29	Organic chemicals	0.8488
HS 39	Plastics and articles thereof	0.7813
HS 76	Aluminium and articles thereof	0.8455

Source: Author's calculation

The products presented in Table 2 have export growth potential in the Chinese market. So far, these potentials have been largely realized. Export of organic chemicals, aces and plastics doubled in 2016-2018, which is in line with the projected potentials. Inorganic chemicals and aluminium are exported at steady amounts.

Deviation from the forecast is a remarkable increase in exports of rubber and rubber products from Saudi Arabia to China. Exports have increased as much as 15 times in three years. The CC for tire exports was 0.52 and therefore was not envisaged as an export opportunity for Saudi Arabia. China has a significant import, and export of this product, but in the Saudi economy, it plays

a minor role and statistics confirm this fact. Its increase in exports of non-petroleum products is a result of a compromise to obtain large investment projects, which, given the size of Saudi Arabia, have far greater value than in other countries.

Saudi Arabia has been receiving significant Chinese investment since 2007. With \$1 billion in 2005, they reached \$37.55 billion in 2019 (China Investment Tracker). Only one-quarter of China's total FDI, about \$8.15 billion, has been invested in the oil and gas sector, which justifies Saudi expectations that joining the Chinese Belt and Road project can diversify this monolithic oil economy.

China invested mainly in transportation infrastructure and projects. Total investment in the transportation sector is more than \$6.5 billion, out of which \$3 billion placed to just one shipyard project - *King Salman International Complex* in 2018. A large number of investment infrastructure projects are allocated to railways. The company that implemented all the Chinese projects is *China Railway Construction*. The total contracted value of the projects is approximately \$5 billion, and by the end of 2019, the value of the investments was \$2.1 billion. Other investments in the construction industry (cement) and real estate construction reached \$5.4 billion by the end of 2019.

In addition to infrastructure projects, a relatively important place among Chinese investments in Saudi Arabia is the aluminium industry, with more than \$5 billion invested by Chinese companies in 2007. An important destination is the chemical industry, with an inflow of \$2.5 billion, as well as alternative energy sources. Export growth results are evident in the case of chemical products, whose exports to China increased from \$9.8 million to \$25 million between 2014 and 2018. In the case of aluminium, growth has also been recorded, but with big annual fluctuations, thus no general conclusion can be made on the effects of Chinese investment in this sector.

#### **OMAN**

China has a pronounced trade deficit with Oman, which is expected since its main trade product is oil. China's imports are ten times higher than its exports to this country (Trade map, 2018).

Energy sources account for 78% of Oman's exports to the world, 70% for oil and 8% for gas. In addition to energy, export products include organic chemicals and fertilisers, with 3-4% of exports. These products show a very high coefficient of compliance with China's imports (Table 3).

Code Product CC

HS 27 Mineral fuels 0.9976

HS 29 Organic chemicals 0.9822

HS 31 Fertilisers 0.8644

Table 3: Coefficient of conformity of the most important export products of Oman with import of China

Source: Author's calculation

However, export potentials beyond fuel were not realized. About 96% of Chinese imports from Oman are mineral fuels, and organic chemicals 3.7%.

The real exchange rate of the Omani rial against the yuan is very unfavourable. In oil and gas exports, this is not of particular importance, as their price is formed outside national economies. This is not the main reason, but it is an additional aggravating circumstance for China's non-oil imports from Oman.

Trade with China has not provided Oman with benefits, but Chinese investments have. The future prospects for the country's socio-economic development depend on its ability to attract more FDI to those outside the oil and gas sector. So far, very little investment has been placed in non-energy sectors, but Chinese companies are an exception.

Table 4: Chinese FDI in Oman

Table 1. Chinese I DI in Chian					
	Chinese Entity	Quantity in Millions	Sector	Subsector	
2005	Sinohydro	150	Utilities		
2008	China National Building Material	160	Real estate	Construction	
2009	Shandong Electric Power	720	Energy		
2015	Sinolight	300	Agriculture		
2016	Ningxia investors	240	Other	Industry	
2016	Power Construction Corp	2,300	Energy	Gas	
2016	Power Construction Corp	330	Energy	Gas	
2018	CNPC	320	Energy	Oil	
	Total	4,520			

Source: China Global Investment Tracker: https://www.aei.org/data/China-Global-Investment-Tracker

China has invested about \$3 billion in the oil and petroleum and petrochemical industries, but about \$550 million has been invested outside the energy sector. Around \$300 million worth project to build the first sugar refinery in Oman in 2015 was implemented by Chinese company *Sinolight*. Production meets domestic needs and exports of sugar, which, according to the latest figures in 2017, doubled compared to 2016 (Trade map, 2018).

The location of the processing complex is important to China as it is located near the Oman port of Sohar in the Gulf of Oman. The second investment also includes a coastal belt and is carried out through a project to build an industrial park on the site of the fishing village of Duqm. The planned investments are about 10 billion, but for now the Chinese company - *Ningxia investors* has realized works worth \$240 million. China has provided access to the Oman coast, and Oman gains a chance to diversify its economy and secure some revenues from the non-oil sectors.

#### YEMEN

Yemen is the least developed country in the Middle East region with a GDP of \$944 per capita (World Bank, 2018). There are no significant reserves of oil or mineral resources, except for rock salt and marble. The scarcity of fertile land, as in all countries of the Arabian Peninsula, has led to dependence on food imports, which is one of the key problems for this poor country.

The already poor economy of Yemen has been further affected by numerous tribal conflicts that have plagued this country and, since 2015, by the civil war, which has left dramatic consequences on the country's economy and society.

Its geographic location is not attractive and the only potential for development is the port of Aden near the entrance to the Red Sea. It is a duty-free zone and is the most attractive destination for FDI placement in this country. Foreign direct investments in Yemen are not large, but since it is on the routes of the Maritime Silk Road, China is interested in expanding and modernizing these port facilities.

China's trade with Yemen is extremely small compared to other countries in the region. Yemen has a small amount of oil. In terms of reserves, in 2015, it ranked 28th and 64th in the world (EIA) in oil production. Nevertheless, as the rest of the economy is so weak, oil is still a major export product.

Accordingly, the coefficient of concurrence with oil imports to China is above 0.98 (Table 5). Other products showing a high coefficient of compliance with Chinese imports are ores, parts of electrical machinery and equipment and fish and seafood.

O		
Product code	Product	CC
HS 27	Mineral fuels	0.9850
HS 26	Ores, slag and ash	0.9259
HS 85 Electrical machinery and equipment and parts thereof;		0.8655
HS 03	Fish and seafood	0.7246

Table 5: Coefficient of conformity of the most important export products of Yemen with import of China

Source: Author's calculation

These export potentials, except fuel exports, have not been realized. More than 98% of Chinese imports from Yemen are mineral fuels (Trade map, 2019).

In contrast to the (expected) low exports, Yemen benefits significantly from the investments made by Chinese companies, especially in the oilfield exploration (Sinopec) and telecommunications infrastructure (Huawei).

Since 2005, Chinese state-owned Sinopec, and since 2008 Sinochem, have been operating in the oil and gas exploration and production sectors in Yemen. There is no official information on Sinopec's investments, and Sinochem owns 17% of Block 10, Yemen's largest oil field, whose daily production was raised from 45,000 to about 70,000 barrels a day, thanks to Sinochem's technical improvements and investments. (Sinochem, 2019).

Table 6: Chinese FDI in Yemen

	Table 0: Chinese TDI in Tenien				
	Chinese Entity	Quantity in Millions	Sector	Subsector	
2006	Sinoma	260	Real estate	Construction	
2006	Genertec	220	Real estate	Construction	
2007	China National Building Material	250	Real estate	Construction	
2008	Sinochem	470	Energy	Oil	
2013	China Communications Construction	510	Transport	Shipping	
	Total	1,710			

Source: China Global Investment Tracker: https://www.aei.org/data/China-Global-Investment-Tracker

Other Chinese investments are in line with the primary objective of the Belt and Road Initiative - engaging the Chinese construction industry. The largest project is aimed at the expansion and deepening of container ports in Aden and Mokha. The project started in 2013 and had an investment value of \$510 million. Chinese Sinoma, Genertec and CNBM have built cement plants by investing \$260, \$220 and \$250 million (table 6).

Although not producing spectacular results, Yemen's cement exports are increasing by an average of 10% per year, while imports in 2018 have been reduced to a third of the 2016's figure (Trade map, 2019). Chinese companies do not participate in the operations of these factories, but affordable construction costs and favourable credit conditions have provided for Yemen to make a significant step in developing its economy.

## **CONCLUSIONS**

Building infrastructure and industry advancements are common needs and mutual benefits of China and countries in the region.

In terms of investment, benefits are measurable in some cases, in others not. The capacities available to the host countries have been significantly increased, and the development of transport infrastructure, an increase of ports' capacities, new roads and railways are visible. Benefits for the host countries include connections to international trade flows, but also an increase of direct revenues in most port facilities: the Suez Canal, Jeddah, Aden and potentially increased use of the Sohar port in Oman.

The potential risk associated with Chinese investments in infrastructure is over-indebtedness as a result of Chinese loans. Rich countries such as Saudi Arabia are not exposed to this risk. These countries have sufficient resources, and their budget can support large infrastructure projects. Chinese companies simply offered the most favourable conditions for construction works.

The risk of costs exceeding benefits is inversely proportional to the size of the economy. Eight out of the 68 countries are not able to repay their debts: Djibouti, Pakistan, Montenegro, Laos, Sri Lanka, etc. (Hurley, Morris and Portelance, 2018, p. 4). These are usually small economies with large infrastructure projects (Stanojevic, 2019, p. 71). In the four analysed countries, including Yemen, as a small and poor country, there was no over-indebtedness due to Chinese investment. Yet, in addition to the careful planning of the loan arrangement, small countries should insist on increasing the share of concessions or grants to the loan in order to reduce the risk of debt repayment, which also suits Chinas' interests more.

Some countries on the Maritime Silk Road have increased their security risks by joining the BRI. Due to the geographic position at checkpoints accessing the Suez Canal, five countries have military bases in Djibouti: France, Italy, Japan, the USA and China. Great tensions were created by the establishment of a Chinese military base Proximity of various military facilities produces tensions, and it is certainly a security risk for the East African region (Babić, 2019, p. 73). The countries included in this survey are not exposed to additional risks so far, but China's presence in volatile Yemen leaves room for international tensions to build up in this country.

In terms of trade, the results of the survey are quite layered in some segments.

The Arab countries along the Maritime Silk Road generally achieve an increase in exports to China, but also in exports generally, as a result of joining the BRI. In some countries, this increase is very positive for the economy, as it relates to sectors outside the oil and gas sector and makes it possible to diversify these monolithic economies. Some export growths have economic logic, others do not.

Examples of mutually beneficial cooperation that have contributed to Arab trade are Saudi Arabia's exports of chemical products and China's investment in the construction of Oman's sugar refineries. The first is the result of China's interest in the chemical sector in which it has invested heavily, and exports are the result of these FDIs. In the second case, Chinese companies provided themselves with a more prosperous project, and Oman realized the production it had not had before. The result is not a direct export of sugar to China, as Omani production is negligible from the perspective of the Chinese market, but export to other countries in the region, which generally lack food production.

On the other hand, there are some examples, which are not explained by economic logic and thus our statistical forecasts, but these results are generally predicted by another hypothesis. Such examples encompass a dramatic increase in exports to China of products that have not received Chinese investments, and exports not expected to take place due to the trade schemes between China and these countries. Those are the export of fabrics and clothing from Egypt to China, which has quadrupled in two years, Saudi exports of rubber, but also examples from research of other authors on the strong growth in exports of African and Balkan products to China. Thus gained benefits by low-competitive economies, represent, by contrast, a loss for China as the main initiator. But this is, most often, calculated cost.

The inconsistencies expressed by economic theories and the empirical research lead to the general conclusion that the Chinese economy in international relations must be understood in the light of the comprehensive system of the Chinese state. Other economies are generally of the Western types, even if they are not originally from the global West. Most economies going international

appear abroad not as a comprehensive economic system but as a set of companies. Due to its strong, centralized national economy, Chinese companies do not necessarily behave in accordance with economic logic. The state has the power and authority to make up for conscious losses to one company, for the sake of a larger project with another company. In a particular sector, China will make compromises (e.g., mass imports of fabrics from Egypt) to achieve higher or higher-order benefits, or benefits in another sector (e.g., control over six ports in the Suez Canal). China may decide that there are no economic benefits at all in one country for the sake of a long-term economic or geopolitical strategy (Pakistan). China's broader and long-term strategy does not necessarily have a negative impact on the future of host countries. The problem is the host countries usually do not take into account the Chinese broader perspective.

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# ARAPSKE ZEMLJIE NA POMORSKOM PUTU SVILE COST-BENEFIT ANALIZA

Apstrakt. Ovaj članak istražuje potencijalne efekte kineskog ekonomskog prisustva u zemljama duž trasa Pomorskog puta svile. Za analizu su odabrane četiri arapske zemlje na Pomorskom putu svile: Egipat, Saudijska Arabija, Oman i Jemen. Potencijalni i realizovani troškovi i koristi istražuju se i za Kinu i za arapske zemlje. Dve hipoteze su testirane. Prva je da investicije kineskih kompanija omogućavaju odabranim zemljama da se uključe u međunarodne trgovinske tokove, da diverzifikuju prihode, povećaju proizvodnju i prošire proizvodne asortimane, uz prihvatljive troškove. To je dokazano analizom sektorske raspodele kineskih investicija i trenda ulaganja u određene segmente arapskih privreda, uglavnom van energetskog sektora. Druga hipoteza je da neke ili sve arapske zemlje duž Pomorskog puta svile mogu povećati izvoz u Kinu, uprkos slaboj konkurentnosti, ograničenoj količini i asortimanu proizvoda i visokoj konkurentnosti kineskih proizvoda s druge strane. Primena koeficijenta podudarnosti između arapskog izvoza i uvoza iz Kine pokazala je da arapske zemlje imaju šansu da povećaju samo izvoz nafte i organskih hemikalija u Kinu. Međutim, analiza trgovinske statistike pokazuje dramatično povećanje izvoza mnogih proizvoda koje sama Kina izvozi po znatno konkurentnijim cenama, što je izvan ekonomske logike. Orijentisana ka širim i dugoročnim nacionalnim interesima, Kina čini kompromise u određenim sektorima radi veće koristi u drugom sektoru ili zarad sticanja prednosti višeg reda, poput geostrateških pozicija.

Ključne reči: Pomorski put svile, arapske zemlje, SDI, infrastruktura, spoljna trgovina.

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