

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Löchel, Horst; Nawaz, Fahad

Working Paper

The Belt and Road initiative of China: A critical analysis of its feasibility

Frankfurt School - Working Paper Series, No. 226

Provided in Cooperation with:

Frankfurt School of Finance and Management

Suggested Citation: Löchel, Horst; Nawaz, Fahad (2018): The Belt and Road initiative of China: A critical analysis of its feasibility, Frankfurt School - Working Paper Series, No. 226, Frankfurt School of Finance & Management, Frankfurt a. M.

This Version is available at: https://hdl.handle.net/10419/179428

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Frankfurt School – Working Paper Series

No. 226

THE BELT AND ROAD INITIATIVE OF CHINA – A CRITICAL ANALYSIS OF ITS FEASIBILITY

by Löchel, H., Nawaz, F.

March 2018



German Excellence. Global Relevance.

Adickesallee 32-34 60322 Frankfurt am Main, Germany Phone: +49(0)69 154 008 0 Fax: +49(0)69 154 008 728

Internet: www.frankfurt-school.de

Abstract

The so-called Belt & Road initiative of China is the largest and most comprehensive global economic activity of our times. It consists on a land as well as a sea channel that covers more than 60 countries in Asia and Europe, around 65 % of the world population, one-third of world's GDP, and 25 % of global trade. Although the project is still in a very early stage it is worth starting a scientific based judgment of its impact and success perspective. This paper aims to kick-off such a discussion by conducting a feasibility study including economic as well as political factors. In order to reduce the complexity of the task the overall project is disaggregated by its six economic corridors plus the sea channel, which are evaluated by the same categories and summarized to an overall result. Our analysis shows that for more than half of the corridors a successful implementation is highly likely, for two the feasibility is judged as medium, and only for one it turns out that a success is unlikely mainly due to political reasons.

JEL Classification: F02/F15/F21/F53

ISSN: 1436-9753

Contact:

Horst Löchel

Frankfurt School of Finance and Management Adickesallee 32-34, 60322 Frankfurt am Main Deutschland / Germany h.loechel@fs.de

Fahad Nawaz

Frankfurt School of Finance & Management Adickesallee 32-34, 60322 Frankfurt am Main Deutschland / Germany

Content

Abstract	2
1.Introduction	
2. The Belt & Road Initiative: A Literature Review	
3. Assessment and Feasibility Analysis: A Corridor Analysis	
3.1 China-Pakistan Economic Corridor	
3.1.1 Corridor Description	
3.1.3 The Risks	8
3.1.4 Benefits and Risks Compared: The Feasibility Analysis	8
3.2 China-Central and West Asia Economic Corridor	
3.2.2 The Benefits	9
3.2.3 The Risks	10
3.2.4 Benefits and Risk Compared: The Feasibility Analysis	10
3.3 The New Eurasian Land Bridge	
3.3.2 The Benefits	11
3.3.3 The Risks	11
3.3.4 Benefits and Risks Compared: The Feasibility Analysis	12
3.4 China-Mongolia-Russia Economic Corridor	
3.4.2 The Benefits	13
3.4.3 The Risks	13
3.4.4 Benefits and Risks Compared: The Feasibility Analysis	14
3.5 The China-Indochina Peninsula Economic Corridor	
3.5.2 The Benefits	15
3.5.3 The Risks	15
3.5.4 Benefits and Risks Compared: The Feasibility Analysis	15
3.6 Bangladesh-China-India-Myanmar Economic Corridor	
3.6.2 The Benefits	16
3.6.3 The Risks	17
3.6.4 Benefits and Risks Compared: The Feasibility Analysis	17

THE BELT AND ROAD INITIATIVE OF CHINA – A CRITICAL ANALYSIS OF ITS FEASIBILITY

	3.7 21 st Century Maritime Silk Road	18
	3.7.1 Corridor Description	.18
	3.7.2 The Benefits	.18
	3.7.3 The Risks	.19
	3.7.4 Benefits and Risks Compared: The Feasibility Analysis	. 19
4.	Summarizing the Corridor Analysis	20

1. Introduction

The so-called Belt & Road Initiative (BRI) was launched by the Chinese government in the year 2013. From an economic point of view the project is an attempt to support domestic growth by more international trade especially for the still underdeveloped West of China and to 'export' current overcapacities in parts of China's industries to the world. In political terms, it is despite the internationalization of the Chinese currency the most import arrangement to promote the rise of the country in international affairs.

The size of the project, financially and geographically, and the significant time required for the completion has forced the Chinese policy makers to strongly market the potential of the project to the outside world. The basic feature of the promotion strategy is the promise of the high prospects and the commitment to satisfy the various needs of the countries involved. To strengthen the validation of these high prospects even more, the Chinese authorities compare and always confirm the high level of similarity of these steps to the ones taken by them in the past for their own economic success. In the end, the decision makers have stated BRI to be a "Win-Win" situation for all parties involved (Corrales, 2017). This is a powerful statement, which has its supporters but critics too.

Considering the different appraisals, this paper will provide a qualitative oriented benefit and risk analysis of the project in order to evaluate its feasibility. The methodology used is a detailed investigation of each of the economic corridors covering the project including economic as well as political considerations. The further part of the paper is divided into 3 chapters. The first one provides a literature review about the overall project. The second chapter will be used to describe each individual economic corridor of the BRI and its prospects with the help of three categories each: description of the specific nature of the economic corridor, identification of the main benefits and the risks, concluded by respective feasibility analysis by judging benefits and risks. The paper is concluded with an overall evaluation and the outlook of the project.

2. The Belt & Road Initiative: A Literature Review

The Belt & Road Initiative (BRI), was first mentioned on Sept 7, 2013, when the Chinese President delivered a speech to the Kazakhstan's Nazarbayev University, explaining the Silk Road Economic Belt (SREB) (Aoyoma, 2016). This idea was marketed by stating it as a cooperation project, with the plans to make it a rewarding benefit to all the parties along the route (Gan & Mao, 2016). The following month, the other part of the BRI, the 21st Century Maritime Silk Road (MSR), was introduced to the Indonesian Parliament and explained as the utilization of the sea channel to the maximum through the initiation and enhancement of the economic cooperation between the states (Li, 2015). To confirm the project's importance and show China's level of commitment, the BRI was written and approved by the country's leadership as a key policy priority before 2020 (Yiping, 2016).

As mentioned in the introduction, analysts showed the acceptance of its prospects and stated it as a certain "Win-Win" situation for all (Gan & Mao, 2016). The validation for the Chinese 'Win' was explained by the access provided to more markets for its exports and imports, while the 'Win' for the other states involved was explained by the easy provision of the

needed financial capital and the professional expertise for the domestic companies from the recognized Chinese companies.

The BRI is a significant sized project divided into two sections. The first section is the so-called Silk Road Economic Belt (SREB), using the land channels and the second is the Maritime Silk Road (MSR) for the sea channels. The project is with plans to cover more than 60 countries in Europe, Asia, and Africa, 65% of the world population, one-third of the world's GDP and a quarter of all the goods and services the world moves (Ngai, Sneader and MaZecha, 2016).

The SREB is planned on bringing together China, Central Asia, Russia and Europe, linking China with the Persian Gulf and the Mediterranean Sea in the process (NDRC, 2015). Most important the Belt is divided into 6 economic corridors:

- New Eurasian Land Bridge (NELB)
- China–Mongolia–Russia Economic Corridor (CMREC)
- China–Central and West Asia Economic Corridor (CCWAEC)
- China-Indochina Peninsula Economic Corridor (CIPEC)
- Bangladesh-China-India-Myanmar Economic Corridor (BCIMEC)
- China–Pakistan Economic Corridor (CPEC)

Additional to these corridors the MSR is a network of maritime routes connecting, Asia, the Indian Ocean, the Middle East, Africa and Europe. The basic approach is to develop the ports to high standards and expand the industrial base of the port cities, transforming these areas as global transit points and regional economic hubs in the process (BMI Research, 2017).

Overall, the above will include the enhancement of the infrastructure and the development of industries to utilize its benefits (Fallon, 2015). The infrastructure projects will include the construction of transport necessities needed such as ports, railways, roads and airports. For the industries, the investments will be used for the development of multiple industrial parks all around the route (BMI Research, 2017).

The Initiative requires a substantial amount of investments by the stakeholders to achieve the aimed success. Currently the investment requirement is valued with more than USD 20 trillion if all the countries on the belt are considered (McKinsey & Co and HKTDC, 2016).

To generate the required capital, multiple sources have been planned and set-up. One of the sources is the "Silk Road Fund", which was created in December 2014 and confirmed with the commitment of USD 40 billion by the Chinese State (Chi, 2015). Even more important was the setup of the Asian Infrastructure Investment Bank (AIIB) as a funding source of the project. The bank was launched in January 2016 with the support of 57 states creating an access of USD 100 billion, where China has provided approximately 27% of the funds.

However, there is still a significant gap between the required funds and the financial resources currently available. To counter this situation, it is also intended using Public Private Partnerships (PPP) to finance the project. On top on that it is thought to raise private capital by issuing project related shares and bonds on different financial markets (Rogers, 2017).

3. Assessment and Feasibility Analysis: A Corridor Analysis

The BRI is divided into seven parts as already mentioned. Given the size and the complexity of the project an overall judgment is at best started with an investigation of each of these parts applying a similar methodology and measures. We are using basically three categories of measurement: description of the scope of the respective corridor, a benefit – risk – analysis, and a feasibility study.

3.1 China-Pakistan Economic Corridor

3.1.1 Corridor Description

China-Pakistan Economic corridor (CPEC) is collaboration between China and Pakistan initiated in 2013 for the development of multiple infrastructure projects in Pakistan, which are valued presently at US\$ 62 Billion (Siddiqui, 2017). These projects are divided into 2 categories, energy and infrastructure, with plans to complete the projects by 2030 (Global Capital, 2016). The aims are to satisfy the energy needs of Pakistan and develop a multiple mode transport network connecting the SREB with the MSR.

The structural plans for the Energy sector projects are the development and expansion of multiple subsectors, such as the fossil fuels (Coal) and the Alternative Energy (Wind and Solar). The Infrastructure projects are the expansion of the Gwadar port, the development of a Special Economic Zone around that region (Lyu, 2015) and the expansion of the road and railway network to provide 3 trading routes throughout the country (Tahir, 2017).

3.1.2 The Benefits

For a significant time period, Pakistan has faced an energy crisis. The state faces an average shortfall of 4,500 MW per annum, which is compensated by approximately US\$ 140 million (7% of the GDP), leading to deficit costs for the Pakistan Economy (Dawn, 2016). The energy sector investments in CPEC and the associated plans will help end these significant hits to GDP as well as help satisfy the energy needs of the other sectors (Ahmadani, 2017).

For its projects in the past, Pakistan has taken loans sizeable in amount and expensive, such as the 5%-8.5% interest rate loans from World Bank and 12% interest rate loans from the private market (The World Bank, 2017). This has led a decrease in the resources available for the other sectors/departments (KPMG, 2016). The CPEC will help counter this problem. The infrastructure projects will be funded by loans ranging from 0%-1.6% (Butt, 2015), and the Energy projects will be in IPP structure, where funds will be foreign investments and loans to the Chinese companies through their own banks (Hussain, 2017), rather than the state. This IPP structure will also support the China's economy by providing an access to another market for its energy companies and the pre-negotiated pricing rates for energy units will potentially lead to higher and consistent revenues.

The present major sea route for China is 13,000 km long and passes through the Straits of Malacca. This route is threatened by Pirates and also faces the potential blockade by the navies of US and its allies, which patrol the sea route (McCauley, 2014). The Gwadar port and the transit route for the oil pipes through Pakistan will help reduce the risks and costs by

diversify the access to multiple markets and decrease the trade route by 6000 miles. Furthermore, this development will also help provide the under-developed western provinces of China access to the regional markets around and thus the prospects for expansion, one of the major aims of the BRI for China.

3.1.3 The Risks

The FDI for the energy projects are one of the prime attractions of CPEC, but these come at a cost for the economy. The equity to satisfy the 60% capital needs of energy projects are guaranteed a 17% annual rate of return, causing a cash outflow of US\$ 2.4 billion annually from the Current Account, which is already at a deficit of US\$ 4.4 billion (Hussain, 2017). To avoid increase in deficits furthermore, a minimum annual growth rate of 14% in exports and a restructure of trade policies will be needed. These requirements are a risk because the average annual growth rate over the past decade has only been an estimated 7% (Trading Economics, 2017) and the high ranking of the Pakistani government in the corruption index confirms the administration's incompetence for the development of the correct trade policies.

Throughout its history, Pakistan has faced excessive political infighting because of the rivalry between the provinces, leading to delays or the cancellation of projects carrying sizeable monetary benefits. This leads to speculate that the political conflicts can delay the future implementation of the projects within CPEC and hurt the valued prospects. This can evaluation can be confirmed with the conflicts between the Federal government and the provincial government of Khyber Pakhthunkwa regarding the route change.

CPEC also faces security threats too. The Gwadar port has throughout the past been threatened by nationalist and separatist parties, such as the Balochistan Liberation Army, while the northern part of CPEC faces threats from the Taliban.

3.1.4 Benefits and Risks Compared: The Feasibility Analysis

The economic risks regarding the growth rate needed has low probabilities because one of the biggest causes for the 7% growth rate mentioned has been the low access to energy and power reserves for the other sectors. The development of the energy sector will help resolve that problem and provide the opportunity for expansion. Furthermore, the development of the Gwadar port will provide access for numerous domestic sectors to multiple international markets and this will help raise the growth rates. On the other hand, the security risks faced are at medium levels because of the successful military programs conducted by the Pakistan army, one of the most recognized in the world (The Express Tribune, 2015). The Political risks due to the bad governance are high, but the initial steps taken by the law department this year, such as the dismissal of the prime minister and more powers for the National Accountability Bureau (NAB), verify the willingness by the Pakistani decision makers to counter this problem. Furthermore, the support for CPEC by the general public has given signals to the elected Pakistani authorities to show flexibility and take the steps required for the project to succeed.

The value of the benefits and the steps taken to counter the risks show that the project has high potential and is feasible for both the sides, China and Pakistan. But the project is long term and the steps being taken to counter the multiple problems are still in its initial stages, therefore the situations can go negative to dent the project's prospective rewards. This shows

that the feasibility is at medium levels, but has the prospects to rise if the high coordination levels are maintained between the stakeholders and the correct steps are taken throughout.

3.2 China-Central and West Asia Economic Corridor

3.2.1 Corridor Description

The CCWAEC, similar to the historic "Silk Road", is a plan to connect the Chinese province of Xinjiang with the Mediterranean Sea, through the Central Asian States as well as with the Western Asian States of Iran and Turkey. The corridor aims to develop the multiple sector infrastructures of the Central Asian States and transform these states to be a transit part of the network between Asia and Europe (Contessi, 2016), as well as help provide multiple access to the Middle East market.

The plans for this corridor include the strengthening and expansion of the energy sector by the development of multiple energy pipelines and improving the present ones. The distribution shall be improved by the creation of the transport network, train and road both. Further agreements have been signed to develop a beneficial cooperation in other sectors such as the Finance, Communication and Trade.

3.2.2 The Benefits

The development of the Central Asian Energy sector, the major source of revenue, will provide substantial benefits to the states (World Finance, 2014). It has been forecasted, that these sector developments will help the GDP of Central Asia recover, providing growth rates at least 3.8% and significantly more in a best case scenario (ADB, 2017). In addition, the development of this energy sector will open up a market other than the Middle East for China, helping to diversify its supplier base and reduce the trading risks faced. The route planned will also provide access to Iran, for both its oil reserves and the significant consumer base, helping increase trade levels between China and Iran (Dillinger, 2017).

The development of the transport network will help provide a time and cost efficient access to potential markets for West China. The completion of the train has confirmed these benefits, by reducing the time to 14 days in comparison to the 45 days on sea and decreasing costs in comparison to air freight, the major delivery source for this region (Ramachandaran, 2016). The development of the connectivity network will open up the European market for the Central Asian States and provide access to the sea ports in the South.

China has strengthened its investments to the region by providing cheap loans for development, with an equity payment option (Miller, 2017). Similar to CPEC, these steps will provide the Central Asian states with the opportunity to boost their economies at a cheaper cost.

The projects in the corridor are planned in coordination with the national development strategies of the Central Asian States- Kazakhstan's "Road to Brightness", Tajikistan's "Energy, Transport and Food" (a three-pronged strategy aimed at revitalizing the country), and Turkmenistan's "Strong and Happy Era" (Tai et al, 2016). This has helped increase the financial and non-financial cooperation between the states and China more as well as reduces the financial risks for both.

3.2.3 The Risks

Due to the diversified communities with variable needs and requirements, conflicts can be triggered between the Chinese investors and the communities if steps are not taken appropriately by the authorities and the Chinese. For example, the lease of the Agricultural land for project development in 2016, caused massive protests in Kazakh Cities (BBC, 2016) and similar developments in Kyrgyzstan caused the bomb attack on the Chinese Embassy in Bishek in 2016 (Phillips, 2016).

The other risk proving to be a significant hurdle for the smooth movement of the projects is corruption and poor governance. This problem is not only caused by the Central Asian State authorities, but the Chinese Investors and Officials are also part of this obstacle. One of the biggest examples are bribes given to government officials for the state licenses in the mining sector (OCCRP, 2016).

The project also faces environmental risks too. These risks can be the trigger to conflicts and financial problems if the projects are not planned or handled appropriately. For example, In 2014, a \$300 million Chinese oil refinery in Kara-Balta was shut down for a year after residents around the refinery complained of the pollution and the medical costs faced because of it (Trilling, 2014).

3.2.4 Benefits and Risk Compared: The Feasibility Analysis

To counter risks due to corruption and fraud, the Central Asian Authorities have taken steps to strengthen administration (OECD, 2013) and the Chinese government has introduced strict domestic policies. Russia, a key investor in BRI and a major player in the Central Asia policy reform will also help put pressure on the region's decision makers to keep the administration standards high. To deal with the environmental risks, the decision makers have shown interests in the Renewable energy sector too. These multiple steps taken show that the authorities and the decision makers have high willingness to handle the problems quickly and efficiently.

The major focus of the economic corridor is the energy sector, which is already functional. This factor increases the probability to achieve the high profits aimed and within a shorter time period in comparison to a complete startup. The enhancement of the connectivity will also help increase the prospects. In the end, these significant sized results and benefits will help the decision makers to promote and validate the project to the general public, leading to an increase in the support from the general public and the reduction in the security risks faced.

The assessment of the present scenario, the size of the prospective results and the high probability to achieve them shows that the economic corridor has great feasibility.

3.3 The New Eurasian Land Bridge

3.3.1 Corridor Description

The NELB, also called the Second or New Eurasian Continental Bridge, is an international passageway connecting the Pacific with the Atlantic. It is a 11,870 Kilometer route

connecting Lianyungang to Rotterdam (Shepard, 2016a) (McClatchy, 2013). The aims are to develop it as the main route of the China–Europe Express Railways system and provide a relatively more time and cost beneficial mode than the other transport channels available for the trading companies (Luft, 2016; Shepard, 2016a).

The China section of the route planned comprises the Lanzhou-Lianyungang Railway and the Lanzhou-Xinjiang Railway, passing through the Eastern, Central and Western Parts of the state. The international part passes through Kazakhstan, Russia, Belarus, Poland and Germany, reaching a number of coastal ports in Europe.

3.3.2 The Benefits

The aggressive policies of the Chinese government for the development of the Western provinces have led to the transfer of the manufacturing sector to cities in the West (Bradsher, 2013). This transfer has increased the demand for the rail route transport more because of the poor access to the eastern ports and the present rail route available, Trans-Siberian route. The NELB is and will be developed specifically to solve this problem.

Rail, sea and air are the major methods for transportation for this route costing US\$10,000, US\$ 5,000 and US\$40,000 and the transit time of 19 days, 42 days and 3 days, respectively (Mount, 2014). The lower transport costs for the maritime transport do give attractions to the companies, but only to those which have easy access to the ports. As Western China does not have that, the cost difference between rail and sea is only 25% (Arduino, 2016). Other analysis has shown that NELB will provide higher overall benefits in comparison to air, the faster one and sea, the cheaper one, especially for the time of sensitive heavy products, processed food, the car parts as well as heavy steel (Rastogi, and Arvis 2014). The impact of fuel price increase to the transit time on sea and air freight costs, amplify these benefits furthermore.

The Chinese sea shipping faces the risks of the Malacca Straits, and is significantly dependent on the safe passage through. This increases the importance of the corridor more, as it will be providing the states and the other stakeholders with route leading to a reduction in geo political and security risks factors.

The critics for this corridor consider the project weak stating that the usage of rail route is small in comparison to the sea and it only consists of 10% of China's EU bound exports (Shepard, 2016b). The supporters counter this opinion by stating higher potential for the project. The analysis is confirmed by the 7% increase in container traffic in 2012-2013 on the Trans-Siberian railway, the potential competitor to the corridor and the one with the more hurdles (Debreczeni, 2016).

3.3.3 The Risks

Comparative analysis with the other options has shown that Rail will provide the time benefits and cost benefits to the other methods. But this transport mode has limited capacity and the potential to only transport 20% of China-Europe cargo (Rastogi, and Arvis 2014; Rodrigue, 2017), due to no double stack services. This causes to reduce the economic efficiency of the route. Furthermore, the imbalance of trade between China and EU is

significant and causes majority of the containers to come back empty (Kurop, 2014; Shepard, 2017).

The transit time increases due to the different technical and administrative structures of the railways systems within the multiple regions and countries it passes by. This increase in transit time can be a significant factor behind the choice of the "Just in Time" supply chain industries, the ones willing to pay the premium for time and the major targeted customers for this project (Debreczeni, 2016; The Chamber of Commerce, USA, 2010).

3.3.4 Benefits and Risks Compared: The Feasibility Analysis

The feasibility of the project is high. The main reason is the constant demand of the route by the Chinese industrial hub because of the easier access, reduced costs and the protection from the risks at the Malacca Straits. The demands will not only be consistent but also high, because this hub is part of China, one of the biggest and the fastest growing economies in the World.

To counter the hindrance in time because of the administrative factors, agreements proposed by China to increase flexibility in the rules have been signed by the other countries, Kazakhstan, Russia and EU (Zimmerman, 2015). On the other hand, the high speeds of the China Express train will always help in countering that increase in time caused due to the technological differences.

The analysis can be further confirmed by the rewards gained by the Central Asian states for its participation. In 2013, the railway freight division increased its labor by 160,000, a 2% of the Country's labor force, to support the Chinese specialists with the project (Debreczeni, 2016). GE moved production facilities to Central Asia for locomotive production and the route provided EU market access to Uzbekistan's car manufacturing industry, one of the fastest growing in the world (EOS Intelligence, 2016).

3.4 China-Mongolia-Russia Economic Corridor

3.4.1 Corridor Description

In September 2014, China proposed the "The China-Mongolia-Russia Economic Corridor", a plan designed in accordance with the development programs of Russia and Mongolia, "Trans-Continental rail plan" and "Prairie Road Program" respectively. This led to positive response from the countries and in 2015, the Heads of States met in Russia and signed the deal to push forward the construction of the economic corridor. The aims of this project are to expand the trade levels between Russia and China by developing a multi-mode transport network and transforming Mongolia as the transit hub in the process.

The project structure, outlined by the National Development and Reform Commission (NDRC), is a cooperation between the states on 7 areas (Soni, 2017; China.org.cn 2016), which are:

- 1. Enhancement of the Transport Infrastructure and Increase of transport facilities
- 2. Renovate ports of entry and overhaul customs procedures

- 3. Closer cooperation in energy and mineral resources, high tech, manufacturing, agriculture and forestry
- 4. Expand trade at border regions and widen services trade
- 5. Cooperation in education, science and technology, culture, tourism, medical care and intellectual property
- 6. Strengthen cooperation in environmental protection
- 7. Promote local and border cooperation

3.4.2 The Benefits

One of the strongest benefits of this corridor is the development of an efficient and effective transport structure. The High-speed rail link being constructed, will provide the Corridor's rail link with connections to the Russian rail route, reducing the transport time between Moscow and Beijing to 48 hours (Pozzebon, 2014). Furthermore, as it is a coordinated plan, connecting three mega transportation infrastructures, the BRI, Prairie Road Project and the Trans-Continental rail plan, it will be a cheap investment for the stakeholders (Kazak, 2017).

The economic corridor will help Mongolia, an Agricultural and Services economy diversifying its revenue base through investments in its untapped minerals (Coal) sector, one of the highest in Asia. Furthermore, the connectivity route planned will provide this sector access to multiple markets. For example, the transportation network through Russia will open up the market in the West and route through China will provide connections to the sea ports.

The connections through this corridor will provide Russia with access to markets other the EU for its imports and exports. The route of that trade will also help Russia by opening up the doors for its eastern parts, to get the required investments for development and expansion, one of the major aims of the present Russian government (POR, 2017).

The economic corridor will benefit China by expanding and diversifying its energy supplier market and providing a route to the EU market, other than one passing through Kazakhstan.

3.4.3 The Risks

Mongolia is a developing economy and like any other faces hurdles in its law making and administration. Over the past period, Mongolia has been adjusting its policies multiple times for the mining industries, one of the major sectors targeted in this project, and this had led to issues for foreign investors. One of the prime examples is the change in policies on "Regulations for Foreign Investments in Business entities" in 2013, which reduced the investments in the mining sector by 57% relative to the previous year (Jie, 2016).

This project also faces geo-political risks because Russia and China are big players in the Global market and they have been strong rivals during past periods (George, 2013). The success of this project is heavily dependent on the stability of the relationship as a difference of opinions on any situation can delay the progress or even give the project the red light.

The prospects for the investments in the Mongolian mining sector are big, but still face environmental risks and damage if regulations made and decisions taken are not correct. Experts state that the recent mining developments are causing damage to the quantity and quality of surface water, which if not handled properly can lead to conflicts in the future (Stern, 2014).

The major investments for the improvement of the transport infrastructure will be the railway links and similar to the NELB, this corridor also faces technological hurdles, which will require heavy costs to counter.

3.4.4 Benefits and Risks Compared: The Feasibility Analysis

The common rival for both Russia and China, past and present, has been the USA. This aspect potentially will keep the states flexible long-term reducing the probability of the negative results due to the Geo-Political risks mentioned above. Furthermore, the significant investments required and the chance to upgrade the own economy will always give the incentive to countries to show flexibility and adjust accordingly to the needs of the corridor.

The present high trade levels of China and Russia with Mongolia, the prospects for more and the similarity of the corridor's plans with Mongolia's own project (Praire Road Program) will always force the state law makers to think about the impact of their decisions when drafting their policies. This factor leads the reduction in the levels of risks faced due to incompetent decision making.

The similarity of the corridor's plans with the present connectivity projects of the states will raise the coordination levels between the states leading to the creation of the official plans for investments and development quick and easy. This aspect will help provide an immediate start for the development of the Economic corridor and earn the rewards early. These connections with the state development plans will also help distribute the investments, reducing the financial risks faced. Overall, this economic corridor has to be evaluated with a high feasibility.

3.5 The China-Indochina Peninsula Economic Corridor

3.5.1 Corridor Description

The concept of this economic corridor was introduced, by the Chinese Premier Li Keqiang, during the 5th leaders meeting for the Greater Mekong Sub-regional Economic Co-operation. The three suggestions explaining the plan were (HKTDC Research, 2017):

- 1. Jointly planning and building an extensive transportation network, as well as number of industrial co-operation projects;
- 2. Creating a new mode of co-operation for fundraising;
- 3. Promoting sustainable and coordinated socio-economic development.

The major aim for this economic corridor is the development of a cost and time efficient transport structure, connecting the inland cities to the sea ports and a link to the MSR (Zhao, 2017).

The draft plan of the proposed route is the rail and road connection of China's two provinces, Yunnan and Guangxi, with the South-East Asian countries of Cambodia, Laos, Myanmar, Thailand and Vietnam and a further extension to Malaysia, Singapore and Indonesia. The plans also include the development of industrial parks in the major cities along the transport route.

3.5.2 The Benefits

ASEAN region, one of the biggest markets globally, is a major trading partner for China (Vinayak et.al, 2014). Past economic cooperation deals have provided benefits to both, such as the 18% growth in trades after the signing of the China-ASEAN Free Trade Area (CAFTA) in 2010 (HKTDC, 2015). This historical record confirms the high potential of the rewards when the cooperation levels and investments are raised more for this economic corridor.

The planned development of the multiple routed highways in the region and the railway network will help provide the Indo-China states, a cost and time efficient, access to the Chinese economic hubs. To further increase the benefits, the states have also raised correspondence levels between the administration departments.

The route planned will open up new outlets to the sea, Myanmar and Malaysia, for China. This development will increase its connections to MSR and help it reduce its dependence on the disputed sea regions. This overland trade route will also help provide China the opportunity to take advantage of the region's growing markets, numerous manufacturing hubs and abundant natural resources (Xinhua, 2016).

3.5.3 The Risks

The ASEAN states have multiple territorial conflicts with China, such as the South China Sea dispute, which have led to the negative opinion of China and mistrust of its aims and plans. A regional survey of 318 experts, conducted by the ASEAN Studies Centre confirmed this negative opinion (Today Online, 2017). This attitude can lead to delays in projects and plans.

Due to variable economic levels and trades, China can have troubles to negotiate and implement projects with the countries having a stable economy and the lesser needs for the soft loans. For example, Thailand a 30 times bigger economy than Laos, delayed the Laos railway line's extension project for its own terms on the agreement (Perlez and Yufan, 2017).

One of the main aims of Chins for the BRI is to provide its companies and sectors access to more markets. But the probability to achieve these aims is low in South East Asia because of the stiff competition from Japan and the West and the poor reputation of the Chinese companies in the market (Ker, 2017; Le Hong, 2017).

3.5.4 Benefits and Risks Compared: The Feasibility Analysis

The political risks due to the conflicts are significant, but the high synchronization by states for the rewarding projects in the past show that the probability is high for the states to show flexibility and coordination because this economic corridor has very high benefits associated with it.

The investments by the Chinese government to build its Soft Core image and the aggressive corporate policies of the Chinese companies to raise standards and counter global competition, shows that the appropriate steps are taken to satisfy the critics and put at ease those negative opinions in the general public (Funnel, 2015).

The project can be considered to have high feasibility considering the acceptance of past projects, steps taken to handle the risks and the present low impact of the territorial disputes on economic deals. But the economic corridor is long-term, which increases the unpredictability of the powers of the territorial disputes in the future and their impact on the cooperation levels needed. This factor leads to value the project to have medium-level feasibility.

3.6 Bangladesh-China-India-Myanmar Economic Corridor

3.6.1 The Economic Corridor

On December 18, 2013, during the first meeting of the BCIM Forum, experts evaluating the prospects of the economic corridor, formally endorsed and marketed the idea to the decision makers. These steps, led to the acceptance of the proposal and agreements were signed by the state decision makers for the development of the economic corridor. The plans were with the aims for infrastructure development, improvement of the connectivity between the states and the increase in cooperation with in multiple sectors to stimulate trade and raise its levels (Bayes, 2017).

The initial projects chosen for investments were the development of an expressway and a high-speed rail link between the Chinese city of Kunming and Kolkata in India via Mandalay in Myanmar and the Bangladeshi capital of Dhaka (Luft, 2016). Further plans included the enhancement of air connectivity, development of waterways connecting each other, the setup of a power transmission system and the development of oil pipelines (Dasgupta, 2016).

3.6.2 The Benefits

South Asia, a region considered to have high potential has always failed to utilize its asset and achieve its aims till now. The major factors are the weak access to the required financial capital resources and the limited levels of cooperation in between. As the plans for this economic corridor are to satisfy those needs, the region has the opportunity to achieve its potential.

The economic corridor will help provide India the resources to access and utilize the key sectors of Oil, Gas and Minerals (ICC, n.d.) as well as the cheap labor of its north eastern states, one of the most under-developed region in Asia (Elliot, 2015). Furthermore, the corridor will help India implement its "Look East Policy" (The access to South East Asia) by providing it time and cost efficient routes to China and South East Asia (Rahman, 2014).

Bangladesh will also earn significant benefits. The expansion and modernization of the multiple ports as well as the development of the access routes to them will provide its sectors an efficient and cost effective access to the mega markets of China and India. This will help transform the country into an industrial hub and a regional trade zone.

The planned port development in Myanmar will help provide it benefits similar to ones achieved by Bangladesh. Investments in its major sectors, such as the Oil and Gas, and the access to multiple markets will help counter its high levels of infrastructure deficits (UNESCAP, 2015).

For China, the project will offer multiple benefits. The economic corridor will provide it the access to multiple markets for its manufacturing sector as well as its development corporations. The route through the Bay of Bengal, will help bypass the Straits of Malacca. Last but not least, it will help satisfy its energy needs by providing access to Myanmar's oil and gas sector and Bangladesh's natural gas reserves (Detsch, 2014).

3.6.3 The Risks

The biggest risk faced by the economic corridor is the lack of trust and confidence between India and China, the two major players of the project, which causes the relationships to be unpredictable. Because of this sensitivity, multiple issues, such as the Pakistan-China cooperation for the CPEC and the border tensions at the Doklam plateau, can trigger conflicts causing the project to be put at a halt or even stopped completely.

The economic corridor faces security risks too. The lack of focus on regional development has led to the creation of nationalist groups in the north east states of India causing conflicts in between. This factor has triggered fear in the Indian analysts, who state that the development projects will increase the support of these nationalist groups for the Chinese rather than the Government, increasing the tensions between China and India more (Sajjanhar. 2016).

The weak administrative infrastructure and high corruption levels will cause problems for the economic corridor too. These problems will cause the inefficient flow of the funds to the projects causing them to go over the budget and time schedule. These results will reduce the attractions for private investors, the important source of investments in the future stages of BRI.

3.6.4 Benefits and Risks Compared: The Feasibility Analysis

The potential of the project is sizeable but the feasibility levels are significantly low. The major factor behind the evaluation is the tension between India and China. The potential of the project and the results achieved can reduce these tensions and increase cooperation levels. But to accomplish those needed results, the economic corridor has to pass the initial stages. This seems to be difficult now because India has always shown an aggressive attitude on its territorial disputes and the present reactions, such as its absence from BRI Forum, confirms this aggressiveness (Business Today, 2017). China on the other hand has also taken aggressive steps on border in the past and present. These reactions reduce the probability of the project to go ahead because the project is highly dependent on the relationship between the two.

The risks due to the weak administration and the high corruption can be countered, as steps will always be taken by Myanmar and Bangladesh because of the Corridor's importance to their economies. But low probability of the project to go ahead as discussed above will never produce the scenario where steps will be needed or taken to counter corruption and weak administration.

3.7 21st Century Maritime Silk Road

3.7.1 Corridor Description

In October 2013, the MSR concept was put forward through the address by the Chinese Premier to the Indonesian parliament at the 16th ASEAN-Summit in Brunei (ASEAN-China Center, 2013). This Project, similar to the SREB, was with the aims to improve the connectivity levels between the East and the West, focusing on the sea channel rather than land.

The Structural plans of the project are the development of deep sea ports, Oil and Gas storage facilities and the industrial zones at the main connection stops of the route (Luft, 2017). The route planned consists of 2 branches. The first branch starts from Kanton, passes through multiple Asian stops to Mombasa and from it goes north connecting to the SREB at Venice. The second route will be moving from the Chinese coastal ports eastward to the South pacific, passing through the South China Sea (Chaturvedy, 2017).

3.7.2 The Benefits

As the sea, is relatively the more important channel for the trades of South East Asia, this maritime project holds significant benefits for the ASEAN states (Cai, 2015). Past economic cooperation deals for maritime trade, such as ASEAN-China Port Development & Cooperation Forum in 2007 and the China-ASEAN Maritime Cooperation Fund in 2011 helped the trade volumes surpass US\$480 billion and increased it by 8.3 % year-on-year in 2014 (China Briefing, 2015). Considering this record and the magnitude of MSR, experts forecast trade levels for the region to increase to US\$ 1 trillion by 2020 (Yosephine, 2016). The access to multiple markets in the West will also help the ASEAN states increase the trade levels furthermore.

The other region on the route is South Asia, where plans are the development of ports and industrial zones at Kolkata and Colombo. The projects in Kolkata, considered the economic hub of eastern India, will help expand the city's manufacturing sector through the industrial zone and provide the needed connectivity to the North-East Indian States. On the other hand, the US\$1.4 billion "Colombo Port City" project, the largest FDI Project in Sri Lanka (Perera, 2016) will help the city transform into a transit hub and maximize trade levels for the whole country.

The East Coast of Africa, the next targeted part of the route on the project, will also earn rewards. The aggressive investments by China for the development of multiple ports in the region, the associated industrial zones and the inland connection routes will help (Kleminsits, 2017) improve the infrastructure of multiple sectors, as well as provide the access to global markets. These will help to utilize the economic potential of the region.

China will earn multiple benefits from the project. The rise in cooperation levels with the ASEAN states, will help settle the maritime disputes, achieve the non-risky transit route and earn the high financial and non-financial benefits aimed for. The access to new markets for its multiple sectors will be the other reward. The developing economies will provide investment opportunities for Chinese capital investors, the infrastructure projects will help the

development sector expand globally and the economic expansion of the states will help increase the consumer base for its manufacturing industry.

3.7.3 The Risks

The MSR faces political risks because of territorial disputes and conflicts with the ASEAN states and India. The multiple needs of the ASEAN states and the Chinese have increased the support levels for the project and the needed cooperation. But due to decisions taken during the present, such as China's negative response to the July 2016 ruling of the Permanent Court on Arbitration and its construction of artificial islands, have raised the tensions (Reuters, 2017). On the other hand, the CPEC and the escalation of border disputes have increased the negative stance of the Indian PM, Modi, and elevated India's cooperation levels with the USA, the global rival of China (First Post, 2016).

Investments in Africa will face multiple risks too. The high corruption levels will be a cause for project delays and budget over runs, weakening the attraction for the private investors needed in the future. The internal conflicts, such as the land disputes in Kenya, cause security and social risks too and inappropriate steps taken to handle these risks can damage the feasibility of the project. For example the opposition by the farmers due to the low compensation given by the authorities led to the cancellation of the US\$ 144 million wind power project in 2016.

3.7.4 Benefits and Risks Compared: The Feasibility Analysis

As discussed in the sections above, the disputes between the ASEAN states and China have been long, but flexibility over the periods and the coordination has been high in the past for the development projects with potential. As the MSR project is significant in size and the rewards sizeable with it, the coordination between these countries will likely be higher. Even if the ASEAN states ignore this project, MSR route will have the backup of the multiple South Asian ports to provide the access to the West.

The relationship between India and China has been and is very sensitive therefore the political risks faced are high, but the eager participating states of Bangladesh and Sri Lanka, provide the decision makers with the sources to counter. The project has the back up of the Chittagong Port in Bangladesh and The Hambantota Port in Sri Lanka if India avoids. The length of the route will increase, but the magnitude will not be significant enough to reduce the prospects of the project dramatically and cause a collapse.

The powers to counter the multiple risks faced in East Africa are high too. This is because of the strong support by the East African authorities and the willingness to take the appropriate steps needed. The support can be confirmed through the powerful statement given by Nkosazana Dlamini Zuma, the chair of the African Union Commission, while the correct steps taken can be validated by the successful opening of the US\$ 3.2 billion Nairobi-Mombassa rail link in May 2017, despite the criticisms by the general public and the experts.

The feasibility of the project can be considered high because the backup ports available for the routes and the eagerness by the African authorities show that even in worst-case scenarios, MSR route will still be functional and provide the connectivity and infrastructure development benefits to all the participating countries in MSR.

4. Summarizing the Corridor Analysis

The economic corridors of the initiative are based all around the Chinese borders, therefore the completion of the multiple BRI projects, will help provide the access to multiple markets for all parts of China, rather than the eastern part only. This change will help utilize the maximum potential of the western states of China and help raise the wealth standards of this under-developed region of the country. Considering the structural plans of the initiative overall, the successful completion of the project will also help provide China multiple access to the markets, both routes and channel wise, helping decrease its transit risks faced at present due to its multiple territorial disputes. These routes planned will also benefit China by providing it a time and cost efficient access to its present markets, the Middle East and EU, and also develop its trade with newer markets, such as Africa and Russia.

The major problems faced by a number of countries involved in the project are in most of cases a low funding base, weak infrastructure and low administrative standards. However, the active participation in the BRI will provide easier access to investment and support a more efficient use of capital particularly with regards to the different infrastructure projects. The project coordination with Chinese companies and authorities will also help public decision makers to raise their administration standards. Similar to China, the multiple trade routes planned will provide the access to multiple markets all around, helping the countries utilize their potential and move towards that expected and sought after expansion. If successfully, these developments could result in an upgrade for some of the involved countries to economic hubs in a globalised market.

However, as has been shown the BRI has a variety of risks, multiple in types and variable in magnitude. The weak infrastructure and the low standards of administration of a variety of countries cause the project to face political risks including corruption and inefficient bureaucracy. These political risks are not independent, but also lead to economic risks, such as going over the limit in costs and time budgets. These economic risks can be fatal for the project, because a failure in the expected profits or a delay in the gains will reduce the project attraction for private investors and hence the major source of funding for future stages.

Moreover, the territorial disputes with states in the south of China, such as India and Vietnam, add a security risk to the initiative. These territorial disputes decrease the trust levels for China, weakening the high commitment and cooperation needed. If not countered appropriately, this element could to significant delays or even a complete stop of the respective projects especially for the Southern economic corridors and the MSR, the part of the BRI with the access to most of the global markets and the channel for the highest trade percentage.

Last but not least, the initiative also faces political risks because multiple economic corridors are based in regions dominated economically and politically by China's competitors, the USA and to some degree Russia as well. A conflict between these three countries will

challenge the fragile stability of the respective regions and significantly reduce the feasibility of the project.

Overall, the projects in the North and the West of China are showing the highest feasibility. One of the major factors behind this evaluation is the development of these economic corridors in accordance with the already established development programs of the participating countries. This will help reduce the economic risks because of the lower investment needs and the higher willingness by the states to cooperate. The other factor which contributes to the high feasibility is the rising cooperation of China with Russia, the major player in these regions and already a heavy investor in the initiative itself.

The Southern economic corridors can also be considered feasible, but with a lower level given the identified risks caused by territorial disputes. The economic corridors in partnership with the ASEAN states will not be jeopardized completely by these territorial disputes because the historical record of the deals already made, show that both sides are ready for a certain degree of flexibility given the huge rewards of the overall project. However, the dispute with India is much more severe, which raises significantly the risks for BCIMEC and reduces its feasibility to the lowest in comparison to the other economic corridors. The territorial disputes with these multiple states are also a risk to the MSR, but they do not have the strength to damage the prospects or endanger it completely. The reason behind this assessment is the fact that a backup plan and route is available, through the Chittagong Port and the Gwadar Port, even if India and ASEAN states do not participate.

The following table summarizes the overall results of the analysis. The colors stand for different feasibility levels given the result of the above analysis:



THE ECONOMIC CORRIDOR	BENEFITS	RISKS	FEASIBILITY LEVELS
China- Pakistan Economic Corridor	 Expansion and improvement of Pakistan's Transport Network Energy Sector development; reduction in energy shortfall for Pakistan and the decrease in energy imports Concessionary loans 	 Fixed rate of return on Equity for the Energy Sector Investments. Increase of variance in profits Pakistan's Inland conflicts and border disputes with India Weak Administration and High levels of Corruption 	

	for investment • Capital and		
	coordination for other sectors		
	 Access to a sea route to the Middle East other than the Mallaca Straits 		
China- Central and West Asia Economic Corridor	 Central Asian Energy Sector development; Higher exports and GDP growth for the states Course to the ports for the Central Asian States Inland Route to the Middle East for China; shorter times and lower dependence on sea Access to an Energy market other than the 	 Inland disputes between the communities Weak Administration and High levels of Corruption Discomfort for the energy projects because of pollution and high medical costs Unrest between the public and the Chinese Investors on 	
	Middle East for China	Project Plans (E.g.Land Lease)	
The New Eurasian Land Bridge	 Cheaper and time beneficial route to the European market for the Western Provinces, China Higher demands for the train access by the premium payers Lower Times and costs relative to other competition routes (e.g.Trans-Siberian Rail Route) Lower sensitivity to fuel costs relative to the sea and air channels 	 Limited capacity because of no double stack services; Lower demand in the winter season Increase in transit times because of technical differences (e,g gauges, buffer heights) Different legal and administrative requirements over the route 	
The China- Mongolia- Russia Economic Corridor	 Development of Mongolia's minerals and energy sector Connection to the ports in China for Mongolia Inland access for China to the European market other than Central Asia Exports and Imports 	 Past rivalry between China and Russia, Future conflicts possible Unpredictable policy making for the Mining sector by Mongolia Increase in transit 	

China- Indochina Peninsula Economic Corridor	 Increase in trades between the ASEAN and China furthermore Improvement of transport infrastructure; easier access to the markets around the region 	times because of technical differences (e,g gauges, buffer heights) Extreme dust and Pollution from mining projects Territorial disputes Variable negotiation powers due to different economic conditions Competition for Chinese companies from the West and	
Bangladesh-	 Development of new outlets to the sea for China Increased cooperation within authorities for reduction in transport hurdles Development of 	Japan Negative opinion strong against China Sensitive relations	
China-India- Myanmar Economic Corridor	transportation network; easier to the markets for all Easier access of capital for the South Asian States Further Development in North East India Transformation of Dhaka to an Important transit hub Development of Myanmar Energy sector	 between China and India High corruption levels and weak administration in the South Asian region; high chances for budget over runs and time delays Weak Financial sector in Myanmar Security risks in the North East region of India 	
21 st Century Maritime Silk Road	 Connection of multiple regions together, further increase in market coordination Higher utilization of the sea channel, potential increase in exports for all participating states, South East Asia the most. 	 Territorial Disputes between South East Asia and China Sensitive relations between India and China Weak administration and High levels of corruption in South Asia and East Africa, both 	

• Development of Ports and Industrial zones;	• Security risks in Africa	
increase in manufacturing capacity and easier access to the markets for the trade Infrastructure development of Africa and the further opening of this market for the other states in the project	• Unrest between the public and the Authorities in Africa regard project policies (E.g. Land disputes)	

5. Conclusion and Outlook

The BRI is a high valued long term project with approximately an investment above US\$ 20 trillion and a period of 30-40 years required to complete it. To satisfy these financial needs and attract the multiple states for cooperation, China has created funds to confirm its commitment and has marketed the potential gains of the project aggressively. To strengthen the prospects more and move ahead with the development, the Chinese government has also taken steps furthermore and developed structural and coordination plans with the other states. Identifying the benefits and risks of these structural plans and the coordination policies, as well as comparing the relative strengths of each, the BRI shows overall a high probability for a success and indeed a "Win-Win" situation for all countries involved.

The above analysis is based on the assumption that the future market conditions and needs of each participant will be similar in the future as assumed and the existing high enthusiasm and cooperation levels between the states will be maintained all the way. As the project is long term, variability of the results calculated above can be significant to the ones achieved if the plans decided for each period or the periodic situations in the global market are different to the ones assumed right now. The structural plans of the economic corridors with the higher feasibility have been made to provide back up support to counter the above factors and satisfy the aims of the initiative even if the ones with lower prospects fail. But again this element is heavily dependent on the maintenance of those required high commitment levels and the willingness by the states to take the required steps for the upholding of the high feasibility levels throughout. Furthermore, as mentioned in the sections above, the BRI is a multiple stage project where the success of each will be dependent on the performance of the previous one. This again shows that the project could be a significant success but also a complete failure, depending on the appropriate steps being taken to adjust to the changes in the global scenarios or the commitment levels maintained to satisfy the high requirements.

Additionally, the assumptions and valuations above are mainly based on analysis of public information and historical records. As in-depth data for the financial and structural plans is not available yet, a more data based feasibility analysis would be a next step of research. However, given the current available information the present feasibility study demonstrates a high likelihood of success for the BRI of China.

References

ADB (2016), Myanmar: Energy Assessment, Strategy and Road Map, *ADB*, Phillipines, https://www.adb.org/sites/default/files/institutional-document/218286/mya-energy-sector-assessment.pdf. (accessed 22 Nov. 2017).

Ahmadani, A (2017), Profit explains: Why is Pakistan moving towards coal as its main energy source while the rest of the world moves away?, *Pakistan Today*, 17th April, https://profit.pakistantoday.com.pk/2017/04/17/mining-our-way-to-zero-loadshedding/. (accessed 21 Nov. 2017).

Aoyama, R. (2016), One Belt, One Road: China's New Global Strategy, *Journal of Contemporary East Asia Studies*, 5(2),pp. 3-22.

Arduino. A (**2016**), China's One Belt, One Road: Has the European Union Missed the Train?-Policy Report, *RSIS*, https://www.rsis.edu.sg/wp-content/uploads/2016/03/PR160307_China-One-Belt-One-Road.pdf. (accessed 21 Nov. 2017).

ASEAN-China Center (2013), Speech by Chinese President Xi Jinping to Indonesian Parliament, http://www.asean-china-center.org/english/2013-10/03/c_133062675.htm. (accessed 22 Nov. 2017).

Bayes, A. (2017), The Tale of a Towering Teacher, *The Financial Express*, 12th March, https://thefinancialexpress.com.bd/print/the-tale-of-a-towering-teacher. (accessed 22 Nov. 2017).

BBC (2016), Kazakhstan's Land Reform Protests Explained, *BBC*, 28th April, http://www.bbc.com/news/world-asia-36163103. (accessed 22 Nov. 2017).

BMI Research (2017), Trillion Dollar Trade Route: Winners Along The Belt And Road, *BMI Country Industry Reports*, BMI Research.

Bradsher. K (**2013**). China Again is Growing, more Slowly, *The New York Times*, 23rd January, http://www.nytimes.com/2013/01/14/business/global/as-chinas-economyrevives-so-do-fears-of-inflation.html. (accessed 21 Nov. 2017).

Business Today (2017), One Belt One Road: India stands alone against China-led globalisation as Pak, Russia joins hands with China over BRI, *Business Today*, 15th May, http://www.businesstoday.in/current/economy-politics/one-belt-one-road-india-stands-alone-against-chinese-led-globalisation-as-pakistan-russia-joins-hands-with-china-over-bri/story/252127.html. (accessed 22 Nov. 2017).

Butt, N. (2015), Economic corridor: China to extend assistance at 1.6 percent interest rate, *The Business Recorder*, 3rd September,

http://fp.brecorder.com/2015/09/201509031223451/. (accessed 21 Nov. 2017)

Cai, P. (2015), China-ASEAN Maritime Cooperation: Process, Motivation, and Prospects, *CIIS*, 25th September, http://www.ciis.org.cn/english/2015-09/25/content_8265850.htm. (accessed 22 Nov. 2017)

Chaturvedy, Rajeev R. (2017), 21st Century Maritime Silk Road, *ORF*, 10th February, http://www.orfonline.org/research/the-21st-century-maritime-silk-road/. (accessed 22 Nov. 2017).

Chi, L. (2015), China's Silk Road Strategy, The International Economy, Fall 2015, pp. 54-71.

China Briefing (2015), China's Growing Ties with ASEAN Opens up New Opportunities for Foreign Investment (2015), *China Briefing*, 7th August, http://www.china-briefing.com/news/2015/08/07/chinas-growing-ties-with-asean-opens-up-new-opportunities-for-foreign-investment.html. (accessed 22 Nov. 2017).

China.org.cn (**2016**), China, Mongolia, Russia to build economic corridor, Eco-Business, 20th September, http://www.eco-business.com/news/china-mongolia-russia-to-build-economic-corridor/. (accessed 22 Nov. 2017)

Contessi, Nicola P. (2016), Central Asia in Asia: Charting growing trans-regional linkages, *Journal of Eurasian Studies*, 7(1), pp. 3-13.

Dasgupta, S. (2016), 'Make in India' Key to Solving India-China Trade Riddle, *China-India Dialogue*, 21st April, http://chinaindiadialogue.com/make-in-india-key-to-solving-india-china-trade-riddle. (accessed 22 Nov. 2017).

Dawn (2016), 7 Facts About Pakistan's Energy Crisis - And How You Can Help End It, *Dawn*, 5th August, https://www.dawn.com/news/1275116. (accessed 21 Nov. 2017)

Debreczeni, G. (2016), The New Eurasian land Bridge – Opportunities for China, Europe and Central Asia, The Public Sphere-Journal of Public Policy, publicspherejournal.com/wp-content/uploads/2016/02/02.eurasian_land_bridge.pdf, (accessed 22 Nov. 2017).

Detsch, J. (2014), Bangladesh: Asia's New Energy Super Power?, *The Diplomat*, 14th November, https://thediplomat.com/2014/11/bangladesh-asias-new-energy-superpower/. (accessed 22 Nov. 2017).

Dillinger, J. (2017), The World's Largest Oil Reserves, World Atlas,

http://www.worldatlas.com/articles/the-world-s-largest-oil-reserves-by-country.html. (accessed 21 Nov. 2017).

Elliot, J. (2015), India's Remote, Underdeveloped North East Quarter, *Asia Sentinel*, 7Th January, https://www.asiasentinel.com/society/india-remote-underdeveloped-quarter-assam/. (accessed 22 Nov. 2017).

EOS Intelligence (**2016**), Driving Growth in Kazakh and Uzbek Passenger Vehicles Markets, *EOS Intelligence*, 16th March, http://www.eos-intelligence.com/perspectives/?p=2316. (accessed 22 Nov. 2017).

Fallon, T. (2015). The New Silk Road: Xi Jinping's Grand Strategy for Eurasia, *American Foreign Policy Interests*, 37(3): pp. 140-147.

First Post (2016), India has Opposed Maritime Silk Road under PM Modi: China Daily (2016), *First Post*, 4th July, http://www.firstpost.com/world/india-has-opposed-maritime-silk-road-under-pm-modi-chinese-daily-2871946.html. (accessed 22 Nov. 2017).

Funnel, A. (2015), China pushes to expand its soft power through cultural exports, *ABC-RN*, 6th May, http://www.abc.net.au/radionational/programs/futuretense/soft-power-with-chinese-characteristics/6446990. (accessed 22 Nov. 2017).

Gan, Y. and Mao, Y. (2016), China's New Silk Road: Where Does It Lead?, *Asian Perspective*. 40(1), pp. 105–130.

George, A. (2013), Russia and China, the ultimate Frenemies, *Russia Direct*, 27th September, http://www.russia-direct.org/reviews/russia-and-china-ultimate-frenemies (accessed 21 Nov. 2017)

Global Capital (**2016**), Corridor of Opportunity, *GlobalCapital*, 11th July, http://www.globalcapital.com/article/b100v1dj8k6pb6/corridor-of-opportunity. (accessed 21 Nov. 2017)

HKTDC Research (2015), The ASEAN Link in China's Belt and Road Initiative, http://hkmb.hktdc.com/en/1X0A3UUO/hktdc-research/The-ASEAN-Link-in-China%E2%80%99s-Belt-and-Road-Initiative. (accessed 22 Nov. 2017).

HKTDC Research (2017), The Belt and Road Initiative, http://china-trade-research.hktdc.com/business-news/article/The-Belt-and-Road-Initiative/The-Belt-and-Road-Initiative/obor/en/1/1X000000/1X0A36B7.htm. (accessed 20 Nov. 2017).

Hussain, I. (2017), Financing Burden of CPEC, Dawn, 11th

February, https://www.dawn.com/news/1313992. (accessed 21 Nov. 2017).

Indian Chamber of Commerce (ICC) (n.d.), Business Opportunities at North East, https://www.indianchamber.org/business-opportunities-at-north-east/. (accessed 22 Nov. 2017).

Jie, Z. (2016), China's Belt and Road Initiatives and Its Neighboring Diplomacy, *World Scientific* Publishing, Singapore.

Kazak, A. (2017), China to spend \$15 billion on roads to Russia in 2017, *Russia Beyond*, 20th March, https://www.rbth.com/business/2017/03/20/china-spend-15-bn-roads-russia-723111. (accessed 21 Nov. 2017).

Ker, M. (2017), China's High Speed Rail Diplomacy, *US-China Economic and Security Review Commission*, 21st February,

https://www.uscc.gov/sites/default/files/Research/China%27s%20High%20Speed%20 Rail%20Diplomacy.pdf. (accessed 22 Nov. 2017).

Kleminsits, **P.** (2017), China and the 21st Century New Maritime Silk Road, *PAGEO*, 16th March, http://www.geopolitika.hu/en/2017/03/16/china-and-the-21st-century-new-maritime-silk-road/. (accessed 22 Nov. 2017).

KPMG (2016), Budget 2016-2017, *The Business Recorder*, 7th Jun, http://fp.brecorder.com/2016/06/2016060754077/. (accessed 21 Nov. 2017)

Kurop, N. (2015), EU: 2015 trade deficit with China booms by more than €40 billion to record high, *AEGIS Europe*, 22nd October, http://www.aegiseurope.eu/news/eu-2015-trade-deficit-with-china-booms-by-more-than-40-billion-to-record-high. (accessed 21 Nov. 2017).

Le Hong, H. (2017), Belt and Road Initiative; Southeast Asia's Boon or Bane?, *ASPI*, 6th June, https://www.aspistrategist.org.au/belt-road-initiative-southeast-asias-boon-bane/. (accessed 22 Nov. 2017).

Li, M. (2015), China's 'One Belt, One Road' Initiative: New Rounds of Opening Up. *RSIS Commentary*, 50, pp. 1-2.

Luft, G. (2016), It Takes a Road: China's One Belt One Road Initiative: An American Response to the New Silk Road, *Institute for the analysis of Global Security*, November, www.iags.org/Luft_BRI.pdf. (accessed 22 Nov. 2017).

Luft, G. (2017), Silk Road 2.0-US Strategy towards China's Belt and Road Initiative, *Atlantic Council*, Strategy Paper No.11, pp 3-66.

Lyu, C. (2015), Chinese firm to develop SEZ in Gwadar, *China Daily USA*, 12th November, http://usa.chinadaily.com.cn/epaper/2015-11/12/content_22441296.htm. (accessed 21 Nov. 2017)

McCauley, A. (2014), Asia's seas offer rich pickings for marauding pirates who steal oil and supplies worth billions of dollars every year, *Time*, 15th August, http://time.com/piracysoutheast-asia-malacca-strait/. (accessed 21 Nov. 2017).

McClatchy, Michael B. (2013), The silk railway: How to link Europe with East Asia?, *The Nation*, 26th April, http://www.nationmultimedia.com/opinion/The-silk-railway-How-to-link-Europe-with-East-Asia-30204791.html, (accessed 22 Nov. 2017).

McKinsey & Co and HKTDC (2016), Navigating the New Silk Road - Executive Summary from the Inaugural Belt and Road Summit, http://china-trade-

research.hktdc.com/business-news/article/The-Belt-and-Road-Initiative/Navigating-the-New-Silk-Road-Executive-Summary-from-the-inaugural-Belt-and-Road-Summit/obor/en/1/1X000000/1X0A6Z9U.htm (Accessed 20 Nov. 2017).

Miller, T. (2017), China's Asian dream: Empire Building Along The New Silk Road, Zed Books, London

Mount, I. (2014), Spain to China by rail: A 21st Century Silk Road riddled with obstacles, *Fortune*, 24th December, http://fortune.com/2014/12/24/spain-china-rail-trade/. (accessed 21 Nov. 2017).

National Development and Reform Commission (NDRC) (2015), Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road, NDRC, China. http://en.ndrc.gov.cn/newsrelease/201503/t20150330_669367.html. (accessed 20 Nov. 2017)

Ngai, J., Sneader, K. and MaZecha, Z. (2016), China's One Belt One Road; Will it reshape global trade?, http://www.mckinsey.com/global-themes/china/chinas-one-belt-one-road-will-it-reshape-global-trade. (accessed 20 No. 2017).

OCCRP (**2016**), Kazakhstan: The Head of Free Trade Zone Detained in US\$ 1 Million Bribe Case (2016), *OCCRP*, 9th September,

https://www.occrp.org/en/daily/5628-kazakhstan-the-head-of-free-trade-zone-detained-in-1-million-bribe-case. (accessed 1 Nov. 2017).

OECD (2013), Anti-corruption Reforms in Eastern Europe and Central Asia, *OECD*, 16th August, http://www.oecd.org/corruption/anti-corruption-reforms-eastern-europe-central-asia-2013.htm. (accessed 22 Nov. 2017).

Perera, N. (2016), China's One Belt One Road Initiative: Implications for Sri Lanka, *Talking Economics*, 22nd June, http://www.ips.lk/talkingeconomics/2016/06/22/chinas-one-belt-one-road-initiative-implications-for-sri-lanka/. (accessed 22 Nov. 2017).

Perlez, J. and Yufan, H. (2017), Behind China's US\$ 1 Trillion Plan to Shake Up the Economic Order, *The New York Times*, 13th May,

https://www.nytimes.com/2017/05/13/business/china-railway-one-belt-one-road-1-trillion-plan.html. (accessed 22 Nov. 2017).

Phillips, T. (2016), Suicide Bomber Attacks Chinese Embassy in Kyrgystan, *The Guardian*, 30th August, https://www.theguardian.com/world/2016/aug/30/bomb-attack-chinese-embassy-kyrgyzstan-bishkek, (accessed 22 Nov. 2017).

Pozzebon, S. (2014), Russia Is Building A New High Speed Train That Will Travel To Beijing In Just 48 Hours, *Business Insider*, 31st December,

http://uk.businessinsider.com/russia-builds-moscow-to-beijing-high-speed-train-2014-12?IR=T. (accessed 21 Nov. 2017).

President of Russia (PoR) (2017), State Council Presidium meeting on the comprehensive development of the Russian Far East, *PoR*, *Russia*,

http://en.kremlin.ru/events/president/news/55544. (accessed 21 Nov. 2017).

Rahman. M (**2014**), BCIM-Economic Corridor: An Emerging Opportunity, *CPD*, 15th March, http://cpd.org.bd/bcim-economic-corridor-an-emerging-opportunity-professor-mustafizur-rahman/. (accessed 22 Nov. 2017).

Ramachandran, S. (2016), Iran, China and the Silk Road train, *The Diplomat*, 30th March, http://thediplomat.com/2016/03/iran-china-and-the-silk-road-train/. (accessed 21 Nov. 2017).

Rastogi, C. and Arvis, Jean F. (2014). The Eurasian connection: supply-chain efficiency along the modern silk route through Central Asia, *The World Bank*,

https://openknowledge.worldbank.org/bitstream/handle/10986/18779/888910PUB0Bo x300EPI199120June122014.pdf. (Accessed 21 Nov. 2017).

Reuters (2017), China builds new military facilities on South China Sea islands: think tank, *Reuters*, 30th June, https://www.cnbc.com/2017/06/30/china-builds-military-facilities-south-china-sea-islands.html. (accessed 22 Nov. 2017).

Rodrigue, Jean P. (2017), The Trans-Asian Railway (Eurasian Landbridge), *Hofstra University*,

https://people.hofstra.edu/geotrans/eng/ch5en/conc5en/NEW_Corridor_Freight.html. (accessed 22 Nov. 2017).

Rogers, J. (2017), China to Build "Silk Road" for Project Finance, *Global Finance*, 7th February, https://www.gfmag.com/magazine/february-2017/china-seeks-build-silk-road-project-finance. (Accessed 20. Nov 2017).

Sajjanhar, A. (2016), Understanding the BCIM Economic Corridor and the Indian Response, *ORF Issue Brief*, 147, pp. 1-6, http://cf.orfonline.org/wp-

content/uploads/2016/06/ORF_IssueBrief_147.pdf. (accessed 22 Nov. 2017).

Shepard, W. (2016a), The Booming China-Europe Rail Network is Taking the Next Step, *Forbes*, 19th October, https://www.forbes.com/sites/wadeshepard/2016/10/19/the-booming-china-europe-rail-network-is-taking-the-next-step/. (acessed 21 Nov. 2017) **Shepard, W. (2017),** London Links Deeper Into The 'New Silk Road' With New Direct Train

Shepard, W. (2017), London Links Deeper Into The 'New Silk Road' With New Direct Train To China, 13th April, *Forbes*, 19th October,

https://www.forbes.com/sites/wadeshepard/2017/04/13/london-links-deeper-into-the-new-silk-road-with-new-direct-train-to-china/#6b08c8d25263. (accessed 22 Nov. 2017)

Shepard. W (2016b), Transport Along China's Silk Road Economic Belt Just Got A Boost, *Forbes*, 29th July,

https://www.forbes.com/sites/wadeshepard/2016/07/29/transportation-along-chinas-silk-road-economic-belt-just-got-a-boost-tir-truck-transit-system/#3ebf329aaed0. (accessed 21 Nov. 2017).

Siddiqui, S. (2017), CPEC investment pushed from \$55b to \$62b, *The Express Tribune*, 12th April, https://tribune.com.pk/story/1381733/cpec-investment-pushed-55b-62b/. (accessed 21 Nov. 2017)

Soni, Sharad K. (2017), **Gauging the Importance of China-Mongolia-Russia Economic Corridor in 'One Belt, One Road'**, *The Dialogue*, 16th January,

http://www.thedialogue.co/gauging-the-importance-of-china-mongolia-russia-economic-corridor-in-one-belt-one-road/. (accessed 21 Nov. 2017)

Stern, R. (2014), Mongolia's mining boom raises environment concerns, *Deutsche Welle*, 1st April, http://www.dw.com/en/mongolias-mining-boom-raises-environment-concerns/a-17534285. (accessed 21 Nov. 2017).

Tahir, A. (2017), Railways Decide to Upgrade Infrastructure of ML_1 in CPEC Framework, *The Business Recorder*, 13th Jun, https://fp.brecorder.com/2017/06/20170613189533/. (accessed 21 Nov. 2017)

Tai, Wei L, Chan, H, Tseng, K and Wen Xin, L. (2016), China's One Belt One Road Initiative, Imperial College Press, London.

The Chamber of Commerce, USA (2010). Land Transport Options Between Europe and Asia: Commercial Feasibility Study, *OSCE*, http://www.osce.org/eea/41310. (accessed 21 Nov. 2017).

The Express Tribune (2015), Pakistan Military Ranked 11th Strongest in the World, *The Express Tribune*, 5th October, https://tribune.com.pk/story/967711/pakistani-military-ranked-11th-strongest-in-world/. (accessed 22 Nov. 2017).

The World Bank (2017), World bank Group Finances – IBRD Statement of Loans, https://finances.worldbank.org/Loans-and-Credits/IBRD-Statement-of-Loans-Latest-Available-Snapshot/sfv5-tf7p. (accessed 21 Nov. 2017)

Today Online (2017), ISEAS poll Shows Low Trust for China in Region, *Today Online*, 4th May, http://www.todayonline.com/chinaindia/china/trust-lacking-china-would-be-reponsible-regional-leader-survey. (accessed 22 Nov. 2017).

Trading Economics (2017), Pakistan Exports 1957-2017, *Trading Economics*, https://tradingeconomics.com/pakistan/exports. (accessed 21 Nov. 2017)

Trilling, D. (2014), Kyrgyzstan Suspends Work at New Chinese Refinery, *Eurasianet.org*, 19th February, http://www.eurasianet.org/node/68061. (accessed 21 Nov. 2017).

UNESCAP (2015), Economic and Social Survey of Asia and The Pacific 2015: Making Growth More Inclusive For Sustainable Development,

http://www.unescap.org/publications/economic-and-social-survey-asia-and-pacific-2015-making-growth-more-inclusive. (accessed 22 Nov. 2017).

Vinayak, HV., Thompson, F. and Tonby, O. (2014), Understanding ASEAN: Seven Things You Need To Know, *Mckinsey & Company*, May,

https://www.mckinsey.com/industries/public-sector/our-insights/understanding-asean-seven-things-you-need-to-know. (accessed 20 Nov. 2017).

World Finance (2014), Central Asia a Major Player in the Oil and Gas Energy Industry, *World Finance*, 16th January, https://www.worldfinance.com/markets/central-asia-a-major-player-in-the-oil-and-gas-energy-industry. (accessed 22 Nov. 2017).

Xinhua (**2016**), Better coordination called for China-Indochina Peninsula Economic Corridor, *Xinhua*, 27th May, http://silkroad.news.cn/2016/0527/1438.shtml. (accessed 22 Nov. 2017).

Yiping, H. (2016), Understanding China's Belt & Road Initiative: Motivation, framework and assessment, *China Economic Review*, 40(C), pp. 314-321.

Yosephine, L. (2016), ASEAN, China target \$1 trillion in trade by 2020, *The Jakarta Post*, 10^{th} June, http://www.thejakartapost.com/seasia/2016/06/10/asean-china-target-1-trillion-in-trade-by-2020.html. (accessed 22 Nov. 2017).

Zhao, L. (2017), 3 sea routes planned for Belt & Road Initiative, The State Council, China, http://english.gov.cn/state_council/ministries/2017/06/21/content_281475692760102. htm. (accessed 22 Nov. 2017).

Zimmerman, T. (2015), The New Silk Roads: China, The U.S., and the Central Asia, *Centre on International Cooperation-New York University*, October, pp. 1-26, cic.nyu.edu/sites/default/files/zimmerman_new_silk_road_final_2.pdf, (accessed 22 Nov. 2017).