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The Belt and Road Initiative – a systematic literature review

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Kevin Marques

Abstract

China's rapid rise has challenged the world's and economic order's dominance. In 2013, President Xi Jinping announced a massive infrastructure and investment project, the Belt and Road Initiative (BRI), which would connect Asia, the Middle East, Europe, and Africa through a complex network of roads, railways, and ports, aiming to be "One Belt, One Road" (OBOR). The aim is to promote economic cooperation, trade, and connectivity among all countries within the Initiative.

This study aims to know what impacts the BRI has on economies within the Initiative and how China's ties with the West have been influenced or influenced. This study seeks to understand the impact of the Initiative on its member countries regarding infrastructure investment, trade, and diplomatic relations with China and how it has influenced relations between China and the West.

The key findings of this study show that the BRI impacts the countries within the Initiative, promoting economic growth and investment, facilitating trade among all countries within the Initiative, and promoting connectivity and regional integration. However, it raises concerns about debt sustainability, especially in countries with a high tax burden. China's BRI has resulted in geopolitical implications with its gained influence. It is perceived as a means for China to extend its strategic interest and impact.

JEL Classification Codes: F02, F43

Keywords: Belt and Road Initiative, China, Economic Growth, Economic Integration, Connectivity

Resumo

A rápida ascensão da China tem colocado um desafio ao domínio da ordem económica mundial. Em 2013, o Presidente Xi Jinping anunciou um projeto de infraestrutura e investimento, a Iniciativa do Cinturão e Rota (BRI) que ligaria a Ásia, o Médio Oriente, a Europa e a África através de uma complexa rede de estradas, caminhos-de-ferro e portos, com o objetivo de criar “Uma Faixa, Uma Rota” (OBOR). O objetivo é promover a cooperação económica, as trocas comerciais e a conectividade entre todos os países da iniciativa.

O objetivo deste estudo é compreender quais os impactos que o BRI tem nas economias que o integram e como é que os laços entre a China e o Ocidente foram influenciados ou influenciaram o BRI. Este estudo pretende compreender o impacto da iniciativa nos países que o integram relativamente ao investimento em infraestruturas, trocas comerciais e relações diplomáticas com a China, e de que forma é que este influenciou as relações entre a China e o Ocidente.

As principais conclusões deste estudo evidenciam que o BRI tem um impacto nos países que o integram, nomeadamente na promoção do crescimento económico e investimento, na facilitação do comércio entre os países, promovendo a conectividade e a integração regional. No entanto, suscita preocupações quanto à sustentabilidade da dívida, especialmente em países com uma elevada carga fiscal. O BRI provocou tensões geopolíticas, com a influência que ganhou sendo visto como um meio para a China alargar o seu interesse e influência estratégicos.

Código de Classificação JEL: F02, F43

Palavras-chave: Iniciativa do Cinturão e Rota, Crescimento económico, Integração económica, Conectividade

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Glossary of Acronyms

AF – African Union

AIIB – Asian Infrastructure Investment Bank

ASEAN – Association of Southeast Asian Nation

BCE – Before the common era

BRI – Belt and Road Initiative

BRICS – Brazil, Russia, India, China and South Africa

CPEC – China-Pakistan Economic Corridor

CRE – China Railway Express

ECB – European Central Bank

EEAS – European External Action Service

EMDC - Emergent Market and Developing Countries

EU – European Union

EUOBOR – European Institute for One Belt One Road

FDI – Foreign Direct Investment

FOCAC – China-Africa Cooperation Forum

FOIP – Free and Open Indo-Pacific

GCC – Gulf Cooperation Council

NDB - New Development Bank

NDRC – National Development and Reform Commission

NELB – New Eurasian Land Bridge

OBOR – One Belt One Road

PBC – People's Bank of China

PPP – Public-Private Partnerships

PRC – People's Republic of China

SAARC – South Asian Association for Regional Cooperation

SCZ – Suez Canal Economic Zone

SLR – Systematic Literature Review

SREB – Silk Road Economic Belt

US – United States

USD – United States Dollar

YBNR – Young Belt and Road

Chapter 1 – Introduction

The Ancient Silk Road is more than a single route or road; it consists of a network of routes used for international trade from Europe to East Asia, which lasted more than 1500 years until the Ottoman Empire closed off the exchange. The routes evolved, and their significance and extent shifted in response to historical and geopolitical factors.

The Silk Road was named after the Ancient Silk Road by the German explorer Baron Ferdinand von Richthofen in 1877 (Ilhéu & Campos, 2021); hence the routes are ancient. These routes lasted years to conduct business, the most important of which was silk and other luxury goods and commodities. The Ancient Silk Road enabled exchange between different civilizations and settlements, such as the Romans, Persians, and Greeks, culminating in a rich chain of cultural interactions that crossed borders and spread across the Ancient Silk Road.

As shown in Figure 1.1., the rise of maritime trade, as well as the Age of Exploration, aided the Ancient Silk Road's growth and spread, particularly with the discovery of new sea routes, such as those along the coasts of Africa, the Middle East, and India.



Figure 1.1. Map of the Ancient Silk Road from the Provincial Museum of Gansu

The Belt and Road Initiative (BRI) is a government-funded initiative that aims to be “One Belt, One Road” (OBOR), also known as the New Silk Road. The Chinese agenda is evident in its intentions to connect a group of nations worldwide by land, sea, and rail, all connected by six economic corridors. With the OBOR, China is “reviving” the Ancient Silk Road, with all of its benefits, spreading across the globe and using the Chinese renminbi as an international trade currency, contributing to the de-dollarization¹.

The rapid rise of China has challenged the dominance of the world and the economic order in recent years. The rise of China has been one of the significant changes in the global power

¹ De-dollarization is the process of substituting the US Dollar as the currency used for international trade

structures in recent decades (Tomé, 2019). The BRI, was announced by the President of the People's Republic of China, Xi Jinping, in 2013 as an ambitious project connecting a group of nations worldwide by sea, road, and rail. This ambitious project aims to re-establish the Ancient Silk Road at several strategic points.

This BRI is beyond revolutionary and is heavily funded by the Xi Jinping government, making this project's scope enormous, and its timeline spans 30 years. The initiative's first phase was completed in 2021, and the project is expected to be completed by 2049.

The discussions about the project that have emerged in the political and economic spheres have primarily focused on the future; as a result, China has emerged as a threat to a global order based on western rules, which could endanger global economies and societies. In this regard, the West increasingly sees the BRI as a mechanism for containing “deglobalization” (Luo et al., 2022).

This study aims to understand better and assess the impacts that the BRI has on all participating countries, on a first level, economic effects directly on them, and on a second level, the ties between China and the West and how the BRI has influenced them. This research will be conducted through a Systematic Literature Review (SLR) since it's a robust method that provides a comprehensive, reliable, and unbiased synthesis of existing research on this topic, offering valuable insights and guidance for future research.

The topicality and relevance of this subject bring so much with it, as there is already a lot of literature available studying exactly the impacts and future trends of the project, how it will look in the future, and what is in it for countries participating. The consequences it will have locally and globally make it an essential study area, even for public and economic reasons, and how to address it.

Nevertheless, studying the BRI represents a problematic endeavor due to the dynamic and ever-changing nature of the topic, which has a broad and expensive scope, constantly changing. In addition, it can be challenging to find reliable and current data.

This research is divided into five chapters, which complement each other. This first chapter acts as a starting point, with an introductory sense of the study to be undertaken, its general framework, objectives, research questions, and relevance of the study.

The second chapter concerns the research methodology to be used, the research objectives, and the entire methodological process. In this specific research, the method comes before the literature for several reasons, including the focus and relevance of the study, defining the methodology upfront, ensuring that the review remains focused and directed to the research topic, establishing a clear research plan defining the scope of the review, allowing to outline

the specific objectives of the research and the selection criteria, including the exclusion criteria for the literature selected (Snyder, 2019).

The third chapter contains the literature review, with the theoretical framework of the concepts addressed, establishing an empirical link with the proposed objectives in the previous chapter. This chapter is divided into an overview of the BRI and its evolutions and ambitions.

The fourth chapter provides a view of the discussion of the results, very much linked to the previous chapter, as it offers critical aspects to be considered for this research, with the primary key takeaways to answer our research questions.

In the fifth and last chapter, the final results of the research are presented, in line with the defined research objectives, as well as the limitations of this study and guidelines for future research in the same field of study. Therefore, this document is intended to serve as a proposal for existing literature for these studies.

Chapter 2 – Research methodology

2.1. A Systematic Literature Review (SLR) approach

Keeping up with the state of the art in a specific field of study and collecting evidence in a particular area makes it hard to be at the vanguard of research (Snyder, 2019). Any scientific study must include a review of relevant prior literature. An adequate review establishes a solid foundation for furthering knowledge (Marangunić & Granić, 2014).

A Systematic Literature Review (SLR) has numerous benefits that make it an effective method for synthesizing existing research and knowledge in a structured and rigorous way. (Tranfield et al., 2003; Zupic & Čater, 2014). Our study will use the SLR as a research method since it's a trusting bibliometric method, increasing the research's reliability. A well-defined structure ensures that all relevant studies are identified and included in the review, minimizing bias and thoroughly analyzing the existing evidence on a specific field of study (Snyder, 2019).

Using an SLR method also ensures that all relevant studies are synthesized, combining the various methodologies and structures of the studies included in reviewing the study's object.

Beyond supporting the synthesis of the information from different studies, the SLR assists in assessing the quality of the studies included in the review, which may help determine the reliability of those studies (Marangunić & Granić, 2014). As a result, when the process is well documented, it becomes easier for readers to follow the methodology, the research criteria, and potential limitations.

2.2. Research objectives

Using an SLR will assist us in establishing a clear research plan and defining our review's scope, outlining the specific objectives, research questions, and inclusion criteria for selecting the relevant studies for this research. As a result, the definition of the methodology ensures that the review remains focused and relevant to the field of study and that the research remains structured and systematic.

The research objectives are stated here as the starting point of this study and aligned with the research purposes and the methodology that have been carefully selected. It is therefore proposed to develop an answer to the following research questions.

The proposed main research question for this study is: “*What impacts does the BRI have on the economies within the Initiative?*” the objective is to assess how the BRI’s impacts reflect on the economies that integrate the Initiative in regards to economic development and growth, trade, infrastructure development.

The proposed secondary research question is: “*How have China’s ties with the West been influenced or influenced the BRI?*” the aim is to put diplomatic relations between China and the West into perspective and assess how these ties could have been damaged or influenced by the BRI and vice versa.

2.3. Data selection and retrieval

Data selection and retrieval are essential in any research, laying the foundation for a robust analysis and offering valuable insights for the study *per se*. The inclusion and exclusion criteria were identified and selected, defining the specific parameters to choose the relevant studies for the review.

The inclusion criteria defined were as follows: (i) relevance to research questions, (ii) keywords, (iii) publication type (e.g., peer-reviewed journal articles, working papers, dissertations, reports, books), and (v) the areas of relevance in line with the study: Business Economics, Management and Regional Studies and International Economics.

After defining the inclusion criteria, the first step consisted of collecting data that met the chosen inclusion criteria, resulting in 97 samples. The second step consisted of the analysis of the articles and, therefore, the definition of the exclusion criteria, which were: (i) irrelevant studies not directly related to our research questions and objectives; (ii) the publication type; (iii) keywords and (iv) areas of relevance not in line with the study.

After this second step, we remained with 47 samples and moved on to the third step, the construction of the review. The process of the SLR is shown in Figure 2.1.

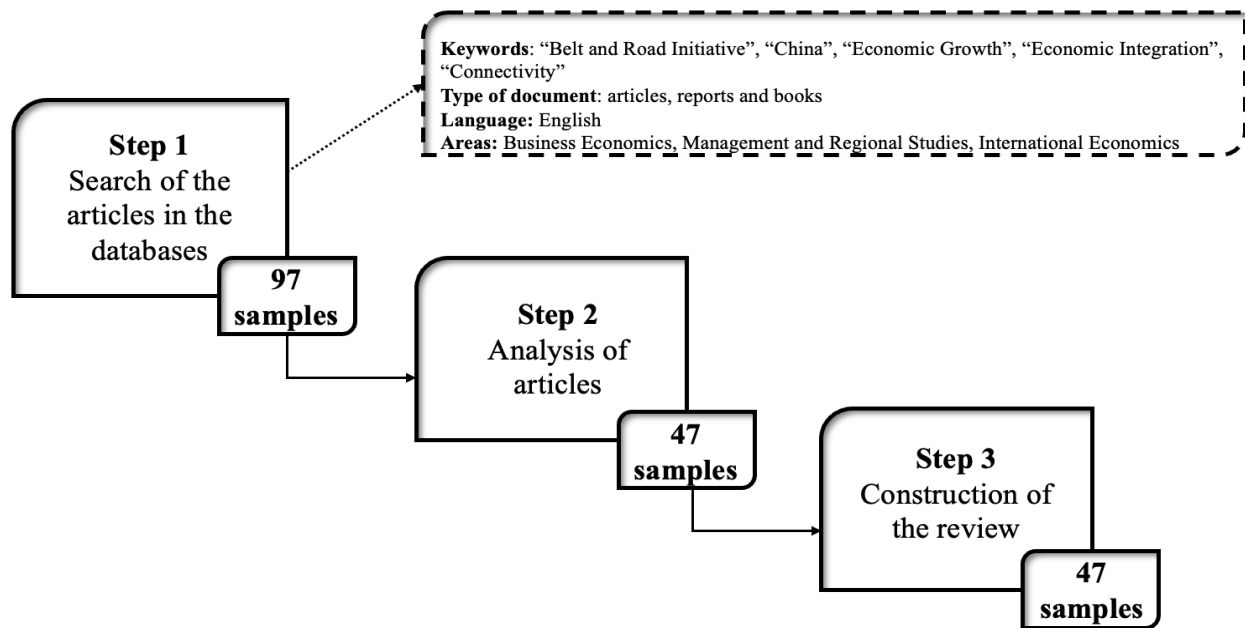


Figure 2.1. Structure of the systematic literature review. Source: the author

Chapter 3 – Literature Review

3.1. An overview of the Belt and Road Initiative

The Belt and Road Initiative (BRI) or One Belt One Road (OBOR) is a program presented by President Xi Jinping in Astana, Kazakhstan, in 2013 and is considered the world's largest. The BRI aims to promote *the orderly and free flow of economic factors, the efficient allocation of resources, and market integration by improving connectivity*. Five principles underpin the Initiative: (i) policy coordination, (ii) connectivity, (iii) unimpeded trade, (iv) financial integration, and (v) people-to-people bonds. The BRI represents an effective instrument for Beijing to increase collaboration with countries and regional groups such as the South Asian Association for Regional Cooperation (SAARC), the EU, the Gulf Cooperation Council (GCC) or the African Union (AF), being “a paradigmatic model of xiplomacy, in line with “going out-brining in” and “the go global” (Tomé, 2021).

China's Belt and Road Initiative aims to connect Asia to Europe and Africa via land and sea (State Council of the People's Republic of China, 2015), representing a high-level structure that encompasses every outreach China is undertaking or plans to launch (Zou et al., 2022) while also attempting to include policy synchronization, crediting, financial integration, trade easing and scientific and cultural exchange (NDRC, 2015).

Geographical emphasis is reflected in the BRI's name and launch site, where the “Belt” refers to China's ancient trading partners on the Eurasian landmass within China's latitude, referring to the opening of trade by the Chinese Han dynasty in 130 B.C.E. (Before the common era). The “road” refers to the emerging economies in Southeast Asia along the Indian Ocean's coast (Johnston, 2019). The BRI reflects a shift towards a more active foreign policy strategy, focusing primarily on Foreign Direct Investment (FDI) to shape China's external environment rather than simply responding to it (Mações, 2018, p. 15), exerting more significant influence on China's regional partners (Fardella & Prodi, 2017), and pursuing shared prosperity through cross-border trade and people bonding (Luo et al., 2022).

The BRI embodies six international economic corridors: (i) China-Mongolia-Russia Economic Corridor, which promotes regional economic integration and increases competitiveness in international markets; (ii) New Eurasian Land Bridge, which serves as an international passageway linking the Pacific and Atlantic oceans; (iii) China-Central Asia-West Asia Economic Corridor, which connects China to the Arabian Peninsula; (iv) China-Indochina

Peninsula Economic Corridor, representing an important link on the BRI; (v) China-Pakistan Economic Corridor, linking the 21st Century Maritime Silk Road in the south with the Silk Road Economic Belt (SREB) in the north; (vi) Bangladesh-China-India-Myanmar Economic Corridor, linking the two vast markets of China and India, improving regional connectivity, including Myanmar and Bangladesh. The six economic corridors are shown in Figure 3.1.

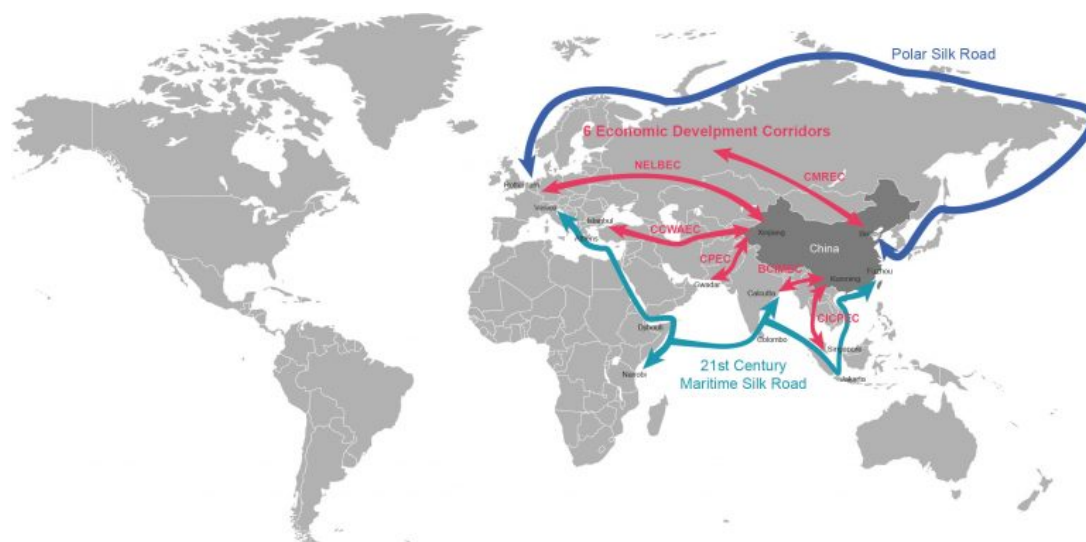
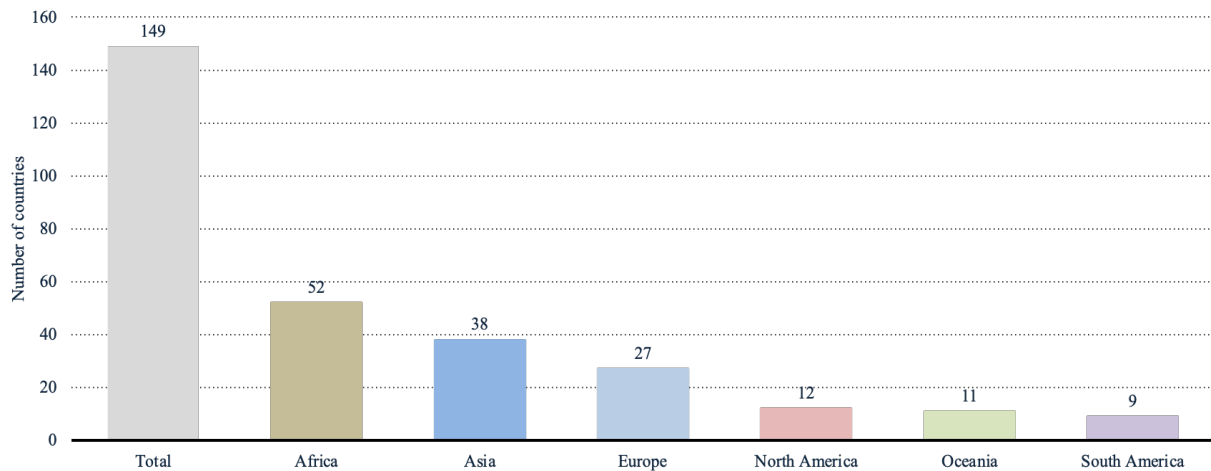


Figure 3.1. BRI Economic Corridors (Source: World Bank, IMF)

The BRI combines the Silk Road Economic Belt (SREB) and the 21st Century Maritime Silk Road, representing a multi-year initiative aimed at reshaping economic ties between China and the rest of the world by encouraging the development of a high-level range of complex infrastructure in Asia, Middle East, Europe and Africa, allowing the creation of new markets for Chinese and foreign products (Zhang, 2019), bringing together 149 countries, as of July 2022 according to Chinese official announcements, in 6 different continents, as shown in Graph 3.1.

The African continent has the most countries participating in the Initiative, followed by Asia, which includes the Middle East and Europe. The Initiative represents these nations by roads, railroads, ports, telecommunications, and health and education infrastructures.

Graph 3.1. Number of countries that joined BRI as of 2022, by region (Source: Statista Search Department, 2022)



According to the European Institute for One Belt One Road Economic Cultural Cooperation and Development (EUOBOR), the “Belt” is also known as the “Silk Road Economic Belt” (SREB), and it is a land corridor that connects the world’s two largest economies, China and Europe. The SREB will serve Central Asia and Eastern Europe as the primary logistics corridor. In contrast, the 21st Century Maritime Silk Road will connect China to Europe, crossing Southeast Asia, South Asia, the Middle East, and Africa, allowing for significant investment in those areas (Mações, 2018), with contracts already signed running through the ports of Hambantota in Sri Lanka, Doraleh in Djibouti, Gwadar in Pakistan, Darwin in Australia or Piraeus in Greece (Tomé, 2019) highlighting the extensive and interconnected nature of modern infrastructure projects, with ports spanning across multiple continents.

3.1.1. Evolution and Ambitions

The evolution of the BRI is reflected in its major financiers. The Asian Infrastructure Investment Bank (AIIB) is the largest BRI investor, followed by the Chinese policy banks, China Development Bank, the Export-Import Bank of China, and the Agricultural Development Bank of China, in that order. The Chinese Silk Road Fund also contributes to the funding. “The interdependence between China’s and the world’s economic development explains the complementarity of the internal and external visions of the BRI in China” (Ilhéu, 2020, p. 152).

Strategically, the BRI is expected to accelerate Chinese company internationalization and the creation of world-class multinational corporations and supply chains (Chan, 2018), while exports from China to BRI countries are projected to grow faster than exports to Europe or the

United States (US) (Schulhof et al., 2022). The Initiative has accelerated its growth rate, forcing Chinese companies to compete in international markets by increasing transparency and hiring foreign labor.

The Initiative has made it easier for China to strengthen economic and political ties with Europe, enhancing its presence and role in the European region (Yu, 2018). So far, there has been little evidence of the strengthening of the renminbi as a national currency used for international trade. However, the European Central Bank (ECB) and the People's Bank of China (PBC), on the other hand, have agreed to a currency swap. Furthermore, the BRI is expected to promote and develop the renminbi as a “global trade and investment currency by creating opportunities for its greater use in international transactions” (Maçães, 2018, p. 23). By strengthening its economic, commercial, and financial weight in the nations and areas concerned and its political influence and geopolitical geostrategic goals, the Initiative helps Xi's China diversify its supply and distribution lines (Tomé, 2021).

According to the Office of the Leading Group for Promoting the Belt and Road Initiative (2019), the BRI focuses on five main goals: (i) *Policy Coordination*, which means that the Initiative intends to encourage countries to collaborate and bond with one another; (ii) *Facilities Connectivity*, focusing on building infrastructure to enable more excellent connectivity between countries participating in the Initiative, as well as improving networks between them; (iii) *Unimpeded trade*, which means that cross-border investments and trade are made more accessible and more cooperative among BRI countries, promoting economic integration; (iv) *Financial Integration*, to improve monetary and financial cooperation in risk monitoring; (v) *People-to-people bonds*, promoting cultural exchange and friendly interaction among organizations.

These purposes appear to be consistent with the Chinese thought and mindset, as described by Smith (1995, p. 973) – “In China, and several other governments of Asia, the executive power charges itself both with the reparation of high roads and with the maintenance of the navigable canals.” The BRI attempted to reach out to everyone by developing a comprehensive framework covering all areas of connectivity. Policy coordination plays an essential role in this perspective, aiming to create and maintain a favorable political environment for project implementation; however, “priority is given to projects that represent the industrial structure, features, and benefits of China” (Zhang, 2019).

The Initiative's primary goal is to ensure free trade flow across all economic corridors; therefore, other forms of connectivity would benefit this goal. Furthermore, the people-to-

people bond can influence public perception, and China can benefit from the approach they are executing within the BRI.

3.2. The Belt and Road Initiative – now and then

China's interest in bringing together several countries and linking them together through the six economic corridors translates as a great ambition, as stated by Smith (1994, p. 904): "In China, the great ambition of every man is to get possession of some little bit of land, either in property or in the lease."

After all, as the BRI's Maritime Silk Road and Economic Corridors develop, it strengthens China's presence and ties with its partners in the Middle East, Asia, and Africa (Ehtesami, 2018; Qian & Fulton, 2017). However, as interdependencies along the Initiative emerge, the same process will promote broader regional cooperation, if not integration (Ehtesami, 2018).

China's economy is quickly emerging to become the most visible growth in international economics in the early twenty-first century. Beijing is focusing more on stable energy sources to support its expanding economy. With its appealing markets and oil reserves and easy access to Europe, Asia, and Africa, the Middle East is central to the BRI.

China's economic and political power has grown in recent years, upon China's economic and geopolitical revival started in the 1970s. It has significantly impacted Africa and Asia, gaining substantial popularity in these regions. Except for the Coronavirus Pandemic, China's image in the Global South has been positive. Nonetheless, as shown in Figure 3.2., its perception has waned in high-income democracies in Europe, North America, and the Asia-Pacific region.

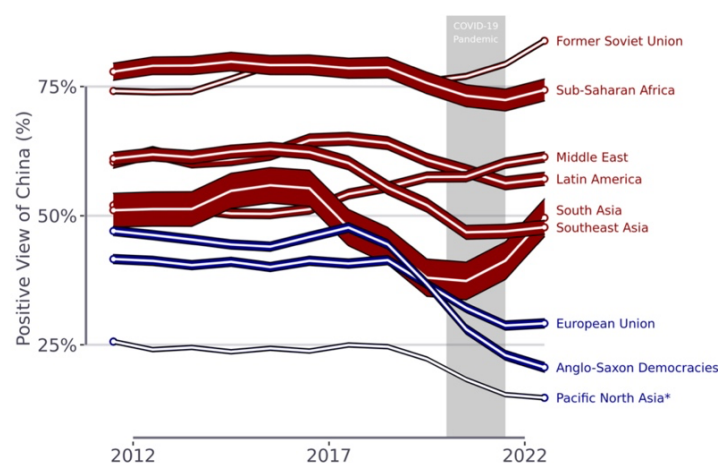


Figure 3.2. China's positive view (2012-2022).

*Pacific North Asia refers to Japan, South Korea, and the Republic of China (Taiwan)

The thickness of the tradelines is relative to total population. Source: S. Foa et al.

According to Liu and Dunford (2016), “the BRI is in part a reflection of China’s emergence as a major economic power, a driver of global economic growth and a catalyst of regional economic integration”, which is supported by the heritage of the BRI has with the Ancient Silk Road, which connects all these regions and aims to build an international trade system based on the renminbi as a global currency.

3.2.1. Middle East

As a crossroads between Africa, Asia, and China, the Middle East plays an essential role in global trade circulation, connecting these regions and providing access to the Mediterranean Sea (Tomás, 2020, p. 186).

The expansion of the BRI through the Middle East is a bold strategy from China, encompassing countries that were part of the first Ancient Silk Road, as this was one of the most critical checkpoints and is now a vital hub for the Initiative, Tomás stated that “no wonder that through Bab El Mandab and the Suez Canal passes 13% of the volume of world trade (2020, p. 186). The Suez Canal connects the Mediterranean Sea to the Red Sea, facilitating international trade and navigation. China has expressed interest in expanding and modernizing the canal to accommodate larger ships and increase its capacity (Tomás, 2013), as shown in Figure 3.3. The vast network of roads, railroads, and deep-water ports facilitates the transportation of goods and services (Tomás, M., 2023).



Figure 3.3. Satellite view of the Suez Canal in August 2014 and 2016. Source: NASA Earth Observatory

Furthermore, China has played a crucial role in developing Egypt's new administrative capital, a large-scale urban project designed to relieve Cairo's overcrowding and centralize government institutions.

Even though the growing Chinese presence in the Middle East can exacerbate geopolitical tensions, given the region's recent conflicts, according to Yang H. (2018, p. 3), the Middle East "is chronically unstable and conflict-prone." The region is one of China's most important economic and trading partners due to its hydrocarbon reserves, which supply China. Regardless of the imports between both countries, which fell 14% in 2016 to 211 billion US Dollars (USD) from \$245 billion in 2015), they maintain solid and healthy ties.

China and the GCC member states have developed dense and multifaceted relations, with economic and commercial relations playing a critical role in developing these ties (Qian & Fulton, 2017), demonstrating how China's presence in the Middle East has influenced all these stakeholders. According to Janardhan (2011), "the Middle East's role in China's economy has been growing steadily since the late 1990s". Egypt's President, Abdul Fatah Khalil Al-Sisi, welcomed the BRI and the revival of the Ancient Silk Road in December 2014 (Jiadong, 2016). However, other Israeli, Iranian, Emirati and Turkish leaders vehemently opposed joining the Initiative.

The Arab League, as an influential organization in the region and an alliance to maintain security following post-war divisions, also plays a role in the relationship between the Middle East and China. Because the Arab League countries are also part of the BRI, the Arab League and China maintain cordial and diplomatic relations.

Due to its energy scarcity and growing economy, China's interests in the Middle East are primarily in energy and commercial-related fields (Tomás, 2013). Those have been in place for several years, and China has been very cautious about its regional presence. As Yang, H. (2018, p. 9) noted, "... China's strategic involvement in Middle Eastern security while expanding, is circumscribed in scope and depth".

The increased investment and growth in the Middle East have required the presence of Chinese military bases throughout the region to ensure security and project execution, especially given the proximity to Europe. With China's presence in the region, conflicts have been controlled and damages avoided, allowing a 'no conflict zone.'

3.2.2. Central Asia and Southeast Asia

The rise of the BRI in recent years has also created a new reality for Central Asian and Southeast Asian development, and opportunities have risen for regional economic integration, in addition to the broader Asia-Europe-Middle East-Africa economic space, which crosses and connects Central Asia to all of its neighbors. (Kohli, 2017), as well as a critical link between the SREB and the 21st-century Maritime Silk Road. For historical reasons, Russia remained an important ally in Central Asia and an economic partner. However, Russia's economy weakened while other strong economies evolved and consolidated (Mações, 2018).

Moreover, the conflict between Russia and Ukraine has demonstrated to China that an impact will be felt across all economic corridors and pillars of the BRI, potentially jeopardizing the BRI's sense. (Mendez et al., 2022).

According to Liu and Lim (2019), Malaysia is an excellent example of a southeast economy because it's one of the founding members of the Association of Southeast Asian Nations (ASEAN), which serves as a multilateral platform for promoting regional integration and cooperation, and the special relationship that Malaysia has with China, as a special ally. However, Qian and Fulton (2017) emphasize that China is not the only crucial external actor in these economies, and Kohli (2017, p. 7) stated that "... countries must keep in mind the role other regional and global actors play in promoting connectivity, trade, investments, and financial flows". Tomás (2020, p. 183), on the other hand, stated that "several associations isolate China to the East, such as ASEAN ... the Shanghai Cooperation Organization or the Southeast Asia Treaty Organization" because China assumes dominance in the China Sea, causing tensions between some of the regions such as Hong Kong and Taiwan.

China's economic relations with Asia were already expanding before the BRI, owing to increased energy demand, which has continued to grow since the Initiative evolved (Kohli, 2017). Nonetheless, Central Asian economies have transitioned from commodity-driven to middle-income economies by remaining relatively open to foreign trade and investment and capitalizing on their low labor cost advantage (Hill et al., 2012; Zhang, 2019). However, since 2010, Europe has been the largest source of FDI for this region, followed by China (Hanemann & Huotari, 2016).

Bird et al. (2019, p. 26) have provided evidence that "BRI offers Central Asia the prospect of large improvements in connectivity, linking places within the region to each other as well as improving connections to the rest of the world."

3.2.3. Africa

China's role in Africa has also grown significantly in recent years, with China now being one of the continent's strong players (Yin & Vaschetto, 2011) and having traded for centuries, with evidence dating back to the tenth century (Reader, 1998). The presence of China in Africa has leveraged its development and economy, resulting in several benefits for those countries, including increased revenue, infrastructure development, and an increase in African social and economic growth (Ado & Su, 2016). Its integration into the Initiative has been outlined in official discourses, with increased cooperation and connectivity promising win-win performance outcomes (Carmody et al., 2022).

At first, the BRI focused on East African countries because they were closer to the Middle East and Central Asia, allowing, in a way, Chinese control. This region was known as the 'Horn of Africa' (Reader, 1998), and it included countries such as Djibouti, Egypt, Ethiopia, Kenya and Tanzania. After that, the Initiative expanded to Cameroon, Namibia, and Nigeria, which played an essential role in infrastructure development (Githaiga et al., 2019). Africa's continental dimensions and uniqueness may hinder its economic growth, as it struggled with connectivity and, as a result, high trade costs.

Along the same lines, China's concentration in East Africa will be replicated in West Africa, bringing together efforts to link the entire continent and facilitate trade while lowering costs, consistent with BRI's connectivity perspective. The establishment of the China-Africa Cooperation Forum (FOCAC) in 2000 was the first step towards Africa and China developing a non-interventionist relationship.

Although Cheru and Obi (2011) provided evidence that the economic benefits would only be seen in the short term, putting Africa's long-term plans in jeopardy, Lyman and Dorff (2007) argued that "China has become a model of economic development for most African countries" (p. 19). However, Githaiga et al. (2019), on the other hand, stated that "trade growth and job creation are perhaps the most salient benefits" (p. 130) of China-Africa cooperation, adding that the benefits would be more significant if BRI African countries could coordinate their development plans.

Through China's strategy to differentiate itself from the West, African countries have gained trust and friendship (Yin & Vaschetto, 2011). Literature also suggests that China has carried out a well-coordinated strategy in Africa, utilizing its economic diplomacy, resulting in close partnerships with enterprises and governments, that allowed the spread of its presence in the region (Yin & Vaschetto, 2011; Wang et al., 2020; Carmody et al., 2022), mainly after

European continents left their colonies in the late 1950s and early 1960s, even though many of them maintain close relations.

The Mombasa port in Kenya is the 21st Century Maritime Silk Road hub, backed up by the Mombasa-Nairobi railway line. The Suez Canal in Egypt will allow it to connect to Greece. According to Githaiga et al. (2022, p. 125), “Djibouti plays a crucial role in Ethiopia’s exports and imports as the major route and a strategic commercial hub for imports and exports to and from Europe, Asia, and the rest of Africa”, reflecting an increase in trade in the region.

3.2.4. Europe

China’s trade investments within the European Union (EU) have increased, and both support multilateralism as a tool for aligning efforts (B. Duarte & Ferreira-Pereira, 2021). While China and the EU “are already the two largest economies in the world... and trade between them can be expected to keep growing and diversifying (Maçães, 2018, p. 57), some may perceive that the BRI’s geopolitical ambitions will undermine ‘European Integrity’, calling for European strength and response to contain this subversion.

The BRI represents China’s efforts to strengthen ties with other countries, and it provides a strategy based on the gradual accumulation of “overlapping contractual arrangements, cooperations, and memberships” (Sielker & Kaufmann, 2020, p. 289). China-EU relations have always included FDI flows, and European investments in Chinese markets began around 1980 (Yu, 2018). In contrast, China’s investment in Europe started in the mid-2000s, but the Chinese FDI has increased. The EU emerged as one of China’s significant FDI outflows (Hanemann & Huotari, 2016).

Since 2003, China and Europe have developed a ‘comprehensive strategic partnership’ that “was intended to elevate their relationship from the economic to the political and even security domains” (Christiansen & Maher, 2017). Since then, an embryonic partnership between China and the EU has evolved, allowing China to integrate into international trade.

As stated before, China has become more engaged in trade, investment, and diplomatic relations in Europe, and its interest is focused on southern Europe and the north of the continent, specifically in the Arctic. China’s interest in the Arctic started quite early, in 1993 (Tomás, 2023), having explored the region and used it for commercial and scientific purposes. The idea of a “quasi-artic state” is an argument China has been operating, despite its location on the perimeter of the Arctic, stating that they want to engage and take part in the concerns and issues

that afflict the region, playing an active role in the development of the Arctic region. (Okamoto, T., 2019).

Given that the BRI has caused uncertainty to the EU, even if Europe was initially skeptical about the Initiative, it quickly banded together to respond to the BRI with a “connectivity strategy” for Europe and Asia (European External Action Service [EEAS], 2018). Most EU countries did not sign a Memorandum of Understanding (MoU) to join the Initiative.

As previously stated, the BRI focuses on Southeast and West Europe due to their “strategic” importance to the Initiative (Liu, 2016), but on the north of the continent as well (Tomás, 2023). China is expected not only to benefit from the BRI but also “steer global economic development and contribute to the principles of economic governance, thus impacting the process of globalization by introducing concepts that diverge from hegemonic market neoliberalism” (Vangeli, A., 2017, p. 102). Indeed, Fardella and Prodi (2017) argued that “geographical proximity is certainly an important asset” and that, while Europe and the Mediterranean appear to be the terminal point of the BRI, they will be critical for the success of the Initiative. Nonetheless, countries located in the south, such as Portugal, Spain, Greece, and Cyprus, as well as countries in Western Europe, joined the Initiative, preserving a privileged position with China.

The EU was still recovering from the effects of the 2008 economic crisis, which had harmed its status as a prosperous and united community when BRI was announced (B. Duarte & Ferreira-Pereira, 2021).

Chapter 4 – Discussion of results

4.1. The Belt and Road Initiative – an assessment of its impacts

A critical component of the BRI’s funding system involves many sources, including state-owned banks, special funds, and private investors. The model is intended to promote infrastructure development while encouraging partnerships and local investments.

4.1.1. Belt and Road Initiative funding

The BRI’s funding structure is highly complex, so it requires a strong funding structure, as well as well-planned project development and execution, coming from various sources. (Öztürk, 2019, p. 16)

As shown in Figure 4.1., the funding structure is made up of the public and private sectors (China’s state-owned banks and some private enterprises, primarily connected to the technology and energy sectors), commercial financiers (consisting of a wide range of business finance products, offered by a third-party provider – e.g., lending to businesses), and national or international institutions as well as multilateral institutions (referring to other governments participating in the BRI).

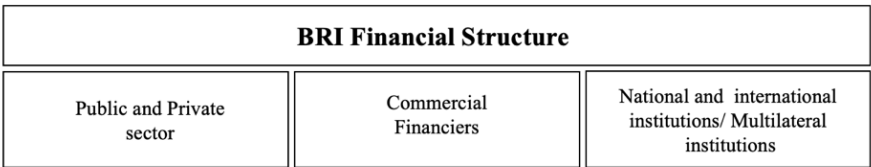
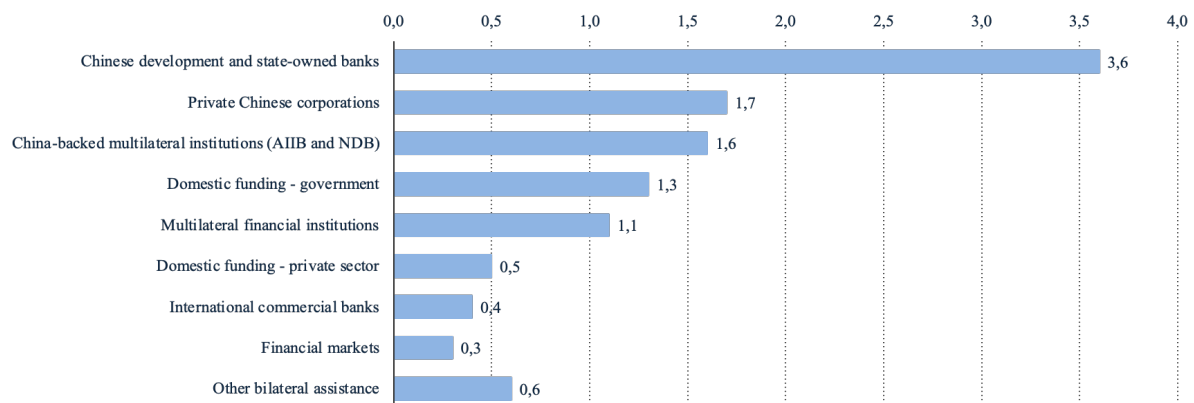


Figure 4.1. BRI Financial Structure (Source: the author)

This structure and type of funding allow the Initiative to have a high level of economic growth and development since these banks provide loans to countries and companies involved in the Initiative to use these funds to finance infrastructure development and lower the risk of debt for China, as argued by Schulhof et al., “the BRI is therefore relatively large and mainly bilaterally funded, but with much lower debt risk and a medium orientation towards sustainability”. As shown in Graph 4.1. these institutions were the most involved and essential in funding the Initiative.

The state-owned bank, Chinese private enterprises, the AIIB, and the New Development Bank (NDB) were key financiers in this process.

Graph 4.1. Most involved institutions in the BRI funding (Source: Statista Search Department, 2022)



On the other hand, Canayaz (p. 4, 2022) stated that “countries that gain access to BRI issue large amounts of debt and use it to finance collective consumption rather than fixed capital formation.” Concerns were raised about the sustainability of their debt levels, as well as the effectiveness of the BRI in promoting long-term economic growth. Investing in infrastructure for collective consumption may provide short-term benefits but does little to address these countries' underlying economic challenges.

The AIIB and the NDB, established in 2015 by the BRICS (Brazil, Russia, India, China, and South Africa), are the primary funders of most BRI projects (Schulhof et al., 2022). In addition to these funding sources, China has also established some special funds to support projects within the Initiative, such as the Silk Road Fund, established in 2014 with a capital of \$40 billion to finance projects in sectors like energy, transportation, and telecommunications. The constitution of the Silk Road Fund corresponds to 65% of investment provided by the State Administration of Foreign Policy, 15% of the Investment Corporation of China, 5% of the Development Bank of China, and 15% of the Export and Import Bank of China. (OECD, 2018; People's Republic of China, 2015; Tomás, 2023; Tomás, 2021).

These institutions were the most involved and essential in funding the Initiative, as shown in Graph 4.1. with the state-owned banks, Chinese private enterprises, AIIB, and NDB play critical roles.

On the other hand, numerous Public Private Partnerships (PPPs) allow for debt reduction. Growth in sectors was expected due to the funding, focusing on energy and transportation, followed by the health, information technology, low carbon industries, and education sectors.

Private investors have contributed to funding the Initiative, and Chinese firms are investing in projects, particularly in the energy and real estate sectors. Furthermore, international

investors, including private equity funds and institutional investors, are becoming more interested in investing in the Initiative, anticipating a significant source of revenue.

Given the importance of global governance, there is also a focus on sustainability, with the most long-term efforts to enforce standards due to global governance, shown in Figure 4.2.

International BRI in detail

Scope	Volumes	Financial structure	Sectors	Sustainability
Global reach – potentially extending beyond the six economic corridors	Increasing - because of rapid economic growth and international contributions	AIIB, NDB, and PPP all contributed significantly to its funding. Debt risk is minimal.	Growth in energy and transportation, as well as in health, information technology, low- carbon industries, and education	Most long-term efforts to enforce standards are due to global governance.

Figure 4.2. International BRI in detail (adapted from Schulhof et al.2022)

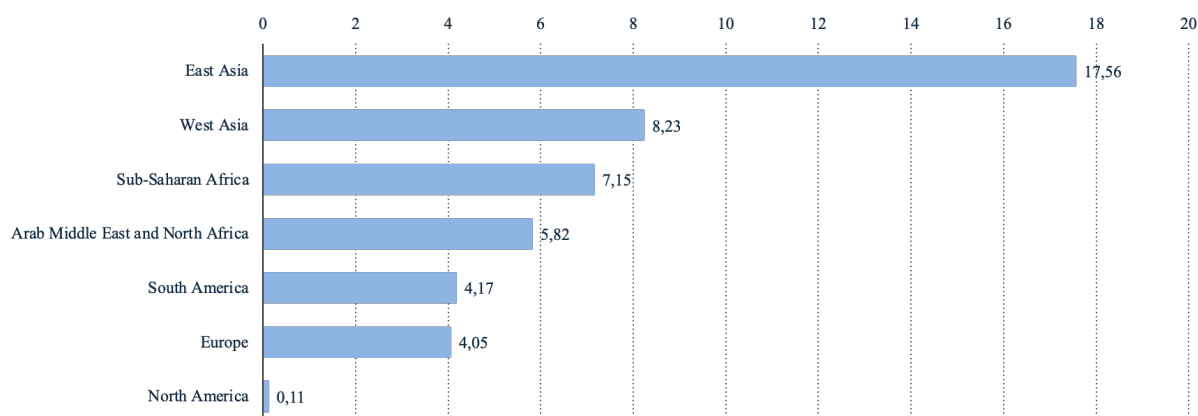
Some authors have expressed concerns that China is burdening recipient countries with unsustainable debt, which could lead to a debt crisis, calling for transparency in the funding system (Öztürk, 2019; Tomás, 2020; Schulhof et al., 2022).

Overall, funding for the BRI is a complex issue involving numerous actors and funding sources. As the initiatives evolve and expand, it will be critical for all parties involved to ensure that the financial arrangements are long-term oriented and transparent and that the benefits of the projects are distributed equitably.

4.1.2. Partnerships and local investments

The BRI's emphasis on developing partnerships between China and the countries within the Initiative is one of its most essential features. This entails working closely with local governments, businesses and communities to identify mutually beneficial areas. As shown in Graph 4.2. East and West Asia benefited the most from Chinese investment in 2020, with new infrastructures to handle trade and logistics infrastructures, followed by the Sub-Saharan region and the Middle East and North Africa.

Graph 4.2. Volume of Chinese investment in BRI countries by region, in billion U.S. dollars (Source: Statista Search Department, 2022)

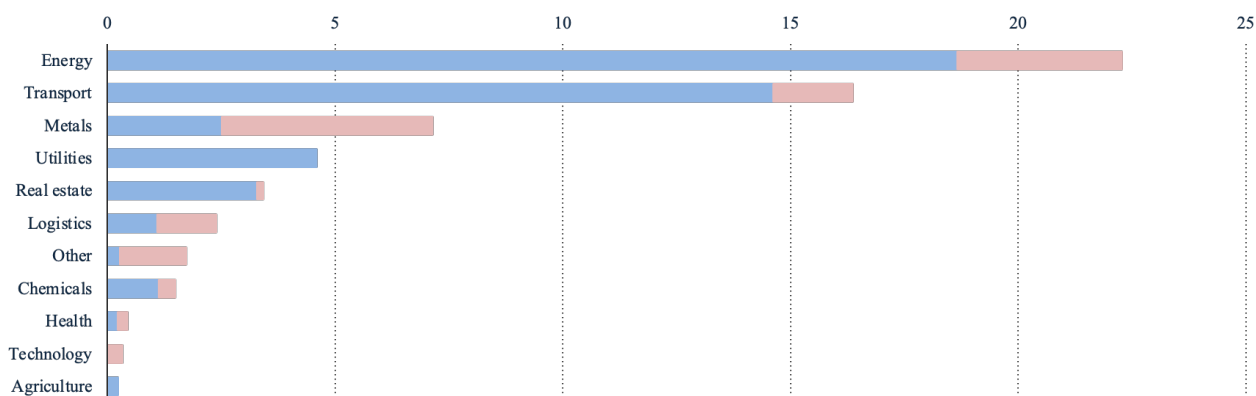


Another critical aspect of the BRI is its emphasis on domestic investments. Rather than relying solely on Chinese investment, it encourages local businesses and investors to participate in infrastructure projects and other economic initiatives.

The Initiative includes several projects encouraging entrepreneurship and innovation to increase local investments. For instance, the International Youth Entrepreneurship and Innovation Contest (YBNR, 2018) was launched in 2018, allowing young entrepreneurs to showcase their ideas and launch new business ventures and partnerships.

The Initiative also aims to promote sustainable development and environmental protection, which includes investing in renewable energy sources, promoting green transportation solutions, and supporting sustainable agriculture and forestry practices. For instance, considering Graph 4.3., Chinese investment in countries participating in the Initiative is broken down by sector, with energy and transportation sectors with the highest investment volume.

Graph 4.3. Volume of Chinese investment in BRI countries, by sector, in billion U.S. dollars (Source: Statista Search Department, 2022)



Technological, agricultural, and health sectors have less volume of investment, which does not necessarily reflect their priority.

Since more projects are being funded by PPPs, originating local investments along the entire road and belt, the BRI is made up of partnerships and local investments, which “would make the BRI less Chinese, more global and local (glocal)” (Öztürk, 2019, p. 18). Due to a multilateral mechanism, this type of partnership encourages new investments and benefits for the countries.

As previously stated, most of the projects in the BRI are heavily funded by AIIB and the NDB, established in 2015 by the BRICS. Aside from that, new partnerships between China and other foreign countries, part of the Initiative, promote funding and Belt Unity—the Chinese aims for economic cohesion and shared prosperity (BRICS information portal).

Overall, the partnerships and local investments promoted by the BRI contribute to creating a more inclusive and sustainable global economy.

4.2. The importance of the Chinese economic corridors

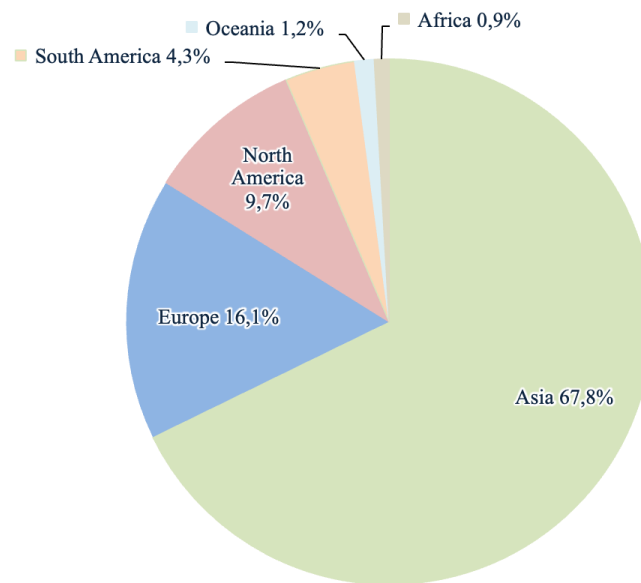
The BRI is more than just an array of infrastructure projects, as was previously stated; hence, it is a comprehensive strategy to promote economic growth, connectivity, and cooperation. At the heart of this strategy, the economic corridors are designed to facilitate trade, investment, and development between China and its neighbors (Foa et al., 2022, p. 17).

The BRI includes six international corridors connecting China to Europe, Africa, and Asia, shaping a vast economic network and facilitating trade between all countries. China aims to promote economic growth, development, trade, and fostering good relations through diplomacy and cooperation while respecting each country’s history and culture.

Economic corridors are essential in the context of the Initiative since China has identified several vital overland points that serve as linked bundles of transportation and logistics, infrastructure and services, and an interface between major economic centers.

The majority of trade was directed towards Asia, which includes the Middle East and Europe, with the highest values. Surprisingly, Africa had the lowest trade values despite the solid Chinese presence in the continent, as shown in Graph 4.4.

Graph 4.4. Distribution of trade value between China and the BRI countries in 2020, by region. (Source: Statista Search Department, 2022)



4.2.1. China and Asia international trade

China and Asia have long been at the forefront of international trade, driving economic growth and development across the globe. With China being the world's largest exporter (World Bank, 2017) and Asia housing some of the fastest-growing economies, the region has become a significant player in international trade.

The rise of China as a global economic superpower has been fueled by its strong manufacturing base, low labor costs, and extensive consumer market. It has become an important trading partner for many countries, including those in Asia, and the BRI has further solidified its position as a critical player in the region. The BRI has already significantly impacted China and Asia's international trade, facilitating the movement of goods and services across borders and improving market access for businesses in the region. It has also resulted in the development new infrastructure, such as ports, highways, and railways, improving logistics and supply chain efficiency and reducing transportation costs and time.

Moreover, the Initiative has created new investment opportunities for businesses by providing a variety of incentives, such as tax breaks, subsidies, and preferential treatment for foreign investors. Significant investment from China and other countries has created new regional jobs and economic opportunities. Nevertheless, China and Asia remain committed to the Initiative, recognizing its potential to drive regional economic growth and development.

As the world navigates these challenging times, China and Asia's importance in international trade will likely remain strong. With a growing middle class, solid manufacturing base, and increasing infrastructure investment, the region is well-positioned to drive economic growth and development in the coming years (Zhang, 2019).

4.2.2. China and Middle East international trade

China and the Middle East have a longstanding history of trade and economic cooperation, dating back to the Ancient Silk Road, and the BRI has strengthened ties between the two regions as it seeks to expand trade and investment opportunities in the region. The two regions have enjoyed a strong and growing trade mutually beneficial trade relationship in recent years.

Given its strategic location at the crossroads of Asia, Europe, and Africa, the Middle East is an essential region in the BRI.

The Middle East is a significant market for Chinese goods, such as machinery, electronics, textiles, and other manufactured products. On the other hand, Chinese companies have heavily invested in the region, particularly in the energy and infrastructure sectors, and have been involved in oil and gas exploration, production, refining, and developing transportation infrastructures.

The region's significant energy resources are one of the key drivers of China's trade relationship with the Middle East, having some of the world's largest oil and gas reserves, with China being a major importer. Long-term energy partnerships have been established between the two regions, with China investing in oil and gas projects in the Middle East and the region supplying China with crude oil and liquid natural gas (Yang, H. 2018).

Furthermore, China has established the Suez Canal Economic Zone (SCZ) near the Suez Canal. The SCZ aims to attract FDI and promote trade and industrial activities, with Chinese companies among the zone's major investors (Scott, 2013). China's participation in the Suez Canal projects aligns with its broader economic interests in improving trade routes and connectivity through the BRI. It also demonstrates China's appreciation for Egypt's strategic location and potential as a gateway to Africa and the Middle East (Tomás, 2013).

The China-Pakistan Economic Corridor (CPEC) is one of the most essential corridors under the BRI in the Middle East, connecting China's western Xinjiang province to the Pakistani port of Gwadar, providing a quicker and safer route from China to the Arabian Sea.

The Middle East has become a significant destination for Chinese FDI, primarily in infrastructure development. The BRI has accelerated China's investment in the region, opening

up new opportunities for economic growth and development (Hanemann & Huotari, 2016). Since Iran and Saudi Arabia announced a deal to restore relations, China's presence in the Middle East has been fruitful. However, it is unclear how this agreement will affect the region's economic trade. Mediating a reconciliation between these two longstanding adversaries has significant strategic and symbolic implications for China. Strategically, China must keep the region's oil flowing freely.

Despite the numerous benefits of trade between the Middle East and China, there have been some challenges: political instability, security concerns, and geopolitical tensions have occasionally impacted trade and investment flows between the two regions (Yang, 2018). Afghanistan has been plagued by conflict and insecurity for a long time, making full participation in the BRI difficult. China, on the other hand, has provided aid and support to Afghanistan in areas such as infrastructure development, energy, and education, as evidenced in the construction of a power transmission line connecting Tajikistan and Afghanistan (Shams, 2017), as well as investment in the development of a copper mine in the country.

China and the BRI have also facilitated talks between Afghan government officials and Taliban representatives to promote peace and stability. The Initiative has the potential to be implemented as Afghanistan stabilizes, bringing much-needed investment and infrastructure development to the country. Although the BRI has not had a significant presence in Afghanistan, China's interest in playing a role in the country's development highlights the potential of the Initiative to foster regional integration and economic prosperity in traditionally overlooked areas (Tomás, 2013).

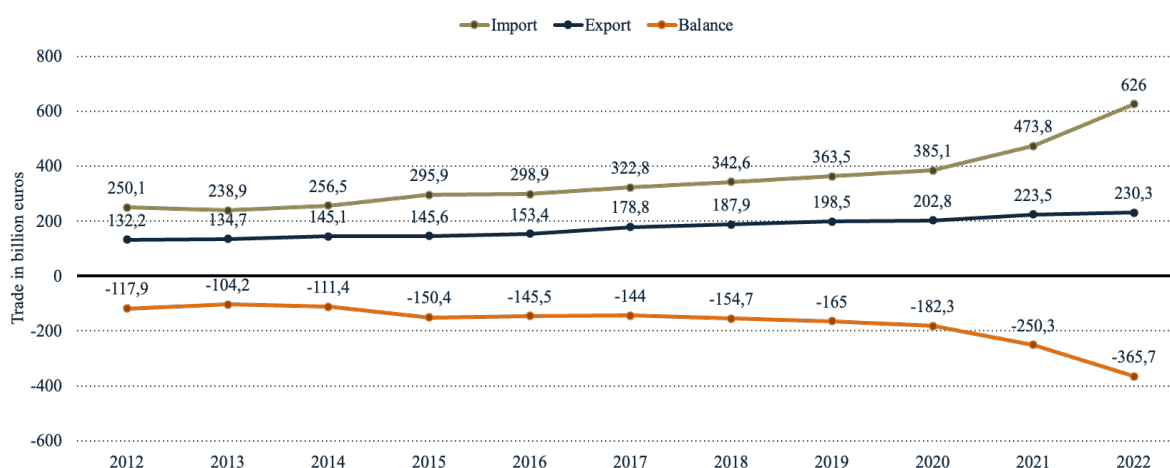
Nonetheless, China and the Middle East are committed to expanding their trade relationship and exploring new areas of collaboration (Jiadong, 2016; Tomás, 2020). These two players have a strong and growing trade relationship that has proven mutually beneficial. As China's global economic influence grows, the association will become even more critical in the coming years.

4.2.3. China and Europe international trade

China and Europe have a longstanding and multifaceted trade relationship that has been rapidly expanding in recent years and has been further enhanced by the BRI. The two regions have grown in importance as trading partners, with China emerging as Europe's second-largest trading partner after the US (Sielker & Kaufmann, 2020).

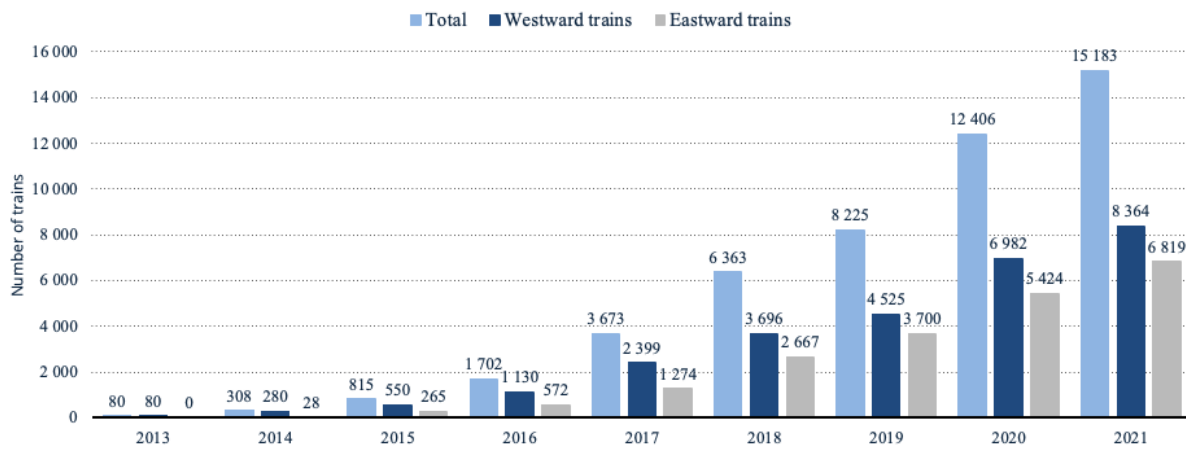
China is an important market for European goods, mainly machinery, automobiles, and luxury goods. Bilateral trade between the two regions has steadily increased, with the total value of goods and services traded approaching 230 billion euros. Despite the imports, which have been growing since 2019, exports have been increasing significantly. Graph 4.5 shows that the balance has decreased since 2019, owing to increased EU imports.

Graph 4.5. Trade balance of the European Union with China, 2012-2022 (in billion euros) (Source: Statista Search Department, 2023)



The BRI will improve transport infrastructure in Europe and reduce the time and cost of shipping goods between China and Europe. It will also stimulate European economic growth and infrastructure and logistics development. Railway connections between China and Europe play an important role in trade and connectivity between the two regions, allowing for faster and more efficient transport of goods while also focusing on improving trade relations. Graph 4.6. depicts the number of trains operated by China Railway Express (CRE) in 2013 and 2021, both westward and eastward.

Graph 4.6. Number of cargo trains between China and Europe by China Railway Express from 2013 to 2021, by direction (Source: Statista Search Department, 2022)



Since 2013, the Initiative was announced, the number of cargo trains has increased, highlighting and reflecting increased trade between the two regions and economic cooperation. The Trans-Siberian Railway, also known as the Eurasian Land Bridge, was built to link the Far East and Europe by train (Tomás, 2023), which resulted in high volumes of trade and trains on this route.

Its position as the world's largest single market is essential to China's trade relationship with Europe. China has recognized the EU's importance as a market for its goods and services and has been working to strengthen its trade ties with China, recognizing the potential benefits of increased trade and investment flows. Figure 4.3. depicts the network of infrastructures planned for the European continent as part of the BRI, with China taking full advantage of the continent and its position, exploring it to its full potential.

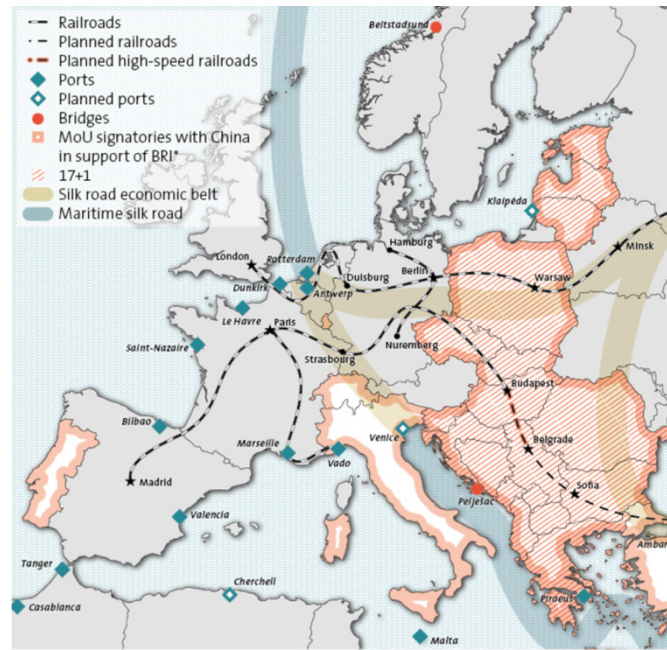


Figure 4.3. Chinese infrastructure investment in Europe (Source: Merics)

The European continent is landlocked and has meaningful maritime and land connections, emphasizing the BRI's ambition in terms of connectivity and that the countries that have joined the Initiative are located at the continent's apex. Portugal and Spain have also been in the spotlight, owing to their geographical positions and the peninsula they share.

In Portugal, the BRI has primarily focused on strategic infrastructure investments, taking advantage of more than 100km of coastline. The primary investment has been in ports, with the development of a deep-water port in Sines with the involvement of a Chinese state-owned company. The port is expected to become a central trade hub between China and Europe and an entry point for Chinese goods into the European market. The investment was quickly followed by railway investments and renewable energies, being one of the European countries with the highest rate of renewable energy (Mações, 2018, p. 21).

Spain also participates in the BRI, with Chinese companies focusing on infrastructure projects and investments in the country's transportation and logistics sectors. One noteworthy project is constructing a high-speed rail link between Madrid and Lisbon, bringing the two cities closer together and promoting economic trade. However, Chinese ambition and interest in investing in Spanish infrastructure has also been reflected in developments such as ports and airports, and some projects have already been funded. Chinese investors have already purchased a stake in Valencia's port, and a Chinese company is also involved in developing a new container terminal in Bilbao's port.

Despite their limited participation in the BRI, Portugal and Spain have the potential for future cooperation and investment. The Initiative may be viewed as an opportunity to promote economic growth and regional integration. Still, it also has the potential to bring much-needed investment and infrastructure development to the two countries.

Considering the obvious of China-Europe trade relations, one of the major concerns has been the impact of China's state-led economic model on European businesses, particularly in strategic sectors such as technology and telecommunications (Duarte & Ferreira-Pereira, 2021). In response, the EU has pushed for a level playing field and greater transparency in China's economic policies. Some European countries have expressed concern about China's growing influence in the region and the BRI's potential to trap developing nations in debt. To address these concerns, the EU has proposed a Connectivity Strategy to increase connectivity between Europe and Asia while ensuring that the projects are financially sustainable, environmentally friendly, and transparent. The EU has also proposed a framework for EU-China cooperation on the BRI to ensure that projects adhere to international standards and promote sustainable development.

Moreover, the Russian and Ukrainian (Mendez et al., 2022) have had severe implications for the BRI, particularly in Europe and China's international trade. Russia's 2014 annexation of Crimea and its support for separatist rebels in east Ukraine have strained diplomatic relations with Western countries, resulting in sanctions and trade restrictions limiting Russia's access to international markets.

This has posed significant challenges for China's BRI, as China has sought to expand its trade relationships with Ukraine despite the ongoing conflict – "Interconnectivity requires not only funds but also a willingness to cooperate across borders. Russia's invasion of Ukraine also jeopardizes the BRI in this sense" (Mendez et al., 2022, p. 492) While the BRI has the potential to serve as a platform for increased economic cooperation among Russia, Ukraine and China, the current political environment makes this difficult. As the conflict continues, how it will affect the BRI and the regional landscape of international trade remains to be seen.

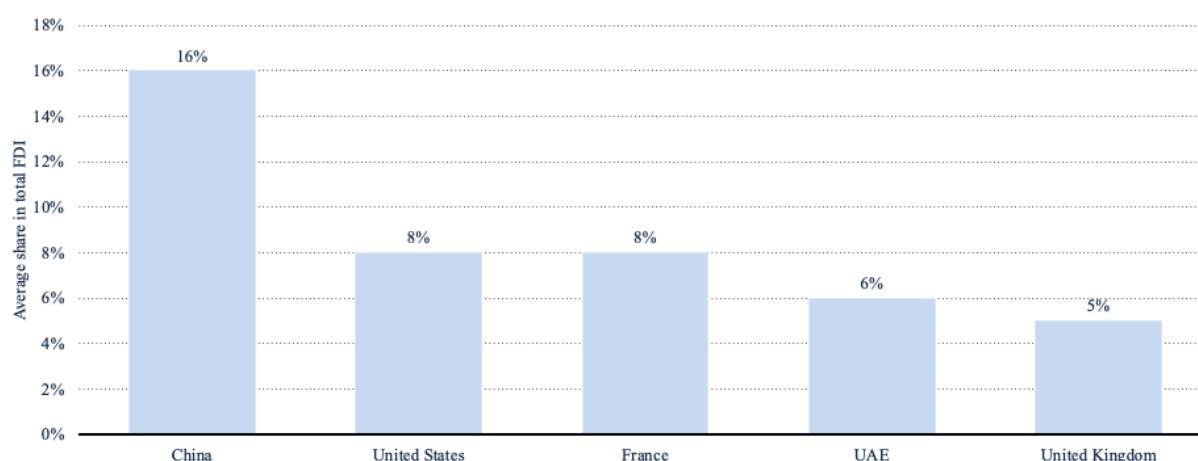
The geopolitical scenario significantly impacts the New Eurasian Land Bridge (NELB). The NELB is a rail network connecting China to Europe via Russia, Kazakhstan, and other countries such as Ukraine. Mendez et al. (p. 491, 2022) stated that "Russia's invasion of Ukraine potentially impacts all the pillars along the corridors, but we shall focus on the NELB, where the bulk of impact is being felt, at least in the short term" since the NELB is geographically embedded in this conflict zone. It has raised concerns about the transport network's security and stability.

4.2.4. China and Africa international trade

Regarding international trade, China and Africa have an extensive relationship, and the BRI has strengthened this economic partnership. The Initiative has significantly increased China-Africa trade by improving connectivity and lowering transportation costs, making it easier for African countries to export goods to China.

China is now Africa's top trading partner, overtaking the US, with trade volumes exceeding \$200 billion in 2019 (Ado & Su, 2016, p.47). The import and export of natural resources is one of the most critical aspects of China-Africa trade, as China is a major importer of African minerals (Wang et al., 2020). As shown in Graph 4.7., up until 2018, China had the highest level of FDI in Africa.

Graph 4.7. Leading sources of Foreign Direct Investment (FDI) into Africa until 2018
(Source: Statista Search Department, 2022)



China invested twice as much in Africa as the United States and France and more than twice as much as the United Arab Emirates and the United Kingdom. China began to establish a specific economic power and a strong presence on the African continent through aggressive investment campaigns that were well-received by the Africans.

The Initiative has also facilitated Chinese companies' investment in Africa, with projects ranging from infrastructure development to manufacturing and agriculture (Carmody et al., 2017). Chinese investment in Africa has been particularly significant in sectors such as energy, where Chinese companies have invested in constructing power plants and developing renewable energy sources. Figure 3.3. depicts China's high investment in ports and railways designed and under development in Africa, demonstrating China's commitment to the Initiative and taking advantage of the African continent's strategic position.

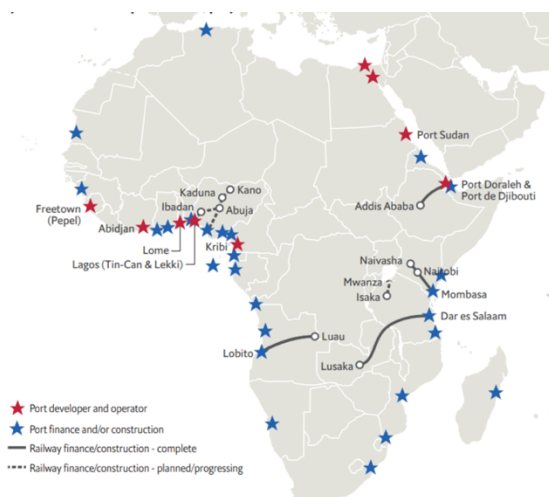
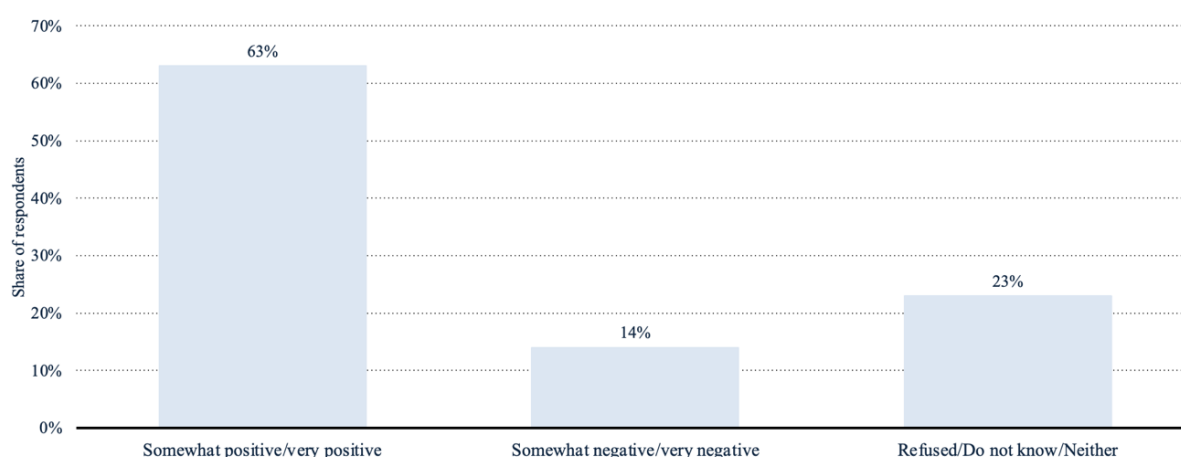


Figure 4.4. Major Chinese backed port and rail projects in Africa (Source: The Economist Intelligence Unit, 2021)

According to the literature, China's involvement in Africa is motivated by a desire to extract natural resources and gain access to new markets rather than a genuine desire to promote development and poverty reduction in the region. In recent years, the Chinese approach has primarily focused on infrastructure development and increasing local population education through learn-by-doing so that the African continent can develop self-sufficiently (Ilhéu & Campos, 2021, p. 76). African perception of China's positive influence on their countries between 2019 and 2021 is somewhat positive, with more than half answering, as shown in Graph 4.8., which highlights Chinese efforts in the African continent.

Graph 4.8. Perception of Africans on positive influence of China in their countries, between 2019 and 2021 (Source: Statista Search Department, 2022)

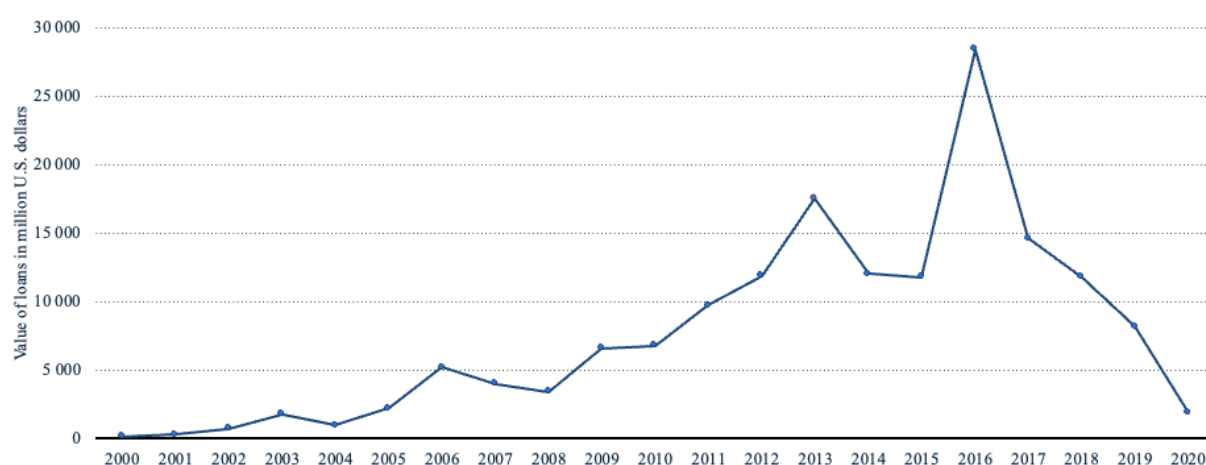


The partnership between China and Africa is expected to grow in the coming years, with the BRI playing an increasingly important role in facilitating this trade. As African countries

seek to diversify their economies and reduce their reliance on natural resource exports, Chinese investment in sectors such as manufacturing may open up new opportunities for economic development and growth.

Despite China's efforts to revitalize the African economies through these types of investments, the number of loans granted to African countries began to become a burden, with the value reaching approximately \$30 million US Dollars in 2017, then dropping drastically, as shown in Graph 4.9.

Graph 4.9. Value of Chinese loans to Africa from 2000 to 2020 (in million U.S. Dollars
(Source: Statista Search Department, 2022)



Debt problems in African countries have persisted for several years and predate the BRI, despite the investments initiated under the Initiative's name have significantly exacerbated these debt problems.

Chapter 5 – Results and limitations

5.1. Results and findings

As mentioned in the literature review, the Belt and Road Initiative is a large-scale, vast, and complex project. The analysis of its impacts is, so far, preliminary as it is still ongoing development, and its influence can vary significantly. Nevertheless, the research results provide us with crucial aspects and valuable data that allow us to draw conclusions and measure the impacts the BRI has on the economies within the Initiative, albeit in a limited way.

The BRI brings with it a lot of infrastructure development along its network as well as global influence, much sought by China, helping to expand its economic and political influence (Zou et al., 2021; Yu, 2018), even though there are some geopolitical considerations, challenges, and criticisms.

The impact the Initiative has on other economies is significantly dependent on a range of factors, as stated previously, from trade and investment to regional integration, debt concerns, and infrastructure development. In the light of the evidence provided, by improving infrastructure and attracting FDI, the countries' economies were positively impacted, which boosted their economic growth and economic development (Ilhéu, 2020). New transport and energy infrastructures have undoubtedly improved trade connectivity between the countries and promoted the much-touted economic integration.

One of the main focuses of the BRI was to facilitate trade between the 149 countries that currently participate in the Initiative, improving transport and logistic networks. As a result, goods and services are delivered more efficiently in all regions, lowering trade barriers and costs while increasing trade volumes and contributing to regional and global economic integration.

In addition, as an outcome of connecting economies and facilitating cross-border trade, the BRI actively promotes regional economic integration, developing new supply chains, markets, and economic corridors that benefit neighboring and participating countries while preventing supply chain disruptions.

Seeking the establishment of economic corridors to promote cooperation and collaboration among participating countries, being the Initiative so vast and complex, shows varying effects on individual economies.

The research indicates that enhanced regional integration leads to economies of scale, increased efficiency, and increased competitiveness for regional businesses. Local people and

regions benefit from these synergies by improving connectivity infrastructures, increasing access to essential services, and addressing the community's needs. However, the impact of the Initiative on these communities is highly dependent on practical implementation and the ability to capitalize on economic opportunities for the general population.

The Initiative has resulted in various types of reliance on China for countries participating in it, as they frequently rely on China as a significant market for their exports or even a source of investment, which can vary depending on the long-term dynamics still evolving.

The BRI's expansion and growing influence have had geopolitical impacts, with some viewing it as a way for China to extend its strategic interests and influence as well as rising economic and political power and potential strategic implications, leaving the Initiative exposed and vulnerable. This perception can fuel tensions and rivalries among major world powers like the US.

The Initiative has also been influenced by Chinese relations with the West, establishing significant economic ties with Western countries, particularly in the EU, which have provided China with the financial resources, technologies, and market access required to support the BRI's implementation in such areas, resulting in increased trade and investment opportunities for both China and the countries involved in the Initiative.

These concerns have encouraged the Western country's efforts to develop alternative initiatives and strategies to maintain their global influence and competitiveness. For example, the US has launched the Free and Open Indo-Pacific (FOIP), including a geoeconomics component which, like the BRI, emphasizes infrastructure development, economic connectivity, and regional cooperation (Tomé, 2019). However, FOIP funds are scarce compared to the BRI, a much bigger initiative (Chandran, 2018).

The EU has launched similar initiatives to connect Europe and Asia to improve connectivity.

Massive infrastructure investment along the BRI's route has had social and environmental consequences, including community displacement, environmental degradation, and concerns about human rights, particularly in Africa and Asia. It is critical to address these issues responsibly to ensure the BRI's long-term development.

Through its projects, the BRI prioritizes digital innovation as an essential aspect of modern life and society, promoting technological exchange, innovation, and capacity-building in developing countries. Some projects require advanced infrastructure and technical know-how. Chinese companies have sought partnerships and collaborations with EU and US firms to participate in and access new markets for this project implementation.

The increased connectivity and trade encourage cultural exchange and people-to-people ties, which improve mutual understanding and appreciation of different cultures. China hopes to create a more interconnected and harmonious global community by embracing digital innovation and promoting cultural exchange.

As a result, the BRI's impact has been scrutinized, particularly regarding debt sustainability, transparency, environmental impact, labor standards, and governance. Some countries have expressed reservations about participating in the Initiative or have chosen to be circumspect. On the other hand, other countries have recognized the Initiative's potential economic benefits and opportunities.

Despite their differences and tensions, China and the West have engaged in dialogues and cooperation, such as improving project transparency, addressing environmental and social concerns, and exploring potential areas of collaboration. It is critical to recognize the complexity and multifaceted nature of China-West relations, which include a wide range of economic, political, and strategic considerations that have influenced and been influenced by the BRI.

The ongoing conflict between Russia and Ukraine has had some implications for the Initiative. It increases geopolitical tensions, raising concerns about China's involvement in politically sensitive areas and contributing to increased scrutiny of geopolitical risks associated with the BRI (Mendez et al., 2022). These factors can impact the implementation and attractiveness of BRI projects in that particular region, hampering connectivity, trade, and investment along the economic corridors.

Nevertheless, the alliance with China represents a source of funding for Russia. Chinese investment in Russia increased due to the economic sanction imposed by the West on Russia following the invasion of Ukraine and the annexation of Crimea in 2014. (Tomás, 2023). China's proactive strategy for spreading its ideas and thoughts through numerous international institutions and platforms and the BRI highlights its active role in shaping narratives and policies on the global stage (Tomé, 2021), where pursuing its diplomatic and economic ambitions requires effective communication.

The BRI's impact on economies is complex and varies depending on each country's projects and approaches. Successful implementation requires careful planning, transparent governance, and stakeholder collaboration to ensure positive and sustainable outcomes.

5.2. Future Improvements and Limitations

The BRI has undeniably increased China's global influence and has the potential to shape the geopolitical landscape. However, the extent of its power and impact is still being assessed as the Initiative evolves and faces new challenges. The systematic literature review demonstrates that our understanding is nonetheless quite dispersed, and it may be lacking in some aspects that distinguish different settings, countries, or even economic variables on the BRI's impact. As this is such a broad topic, it is time to dive more into this theme as it deepens and evolves.

When studying the BRI, some future improvements can be taken into consideration, such as investing in enhanced data transparency with greater transparency in details and implementation progress with more reliable data and robust data collection and research by conducting comprehensive and impartial research by independent institutions and academic organizations, contributing to the creation of a solid database with fields of study and different methodologies to ensure accurate and reliable data for future studies on the BRI.

The use of comparative studies and in-depth case studies of specific BRI projects or regions can provide valuable insights into various impacts and outcomes to better understand the factors that influence the effectiveness and effects of the BRI as well as conducting rigorous impact assessments over extended periods, assessing socioeconomic, environmental and political impacts of BRI projects over time.

During the study, some limitations were found that deviated from the course of the investigation or required more careful analysis and consideration, such as (i) Lack of Transparency: the BRI lacks a centralized and transparent mechanism for reporting and information sharing. Obtaining comprehensive and accurate data can be complex in determining the proper scope, impact, and effectiveness of the BRI; (ii) Data Reliability and Availability: when studying the BRI, data can be limited, as official data from participating countries or China may not always be readily available or may be biased, making accurate analysis complex; (iii) Long-term and Evolving Initiative: the BRI is a long term initiative, that is still being implemented and constantly changing, with new projects, partnerships and policy changes. Therefore, assessing long-term impacts and outcomes is difficult; (iv) Limited Research: the BRI is a relatively new and expansive theme; as such, there's a limited amount of independent research available. Many studies are carried out by think tanks or organizations associated with participating countries in the BRI, which sometimes can introduce biases or specific perspectives. Also, the BRI encompasses a wide range of countries and acts in different sectors.

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